



*Inspect What You Expect: Information on
Results as an Element of Policy Reform*

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Management Systems (NCHEMS)

CC Bridges Winter Meeting 2005

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Overall Premises of the Bridges Project

- More Underserved Individuals (Low Income, Minority, etc.) Enter Post-secondary Study [*Access*]

- More of Those Entering in fact Earn a Credential [*Progress/Completion*]

- They Earn a Credential of Value [*Outcomes*]

- Success Requires Information and Associated Policies in *All Three Areas* at State and Campus Levels





The Special Case of “Outcomes”

Accountability Demands are Behind Much of the “Press to Assess,” but Information About Outcomes is Needed for More than Just Accountability...

- Requirement to Identify and Target Performance Gaps (by Skill Area, by Population, by Region, etc.)
- Growing Interest in Establishing Common Skills Standards for Key “Transition Points” (e.g. to Postsecondary Work, Transfer/Articulation, etc.)





Access: What Information is Needed?

- Educational Attainment and Attendance Levels by Income, Race/Ethnicity, Age Group, Region, etc.
- Ditto for the Pool of High School Graduates and GED Recipients
- High School Preparation Levels (NAEP, Core Curriculum, Teacher Quality, etc.)
- Affordability/Cost of Attendance for Low Income Families





Progress: What Information is Needed?

- Persistence and Completion Rates
- Placement in, Successful Completion of, and Effectiveness of Developmental Skills Coursework
- Enrollment in and Successful Completion of Key Courses and Curricular Sequences
- Key Collegiate Experiences





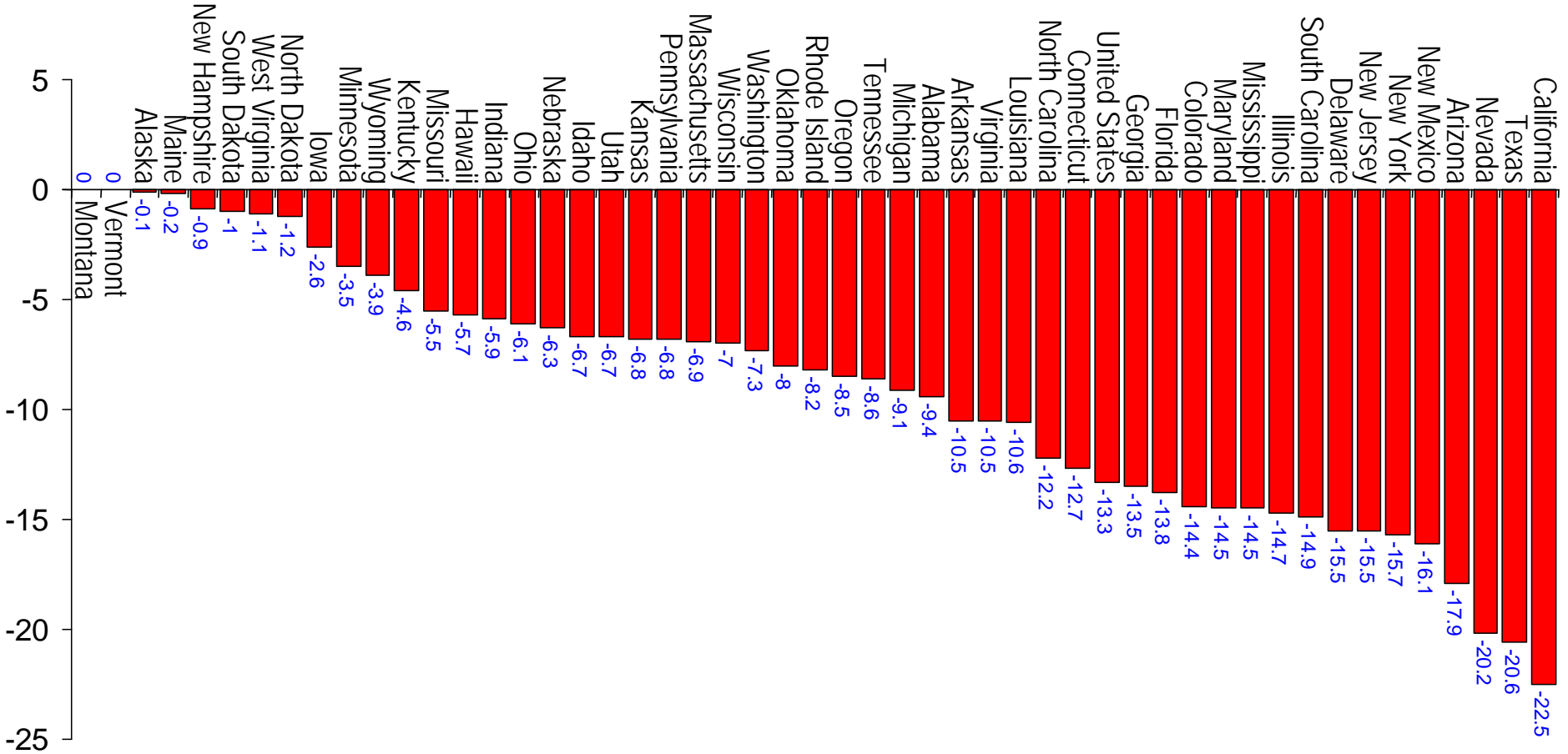
Retention and Completion: Specifics

- Differences by Income, Race/Ethnicity, Age, Region, Academic Challenge, High School, etc. [Cross-Sectional Ratios, Longitudinal Cohorts]
- *Timing* of Withdrawal, Completion, Change in Status
- Correlates of Progression and Completion for Different Student Subpopulations [There are “Multiple Student Bodies” at any Community College...]





Change in the Representation of African-Americans and Hispanics from High School to College Completion, 2000

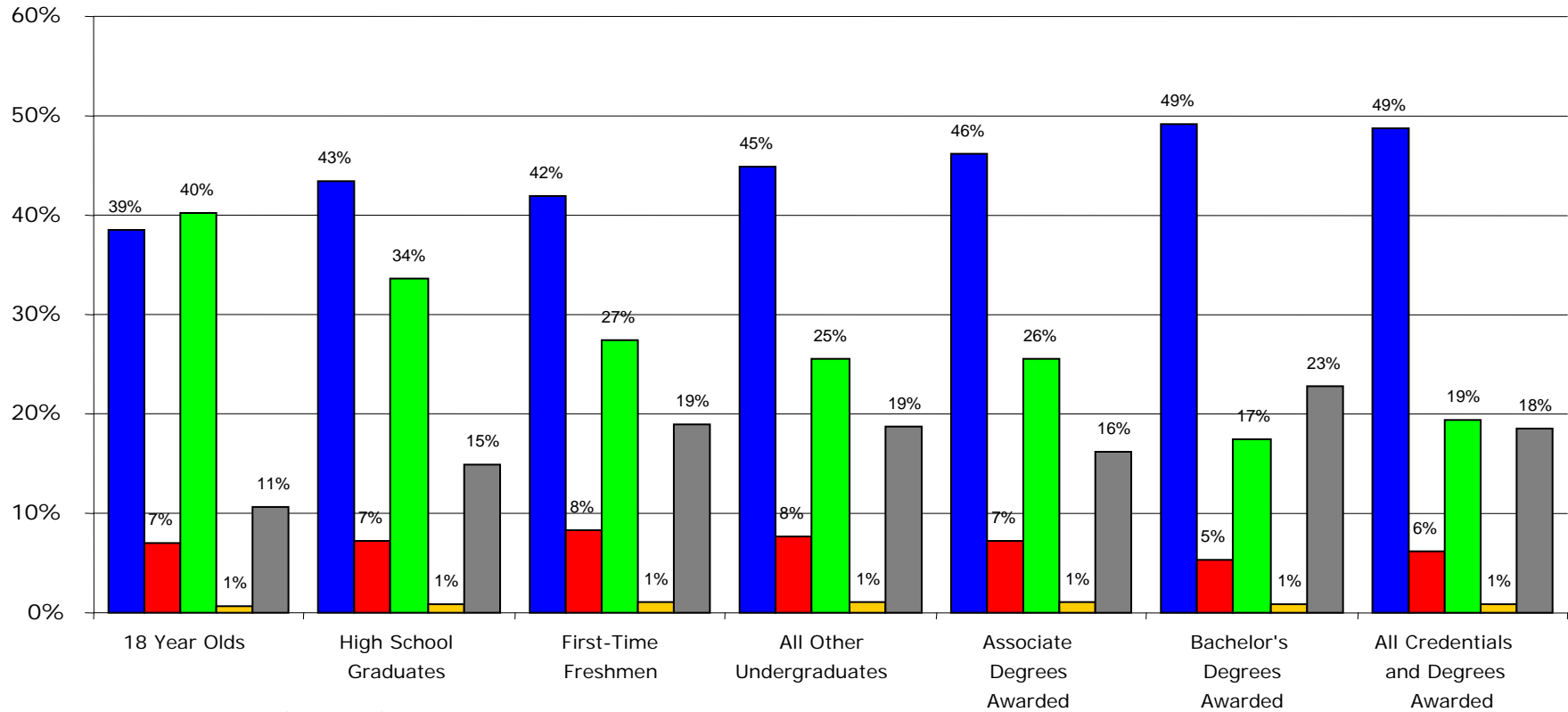


Source: U.S. Census Bureau, NCES-CCD, NCES-IPEDS Fall Enrollment and Completion Surveys



Representation (%) of Race/Ethnic Groups in California at Each Stage of the Education Pipeline (2002)

■ White
 ■ African-American
 ■ Hispanic/Latino
 ■ Native American/AK Native
 ■ Asian/Pacific Islander



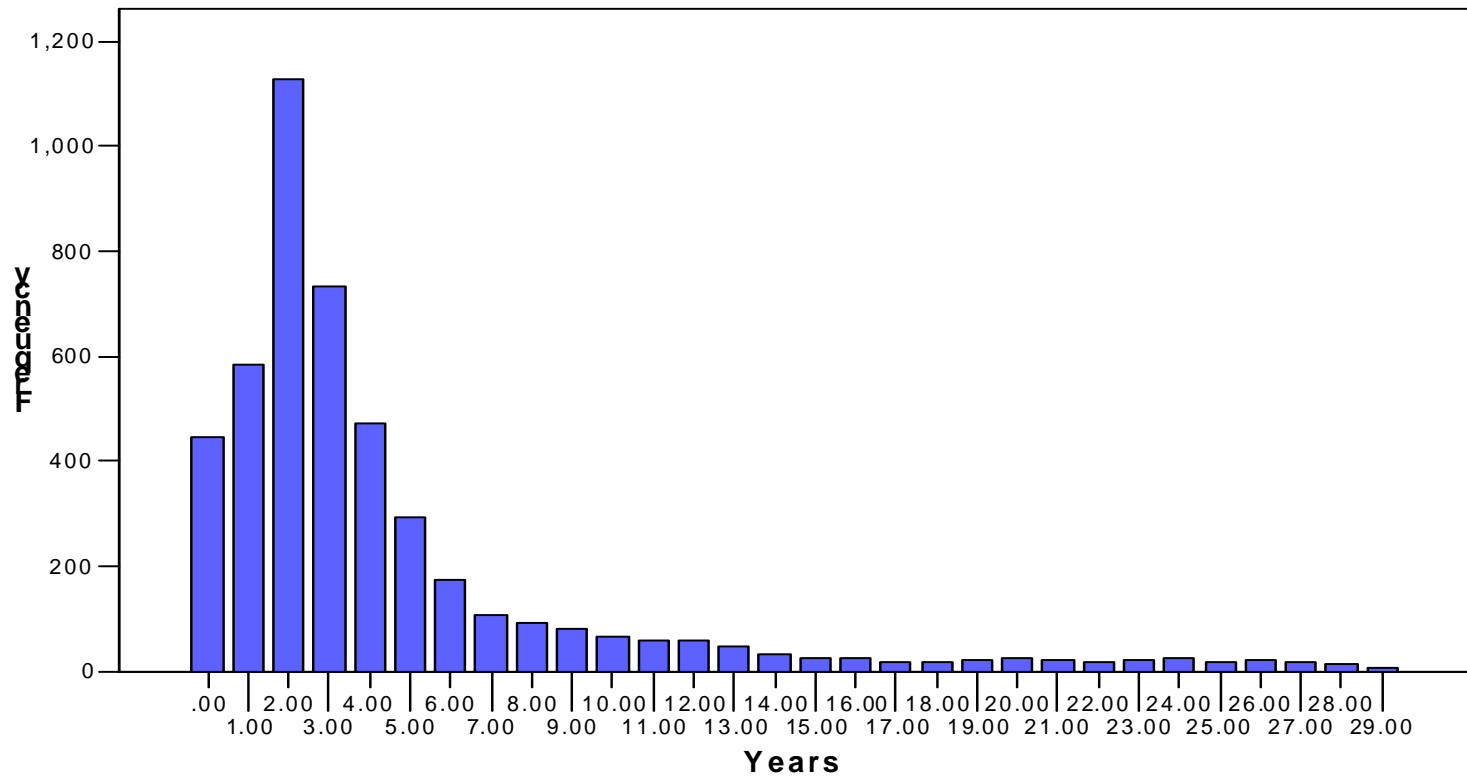
Sources: US Census Bureau (18 Year Olds), Western Interstate Commission for Higher Education (HS Graduates), and the National Center for Education Statistics (College Participation and Completion)



District Example: How Long are Students Enrolled?

[USC TRUCCS LACC Project]

Number of Years in the Los Angeles Community College District

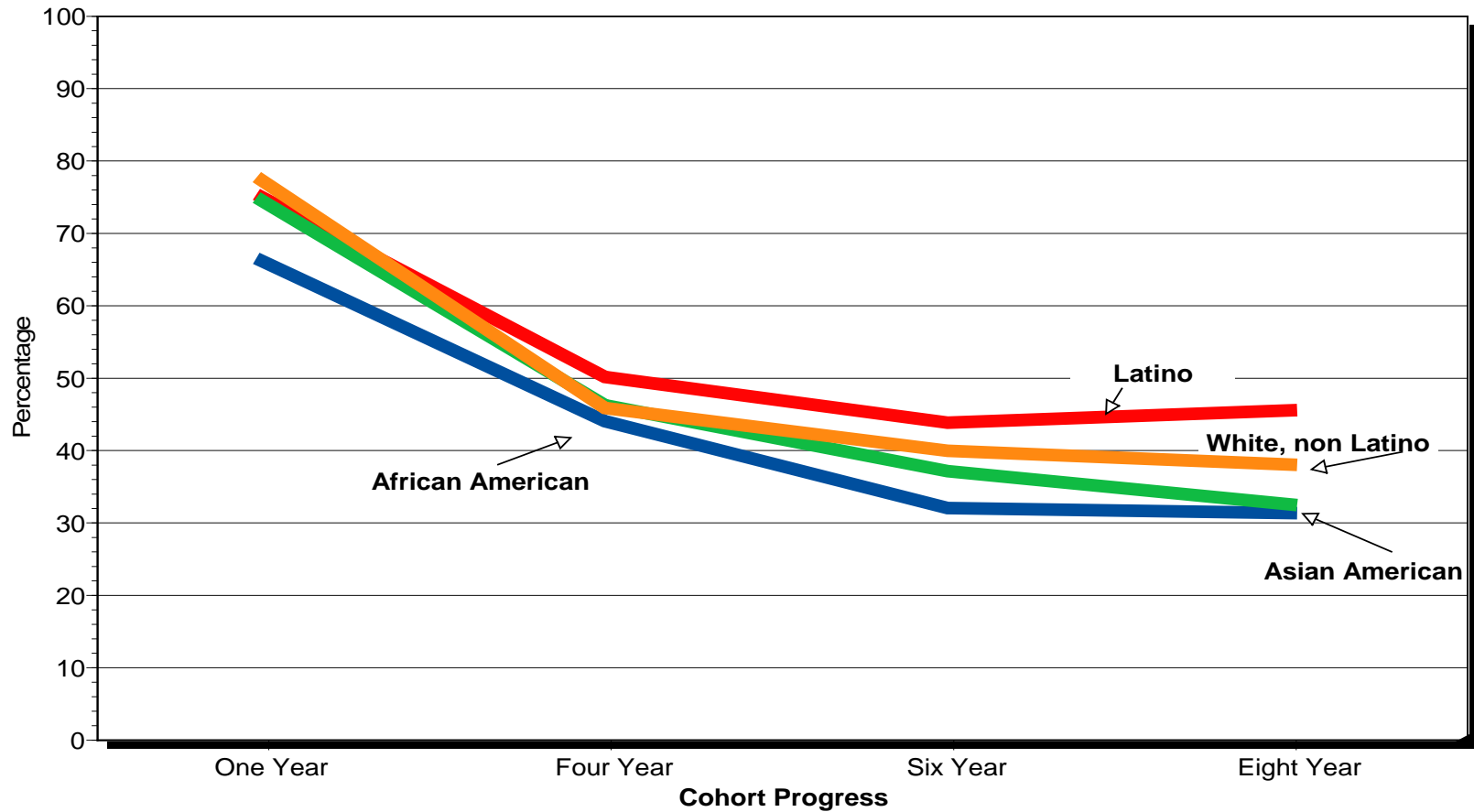




Institutional Example: Long-Term Persistence

[USC Diversity Scorecard Project]

Fall 1993 First-Time Freshman Tracking Rates by Time Interval and Ethnicity





Developmental Coursework: Specifics

- Differences in Placement Levels for Different Basic Skills by Income, Race/Ethnicity, Age, Region, Academic Challenge, High School, etc.
- Ditto for Participation in Developmental Work and Timing of Participation
- Consequences of Performance (or Non-Participation) for Progression and Later Coursework (e.g. Math Placement vs. Participation vs. Later Math/Quantitative Course Performance)



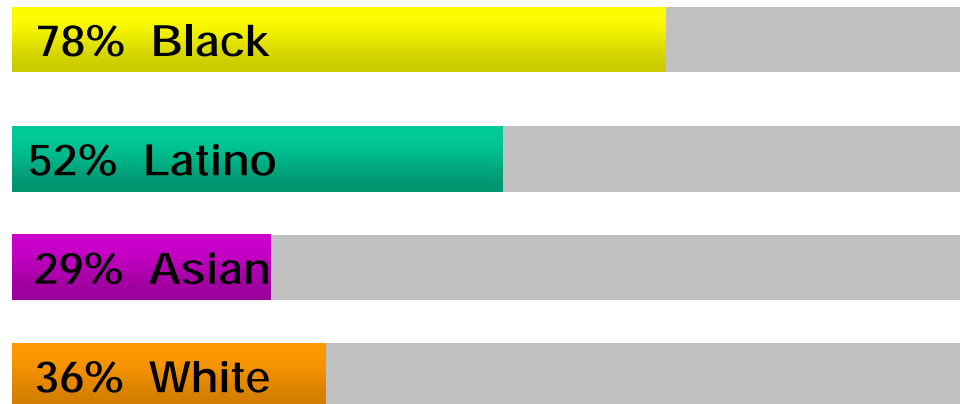


Institutional Example: Participation in Remediation
[USC “Diversity Scorecard” Project]

Institution
Example

Math Remediation

41% All Incoming Students Fall 2000





State Example: Common Placement Test Results

[Florida K-20 Information Office]

State Summary by Ethnicity and Gender

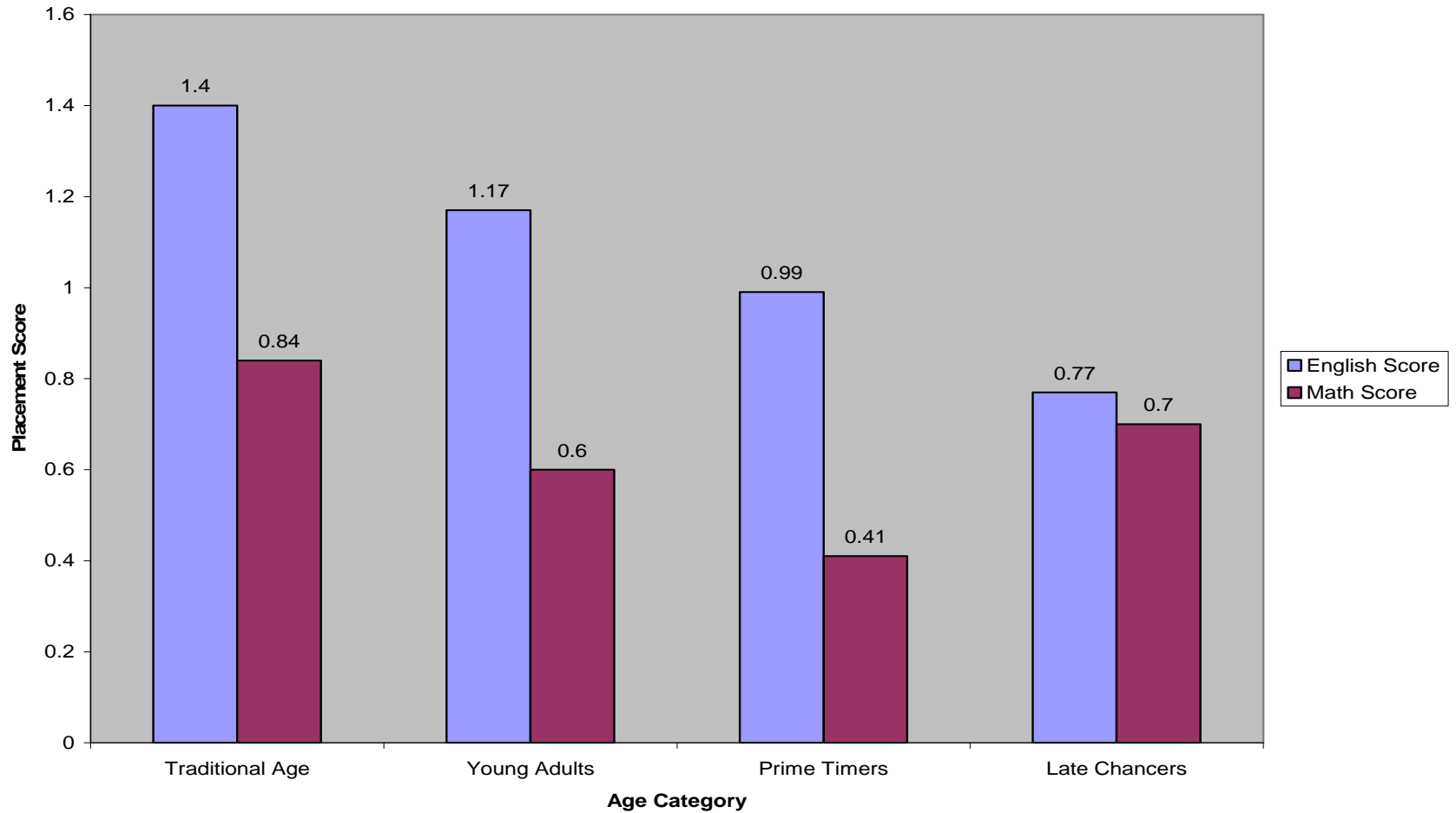
Graduation Year	Gender	Number of Degree Seeking Students	Number Tested in Math	Number Scoring Above Cutoff Score in Math	Percent Scoring Above Cutoff Score in Math	Number Tested in Reading	Number Scoring Above Cutoff Score in Reading	Percent Scoring Above Cutoff Score in Reading	Number Tested in Writing	Number Scoring Above Cutoff Score in Writing	Percent Scoring Above Cutoff Score in Writing	Number Tested in all Three Subjects	Number Scoring Above Cutoff Score in All Three Subjects	Percent Scoring Above Cutoff Score in All Three Subjects
State Totals														
2002		62,015	60,357	39,210	65%	60,247	43,882	72.8%	59,868	47,876	80%	59,451	34,569	58.1%
BLACK, NOT OF HISPANIC ORIGIN														
2002	FEMALE	6,750	6,545	2,740	41.9%	6,568	3,378	51.4%	6,535	4,170	63.8%	6,493	2,217	34.1%
	MALE	3,906	3,747	1,686	45%	3,760	1,823	48.5%	3,744	2,140	57.2%	3,710	1,240	33.4%
	TOTAL	10,656	10,292	4,426	43%	10,328	5,201	50.4%	10,279	6,310	61.4%	10,203	3,457	33.9%
WHITE, NOT OF HISPANIC ORIGIN														
2002	FEMALE	20,922	20,486	14,502	70.8%	20,435	16,513	80.8%	20,305	17,838	87.9%	20,169	13,388	66.4%
	MALE	15,624	15,240	11,376	74.6%	15,193	12,518	82.4%	15,090	12,982	86%	15,004	10,347	69%
	TOTAL	36,546	35,726	25,878	72.4%	35,628	29,031	81.5%	35,395	30,820	87.1%	35,173	23,735	67.5%





District Example: Placement Scores by Age Group

[USC TRUCCS Study of LACC District]





Key Courses: Specifics

- What are Key Courses? (“High Enrollment,” “Gatekeeper,” “Bottleneck”)
- Differences in Participation, Timing, Success in Key Courses by Population Group
- Consequences for Progression and Later Related-Field Course Enrollments and Performance
- Are Pre-Requisites Followed? What Happens When They’re Not?





Institutional Example: Key Course Completion

[USC “Diversity Scorecard” Project]

Access

Gateway Courses	Pass Rates by Ethnicity				Av. Pass Rate
	White	AF-AM	Latino	Asian	
ACCT 2A	67.7%	60.4%	58.5%	69.9%	65.2%
ACCT 2B	76.4%	64.4%	66.0%	70.9%	70.0%
ACCT 3	78.2%	52.9%	60.7%	70.1%	67.8%
AN 260	81.6%	59.7%	63.5%	85.0%	71.4%
CS 283	70.2%	56.3%	67.1%	74.1%	71.5%
ECON 2A	64.0%	47.1%	52.6%	65.3%	58.8%
ECON 2B	65.9%	50.0%	54.8%	64.6%	61.0%
ECON 3A	72.5%	53.5%	55.3%	67.5%	63.0%
ECON 3B	76.8%	67.0%	56.1%	71.8%	68.4%
ECON 3C	62.9%	56.4%	48.4%	70.0%	65.4%
FIN 1A	74.2%	68.4%	67.6%	66.3%	67.7%
FIN 1B	71.1%	44.1%	52.7%	67.5%	62.3%
GEOG 100	85.1%	53.8%	68.4%	83.6%	72.1%
HIST 2A	76.8%	59.2%	70.1%	75.3%	71.1%
HIST 2B	81.2%	58.6%	67.0%	74.9%	70.2%
MATH 081	72.1%	62.4%	74.5%	90.0%	73.4%
MATH 082	82.4%	59.2%	74.9%	87.3%	74.8%
MATH 083	73.3%	70.4%	71.0%	77.3%	71.3%
MATH 090	68.8%	38.5%	59.5%	71.8%	57.8%
MATH 091	55.2%	45.1%	53.8%	66.7%	54.9%
MATH 100	75.5%	61.4%	61.5%	74.9%	64.9%
MATH 102	62.0%	43.0%	49.7%	65.9%	55.1%
MATH 103	62.1%	43.0%	46.9%	66.7%	52.7%
MATH 206	63.6%	57.1%	47.1%	62.5%	55.3%
MATH 207	46.8%	41.5%	46.0%	54.6%	50.4%
MATH 242	48.6%	34.8%	44.9%	55.6%	50.5%
POL SCI 150	86.2%	65.8%	65.8%	75.5%	70.6%

Diversity Scorecard Project
USC



District Example: Progression in Math

[USC TRUCCS LACC Project]

Start with Math 0 (Remedial)

Age Step	Total N	Attempt Math 0	Passed Math 0	Attempt Math1	Passed Math 1	Attempt Math 2	Passed Math2	Attempt Math 3	Passed Math3
Traditional	2978	1070	774 (72.3%)	676 (63.2%)	425 (39.1%)	349 (32.6%)	232 (21.7%)	206 (19.3%)	144 (13.5%)
Young Adults	915	365	301 (82.5%)	231 (63.3%)	184 (50.4%)	121 (33.2%)	101 (27.7%)	72 (19.7%)	62 (17.0%)
Prime Timers	546	236	196 (83.1%)	125 (53.0%)	140 (59.3%)	45 (19.1%)	32 (13.6%)	24 (10.2%)	15 (6.4%)
Last Chancers	108	42	36 (85.7%)	21 (50%)	16 (61.9%)	12 (28.6%)	5 (11.9%)	4 (9.5%)	1 (2.4%)

Start with Math 1 (Basic)

Age Step	Attempt Math 1	Pass Math 1	Attempt Math 2	Pass Math 2	Attempt Math 3	Pass Math 3
Traditional	579	390 (67.4%)	277 (47.8%)	190 (32.8%)	159 (27.5%)	110 (19.0%)
Young Adults	219	175 (79.9%)	104 (47.5%)	87 (39.7%)	59 (26.9%)	51 (23.3%)
Prime Timers	121	93 (76.9%)	34 (28.1%)	26 (21.5%)	17 (14.0%)	12 (9.9%)
Last Chancers	21	16 (76.2%)	10 (47.6%)	4 (19.0%)	4 (19.0%)	1 (4.8%)





District Example: Completion of Transfer Curriculum
[USC TRUCCS LACC Project]

	Traditional Age	Young Adults	Prime Timers	Last Chancers
No Steps	870 (37.8%)	258 (44.9%)	149 (56.4%)	17 (56.7%)
1 Step	669 (29.1%)	163 (28.3%)	65 (24.6%)	8 (26.7%)
2 Steps	416 (18.1%)	93 (16.2%)	24 (9.1%)	5 (16.7%)
3 Steps	248 (10.8%)	48 (8.3%)	22 (8.3%)	0 (0%)
Transfer Ready	99 (4.3%)	13 (2.3%)	4 (1.5%)	0 (0%)



Collegiate Experience: Specifics

- Experience of “Good Practices” in Teaching and Learning (e.g CCSSE) by Population Group
- Enrollment in “High Payoff” or “High Value” Programs of Study by Population Group
- Access to, Participation in Student Support Services by Population Group
- Consequences for Progression and Completion of Participation in Student Support Service





Improving Progress: Policy Options

- Placement Assessments Linked to High School Exit Standards and to Correlates of College Success
- Directed or Mandatory Placement Policies
- Commonly-Defined Outcomes for Key Courses
- Learning Communities or Similar 1st-Year Transition Approaches
- Institutional Incentives to Graduate High-Risk Students





Outcomes: What Information is Needed?

- Placement into [and Success in] Further Education
- Placement into [and Success in] Employment
- What Completers Know and Can Do [Especially with respect to recognized “Educational Capital” Abilities]





Further Education: Specifics

- Transfer Rates and Participation in Further Education by Population Group
- Transfer Destinations by Population Group (e.g. Which Institutions? Which Programs?)
- Conditions of Transfer and their Consequences (e.g. Timing, How Many Credits?)
- Success at Transfer Institutions by Population Group (e.g. GPA, Completion, Program of Study)





State Example: Transfer GPA Comparisons

[Florida K-20 Information Office]

FLORIDA COMMUNITY COLLEGE SYSTEM - Articulation Report

Table 2

Florida Community College Transfer Students Attending Florida Public Universities In The Fall Classified By Race And University

YEAR 2002	FAMU		FAU		FGCU		FIU		FSU		UCF	
	N	%	N	%	N	%	N	%	N	%	N	%
White	116	14.5	5049	58.1	1072	78.2	1777	19.2	8345	78.4	10760	68.5
Black	649	81.3	1563	18.0	79	5.8	1387	15.0	1121	10.5	1335	8.5
Asian	11	1.4	369	4.2	21	1.5	229	2.5	290	2.7	854	5.4
Non-Resident Alien	4	0.5	444	5.1	8	0.6	440	4.7	36	0.3	247	1.6
Hispanic	17	2.1	1231	14.2	143	10.4	5341	57.6	698	6.6	1812	11.5
Amer. Indian	1	0.1	38	0.4	6	0.4	26	0.3	54	0.5	111	0.7
Not Reported	0	0	0	0	41	3.0	77	0.8	102	1.0	588	3.7
Total	798	100.0	8694	100.0	1370	100.0	9277	100.0	10646	100.0	15707	100.0

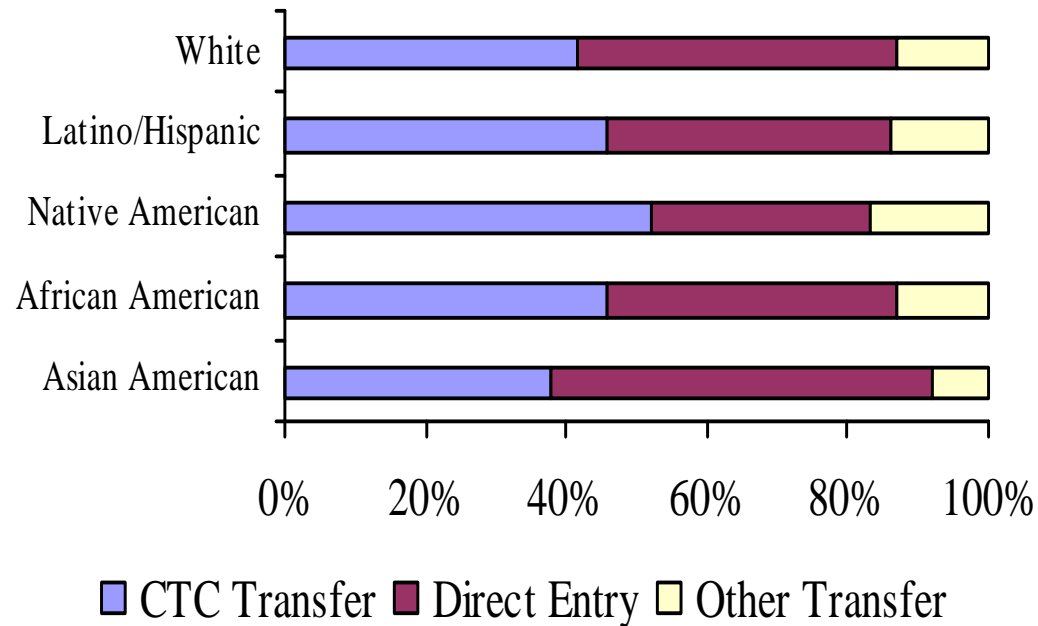
YEAR 2002	UF		UNF		USF		UWF		NCF		SUS	
	N	%	N	%	N	%	N	%	N	%	N	%
White	4708	77.3	4210	78.7	9167	70.8	2295	78.0	68	88.3	47567	64.4
Black	256	4.2	521	9.7	1421	11.0	286	9.7	1	1.3	8619	11.7
Asian	267	4.4	259	4.8	624	4.8	129	4.4	1	1.3	3054	4.1
Non-Resident Alien	150	2.5	39	0.7	143	1.1	10	0.3	1	1.3	1522	2.1
Hispanic	615	10.1	242	4.5	1279	9.9	84	2.9	5	6.5	11467	15.5
Amer. Indian	32	0.5	24	0.4	63	0.5	38	1.3	0	0	393	0.5
Not Reported	60	1.0	56	1.0	245	1.9	102	3.5	1	1.3	1272	1.7
Total	6088	100.0	5351	100.0	12942	100.0	2944	100.0	77	100.0	73894	100.0





System Example: BA/BS Graduates by Transfer Status *[Washington SBCTC]*

CTC Transfers Share of Total Baccalaureate Graduates by Race and Ethnic Group





State Example: Grade Performance of Transfers

[Florida K-20 Information Office]

FLORIDA COMMUNITY COLLEGE SYSTEM - Articulation Report
Table 11
Comparison of Cumulative Grade-Point Averages Attained in Universities of
Students Transferring Prior to Earning 60 Semester Hours (P) and Students
Transferring After Earning 60 semester Hours or More (A)


		2002			2001			2000		
		N	Avg	Std	N	Avg	Std	N	Avg	Std
Brevard	P	797	3.00	0.61	774	2.99	0.66	737	2.89	0.75
	A	2220	3.00	0.79	2158	2.97	0.76	2192	2.99	0.75
Broward	P	1518	2.85	0.76	1454	2.80	0.78	1228	2.76	0.85
	A	4559	2.94	0.74	4586	2.93	0.74	4387	2.93	0.73
Central Florida	P	325	2.98	0.69	342	2.99	0.73	346	2.97	0.70
	A	703	2.93	0.71	660	2.87	0.72	621	2.90	0.69
Chipola	P	78	2.85	0.90	66	2.95	0.71	70	2.86	0.77
	A	416	3.02	0.75	391	2.93	0.73	371	2.94	0.76
Daytona Beach	P	221	2.86	0.66	223	2.84	0.74	223	2.75	0.70
	A	1437	2.98	0.82	1350	3.02	0.76	1408	2.98	0.77
Edison	P	792	2.87	0.72	767	2.84	0.79	725	2.87	1.00
	A	1494	3.10	0.72	1488	3.08	0.74	1527	3.06	0.76
Fla CC at Jax	P	959	2.84	0.71	946	2.83	0.73	903	2.85	0.71
	A	3319	2.84	0.75	3283	2.82	0.76	3203	2.82	0.76
Florida Keys	P	73	3.01	0.63	66	2.98	0.71	79	2.83	0.81
	A	93	3.07	0.74	79	2.94	0.80	89	2.88	0.72
Gulf Coast	P	243	2.86	0.71	243	2.85	0.72	230	2.83	0.72
	A	824	3.10	0.71	816	3.11	0.69	784	3.06	0.72
Hillsborough	P	1997	2.83	0.65	2114	2.80	0.69	2200	2.76	0.71
	A	3126	2.82	0.74	3051	2.79	0.76	3037	2.80	0.76
Indian River	P	534	2.89	0.75	529	2.84	0.78	461	2.81	0.82
	A	1297	3.00	0.80	1246	3.02	0.75	1136	2.96	0.79
Lake City	P	57	3.18	0.65	69	3.10	0.60	75	2.98	0.72
	A	173	3.04	0.69	183	2.97	0.69	195	3.06	0.71

IT DATA COURSE FILES





Employment: Specifics

- Employment Rates (in Related Field) by Program by Population Group
 - Timing of Employment (e.g. Before or After Credentialing? Continuation with Skills Upgrades? Tenure within Field?)
 - Returns of Employment (e.g. Increases in Earnings)
 - Avoidance of Negative Social/Civic Outcomes (e.g. Incarceration, Welfare, etc.)
- 



State Example: Comparative Earnings of Graduates

[Florida K-20 Information Office]

Initial Quarterly Earnings by Major Education Sector

Year and Quarter								
Level	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
	Oct.-Dec.'96 \$	Oct.-Dec.'97 \$	Oct.-Dec.'98 \$	Oct.-Dec.'99 \$	Oct.-Dec.'00 \$	Oct.-Dec.'01 \$	Oct.-Dec.'02 \$	Oct.-Dec.'03 \$
Minimum Wage	\$2,279	\$2,678	\$2,678	\$2,678	\$2,678	\$2,678	\$2,678	\$2,678
Forecasting Threshold	\$4,320	\$3,600	\$4,680	\$4,680	\$7,202	\$7,207	\$7,280	\$7,207
FI Per Capita	\$5,178	\$5,296	\$6,199	\$7,006	\$6,945	\$6,959	\$6,959	\$7,612
Poverty Threshold	\$3,413	\$4,112	\$4,113	\$4,257	\$5,382	\$5,382		
HS Grads	\$3,365	\$3,792	\$3,898	\$3,981	\$4,041	\$4,008	\$4,017	\$4,075
Secondary Voc.	\$3,302	\$3,804	\$3,911	\$3,937	\$4,016	\$3,935	\$4,005	\$4,085
90-91 HS Grads	\$4,973	\$5,850	\$6,642	\$7,299	\$7,866			
District PBT	\$5,459	\$6,097						
District Adult Voc.	\$4,934	\$5,456	\$5,803	\$6,001	\$6,492			\$6,714
CC Adult Voc.	\$5,405	\$6,140	\$6,651	\$7,205	\$6,779			\$8,132
Joint Postsec. Adult Voc.						\$7,003	\$6,757	\$7,954
CC Voc. College Credit	\$6,217	\$7,014	\$7,622	\$8,198	\$7,903	\$8,758	\$9,378	\$9,372
CC AS Degree	\$7,210	\$7,739	\$8,074	\$8,266	\$8,384			\$10,054
CC AAS Degree						\$8,253	\$8,505	
CC PBT	\$6,503	\$7,180						
CC AA Degree	\$5,307	\$6,320	\$6,337	\$6,522	\$6,453	\$6,410	\$6,604	\$6,627





State Example: Comprehensive Former Student Results [Florida FETPIP]

2001-02 QUICK RESPONSE FLORIDA COMMUNITY COLLEGES - FALL 2002 FINDINGS

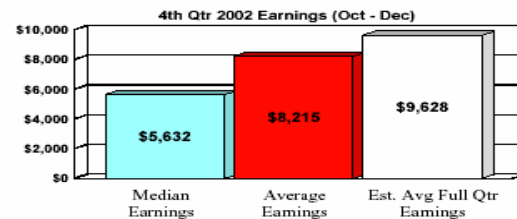
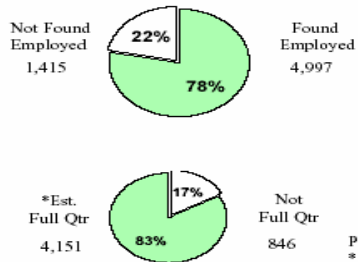
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Total Individuals: 6,412

Total with Outcome Data: 5,317

83%

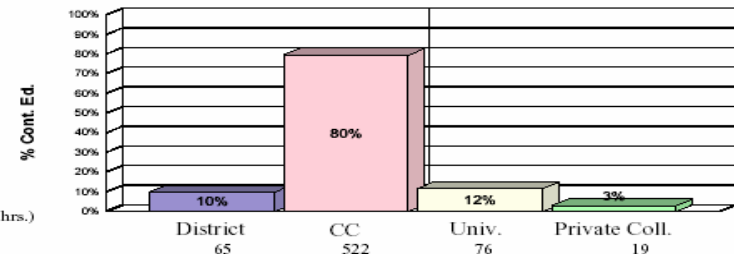
EMPLOYMENT DATA (4th QTR)



Percent working full qtr is of those employed.
* Est. Avg Full Qtr = earnings of at least \$2,678 per qtr (min. wage x 13 wks. x 40 hrs.)

FLORIDA CONTINUING EDUCATION DATA

Total Cont. their Education (Unduplicated): 656 10%



Students may be in multiple settings, therefore, sum of detail may exceed total unduplicated count.

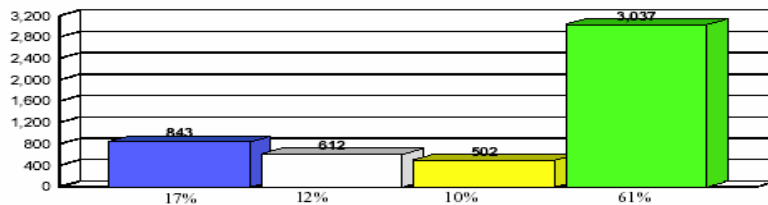
Found Employed of those Cont. Ed.: 516 79%

EARNINGS BY LEVEL*

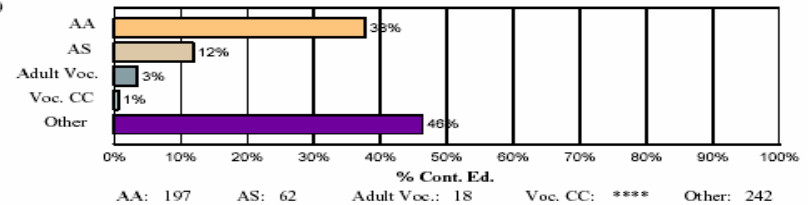
*Levels determined by qtrly wage / 520 hrs. (40hrs. x 13 wks.)

Number of employed earning:

Less than \$2,678 (Less than \$5.15 hr) \$2,678 to \$3,899 (\$5.15 to \$7.49 hr) \$3,900 to \$4,679 (\$7.50 to \$8.99 hr) More than \$4,679 (More than \$8.99 hr)



Community College Cont. Ed. Details



FEDERAL EMPLOYMENT DATA

CIVILIAN EMPLOYMENT: 22 0%
(U.S. Post Office, U.S. Civil Service)
FOUND IN THE MILITARY: 25 0%

FLORIDA DEPARTMENT OF CORRECTIONS DATA

INCARCERATED: **** **
COMMUNITY SUPERVISION: 108 2%


RECEIVING PUBLIC ASSISTANCE

(Temporary Assistance to Needy Families (TANF, Food Stamps))

RECEIVING TANF:	51	1%
... & EMPLOYED	29	57%
RECEIVING FOOD STAMPS:	310	5%
... & EMPLOYED	172	55%
RECEIVING TANF &/or FOOD STAMPS:	323	5%
& EMPLOYED	181	56%



Knowledge and Skills: Specifics

- Focus on What Graduates Can *Do* with What they Know [Involves Applications and Attitudes as Much as Pure Cognition]
 - Which Skills Show Performance Gaps? Which Show Areas of Strength?
 - Which Populations Show Performance Gaps on Which Specific Skills?
 - Linking Educational Experiences with Outcomes
- 

ILLINOIS

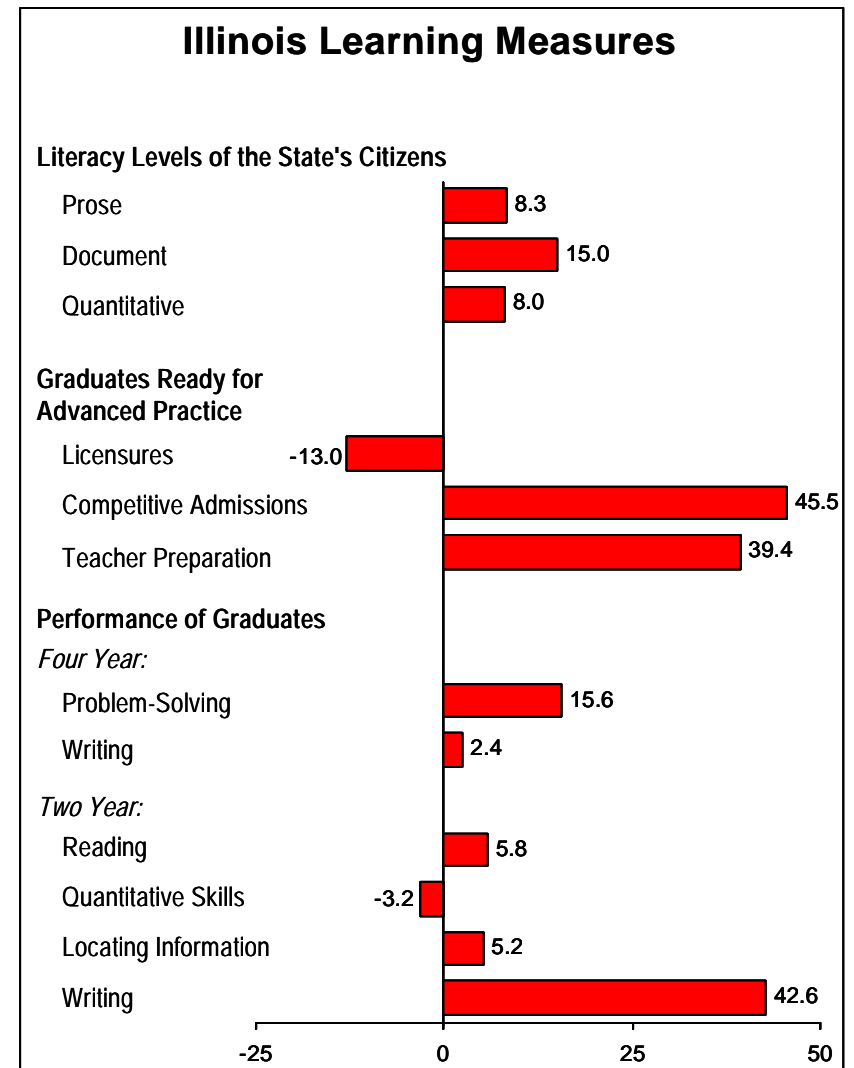
Large and complex higher education system with respectable college-completion rates, a diverse economy, and solid K-12 preparation.

Results:

- High literacy performance mirrors high levels of educational attainment
- More emphasis on academic than workplace preparation in “educational capital” outputs; strong teacher licensing performance
- High levels of tested abilities for graduates of both two-year and four-year institutions

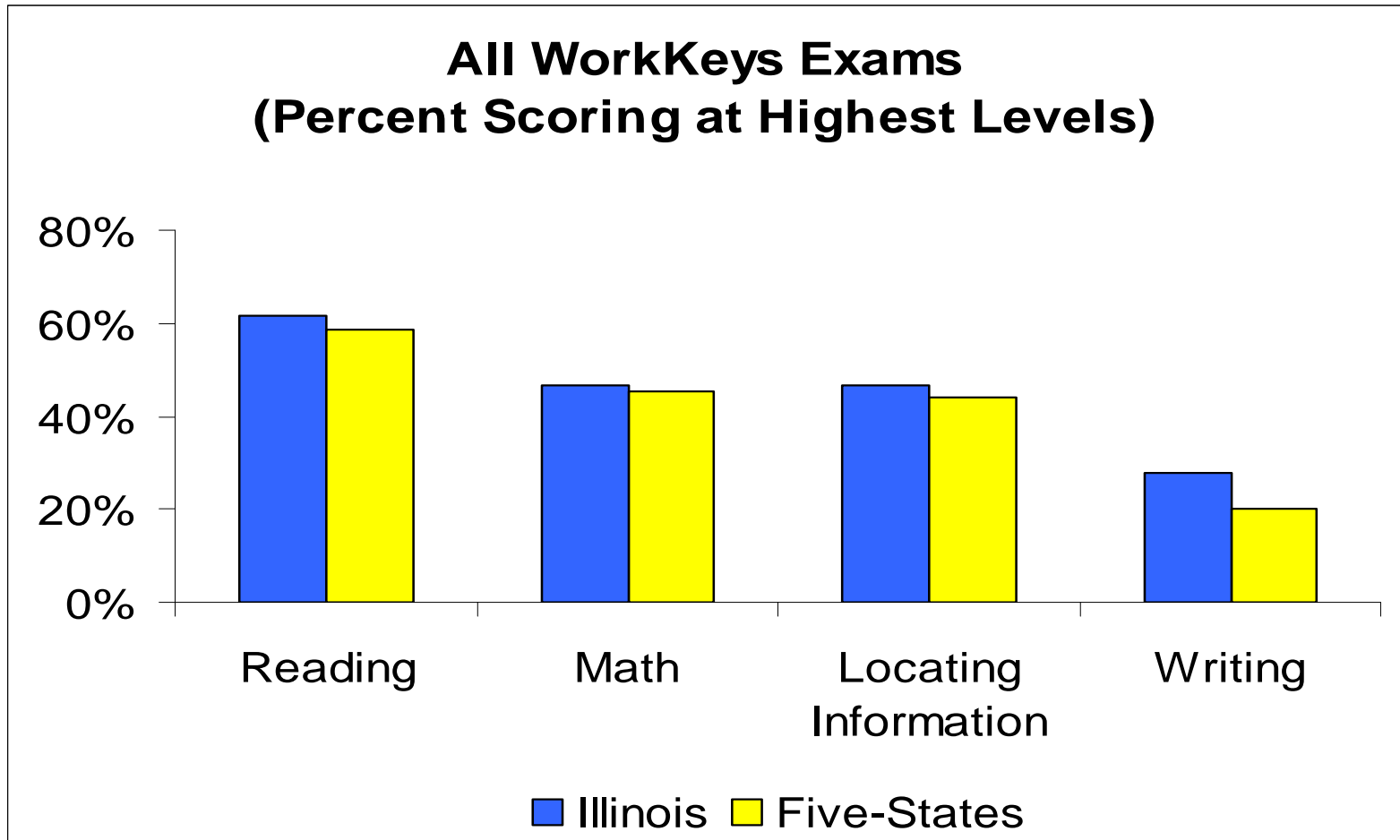
Challenges:

- Quantitative skills among two-year college students
- Competitiveness in licensed professions



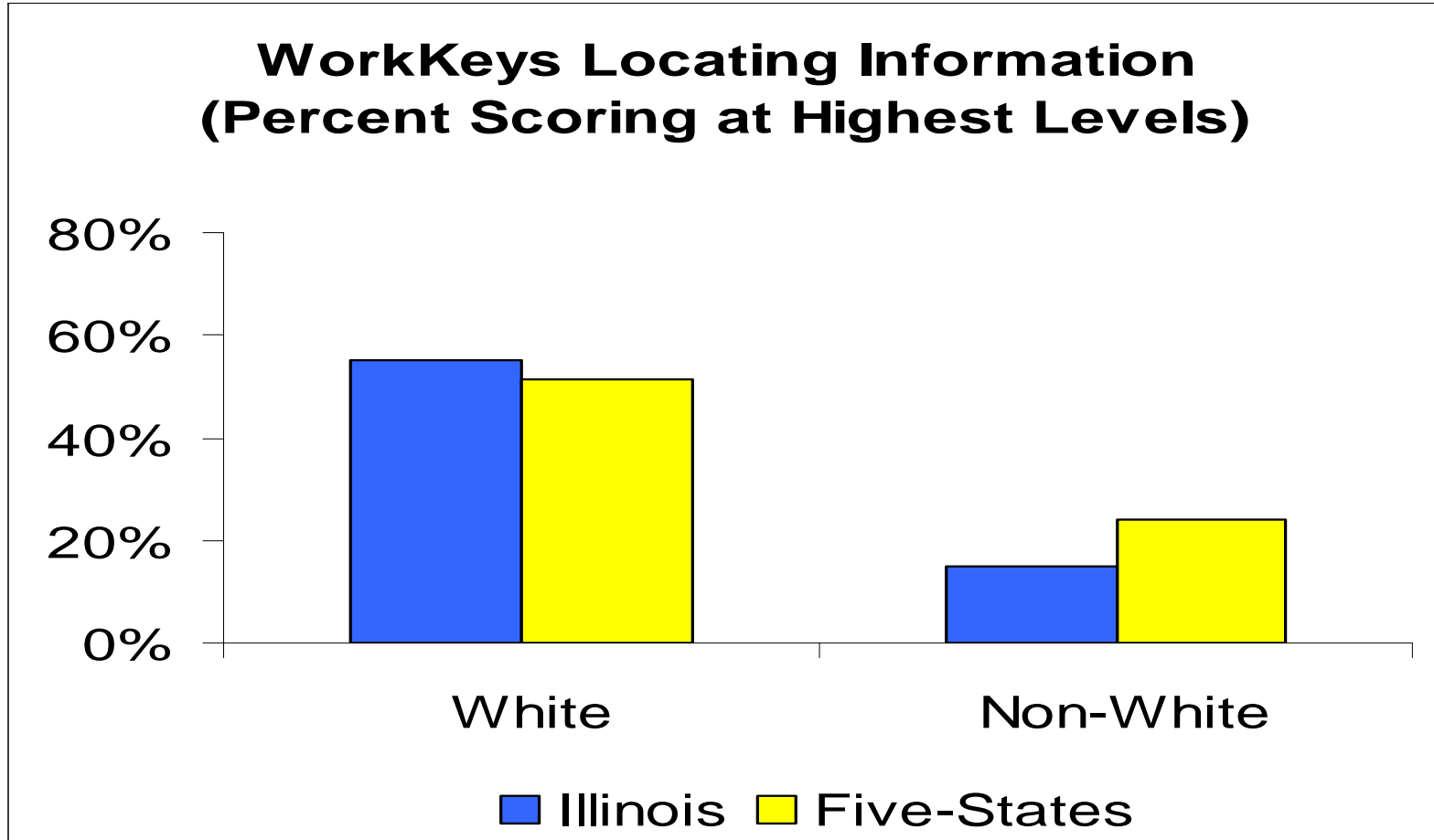


State Example: Comparative Work Keys Performance
[Forum on College-Level Learning 5-State Demonstration Project]





State Example: Work Keys Performance by Race
[Forum on College-Level Learning 5-State Demonstration Project]





Improving Outcomes: Policy Options

- Periodic Outcomes Benchmarking Using External Assessments and Standards (“Grade-14 NAEP”)
- Common Learning Outcomes for General Education and Transfer (Commonly Assessed? Audited via an “Accreditation” Process?)
- Performance Incentives for Transfer Success
- Job Profiling and Work-Related “Job-Readiness” Certification





Concluding Thoughts

- Improving Success for Underserved Students Involves Far More than Just Access
- The Credentials Students Achieve Must Be Valued by Students, the Marketplace, and the State
- Outcomes Information is Increasingly Important for Accountability—But It Can Also Help Identify Performance Gaps and Help Set State Priorities for Targeted Investments in Teaching and Learning

