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## ABSTRACT

This report contains 25 facts on the Florida Community College System (FCCS). The facts are designed to provide information on a given topic in a concise format. Each one- to two-page description contains a summary as well as relevant data, statistics, or tables. The following issues are addressed: (1) FCCS continues to produce more completers; (2) Dual enrollment is alive and well in the FCCS; (3) Many teachers get their start in the FCCS; (4) Federal financial aid and Florida's college preparatory students; (5) Highlights of national look at community colleges; (6) How many community college graduates will you meet today?; (7) Who will train the labor force of 2006?; (8) Transfer behavior; (9) Community colleges continue to improve; (10) Florida's comprehensive community college system; (11) Hot careers; (12) Community colleges = success; (13) FCCS leads the nation in degree production; (14) Where have all the males gone?; (15) FCCS College Preparatory program; (16) Isn't it nice to be a leader?; (17) Minorities continue to increase award share; (18) How long does it take to get an Associate of Arts degree?; (19) We are not producing widgets here; (20) Community colleges--part of the solution; (21) Community college physics; (22) Employment and postsecondary persistence and attainment; (23) Black students and the FCCS; (24) Income trends and the impact of an associate degree; and (25) Literacy: helping families now and in the future. (RDG)

7C000346

Patricia Windham

# Fast Facts 1-25

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September 28, 1999

# FLORIDA COMMUNITY COLLEGE SYSTEM

**PUTTING MINDS TO WORK**

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September 28, 1999

## MEMORANDUM

**TO:** Interested Persons in the Postsecondary Education Community

**FROM:** J. David Armstrong, Jr. *JDA*

**SUBJECT:** Fast Facts Collection

Attached is a copy of the first twenty-five Fast Facts that have been produced by the Division of Community Colleges, Office of Educational Effectiveness and Research. They have been written with the intention of providing information on a given topic in a concise easy-to-read format. The information has been extracted from various sources including the DCC Student Data Base and national publications. Feel free to share copies. We hope that you find them useful and would appreciate any input about possible future topics.

Please contact Dr. Thomas E. Furlong, Jr. or Dr. Patricia Windham for additional information. They can be reached at (850) 488-0555 or SunCom 278-0555, ext. 163 or ext. 172 respectively.

Thank you.

JDA/pwh

Attachments

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# State Board of Community Colleges

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**FLORIDA'S COMMUNITY COLLEGES CONTINUE TO PRODUCE MORE COMPLETERS**

The number of degrees and awards produced by the Florida Community College System (CCS) continues to increase. The Associate in Arts (AA) degree remains the primary award of the CCS, but in response to the job market's demand for skilled labor, the number of Associate in Science (AS) degrees and certificates awarded are increasing faster than the AA. In 1992-93, the number of Associate in Arts granted by the CCS was 23,115. The AA is the degree normally sought by students wishing to transfer into the State University System. By 1996-97 this had increased by 9.8% to 25,380. The Associate in Science, the other degree granted by the CCS, is traditionally known as a terminal degree since it prepares individuals for the world of work rather than transfer. In 1992-93, the CCS granted 8,120 AS degrees. By 1996-97 this number had risen by 18.8% to 9,645.

In addition to degrees, the CCS also grants certificates. These awards take less than two years to earn and provide specific technical skills. Some of these awards are the first step toward an AS degree. In 1992-93, the CCS granted 9,487 certificates. By 1996-97 this number had increased 26.8% to 12,034.

Minorities are also benefiting from this trend. In 1992-93, the number of minority program completers totaled 8,593. By 1996-97 this number had increased by 48.7% to 12,781. Separating this number into the standard ethnic groups revealed increases for blacks from 3,540 to 5,278; for Hispanics from 4,129 to 5,831; for Asian/Pacific Islanders from 761 to 1,403; and for American Indian from 163 to 269.

**DUAL ENROLLMENT IS ALIVE AND WELL IN  
FLORIDA'S COMMUNITY COLLEGE SYSTEM**

The Florida Legislature has established a means of providing students a variety of opportunities to "...broaden the scope of curricular options available...or increase the depth of study available for a particular subject." (FS 240.116 (1)) Those options include dual enrollment, vocational dual enrollment, early admission, the Advanced Placement (AP) program administered by the College Board, credit by examination, and the International Baccalaureate (IB) Program. Students who are successful in these classes earn credit toward both their high school diploma and college degree. The college credit is put into the equivalent of an escrow account that can be used when the student actually enters college. The most popular option in terms of enrollments is dual enrollment.

In 1992-93, 19,375 high school students were enrolled in 46,541 dual enrollment courses in the Florida Community College System. By 1996-97, the number of high school students involved in dual enrollment programs had grown to 26,672, an increase of 38%. These students signed up for 64,759 enrollments or an increase of 39%.

Under Florida law, these students are not assessed students fees. These enrollments represent a savings of approximately 7.1 million dollars to these high school students and their families.

Produced by the Office of Educational Services and Research, Division of Community Colleges  
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For additional information, contact: Patricia Windham, Ph.D.

**MANY TEACHERS GET THEIR START IN FLORIDA'S  
COMMUNITY COLLEGE SYSTEM**

Preparing young people for the future is one of the most important tasks of society. Preparing teachers to fulfill that role is one of the most important tasks of colleges and universities. In Florida, many future elementary and secondary teachers begin their education at one of the twenty-eight institutions in the Community College System (CCS).

The CCS and State University System (SUS) have recently spent many hours in a collaborative effort to establish groups of courses known as common prerequisites. This means that there now exists lists showing what courses are required by each SUS institution for each major. Students taking these courses are assured of meeting the entering course requirements. This saves the students and the State both time and money.

There are three core prerequisites listed for teacher education in the Common Prerequisite Manual. In 1996-97, six colleges offered one of these courses, nine offered two and another six offered all three. Enrollment in the first of the three - Introduction to American Education, which is offered by 21 colleges - has grown from 4,547 in 1992-93 to 5,794 in 1996-97, an increase of 27%.

In 1993-94 there were 9,176 native students or AA graduates in the upper division of the SUS majoring in education. Six thousand six hundred and sixty-six (6,666) or seventy-three (73) percent were from the CCS. The mean cumulative grade point average (GPA) for the AA graduates was 3.25 compared to an average cumulative GPA of 2.99 for the native students.

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FF-04

November 1, 1997

## FEDERAL FINANCIAL AID AND FLORIDA'S COLLEGE PREPARATORY STUDENTS

The United States General Accounting Office, in response to an inquiry from the House of Representatives, has recently completed a study of federal financial aid awarded to students taking remedial courses (GAO/HEHS-97-142). The two main results were based upon survey responses from 430 institutions including 153 2-year colleges. The first finding was that of the federal financial aid awarded during Fall 1995 at 2-year colleges, 24% went to students taking at least one remedial course. The second major finding was that about eight percent (8%) of the federal aid awarded could have paid for remedial courses.

Florida's community colleges show a much smaller percentage of federal aid going to students enrolled in remedial courses. The Student Data Base (SDB) for Fall 1995 reports only \$8,035,392 of the \$56,859,460 recorded as awarded went to students enrolled in College Preparatory courses. This is only 14% compared to the national 24%. (The SDB is an end of term snapshot file; thus, the actual amount of aid received by any one individual may differ due to subsequent updates to that student's file.)

However, the percent of aid paid for remedial courses is estimated to be higher due to a higher average remedial credit load. Seventy-two percent of the hours taken by Florida's students were in College Preparatory courses. Therefore, it is estimated that 10% of the federal aid received by Florida community college students was spent on remedial course work. The national estimate was 8%. The national estimate was based upon an average remedial load of 4.9 credit hours, while the Fall 1995 average remedial load for Florida was approximately 9.7 credit hours. (Since College Preparatory hours were reported as clock hours rather than credit hours, a conversion factor of 15 clock hr/1 credit hr was used.)

The GAO study concluded that "...relatively few financial aid dollars were associated with college remediation at the schools responding to our survey." [p 10] Florida can say the same thing for the CCS.

FF-05

December 5, 1997

## HIGHLIGHTS OF NATIONAL LOOK AT COMMUNITY COLLEGES

*Investing in Quality, Affordable Education for All Americans: A New Look at Community Colleges* is the title of an October 1997 publication from the U.S. Department of Education, Office of Vocational and Adult Education, Community College Liaison Office. The publication is a national overview of community colleges in America and opens with the following quote from President Bill Clinton's address on September 6, 1996, at Gulf Coast Community College:

I believe America ought to work the way the community colleges in America work. I believe they are the ultimate democratic institution, small "d"; open to everybody, where everybody has a chance; results oriented; flexible, but not bureaucratic; working in partnership with the private sector; guaranteeing opportunity for everybody who is responsible enough to seek it.

## Highlights include:

- , More than 5.3 million credit-earning students study at more than 1,200 community colleges.
- , With an average community college tuition of \$1,320 projected for the 1998-99 academic year, the [national] HOPE Scholarship will pay for, on average, 88 percent of an eligible student's tuition at a two-year institution. (Florida's percentage is 92 - *Community College Week*, November 3, 1997, Volume 10, Number 7, p 3.)
- , An American worker with two years of college earns, on average, almost \$1.1 million over the course of his or her lifetime. By contrast, the average American worker with only a high school diploma will earn about \$250,000 less.
- , The growth in the 18-to-24 age group is one of several factors expected to drive up community college enrollment by 11 percent over the coming decade. (PEPC Enrollment Model projects a 30 to 35 percent increase for Florida.)
- , One out of 10 community college students already possesses a bachelor's degree. These students turn to a community college for technical or occupationally related course work.
- , Community colleges train the bulk of nursing and credentialed allied health service workers in the United States -- 85 percent of the training in ophthalmic technology, 71 percent in medical imaging, 69 percent in respiratory technology.
- , One in six bachelor degree recipients in engineering, engineering technology and architecture started in a community college. One in ten of last year's graduating Ph.Ds in math and electrical engineering began in a community college.

The full text of the report is available at <http://www.ed.gov/offices/OVA/indxcclo.html>

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FF-06

December 15, 1997

## HOW MANY COMMUNITY COLLEGE GRADUATES WILL YOU MEET TODAY?

We have all heard about the important role Florida's Community College System plays in the production of baccalaureate degrees. While the System still grants more AA's than any other type of award, various types of vocational training are becoming more and more important. The top 25 vocational programs in terms of awards granted for 1996-97 cover a wide variety of occupations. So wide in fact, that it is hard to imagine being able to go through a normal day without meeting at least one Florida Community College System graduate.

If anyone in your family has a doctor's or dentist's appointment, the nurses or dental hygienist will probably have a CCS AS degree on their wall. There were 3,069 ADN nursing degrees awarded in 1996-97 and 327 AS dental hygienists. Additional assistance was provided the health profession in 1996-97 by 1,254 EMT's, 1,241 patient care assistants, 629 paramedics, 501 practical nurses, 338 radiographers, 246 respiratory care technicians, and 235 physical therapist assistants.

If anyone comes in contact with the police, the CCS produced 1,531 graduates in law enforcement. The criminal justice area received additional help from 1,976 correctional officers, 257 criminal justice technologists and 589 legal assistants.

Your insurance agent could have received additional training from the CCS - 616 individuals completed the requirements for an award in insurance marketing.

The manager of that small business you frequent could have a CCS award. There were 505 awards in business administration and management granted in 1996-97, 257 in accounting technology, and 389 in office systems technology.

Computer related industries gained 247 persons who completed the computer programming and applications program and an additional 221 individuals completed the computer information systems analysis program.

If you should need one, the CCS trained 461 firefighters and 395 persons in child care supervision. And finally, that 18-wheeler you pass may be driven by one of the 207 people who completed a program in commercial vehicle driving.

These are just the top 25 programs - there are hundreds more across the State that provide general and specialized services to increase the employment opportunities of Florida's citizens.

A five year trend for the top 25 programs is included on the back of this page.

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Top 25 Vocational Occupations in Florida's Community College System in 1996-97

Program Name	Type of Award	Number of Awards Granted			
		1996-97	1995-96	1994-95	1993-94
Nursing - ADN	Associate Degree	3069	3271	3194	3277
Correctional Officer	Certificate	1976	2796	1714	930
Law Enforcement	Certificate	1531	1141	729	689
Emergency Medical Technician	Certificate	1254	1670	1191	1083
Patient Care Assistant	Certificate	1241	653	702	681
Paramedic	Associate Degree/Certificate	629	611	458	414
Insurance Marketing	Certificate	616	658	584	552
Legal Assistant	Associate Degree	589	557	575	572
Business Adm. and Mgt.	Associate Degree/Certificate	505	505	467	458
Practical Nursing	Certificate	501	467	443	499
Cosmetology	Certificate	466	383	352	463
Firefighting	Certificate	461	300	350	396
Child Care Supervision	Certificate	395	562	330	176
Office Systems Technology	Associate Degree/Certificate	389	324	316	311
Radiography	Associate Degree/Certificate	338	396	418	427
Dental Hygiene	Associate Degree	327	269	289	255
Electronic Technology	Associate Degree/Certificate	283	289	317	295
Criminal Justice Technology	Associate Degree	257	259	202	192
Accounting Technology	Associate Degree/Certificate	257	171	178	153
Computer Programming & App.	Associate Degree/Certificate	247	217	223	223
Respiratory Care	Associate Degree	246	201	248	213
Physical Therapist Assistant	Associate Degree	235	222	168	170
Computer Info Systems Analysis	Associate Degree	221	191	123	125
Dental Assisting	Certificate	217	171	173	161
Commercial Vehicle Driving	Certificate	207	288	53	20
Total Top 25 1996-97 Vocational Occupations		16457	16572	13797	12735
All Other Occupations	Associate Degree/Certificates	5163	5873	5799	7202
Total Vocational Associate Degrees/Certificates Awarded		21620	22445	19596	19937

## WHO WILL TRAIN THE LABOR FORCE OF 2006

The U.S. Bureau of Labor Statistics periodically produces projections for the types of jobs that will comprise the labor market in ten to fifteen years. The latest projections attempt to show the educational requirements for the labor force of 2006. (<http://state.bls.gov/news.release/ecopro.nws.htm> USDL 97-429) The following analysis and graph have been extracted from Postsecondary Education OPPORTUNITY, Number 66, pp 15-16.

...buried in the Bureau of Labor Statistics projections is another important finding. Among those job openings that require less than an associate degree from college, about three-quarters are net replacement openings with the remaining quarter resulting from employment growth. However, among those job openings that require an associate degree or more from college, less than half of the new job openings will be net replacement positions and just over half - about 55 percent - will result from employment growth.

The new job openings that are created by employment (and economic) growth will require the talents and skills of college educated workers. In contrast, the net replacement job openings of existing jobs will be filled primarily by long-term, moderate-term or short-term on-the job training. *This is a clear signal that economic growth is more dependent on college-educated workers than are the jobs in the existing economy.* (Emphasis added.)

There are other aspects of these employment projections by the Bureau of Labor Statistics that deserve special note with respect to our concerns for postsecondary education and training opportunities for young people. Foremost among these is the changing demographic profile of the population. The labor market generally will have to adapt to the baby-bust that has moved through the education pipeline. (Note - the baby boom echo is just now entering postsecondary education and won't be in the labor pool in large numbers for several years.) That means fewer younger workers entering the labor pool.

More importantly, these newer and younger workers will look less like the older workers they are replacing. Racially and ethnically they will be much less white and more Asian, Hispanic and black than in the past.

Since the Community College System is the major postsecondary entry point of black and Hispanic citizens in Florida, this implies that the community colleges will provide either the entire training or at least the initial training for a larger portion of the workforce in 2006 than is the current situation.

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## TRANSFER BEHAVIOR

The National Center for Education Statistics has recently released a report on Transfer Behavior Among Beginning Postsecondary Students: 1989-94 (NCES97-266). The study is based upon information contained in the Beginning Postsecondary Students Longitudinal Study (BPS:90/94). Listed below are the highlights for students transferring from public 2-year colleges to 4-year institutions.

- One out of four community college students indicated in 1989-90 that they were working toward a bachelor's degree (*prospective transfers*). Of this group, 39 percent transferred directly to a 4-year institution by 1994.
- Among community college students identified as prospective transfers, those who enrolled full time in their first year were about twice as likely as those who enrolled part time to transfer to a 4-year institution within 5 years (50 percent of full-timers transferred, compared with 26 percent of part-timers).
- Among community college beginners who transferred to a 4-year institution, 65 percent transferred without a degree. About one out of three completed an associate's degree before transferring.
- On average, community college beginners who transferred to a 4-year institution spent about 20 months at the first institution. They often took a considerable amount of time off between institutions, averaging 21 months.
- While one out of four community college transfers had received a bachelor's degree by 1994, another 44 percent were still enrolled at a 4-year institution, for an overall persistence rate of 70 percent. This is comparable to the persistence rate among students who began at 4-year institutions and among 4-year horizontal transfers.
- The bachelor's degree attainment rate was much higher among the minority of community college transfers who completed an associate's degree before transferring: 43 percent of associate's degree completers had received a bachelor's degree by 1994, compared with 17 percent among those who transferred without any credential.

The most comparable study for Florida is the longitudinal tracking of the 1993-94 public high school graduating class being conducted by PEPC. The work done so far with that graduation class has been limited to those students who met SUS entrance requirements in terms of courses, GPA and/or

SAT/ACT scores. Preliminary findings from that select cohort indicate that by Fall 1996, approximately two years later, 25.6% of those starting in the CCS had transferred to the SUS. Of those transferring 81.8% had an AA degree. These 742 AA degree holders represented 91% of the students who had earned an AA prior to Fall 1996. Internal CCS studies have indicated that approximately 75% of AA degree earning students will eventually transfer to the SUS.

The SUS Fact Book for 1995-96 shows an AA transfer graduation rate of 55.9% for the latest three year tracking period and a rate of 65.0% for four years. Both rates have been steadily increasing during the time periods displayed.

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## COMMUNITY COLLEGES CONTINUE TO IMPROVE

The Florida Community College System (CCS) has just completed its second round of Performance Based Program Budgeting. This method of distributing incentive dollars is based upon three measures: I. Program Completers, II. Special Categories, and III. Excess Hours. Measure I is the sum of the AA and AS degrees awarded by an institution, plus one-half the number of certificates. Measure II is the sum of the number of completers in Measure I who fell into any of the following categories: (a) enrolled in college prep courses, (b) enrolled in ENS or ESL courses, (c) economically disadvantaged, (d) disabled, (e) passed licensure exams, or (f) were placed in field. Measure III is the number of AA completers in Measure I who achieved the degree in 72 or fewer hours. [More complete definitions of these Measures and/or categories may be obtained from the Bureau of Research and Information Services, Division of Community College, Department of Education.]

All three measures showed improvement between 1995-96 and 1996-97. The number of students awarded AA degrees rose by 1,627 or 6.9%. For all completers, the increase in points was 3.1%. 1996-97 saw large increases in the number of economically disadvantaged students and those needing ESL or ENS courses earning awards. [ESL and ENS courses are often needed by students who did not grow up speaking English.]

The final area of improvement was in the number and percent of students needing 72 or fewer hours to complete their AA degree. Fewer hours means cost savings to both the student and the State. In 1995-96, the number meeting the requirement for Measure III was 7,898. By 1996-97, this had increased to 8,776 or by 11.1%. Not only had a larger number of students met the requirement of this measure, but a larger percentage of completers had met it as well.

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## FLORIDA'S COMPREHENSIVE COMMUNITY COLLEGE SYSTEM

When the uniquely American educational phenomenon of the two-year college began approximately 100 years ago, it was established to serve only the educational needs of those students intending to earn a baccalaureate. Those institutions were appropriately known as "junior colleges." During the sixty's and seventy's, these institutions broadened their missions to meet the economic needs of their communities and became known as community colleges. Today, that mission has expanded to served the entire range of educational needs of communities, from adult education, to the first two years of the baccalaureate, to preparing individuals to directly enter the workforce. These institutions are known as comprehensive community colleges.

Data from the Fall 1996 Student Data Base indicate that Florida's community colleges are living up to that description. Individuals who want a bachelor's are served via the AA degree program. Forty-three percent (43%) of the students enrolled in Fall 1996 had the AA listed as their intent. This was the highest percentage of any area. These students were the second youngest group with two-thirds less than 25 years old.

The second highest percentage was for individuals wanting to continue their education. Slightly over twenty-five percent (25%) of the enrollees listed in this area. This group was at the opposite end of the age spectrum with an average age of 36 and only about twenty-five percent less than 25 years old.

Direct entry workforce training is provided by the AS degree and the PSAV and CCC certificates. Together these areas were the chosen intent of about twenty-two percent (22%) of the enrollees. The average age was 30 with about forty percent (40%) less than 25 years old.

The final specific intent is the adult diploma. This area provides an opportunity for persons who dropped out of high school to go back and complete their diploma in a college setting rather than having to return to a school district. This group of students was the youngest with an average age of 22 and slightly over three-fourths less than 25.

The intent chart found on the back of this report indicates that the Florida CCS is fulfilling the broad mission presented above and has become a comprehensive community college system.

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**FALL 1996 AGE DISTRIBUTION**  
**By Student Intent**

AGE	(Column Percent)						
	AA	AS	PSAV	CCC	Non-Degree	Credit	Adult Diploma
17 or less	3.36	0.70	0.42	6.03	18.05	32.33	Continuing Education
18	9.59	4.13	3.07	2.89	7.58	15.81	10.84
19	14.09	6.45	5.32	4.16	4.32	10.48	3.23
20	11.97	5.78	5.09	4.45	3.59	5.63	2.17
21	8.89	4.95	4.99	4.60	3.20	3.32	1.79
22 to 25	19.97	17.41	19.04	17.88	11.09	9.48	1.67
26 to 35	19.75	32.94	36.28	30.09	21.28	12.47	7.50
36 to 45	8.83	20.14	18.27	18.58	16.37	6.54	23.36
46 to 55	2.86	6.48	6.25	8.57	9.50	2.50	22.74
Over 55	0.69	1.01	1.25	2.75	5.04	1.44	15.18
Total %	100.00	100.00	100.00	100.00	100.00	100.00	11.52
							100.00
% 25 or less	67.87	39.42	37.93	40.01	47.83	77.05	27.20
							68.10
							50.08

AGE	(Row Percent)						
	AA	AS	PSAV	CCC	Non-Degree	Credit	Adult Diploma
17 or less	22.44	1.84	0.08	3.57	19.68	8.58	Continuing Education
18	60.95	10.26	0.52	1.63	7.87	4.00	42.84
19	70.81	12.66	0.71	1.86	3.55	2.09	12.17
20	71.03	13.39	0.81	2.35	3.48	1.33	6.44
21	67.63	14.71	1.02	3.11	3.97	1.00	6.29
22 to 25	55.71	18.97	1.42	4.43	5.05	1.05	7.53
26 to 35	36.24	23.61	1.78	4.90	6.38	0.91	12.38
36 to 45	24.91	22.19	1.38	4.65	7.54	0.73	25.36
46 to 55	16.78	14.87	0.98	4.47	9.12	0.58	37.94
Over 55	7.63	4.36	0.37	2.69	9.07	0.63	52.73
							75.06
Overall % for Intent	43.01	16.80	1.15	3.82	7.03	1.71	25.45
							1.04
							100.00
Ave. Age by Intent	25.1	30.1	30.2	30.7	30.2	22.5	36.4
							24.8
							29.7

## HOT CAREERS

The American Association of Community Colleges recently surveyed the nation's community colleges concerning the "hot" career programs at each institution. Programs qualified as "hot" when college officials reported that graduates are hired immediately following, or sometimes prior to, graduation. More than half of the programs qualifying for this designation fell into the areas of health care or computers (Community College Week, May 18, 1998, page 7).

The table below lists the top hot programs for the South as shown in the Community College Week article. Included in the table are the number of 1996-97 graduates in each area for the Florida Community College System and the number of colleges producing those graduates.

## Hot Careers

Career	Number of 1996-97 Graduates	Number of colleges
Registered Nursing (AS only)	3069	25
Computer Tech/Computer Info Systems (AS only)	221	13
Electronics Technology/Elec Engineering (AS & Cert)	282	22
Dental Hygiene (AS only)	327	14
Physical Therapy (Assistant) (AS only)	235	8
Computer Programming (AS & Cert)	247	20

Several of these programs produce both an AS degree and some type of certificate. The 4,250 AS graduates of these six top hot programs represent 44% of the 9,638 AS degrees granted. The average starting salary for these programs in the South was \$26,509 (American Association of Community Colleges as quoted in Community College Week).

"The hottest programs at two-year institutions today closely mirror those that the U.S. Bureau of Labor Statistics projects will be in the greatest demand in the future....The number of people employed in several computer-related occupations is expected to double within the next 10 years, according to the bureau's projections...The fastest employment growth will be in the fields of computer and data processing, health services and management, and public relations, the bureau's projections indicate." (Community College Week, May 18, 1998, page 7)

Thus, the Florida Community College System is already poised to meet the anticipated economic needs of the State during the coming years, with an emphasis on programs that provide both employment opportunities and a living wage.

## COMMUNITY COLLEGES=SUCCESS

The U.S. Department of Education has recently required each college in the United States to produce a report known as the Graduation Rate Survey or the GRS. The purpose of the GRS is to provide interested students information on the completion rate of various programs at different institutions within a standard length of time. This first set of Surveys has been limited to full-time students. Community colleges were directed to track their Fall 1994 first-time-in-college, full-time, degree-seeking students for three years.

Degree-seeking students are those wanting either an Associate in Arts (AA) or an Associate in Science (AS) degree. The AA track was designed to prepare students for continued academic work at a senior institution, usually within the State University System (SUS), by either fulfilling the entire set of degree requirements or taking most of their lower division course work and then transferring to another institution prior to degree completion. The primary purpose of an AS is preparation for the workforce, but small numbers of AS students also transfer to the SUS, both with and without formal degrees. The US DOE recognized the value of both full and partial degree completers, and allowed community colleges to count students who formally completed and those who had completed 60 hours with at least a 2.00 GPA as one category of success. Other categories included students who earned certificates, transferred to other postsecondary institutions, were still enrolled or left in good standing, i.e., those who left with an overall GPA of 2.00 or above.

The data are actually reported to the US DOE on an institutional level and there are no plans at the national level to combine these data in any way. However, in Florida, the Division of Community Colleges (DCC) was able to use its Student Data Base and produce the required reports for all twenty-eight member institutions. This saved the individual colleges both time and money, and allowed the DCC to produce a system-level report. The results of that report are presented below:

Earned a degree or were prepared for transfer -	26.3%
Earned a certificate -	2.1%
Transferred to another postsecondary institution -	11.0%
Still enrolled -	16.3%
Left in good standing -	16.5%
Left not in good standing -	27.8%

Based upon the results of the GRS, 39.4% of the cohort group tracked had either earned a degree, certificate, or transferred; and an additional 32.8% were either still enrolled or eligible to return when able. Even with Florida's open-door admissions policy for the CCS, the combination of these two percentages gives an overall success rate of 72.2%.

## FLORIDA'S COMMUNITY COLLEGES LEAD THE NATION IN DEGREE PRODUCTION

*Community College Week*, a biweekly newspaper dealing with issues related to community colleges, has just released its 1995-96 list of the nation's 100 top associate's degree producers. Fourteen of the 28 institutions in the Florida Community College System (CCS) made the list. Furthermore, nine of those fourteen were in the top 25.

Miami-Dade is the top associate's degree producer in the nation. They are also number one in associate's degrees conferred to minority students, to Hispanics, and second for African-Americans. Eight other Florida community colleges joined Miami-Dade on the list of top 100 institutions for minority students.

Complete lists, including college and rank, for each category are presented below.

Top 100: Miami-Dade (1), Saint Petersburg (4), Valencia (5), Florida Community College at Jacksonville (8), Broward (9), Hillsborough (11), Santa Fe (13), Brevard (15), Palm Beach (19), Tallahassee (32), Pensacola (36), Daytona Beach (59), Edison (70), Manatee (80)

Top 100 Minority: Miami-Dade (1), Broward (17), Valencia (22), Florida Community College at Jacksonville (32), Hillsborough (36), St. Petersburg (67), Palm Beach (73), Santa Fe (87)

Top 50 African-American: Miami-Dade (2), Broward (19), Florida Community College at Jacksonville (21)

Top 50 Hispanic: Miami-Dade (1), Valencia (15) Broward (22), Hillsborough (27)

Top 50 Native American: Pensacola (47)

Top 50 Asians: Valencia (41)

Produced by the Office of Educational Services and Research, Division of Community Colleges  
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### Where Have All the Males Gone?

A popular song during the time community colleges were being created was "Where Have All the Flowers Gone?" A more appropriate version, based upon recent completion data would be "Where Have All the Males Gone?" The October 1998 issue of *Postsecondary Education OPPORTUNITY* discusses the dramatic change in the percent of awards granted to males during the past decades. While the number of awards granted continues to increase, the percent for baccalaureate degrees has declined from 56.9 in 1970 to 44.9 in 1996. This decline has been even greater at the associate level. Nationally, the percent of associate degrees awarded to males has declined from 57.0 in 1970 to 39.5 in 1996.

There were also differences among the various ethnic groups. White males earned 39.7% of the associate degrees earned by whites, black males earned 34.4%, Hispanic males earned 41.1%, Asians 44.2% and American Indian 35.7%

The relationship in Florida mirrors almost exactly that of the nation. In 1997-98, 39.6 percent of the AA and 32.4 percent of the AS degrees awarded by the CCS were granted to males. White males earned 39.6% of AA degrees granted to whites, black males earned 33.9% of the degrees granted to blacks, Hispanic males earned 41.9%, and Asians 45.5%. American Indians males varied the most from the national picture by receiving 48.3% of the AA granted to American Indians.

While providing access to female students remains a System priority, the large discrepancy between male and female completion rates has societal implications that need to be considered. As Mortenson states, "[Young males] appear to not be aware that the economic world in general and the labor market for their adult services require more and better education than males have ever earned before."

Family structure is another area where Mortenson expresses concern. If the percent of males and females earning degrees does not become more equal, future families will

have more highly educated mothers than fathers. The implications of this shift have yet to be explored.

Florida community colleges are in an ideal position to help restore a balance in degrees earned. The CCS offer courses in times, places and areas that provide the flexibility needed to fit with the different lifestyles of today's society.

### Awards for 1997-98 by Ethnicity and Gender

	AA		AS		Certificates	
	Number	Percent	Number	Percent	Number	Percent
Asian						
Females	605	54.50	154	56.83	89	39.73
Males	505	45.50	117	43.17	135	60.27
Black						
Females	1900	66.11	787	70.65	1438	65.10
Males	974	33.89	327	29.35	771	34.90
Hispanic						
Females	2504	58.06	621	63.05	516	46.20
Males	1809	41.94	364	36.95	601	53.80
Indian						
Females	78	51.66	40	57.97	50	64.94
Males	73	48.34	29	42.03	27	35.06
White						
Females	12037	60.41	4706	68.29	3818	47.68
Males	7888	39.59	2185	31.71	4190	52.32

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## CCS COLLEGE PREPARATORY PROGRAM

There has been much discussion lately related to various aspects of the Community College System's College Preparatory program. Listed below is the latest available information on the primary components of that program.

- Cost of Program

The total cost of remediation at Florida's twenty-eight public community colleges for 1997-98 was \$63,537,463. The State paid \$31,387,102. For recent high school graduates, i.e., people who have been out of high school for three years or less, the State paid \$12,299,622 or 1.7% of the \$725,107,669 total State appropriations to the CCS.

- Level of Program

The three areas of College Preparatory are labeled reading, writing and mathematics. The mathematics label is a misnomer since the students are being tested to determine if they are ready for college level algebra. The six hours of college level mathematics required for college graduation in Florida is one of the highest graduation requirements in mathematics in the nation. A study done by Dr. Mike Resnick of the University of Florida showed that Algebra I in high school was not sufficient preparation for the mathematics section of the CPT. While high schools are moving toward preparing more and more students for college, until all students who enroll in college take Algebra I, geometry and Algebra II in high school, there will be a need for College Preparatory mathematics.

- Need for Remediation

While the exact percentages vary by term and year, slightly over one-third of an entering community college class will be college ready, another third will need only one area of remediation, and the final third will need College Preparatory courses in two or more areas.

- Success in College Prep

The SBCC is very interested in how well the students who need College Prep are doing in their courses and how many are able to complete the highest level course in each area. Students completing the highest level courses are then ready to enroll in college level courses. Accountability Measure 4 Part 1, tracks an incoming group of first-time-in-college (FTIC) students and determines the percentage of those students enrolling in the various prep areas that complete the highest level. The



latest published Accountability data (1997) show that 62% of reading students were successful. This dropped slightly to 59% of those needing writing and 45% of those needing mathematics. Mathematics continues to be the most difficult area for students.

- Success in College Level Courses

Once students have completed their College Prep requirements, the next step is to enroll in college level courses, particularly those related to communication and computation. In-house tracking of students needing College Prep indicate that once a student has completed the necessary prep and enrolled in college level courses, they are at least as successful as those students who were ready when they initially enrolled. In fact, if they have completed mathematics, they are more successful.

- Pre-K–16 Initiatives

The SBCC recognizes that the need for College Preparatory courses is part of the reality of today, but that we should be working with the K-12 sector to ensure that need is kept to a minimum. Many cooperative activities and programs are currently taking place at the state level. Some of the major ones include:

- (1) Community colleges and public schools are joint partners in several grant projects and enrichment experiences for public school students. Sample projects include Tech Prep, Science for Kids special programs for “at risk” students, and summer camp experiences.
- (2) Seven colleges have developed a 2+2 Teacher Education Alliance Program with the public schools and the university in its region.
- (3) Faculty-to-faculty articulation meetings are held to review course sequences.
- (4) A letter is sent annually to eighth grade students and their parents encouraging students to take the high school college prep courses needed for admission to the SUS, whether they plan to attend a community college or a university.
- (5) A brochure is being developed jointly by the CCS and SUS, which will provide additional information on coursework, transferring and articulation issues.
- (6) Twenty colleges are expanding their visits with high school administrators and counselors to add regular meetings with parent groups at middle and high schools in the institution’s district.
- (7) Sixteen colleges have established a Student Ambassador program whereby the college works with high school counselors to identify outstanding seniors who would be likely candidates. Students selected are provided a two-year tuition scholarship to begin their first year of matriculation at the college.
- (8) Appointment of K-16 Liaisons at each community college to provide a link/contact person between community colleges and school districts.
- (9) All colleges participate in county schools’ College Night programs.
- (10) Ten schools are piloting a basic skills assessment project which will allow the college to administer the CPT to 10<sup>th</sup> grade students. Feedback will be provided so that students can remediate while still in high school.
- (11) Twenty-five colleges work with the middle school College Reach-Out Program (CROP).
- (12) Twenty-one host Counselor Appreciation Days which bring high school counselors on to the college campus and allow the institutions to provide them with course and other types of information in a relaxed setting.

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### ISN'T IT NICE TO BE A LEADER

Fast Facts 15 provided information on the current situation regarding the College Preparatory program in Florida's Community College System (CCS). Many of those same points are addressed in a national study recently released by The Institute for Higher Education Policy. The Institute is a Washington, D.C. based non-profit, non-partisan organization whose mission is "to foster access to and quality in postsecondary education. The Institute's activities are designed to promote innovative solutions to the important and complex issues facing higher education." The Institute's study, entitled *College Remediation*, addresses the issues of definition, costs and outcomes. It contains the following highlights:

*Remediation is a core function of higher education.* There has never been a golden age in American educational history when all students who enrolled in college were adequately prepared, all courses offered at a higher education institution were "college level," and the transition for students between high school and college was smooth.... Beginning with Harvard College in the 17<sup>th</sup> century, where tutors in Greek and Latin were provided for underprepared students, and continuing into the middle of the 20<sup>th</sup> century with the establishment of the G.I. Bill, remediation for inadequately prepared students has been an integral part of American higher education.

*There is no evidence that remediation is expanding in size or scope.* Despite the fact that college and university enrollments grew by approximately half a million students between 1989 and 1995 – or about 6 percent overall – there was little change in the percentage of students enrolling in remedial courses.

*The financial costs of remediation are modest and generally comparable to or lower than the cost of other academic programs.* National data regarding the costs of remediation are limited. The most recent analysis of remediation costs suggests that remediation absorbs approximately \$1 billion annually in a public higher education budget of \$115 billion – less than 1 percent of expenditures.

*The financial or academic merits of "outsourcing" remediation to private vendors are not readily apparent.* As a management strategy, outsourcing to the private sector is not inherently good or bad... However, determining the cost of using private vendors is complicated and subject to a variety of factors. These factors include who provides the instruction (institutional faculty or faculty supplied by the vendor), requirements for student-faculty ratio, who provides assessment

and diagnostic services, the competency level required to pass remedial courses, and the expectations of the institution with regard to the percentage of students who will succeed. No clear evidence exists about whether this kind of outsourcing actually saves resources or improves learning.

*Remediation is a good investment for society, and for colleges and universities.* Remedial education at the college level is a more cost-effective investment when compared to the alternatives. The alternatives can range from unemployment and low-wage jobs to welfare participation and incarceration – or any of a number of other options in between that are far more expensive for society. The modest financial costs, combined with the high payoff associated with collegiate success, make the investment readily apparent.

### *Strategies for the Future –*

The publication lists several strategies for reducing the need for remediation and improving the effectiveness of remediation. All of these strategies are being incorporated in the various remediation reduction plans of CCS institutions.

Strategies to *reduce the need for remediation*: (1) aligning high school requirements with college content and competency expectations; (2) early intervention and financial aid programs targeted at students at the K-12 level that link mentoring, tutoring, and academic guidance with a guarantee of college financial aid; (3) student follow-up and high school feedback systems; (4) improved teacher preparation; and (5) K-12 school reform.

Strategies to *improve the effectiveness of remediation*: (1) creating interinstitutional collaboration among colleges and universities in a state or system allowing best practices and ideas to be shared and replicated; (2) making remediation a comprehensive program that encompasses more than just tutoring and skills development; and (3) utilizing technology to enhance the teaching-learning process.

Florida's willingness, years ago, to address the complexities of remediation via the College Preparatory program placed it in a leadership position. As this report indicates, the State remains in a leadership position via the remediation reduction plans and the use of nationally recognized "best practices" strategies. Finally, the serious discussions in Georgia, California, and other states about shifting remedial programs at state colleges and universities to community colleges were conducted in Florida during the early 1980's. Since that time, with the exception of FAMU, all College Prep courses in Florida have been offered by the CCS.

The full report can be found at [www.ihep.com](http://www.ihep.com).

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# State Board of Community Colleges

# Fast Facts

FF-17

March 26, 1999

## MINORITIES CONTINUE TO INCREASE AWARD SHARE

The vast major of awards conferred by the Florida Community College system (CCS) are either Associate in Arts (AA) degrees, Associate in Science (AS) degrees, Vocational Credit (VCC) certificates, or Postsecondary Adult Vocational (PSAV) certificates. Over the past five years, the number of awards has increased dramatically, especially the AA. While white students remain the majority ethnic category for all four types of awards, minority students have made great strides in the number and percent of awards earned, especially AA and AS degrees.

Blacks and Hispanics are the two main minority ethnic groups in the State and represent almost equal shares of the total population. Much smaller portions of the population are represented by Asians and Indians.

In 1993-94, blacks received 1,576, or 6.9%, of the AA degrees awarded. By 1997-98, that number had increased to 2,729, or 9.6%, of the AA's awarded. Hispanics followed this same trend, earning 2,796, or 12.2%, of the AA's in 1993-94 and 4,091, or 14.4%, by 1997-98.

The change in AS degrees was less dramatic, with blacks increasing their number and percentage share from 762, or 8.3%, in 1993-94 to 1,070, or 11.5%, in 1997-98. The number and share for Hispanics changed from 756, or 8.2%, in 1993-94 to 937, or 10.0%, in 1997-98.

Although the overall change for both groups for both types of certificates has also been positive, the changes have not occurred in a stable pattern. (See year-by-year chart on back.) At the beginning of the time period under consideration, blacks were earning more Vocational Credit certificates than Hispanics. That relationship has shifted with Hispanics earning more the last two years.

The final category of award is the PSAV. Blacks earn far more PASV certificates than any other minority group. In 1993-94, they were earning 18.8% and increased that percentage to 21.2 by 1997-98. During the same period, Hispanics increased their percentage from 5.1 to 9.1.

The Florida CCS can be proud of its commitment to all groups of students. The fruits of that commitment are found in increasing awards of all types for all students.

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## HOW LONG DOES IT TAKE TO GET AN AA DEGREE?

Like so many things in life, that question has many different answers. The AA degree is an associate degree and associate degrees are two-year degrees. This assumes a lock-step process of taking 15 hours per semester for four major semesters in a row in order to accumulate the 60 credit hours required in Florida for the AA. This approach may work if you are 18 – 19, arrive academically prepared for college level courses, are supported by your family and are able to attend full-time. However, the majority of students served by the Community College System (CCS) do not fit that profile.

The typical AA seeking student in Fall 1997 was female, white, with an average age of 25, part-time, classified as a freshman, a native student and returning for another semester. They were not disabled, were not receiving grants, loans, scholarships or work study money from the college, and would need at least one area of College Preparatory course work prior to being able to fully enroll in college level classes.

Of those students enrolled in Fall 1997 who had declared the AA degree as their intent, 57% were female. The students were more minority than the State as a whole – 13.8% black, 18.8% Hispanic and 3.8% other minorities. Whites comprised 63.4%. Only one in four was 19 or younger, and one-third were over 25. Almost two-thirds were attending part-time. More were freshmen, 47.6%, than sophomores, 43.9%. An additional 6.4% were unclassified. For 16.2%, this was their first semester. Two point one percent (2.1%) were dual enrollments and the remainder were returning for at least their second semester. Three out of four were native students, meaning they had not transferred from some other postsecondary institution. Slightly over two percent were disabled and slightly less than one third were receiving some type of official financial aid.

About one third of incoming FTIC students arrived fully prepared for college level courses, one third needed one area of remedial course work, and the remaining third needed two or more areas. More students needed help in mathematics than in reading or writing. The more areas needed, the harder it was to complete all of the necessary College Preparatory course work.

A student meeting the typical AA student profile may only be able to take one course a semester as they seek to earn their degree. This would represent a significant effort for a working mother with children. Since the AA degree consists of approximately 20 credit courses, not counting any necessary remedial work, taking the “one course a semester” route would yield a degree in 10 years.

Despite this student profile, in-house research shows that of those native students earning an AA in 1996-97, 36% had entered the CCS within the past two years. An additional

32% had entered within the past three or four years, meaning 68% had graduated within four years. These are the students who were able to average attending half-time. The remaining students were able to attend at varying rates that were less than half-time. Eighty-two percent had graduated within six years and by the end of eight years, the percentage had reached 89. Ninety-three percent (93%) of the graduates had entered within the last ten years.

Expecting the students served by the CCS to graduate within two years is simply not realistic. These students are not able to follow the “four semesters and you’re out” model. Society needs to recognize the barriers that these students are overcoming and not place any other obstacles in their way. Students with that much determination and perseverance should be congratulated, and the Florida community colleges are prepared to provide the courses necessary to assist their eventual graduation. Once the AA is earned, 75% of these students will transfer to a state university. Once in the SUS, these students will do just as well as native university students.

Time-To-Degree  
Based Upon 1996-97 Native AA Graduates

Years	Percent of Graduates AA
0 to 2	36.08
3 or 4	31.64
5 or 6	13.93
7 or 8	7.12
9 or 10	3.89
Over 10	7.34

Source: 1996-97 Student Data Base  
Cohort limited to native graduates with complete data.

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# State Board of Community Colleges

# Fast Facts

FF-19

April 13, 1998

## We Are Not Producing Widgets Here

A recently released report from The National Center for Public Policy and Higher Education entitled *Taking Responsibility* illustrates the disagreement among the leaders of business, government and education on the issue of making education leaner:

Eighty-three percent of business executives believe that colleges and universities must become leaner and more efficient, just as business and government have done in recent years. Sixty-six percent of education leaders agree with that statement, but only 40 percent of faculty members thought that was a good idea. ("Differing Points of View," *National Crosstalk*, Vol. 7 No 1 Winter 1999, p 4.)

One of the business leaders was concerned that the unit cost of education has gone up, while the unit cost of almost everything else has gone down. However as a faculty member reminded the surveyer, "...it takes the same number of hours to perform a Mozart symphony today as it did when Mozart wrote that symphony. In the same way, it takes the same amount of hours to handle teacher-student contact as it always has." (*Ibid*, p 4)

Knowledge transfer, the business that education is in, is an extremely labor intensive business. Much of it is done one-on-one, informally in the home, or in small groups such as churches or civic organizations. While research has yet to determine the ideal, the value of small teacher/pupil ratios has been recognized for many years. Students learn best when they can receive individualized attention to address their needs. It is this aspect of learning that makes it extremely difficult to realize efficiencies in the same way as one would with an assembly line process. This is not to say that efficiencies should not or can not be achieved; merely to stress that they can not be done in the same manner as a "widget" factory.

Efficiencies in education increase the amount of learning taking place given the same amount of time. Appropriate strategies come from questions such as "How can we increase the amount of knowledge transferred? How can we present this material so that more students understand it the first time around? What do my students already know that can be used as a base for acquiring this additional knowledge?"

These questions are not easy to answer, nor can one expect exactly the same answer from two different groups. Finding the right answers takes time and time is money. The CCS takes its fiscal responsibilities very seriously. We also take our educational responsibilities very seriously. We hope that the public understands that there may sometimes be a conflict between the two, and if that happens our charge is to provide a quality education. This is the product the State and students are purchasing from our system. They have every right to expect to get what they pay for.

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## Community Colleges – Part of the Solution

The American Association of University Women (AAUW) Educational Foundation just released a report entitled *Gaining a Foothold: Women's Transitions Through Work and College*. This report compared quantitative and qualitative research on educational decisions, goals, obstacles, and opportunities for three different groups of women: those moving from high school to work, from high school to college, and from work back to postsecondary education.

Two-thirds of the individuals interviewed said they considered predictions about the economy and the future job market when deciding to go to college. Money matters affect men and women differently. More women than men cite credit card debt and lack of financial aid as obstacles to postsecondary education. More women feel that better information about financial aid would have made them more likely to go to college (51% versus 33%). Women attend college for both economic gain and self-fulfillment goals. They tend to place more emphasis on self-fulfillment than do men. More men believe they can “get a decent job” without a college degree than do women (24% of men, 14% of women).

The report again states that today's students are “more heterogeneous now-in the obstacles they face, the educational goals they have, their ages, social background, economic status, and level of preparedness.” This finding comes as no surprise to individuals connected with the Florida Community College System. The FCCS has been aware of these changing student characteristics for years. This awareness has been translated into accommodations for students and potential students are recognizing this. The report goes on to state:

Most students, including those in four-year colleges and universities, view community colleges positively. Roughly three-fourths of college-bound women agree that community colleges offer a good value financially, more flexibility for students who have children or work, additional academic assistance for those who need it, practical and technical training and provide quality instruction that is at least comparable to that of four-year colleges.

The message is clear. The sector of postsecondary education that will be chosen to serve tomorrow's students is the one that is aware of the obstacles faced by those students. The FCCS has this awareness and will continue to provide viable solutions.

Most of the information in this Fast Facts was extracted from the press release accompanying the publication of this study. Produced by the Office of Educational Services and Research, Division of Community Colleges, 325 West Gaines Street, Suite 1340, Tallahassee, FL 32399-0400. For additional information, contact Dr. Patricia Windham.

## Community College Physics

In 1998, the Education and Employment Statistics Division of the American Institute of Physics conducted a survey of physics courses in community colleges. Their report, entitled *Physics in the Two-Year Colleges*, contained the following highlights:

- Fifty-nine percent of the two-year college campuses in the United States offered physics courses in 1995-96.
- During the 1996-97 academic year, some 120,000 students took physics at a two-year college. This represented only 2% of all students enrolled.
- Women comprised 31% of the physics students compared to 58% of the student body. Minorities were similarly underrepresented at 15% of the physics students and 23% of the total student body.
- Most two-year college physics students were enrolled in the same type of introductory physics course that is taught in four-year institutions. Some 33% were enrolled in the algebra and trigonometry based course, while 28% were taking the calculus-based or other advanced version. Only 10% seemed to be taking courses that were specially designed for the academic backgrounds and career objectives of two-year college students.

Information contained in the 1997-98 Student Data Base indicates that the Florida Community College System was similar to this national pattern in many ways, but different in several important aspects.

- All 28 institutions offered at least one PHY course. These offerings included courses for non-scientists, courses without calculus for science majors or related majors, and advanced calculus-based courses.
- There were 8,383 students enrolled in these courses, or 3.2% of the AA and AS program enrollees in the CCS.
- Women comprised 38.9% of the physics students compared to 56.5% of the student body. Minorities were not underrepresented in the FCCS with 34.8% of the physics students falling into that broad category, compared to 33.1% of the student body.
- The most popular course was PHY2048 General Physics. This is a calculus-based physics course for students who plan to major in science or related fields.

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### Employment and Postsecondary Persistence and Attainment

The 1997 *Condition of Education*, published by the National Center of Education Statistics (NCES), includes information on the relationship between employment and postsecondary persistence and degree attainment. The information has been extracted from the 1990 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:90/94). The findings indicated:

- Five years after their initial enrollment in 1989-90, 89 percent of the students had worked at some time. The majority (75%) had worked part-time, but 15 percent had worked full-time.
- Students who first enrolled in public 4-year institutions were more likely to work less than 15 hours per week than were those who enrolled in public 2-year institutions. The NCES study showed that 5.4% of the students enrolled in public 4-year institutions did not work, 41.1% worked 1-14 hours, 46.7% worked 15-33 hours and the remaining 6.8% worked 34 or more hours per week. The corresponding percentages for public 2-year students are 9.8% not working, 22.2% working 1-14 hours, 46.2% working 15-33 and 21.8% working 34 or more. This is in keeping with other research that has shown that 4-year students tend to be working to support going to college, while 2-year students tend to go to college to improve their employment status.
- Regardless of the type of institution first attended, students who worked full time were less likely than students who worked part time to have attained a degree or still be enrolled five years after initial entry into postsecondary education. Overall, 31 percent of students who worked full time while enrolled attained a degree or were still enrolled compared to 79 percent of students who worked 1-15 hours per week and 65 percent of those who worked 15-33 hours per week.
- Students who work full time may need to adjust the intensity of their enrollment. Students who worked full time were more likely than students who worked part time to attend exclusively part time. At each type of institution, those who attended exclusively part time were less likely to persist and attain a degree 5 years after their initial entry into postsecondary education than their counterparts who attended sometimes or always full time.

The table displayed below shows the dramatic impact that working full time has on degree attainment and persistence in the 2-year institution. Students working full time were about half as likely to have completed or still be enrolled after five years as those working only part time. Thus, these students often find themselves in a “Catch-22” position – they need to work to have enough money to attend college, and that very work reduces their probability of finishing.

Average Hours Worked	Percent of Students	Percent Attaining a Degree or Still Enrolled
Did not work	9.8	43.1
Less than 15 hours	22.2	68.5
15 – 33	46.2	56.9
34 or more hours	21.8	26.1
Total	100.0	51.4

The State of Florida needs to ensure that there is sufficient financial aid available so that students who are trying to better themselves won’t be caught in this situation, and will be able to attend college in a manner that allows them to finish.

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## FAST FACTS

### Black Students and the Florida Community College System

FF-23

August 17, 1999

Much discussion and study has been devoted to the plight of the black male in higher education. The essence of this work has been to document the small gain in the number and percent of these students in higher education during the past several years. These gains take on even greater significance when compared to the much larger increases in the number and percent of black females (Digest of Education Statistics 1998, National Center for Education Statistics). The Division of Community Colleges was asked by one of the institutions in the FCCS to provide data on the number of black males enrolled in courses between 1993-94 and 1997-98. This information was also to include the number and types of awards earned during this period. The review of the enrollments of the past five years in the Florida Community College System (FCCS) reveals a different story from the national picture.

The number of black males attending the FCCS in 1993-94 was 41,184. By 1997-98, this number had increased to 43,007, or 4.4%. Black females increased from 67,024 to 71,285, or 6.4%. Black males appear to be increasing their enrollment faster in Florida than nation-wide, while black females appear to be increasing at a slower rate. Exact comparisons are not possible due to the time lag in obtaining comparable national data.

During this same period, the number of awards earned by black males increased from 1,256 to 2,059, or 64%. Black females increased their awards by 56% from 2,629 to 4,095. Although both genders have increased the percent of awards received that are AA and AS degrees, they continue to earn a higher portion of certificates relative to degrees than do FCCS students in general.

Based upon these data, black students in general and black males in particular appear to be increasing both enrollments and the number of degrees earned at a faster rate in the FCCS than in the nation as a whole.

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## FAST FACTS

### Income Trends and the Impact of an Associate Degree

FF-24

August 25, 1999

A December 16, 1997 report by the Center on Budget and Policy Priorities provides information on income trends in each of the fifty states. Their report for Florida states:

Inequality has been increasing in Florida for nearly two decades. This can be observed by ranking all Florida families with children according to their income level, dividing them into five groups (or fifths) of equal size, and calculating the average income of each fifth of families. This analysis shows by the mid-1990s:

- The richest 20 percent of families with children had average incomes 14 times as large as the poorest 20 percent of families.
- The richest 20 percent of families with children had average incomes 3 times as large as the middle 20 percent of families.

#### The Long-Term Trend

Since the late 1970s, income inequality has increased in Florida. The long-term economic growth of the past two decades was not shared evenly among the poor, the rich, and the middle class. Instead, the top fifth of families with children fared substantially better than other income groups.

The gap between the top fifth of families and the bottom fifth of families grew by 63 percent since the 1970s. The gap between the rich and the poor increased faster than in all but 16 states. The gap between the rich and the middle class increased faster than in all but 19 states.

- The average income of the poorest fifth of families fell by \$1,780 between the late 1970s and the mid-1990s, from \$9,480 to \$7,710.
- The average income of the middle fifth of families increased by \$1,590 between the late 1970s and the mid-1990s, from \$34,400 to \$36,000.

- The average income of the richest fifth of families increased by \$26,570 between the late 1970s and the mid-1990s, from \$81,240 to \$107,810.

### The Recent Trend

Over the past decade, income inequality has worsened in Florida. The average income of the richest fifth of families increased while the incomes of poor and middle class families declined. The gap between the top fifth of families and the bottom fifth of families increased between the mid-1980s and the mid-1990s, faster than in all but 6 states, while the gap between the rich and the middle class increased at a slower rate.

- The average income of the poorest fifth of families declined by about \$2,290 between the mid-1980s and the mid-1990s, from \$10,000 to \$7,710.
- The average income of the middle fifth of families declined by \$890 between the mid-1980s and the mid-1990s, from \$36,880 to \$35,990.(1)
- The average income of the richest fifth of families increased by \$5,630 between the mid-1980s and the mid-1990s, from \$102,180 to \$107,810.

Follow-up information provided by the Florida Education and Training Placement Information Program (FETPIP) on the Fall 1997 earnings for 1996-97 graduates indicates that the average earnings for persons holding any of the certificates or associate degrees granted by the Florida Community College System (FCCS) would place them in at least the second fifth of families. The FCCS average fourth quarter earnings ranged from \$6,013 for AA graduates to \$7,739 for AS graduates. Multiplying these quarterly earnings by four yields approximate annual salaries of \$24, 052 for AA graduates and \$30,956 for AS. This would place the typical graduate at the upper end of the second fifth of families, and many individual graduates would be in the middle fifth. AA graduates have consistently averaged less immediately following graduation than certificate or AS graduates because a large portion continues their education and do not start full-time work until later. Thus, the FCCS is providing individuals not only a better way of life for themselves, but also for their families.

### End Notes

1. The direction of this change was not statistically significant at the 95 percent level of confidence.

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# FAST FACTS

## Literacy: Helping Families Now and In the Future

FF-25

September 8, 1999

The National Institute for Literacy (NIFL) has developed several Fact Sheets on the impact of literacy on the national economy and on families. The National Literacy Act defines literacy as "an individual's ability to read, write, and speak in English, compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one's goals, and develop one's knowledge and potential." The NIFL's information on the scope of the problem nationally states, "More than 20 percent of adults read at or below a fifth-grade level – far below the level needed to earn a living wage. The National Adult Literacy Survey found that over 40 million Americans age 16 and older have significant literacy needs."

A major impact of illiteracy is in the workplace. NIFL states:

- American businesses are estimated to lose over \$60 billion in productivity each year due to employees' lack of basic skills.
- About 20 percent of America's workers have low basic skills, and 75 percent of unemployed adults have reading or writing difficulties.
- Workers who lack a high school diploma earn a mean monthly income of \$452, compared to \$1,829 for those with a bachelor's degree.
- The number of companies reporting skilled worker shortages more than doubled between 1995 and 1998, from 27 percent to over 47 percent.
- A survey of more than 300 executives found that, while 71 percent reported that basic written communication training was critical to meeting their workplaces' changing skills demands, only 26 percent of companies offered this kind of training. While 47 percent of the executives reported the need for workers to improve basic math skills, only 5 percent of companies offered basic math skills training.

The second major impact is upon families. Again, NIFL states:

- Children's literacy levels are strongly linked to the educational level of their parents, especially their mothers.



- Parental income and marital status are both important predictors of success in school, but neither is as significant as having a mother (or primary caregiver) who completed high school.
- Children of parents who are unemployed and have not completed high school are five times more likely to drop out than children of employed parents.

The Florida Community College System (FCCS) is in a position to help correct these negative aspects of the lack of literacy. With the passage of SB1688, all twenty-eight institutions became eligible to offer adult basic and adult secondary courses. During 1997-98, over 38,000 students were served by fifteen FCCS colleges offering adult high schools, adult basic and GED programs. In 1998-99, these fifteen colleges reported 15,684 FTE in these areas. This instruction will help both today's workforce and families, and those of the future.

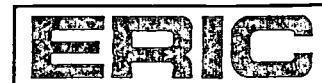
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