Fostering Collaborative State-Level Education and Workforce Database Development

Tapping into the Potential
Florida’s Integrated, Longitudinal PK20 Education Data Systems

**The “System”**

- Public pre-kindergarten through graduate school with student level data for public schools, community colleges, career and technical education, adult education, and the state university system
- Staff, facilities, finance, and financial aid
- Post school employment and non education system program data
- Primary means of support is state general revenue

**Dependencies**

- State level imperatives, funding
- System of common course numbers and directories
- Statewide articulation agreements and oversight committee
- A state level culture of data management and interagency sharing
- A means to follow the records of individual students across geographic areas, education sectors, and related programmatic areas.
- 67 School Districts, 28 community colleges, 11 state universities
- Very open public records laws
The PK-20 Pipeline Model

Credential Outputs
Major Pipeline Outputs

- Doctoral Degrees
- Professional Degrees
- Master's Degrees
- Bachelor's Degrees
- Associate Degrees
- One-year PS Cert.
- HS Diplomas

Students Exiting/Entering
Additional Pipeline Inputs

"Traditional Students" 18-24 Age Group

Part time traditional students, stop in/stop outs, students entering from out of state, students >24 years old.
Cooperating Agencies

Federal Agencies:
• Postal Service
• Dept. of Defense
• Office of Personnel Management
• U.S. Census

State Agencies:
• Education
• Workforce Innovation
• Children & Families
• Business & Professional Regulation
• Corrections

Other Organizations:
• National Student Clearinghouse
Integrated, Longitudinal Education Data Have Many Uses

- **Administration**
  - Funding distribution and Equity
  - Performance funding
  - Access Planning
  - Class Size Planning
- **Data Marts/Reports**
  - Program Effectiveness – PK20
  - Teacher Preparation, Employment Characteristics & Performance
  - PK20 Pipeline/Alignment
  - High School Feedback
  - Community College Feedback
- **Research**
  - Teacher Preparation and Development Best Practices
  - CHOICE Option Evaluations
  - Return on Investment
  - Evaluating Key Transitions for all Students
Integrated, Longitudinal Education Data Have Many Uses - continued

- **Research Partnerships**
  - CALDER
  - State University System
  - Foundations
  - Community College Research Center

- **Classroom Uses**
  - FACTS.Org, CHOICES
  - Contextual Information
  - Early Warning Systems
  - Transcript Exchanges, K20
  - Collaboration

- **Education-Related Uses**
  - Chafee Act, Foster Children
  - Welfare Dependency
  - Related Programs (Prison Education, Workforce Investment Act)
  - Economic Development
How do Florida Students Leave Public High Schools?
1995-96

Source: PK-20 Education Data Warehouse
How do Florida Students Leave Public High Schools? 2007-08

- Standard High School Diplomas: 139,368
- Special Diplomas: 6,209
- Certificate of Completion: 9,360
- GED: 2,970
- Dropouts (Grades 9 - 12): 24,121

Source: PK-20 Education Data Warehouse
### What Happens After They Graduated? - Standard Diplomas to Postsecondary

#### 1995-96
- **89,461 Diploma Recipients**

#### The 1996-97 Academic Year*

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Recipients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>PK-12 Vocational Programs</td>
<td>4,735</td>
<td>9%</td>
</tr>
<tr>
<td>Community Colleges</td>
<td>34,343</td>
<td>62%</td>
</tr>
<tr>
<td>State University System</td>
<td>14,518</td>
<td>26%</td>
</tr>
<tr>
<td>Independent Universities</td>
<td>2,608</td>
<td>5%</td>
</tr>
<tr>
<td>Outta State</td>
<td>2,805</td>
<td>5%</td>
</tr>
</tbody>
</table>

*54,858 Unduplicated Students – 61%

Source: PK-20 Education Data Warehouse
What Happens After They Graduated? - Standard Diplomas to the Florida Labor Force

<table>
<thead>
<tr>
<th>1995-96</th>
<th>October- December, 1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>89,461 Diploma Recipients</td>
<td>Employed 45,763 (51%)</td>
</tr>
<tr>
<td>53% of Postsecondary Enrollments also working</td>
<td>* Employed Full Time 40% of employed</td>
</tr>
<tr>
<td></td>
<td>*Av. Earnings Full Time $17,336</td>
</tr>
<tr>
<td></td>
<td>Military Enlistment 1,408</td>
</tr>
<tr>
<td></td>
<td>Public Assistance (TANF &amp;/or Food Stamps) 5,518</td>
</tr>
</tbody>
</table>

Source: PK-20 Education Data Warehouse
Florida 1995-96 High School Graduates
Highest Educational Credential Attainment as of 2007

- Standard Diploma: 66%
- BA: 18%
- AA: 8%
- Post BA: 4%
- Col Credit Voc: 2%
- VOC: 2%
- 89,461 Standard Diplomas
(15,478 – 17% Never Enrolled in Florida – 6.48% out of State)

Source: PK20 Education Data Warehouse
'96 HS SHD Recipients who Passed Algebra II Before Graduating

89,461 Standard Diplomas
49,810 Took and Passed Alg. II

BA Plus 6%  
BA 27%  
AA 10%  
Col Credit Voc 2%  
Voc 2%

Standard Diploma 53%

Source: PK20 Education Data Warehouse
'96 SHD Recipients who Completed at least One Advanced Placement Course Before Graduating

89,461 Standard Diplomas
18,835 Completed at least one Advanced Placement course.
(6,772 – 35% Did not attempt postsecondary in Florida)

Source: PK20 Education Data Warehouse
1995-96 Florida Public High School Exiters: "Others"
Highest Credential Attainment as of 2007

- **HS GEDs**: 93%
  - Total 1,587
  - 29% Never Enrolled

- **All GEDs**: 94%
  - Total 28,987
  - 28% Never Enrolled

- **Cert Cmpltn**: 94%
  - Total 1,505
  - 32% Never Enrolled

- **Spc Dip**: 99%
  - Total 2,329
  - 55% Never Enrolled

- **Dropouts**: 75%
  - Total 31,749
  - 43% Never Enrolled

Source: Florida K-20 Education Data Warehouse
Student Outcomes in 2006-07

Source: Florida Education and Training Placement Information Program (FETPIP)
Florida Public High School Class of 1996
Annualized Earnings Based on Highest Education Credential
Attained Through 2007

Source: Florida Education and Training Placement Information Program (FETPIP)
### Unemployment Rate
(Percent)

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctoral degree</td>
<td>1.4</td>
</tr>
<tr>
<td>Professional degree</td>
<td>1.1</td>
</tr>
<tr>
<td>Master's degree</td>
<td>1.7</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>2.3</td>
</tr>
<tr>
<td>Associate degree</td>
<td>3.0</td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>3.9</td>
</tr>
<tr>
<td>High-school, graduate</td>
<td>6.8</td>
</tr>
<tr>
<td>Some high-school, no diploma</td>
<td></td>
</tr>
</tbody>
</table>

### Median Earnings
(Dollars)

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>Median Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctoral degree</td>
<td>$74,932</td>
</tr>
<tr>
<td>Professional degree</td>
<td>$76,648</td>
</tr>
<tr>
<td>Master's degree</td>
<td>$58,708</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>$50,024</td>
</tr>
<tr>
<td>Associate degree</td>
<td>$37,492</td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>$35,048</td>
</tr>
<tr>
<td>High-school, graduate</td>
<td>$30,940</td>
</tr>
<tr>
<td>Some high-school, no diploma</td>
<td>$21,788</td>
</tr>
</tbody>
</table>

**Notes:** Unemployment and earnings for workers 25 and older, by educational attainment; earnings for full-time wage and salary workers.

**Sources:** Unemployment rate, 2006 annual average: Bureau of Labor Statistics; 2006 Weekly Median Earnings (multiplied by 52 weeks), Bureau of the Census.
100 Fastest Growing Occupations to 2016 by Minimum Educational Requirements

- High School or Less: 10
- Vocational Certificate: 39
- College Credit/Associates: 27
- Bachelors: 15
- Bachelors Plus: 9

Includes occupations with at least 4,000 jobs in 2008; Occupations growing at 2% per year or greater.

Source: Florida Agency for Workforce Innovation
Placement Data for SUS Bachelor’s Degrees

Employment placement data can be used to identify bachelor’s degree disciplines where a substantial number of graduates are placed in Florida jobs plus additional details such as quarterly earnings. In the example below, disciplines were sorted first by placement rate, then by earnings.

<table>
<thead>
<tr>
<th>DISCIPLINE</th>
<th>Total N</th>
<th>EMP</th>
<th>% EMP</th>
<th>EARNINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUCATION</td>
<td>5135</td>
<td>4035</td>
<td>79%</td>
<td>$8,661</td>
</tr>
<tr>
<td>ENGINEERING TECHNOLOGY</td>
<td>439</td>
<td>326</td>
<td>74%</td>
<td>$12,944</td>
</tr>
<tr>
<td>PUBLIC ADMINISTRATION AND SERVICE</td>
<td>996</td>
<td>718</td>
<td>72%</td>
<td>$9,156</td>
</tr>
<tr>
<td>BUSINESS AND MANAGEMENT</td>
<td>15009</td>
<td>9703</td>
<td>65%</td>
<td>$9,556</td>
</tr>
<tr>
<td>COMPUTER &amp; INFORMATION SCIENCES</td>
<td>1056</td>
<td>682</td>
<td>65%</td>
<td>$11,105</td>
</tr>
<tr>
<td>HEALTH PROFESSIONS &amp; RELATED SCIENCE</td>
<td>5166</td>
<td>3330</td>
<td>64%</td>
<td>$10,910</td>
</tr>
<tr>
<td>LIBERAL/GENERAL STUDIES</td>
<td>1790</td>
<td>1106</td>
<td>62%</td>
<td>$7,870</td>
</tr>
<tr>
<td>PSYCHOLOGY</td>
<td>4256</td>
<td>2617</td>
<td>61%</td>
<td>$6,108</td>
</tr>
<tr>
<td>ENGLISH</td>
<td>2126</td>
<td>1300</td>
<td>61%</td>
<td>$6,642</td>
</tr>
<tr>
<td>MASS COMMUNICATION</td>
<td>3302</td>
<td>2018</td>
<td>61%</td>
<td>$6,667</td>
</tr>
<tr>
<td>PROTECTIVE SERVICES</td>
<td>2260</td>
<td>1356</td>
<td>60%</td>
<td>$7,891</td>
</tr>
</tbody>
</table>

Note: These data are for 2006-07 graduates based on Florida employment in the late fall of 2007.

Source: FETPIP
Workforce’s Need for Education Data

• Workforce Investment Act, Common Core Measures and the ETA’s National Youth Initiative

• The Direct and Unavoidable Correlation between Education and Workforce Success

• Automated Follow-up as a Solution to Staffing Issues
Education Users of Data

- Local School Districts - High School & Vocational Centers
- Community Colleges – Academic & Technical
- Public University System & ICUF Universities
- Commission for Independent Education & Other programs- Drop out prevention, students with disabilities, Adult Migrant Education, Apprenticeships, Blind Services
- Special Projects & Longitudinal Studies
Key Sources of Strategies and Direction

- Enterprise Florida, Inc.
  - Industry Sectors
  - Roadmap to Florida’s Future
- Council of 100, 2006 Report
- Chamber of Commerce Cornerstone Report
- Workforce Florida, Inc., Targeted Industries, Statewide and Regional
- Florida High-Tech Corridor
- Agency for Workforce Innovation
- Florida Hospital Association and Department of Health
- State Board of Education, Critical Teachers
- Florida Board of Governors
General Areas of Emphasis

- **Business & Global Economics**
  - Financial Services
  - Professional Services
  - Hospitality
- **Sciences**
  - Life Sciences
  - Biotechnology Mfg.
  - Scientific & Technical Services
- **Medical Services**
  - Healthcare
  - Social Services
- **Education**
- **Technology**
  - Research and Development
  - Emerging Technologies
- **Sustainable Development**
  - Energy
  - Environment
- **Information Technology**
- **Disaster Management**
  - Homeland Security
  - Hurricane Preparedness
- **Engineering**
  - Aerospace/Aviation
  - Manufacturing
  - Construction
- **Arts/Communication/Interactive Entertainment**
Concluding Remarks

1. The linkage between employment opportunity, economic prosperity, and the educational system—particularly postsecondary education—is critical to the nation’s future.

2. There are sources of data that can and should be used to inform decisions about the types of degrees to be offered that are based on historical trends, tempered by recent events. Consider:
   • occupational projections by states departments of Labor.
   • occupational needs analysis conducted by state organizations.
   • placement data indicating which disciplines provide educated workers to which industries.
   • regional, as well as state level information from employers and organizations that represent them.

3. Sources need be considered that look beyond the “status quo” and relatively short term needs of the existing economy toward a new, more competitive economy.
Questions?
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