

# From a Culture of Evidence to a Culture of Action & Inquiry

## APPENDIX: Examples of Outcomes Data That Matter



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Aspen / ATD Leadership Symposium  
Wye River, MD  
April 1, 2014

# Acknowledgements

- ❖ The content in this presentation has been collected from a variety of sources, all of which are publicly available on websites or have been presented in public settings.
- ❖ These sources include local college IR efforts, state system efforts, and national projects such as:
  - ❖ Completion by Design
  - ❖ The Aspen Prize for Community College Excellence
  - ❖ The Carnegie Foundation's Statway / Quantway
  - ❖ Collegemeasures.org
- ❖ Content has also been developed by and with a host of national partners, including CCRC, the Aspen Institute, the RP Group (CA), and AIR (American Institutes for Research)



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# Examples of Data that Matter



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# **Aspen's Take on Data that Matters:**

**Progress / Completion Outcomes Data**

**Labor Market Outcomes Data**

**Learning Outcomes Data**

**Equitable Outcomes Data**





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# Progress / Completion Data: A “Quick” Look



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# **Completion Example #1**

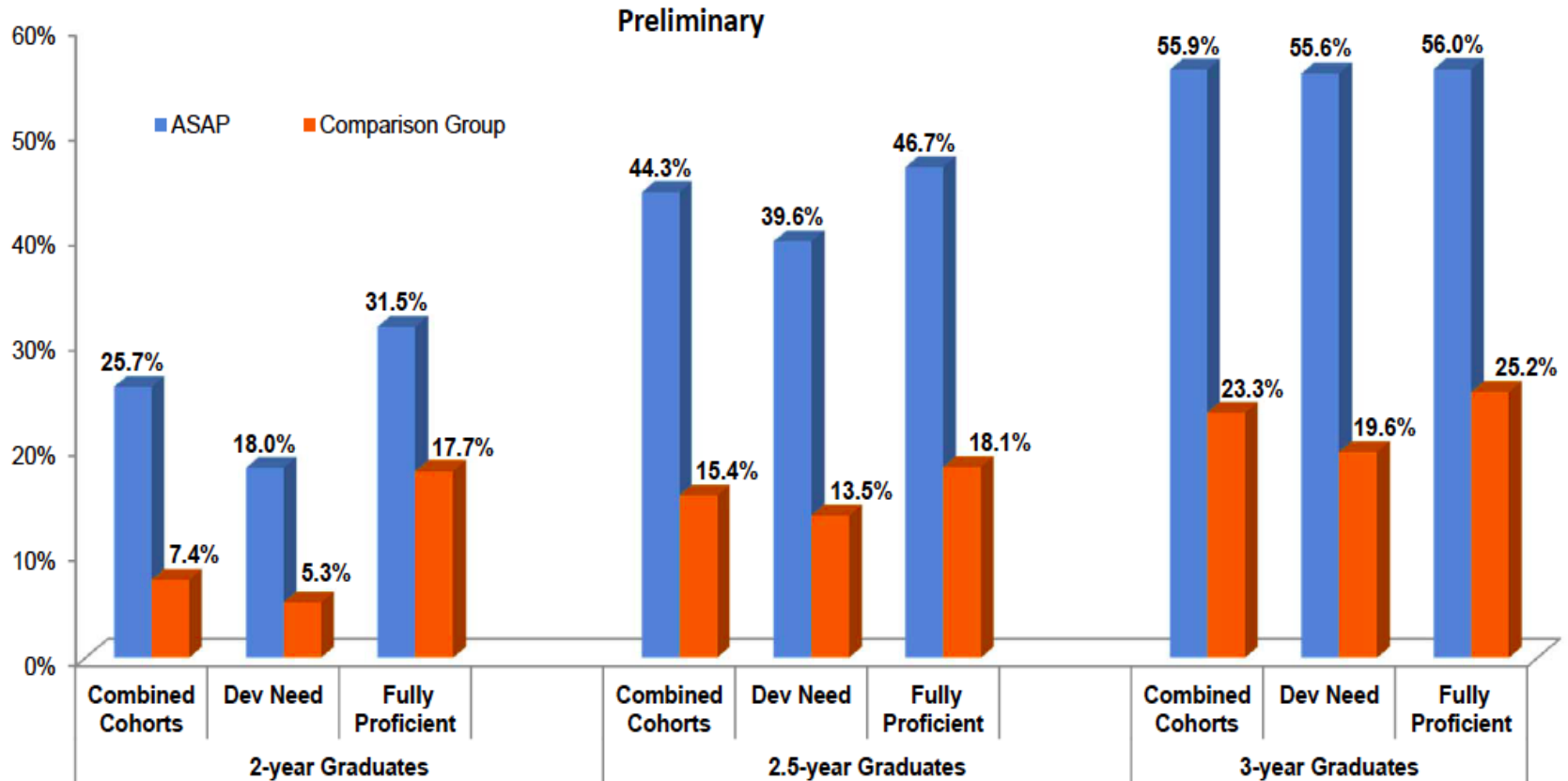
## **CUNY ASAP Program**

### **Graduation Rates**



# ASAP Program Results

Chart 1: Graduation Rates for Combined ASAP and Comparison Group Cohorts:  
By Developmental Need at Time of Entry<sup>1</sup>



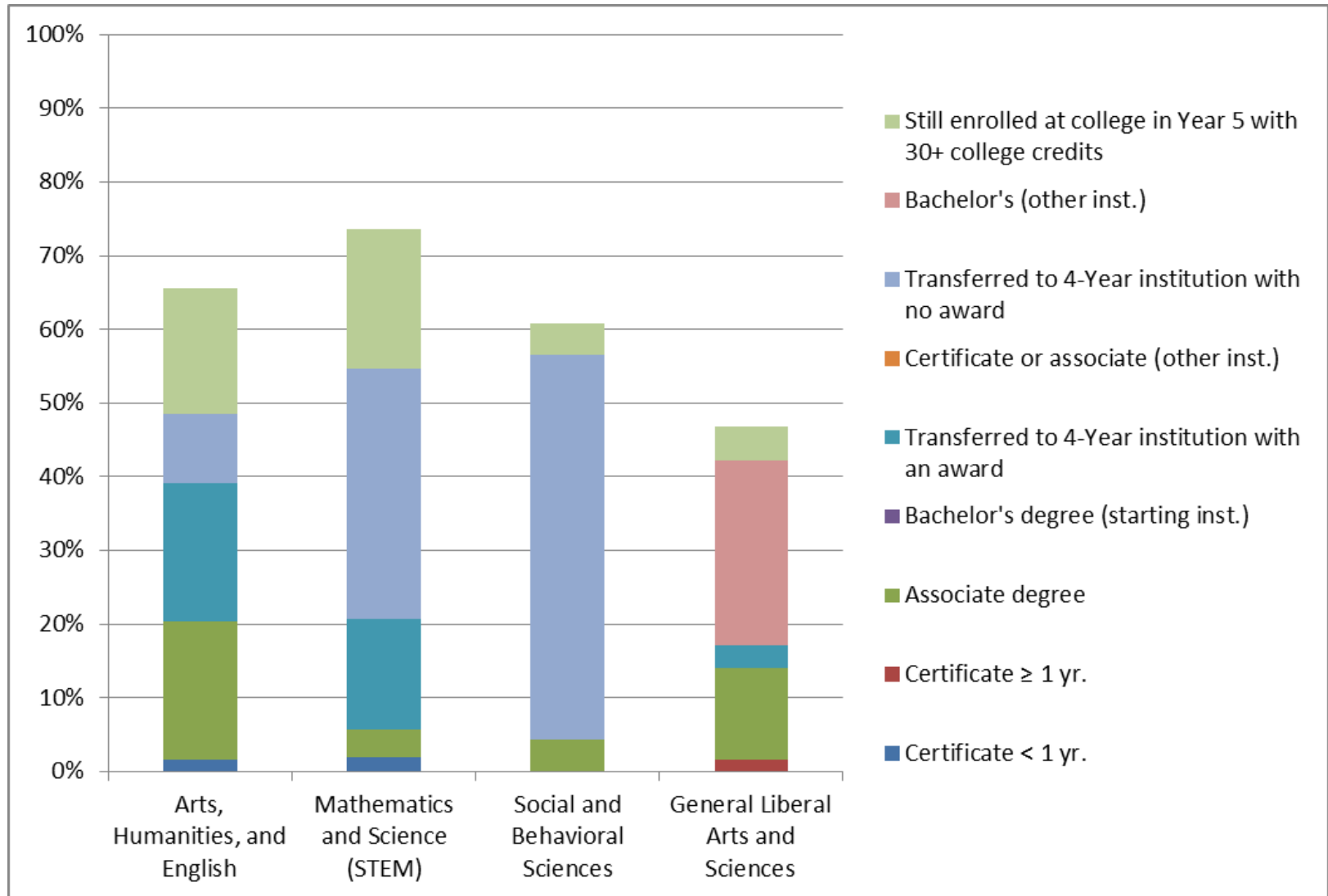
# **Completion Example #2**

## **Completion Rates in Completion by Design**

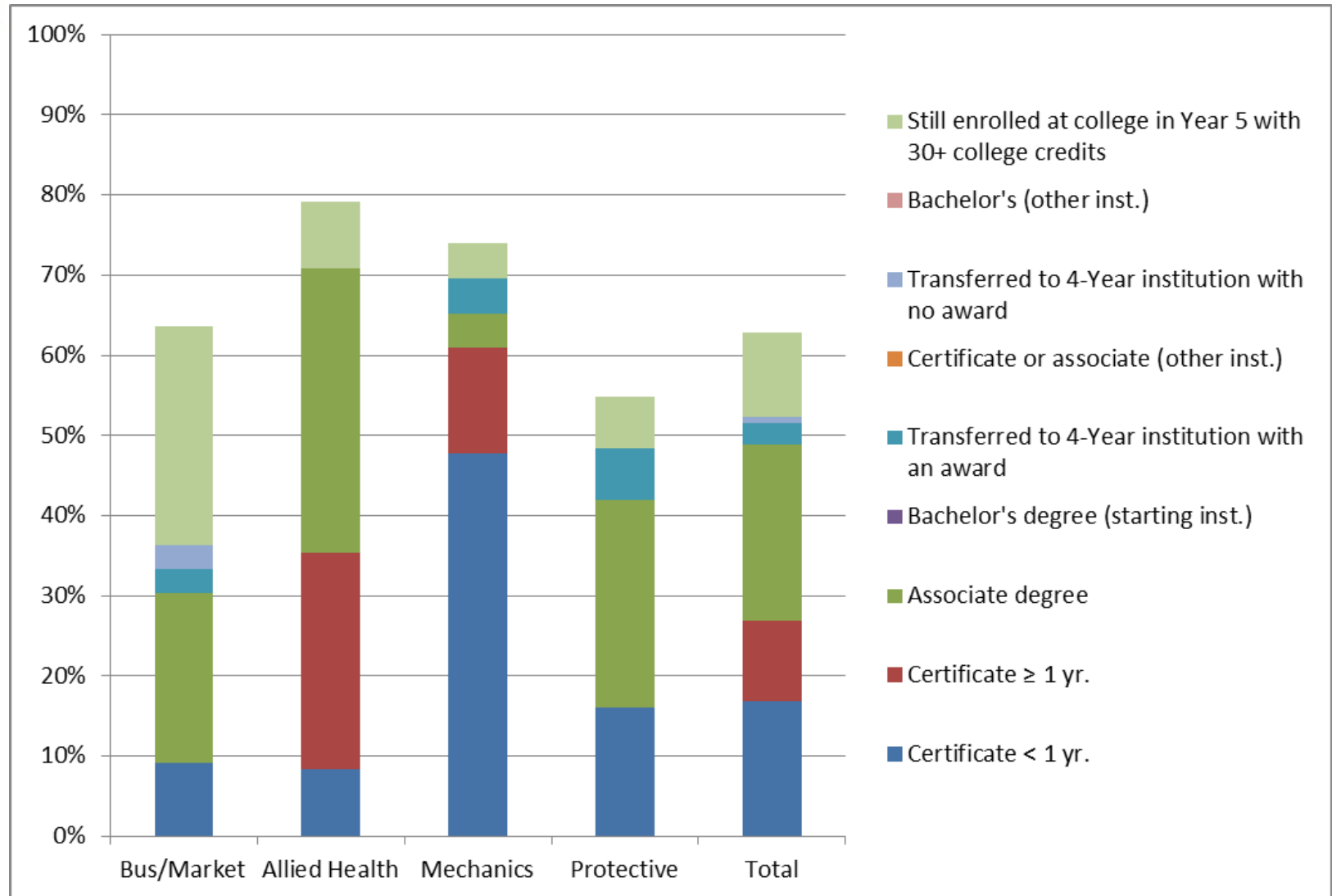




# Example from CBD: Outcomes for LAS Concentrators



# Outcomes by CTE Concentrators



# Completion Example #3

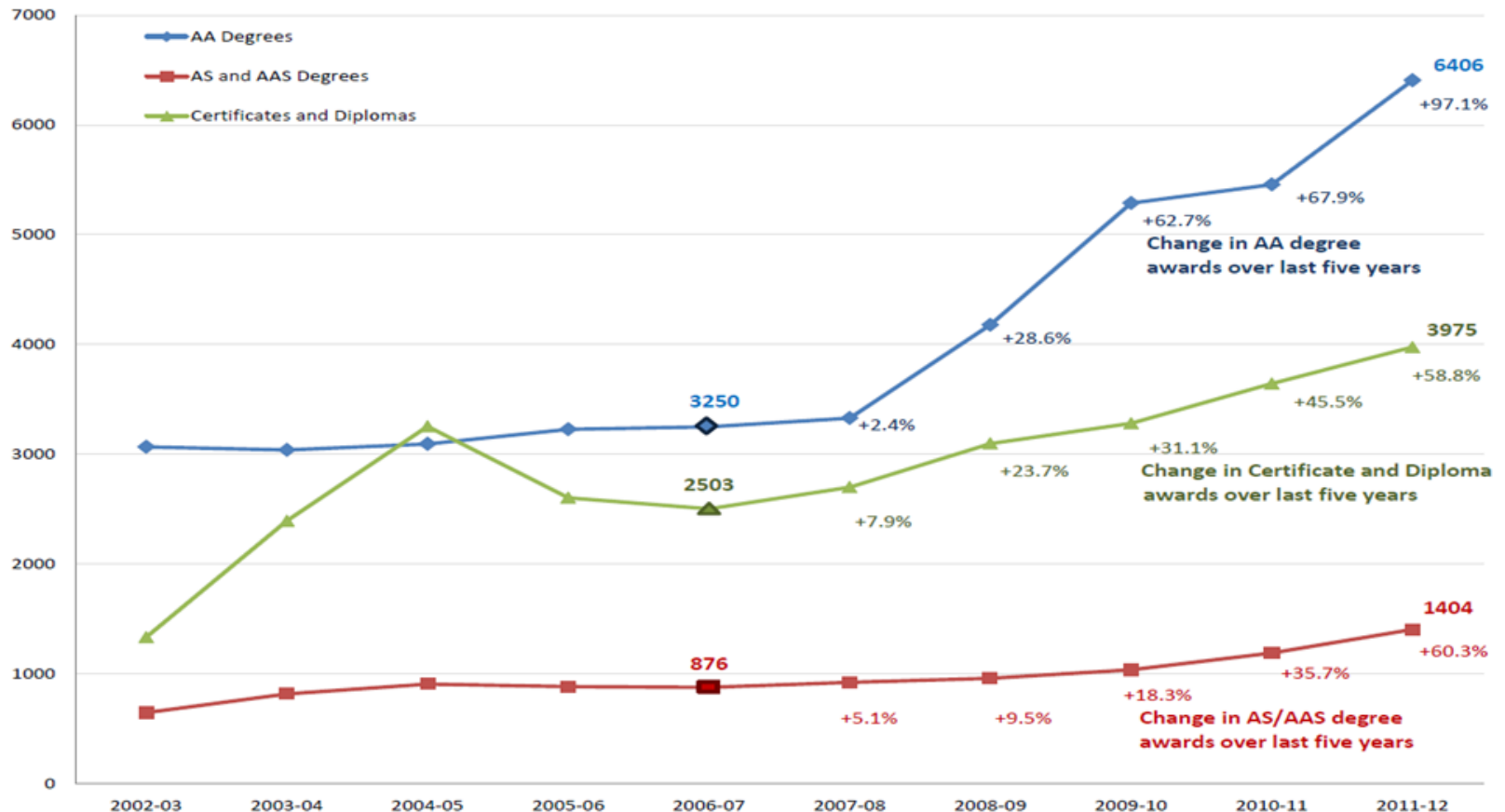
## Valencia College



# Outcomes of Prize finalist colleges:

*Exceptional improvements over time in completion*

**AA, AS/AAS Degrees and Certificates / Diplomas Awarded**



Source: State Student Database Submissions

Valencia College  
Institutional Research

Board Presentation June 2012 aa



# Progress Example 1: Grades in Sequenced Courses



# Grades in Sequenced Courses Backdrop

- Course sequences analyzed in Mathematics, English, Biology, Chemistry, Physics & Economics
- Relationship between grade in 1<sup>st</sup> course in sequence and success in 2<sup>nd</sup> course in sequence was examined.
- Enrollment data tracked over five-year period
- Selected highlight slides follow; full PPT provided on request

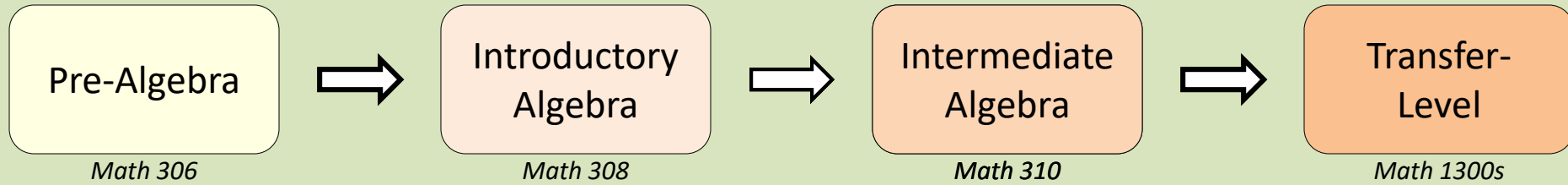


# Data Too Often Presented Like This...

Status in Math 310	Count	% of Total N	Success Rate in Math 310
A in Math 308	5,659	10%	81%
B in Math 308	7,726	13%	60%
C in Math 308	7,234	12%	37%
Unclear Status in Math 308*	1,675	3%	16%
Math 310 Repeater / Non Success	14,568	25%	41%
Math 310 Attempt was First Math Course	16,812	29%	57%
Taking Math 308 / 310 in Same Semester	4,505	8%	68%
Other	487	1%	44%
Total	58,666	100%	53%



# And Not Often Enough Like This...



The grade received by students in Math 308

A

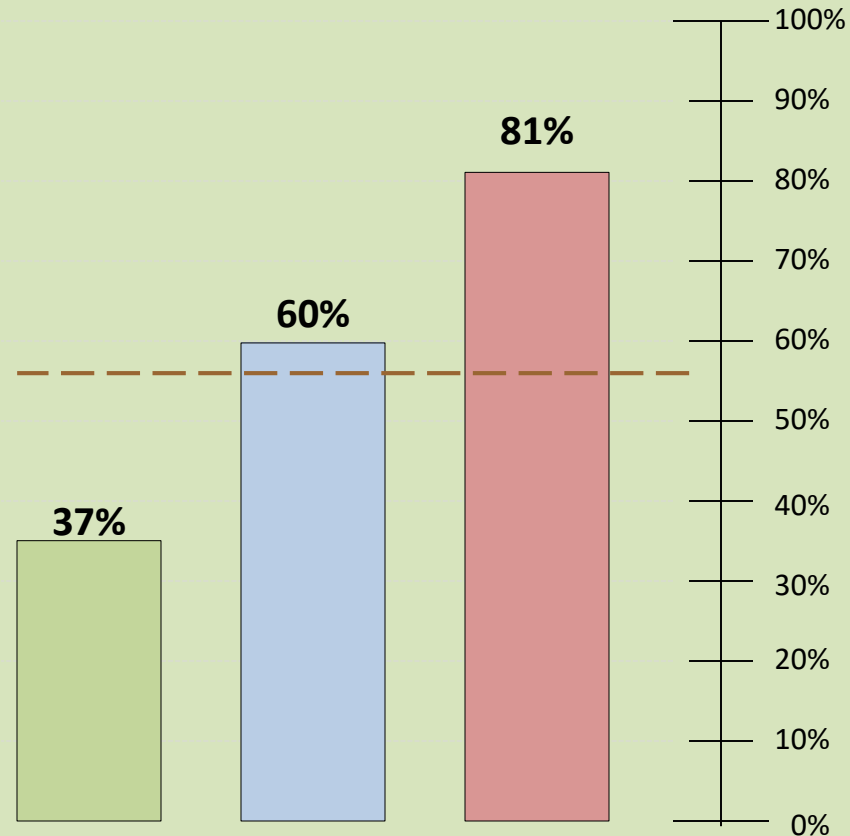
B

C

Success Rate of those same students in Math 310

Those placing directly into Math 310

57%





# Calculus Course Sequence

Calculus I

*MATH 2413*

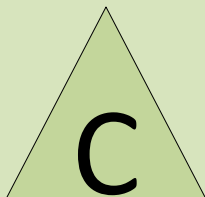
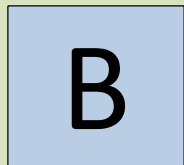
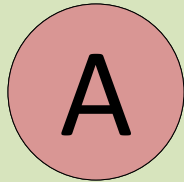


Calculus II

*MATH 2414*

The grade received by  
students in Math 2413

Success Rate of those same  
students in Math 2414



Those placing  
directly into Math  
2414

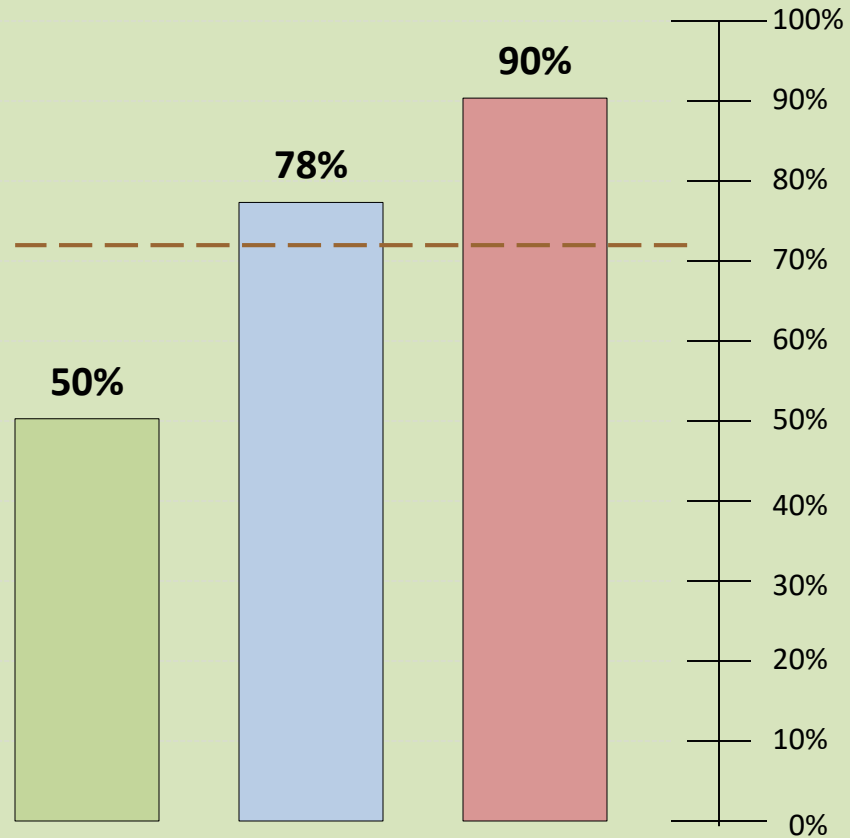
72%

50%

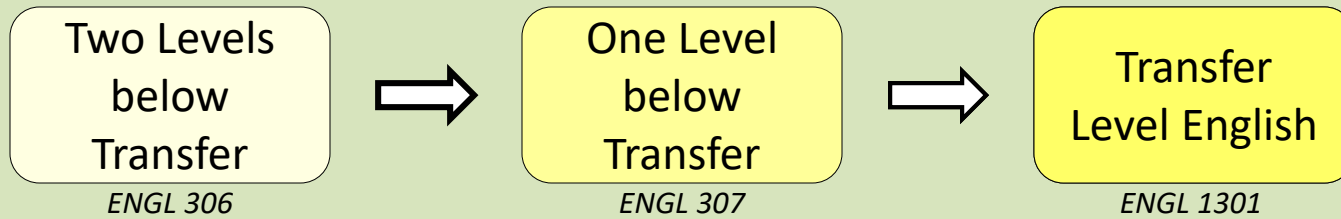
78%

90%

100%  
90%  
80%  
70%  
60%  
50%  
40%  
30%  
20%  
10%  
0%

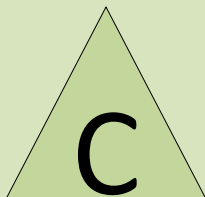
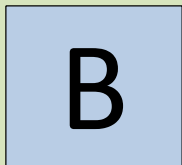
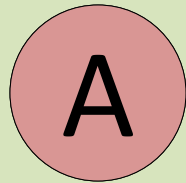


# Developmental Education Writing Course Sequence



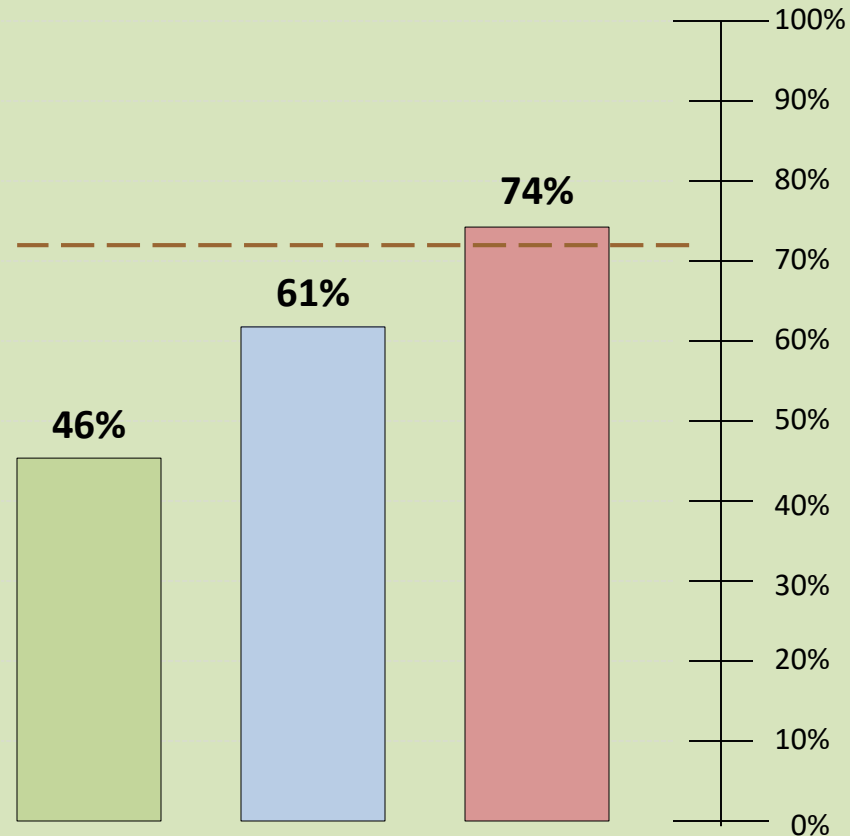
The grade received by students in English 307

Success Rate of those same students in English 1301



Those placing directly into English 1301

71%



# College Biology Course Sequence

Anatomy

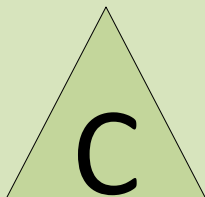
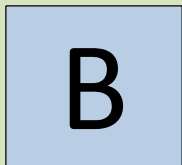
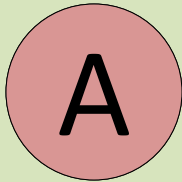
*BIO 2401*



Physiology

*BIO 2402*

The grade received by  
students in Biology 2401



Success Rate of those same  
students in Biology 2402

Those placing  
directly into  
Biology 2402

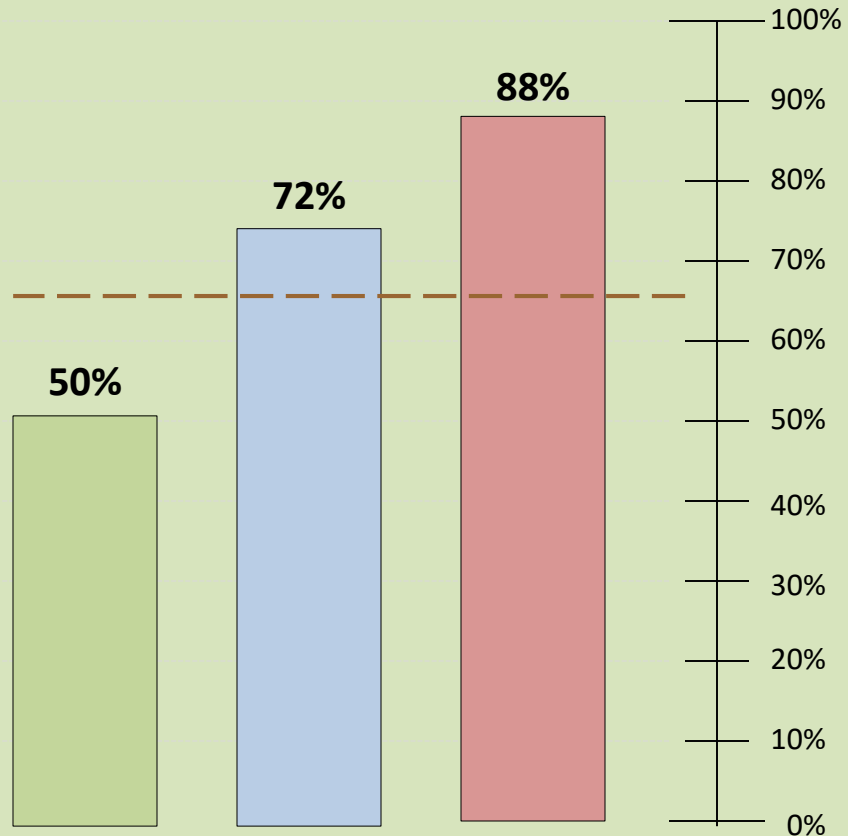
67%

50%

72%

88%

100%  
90%  
80%  
70%  
60%  
50%  
40%  
30%  
20%  
10%  
0%



# College Chemistry Course Sequence

General  
Chemistry I

*CHEM 1411*



General  
Chemistry II

*CHEM 1412*

The grade received by  
students in Chemistry 1411

A

B

C

Success Rate of those same  
students in Chemistry 1412

Those placing  
directly into  
Chemistry 1412

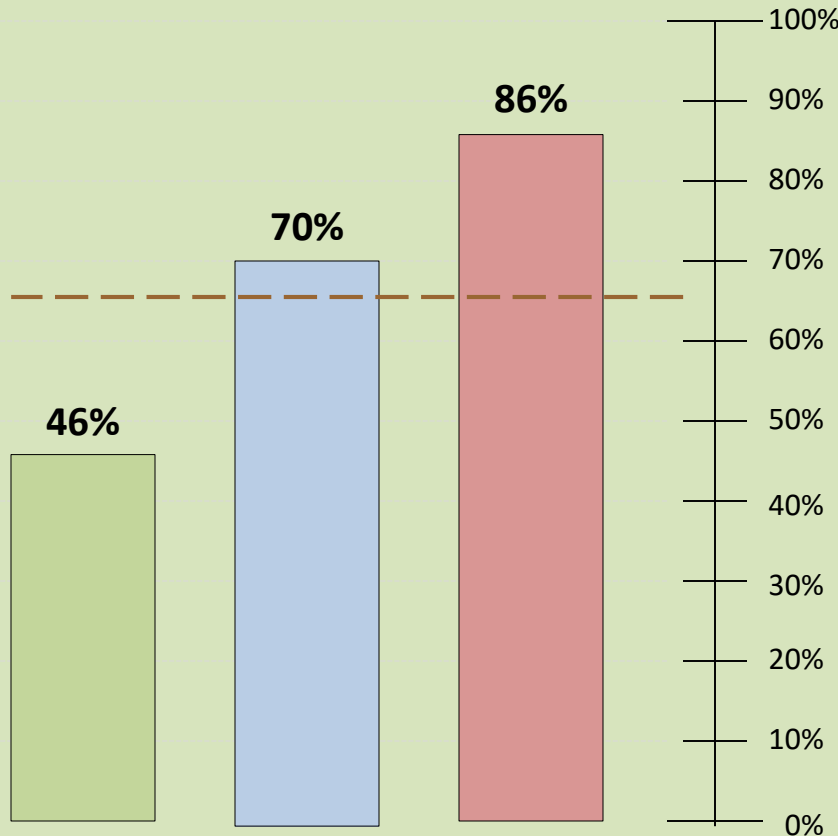
66%

46%

70%

86%

100%  
90%  
80%  
70%  
60%  
50%  
40%  
30%  
20%  
10%  
0%





# Economics Course Sequence

Macro  
Economics

*ECON 2301*



Micro  
Economics

*ECON 2302*

The grade received by  
students in Economics 2301

A

B

C

Success Rate of those same  
students in Economics 2302

Those placing  
directly into  
Economics 2302

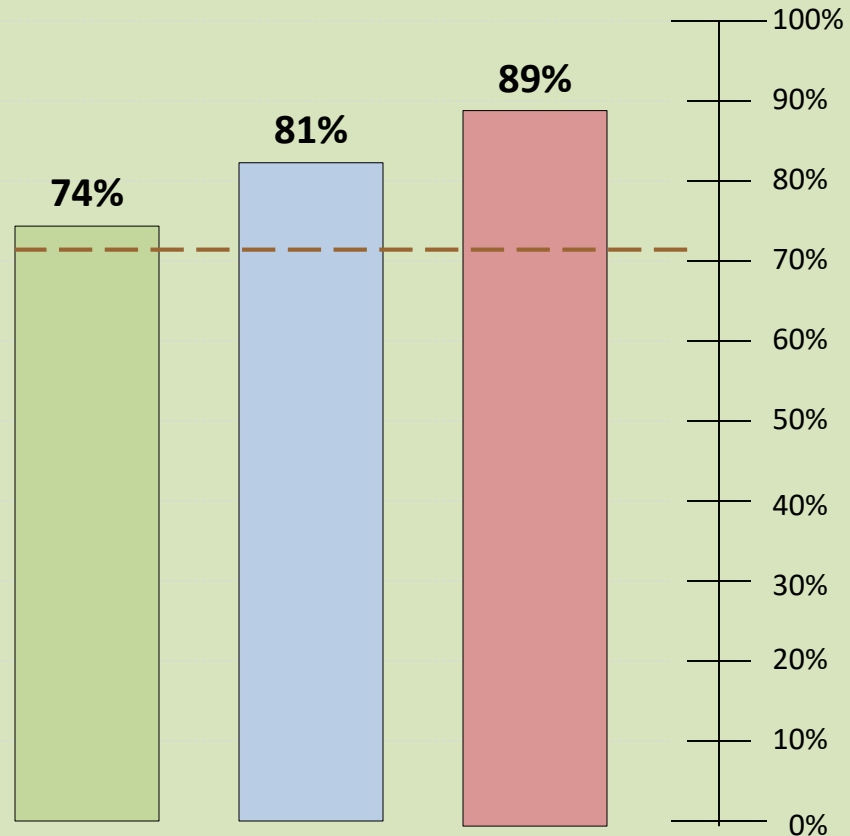
71%

74%

81%

89%

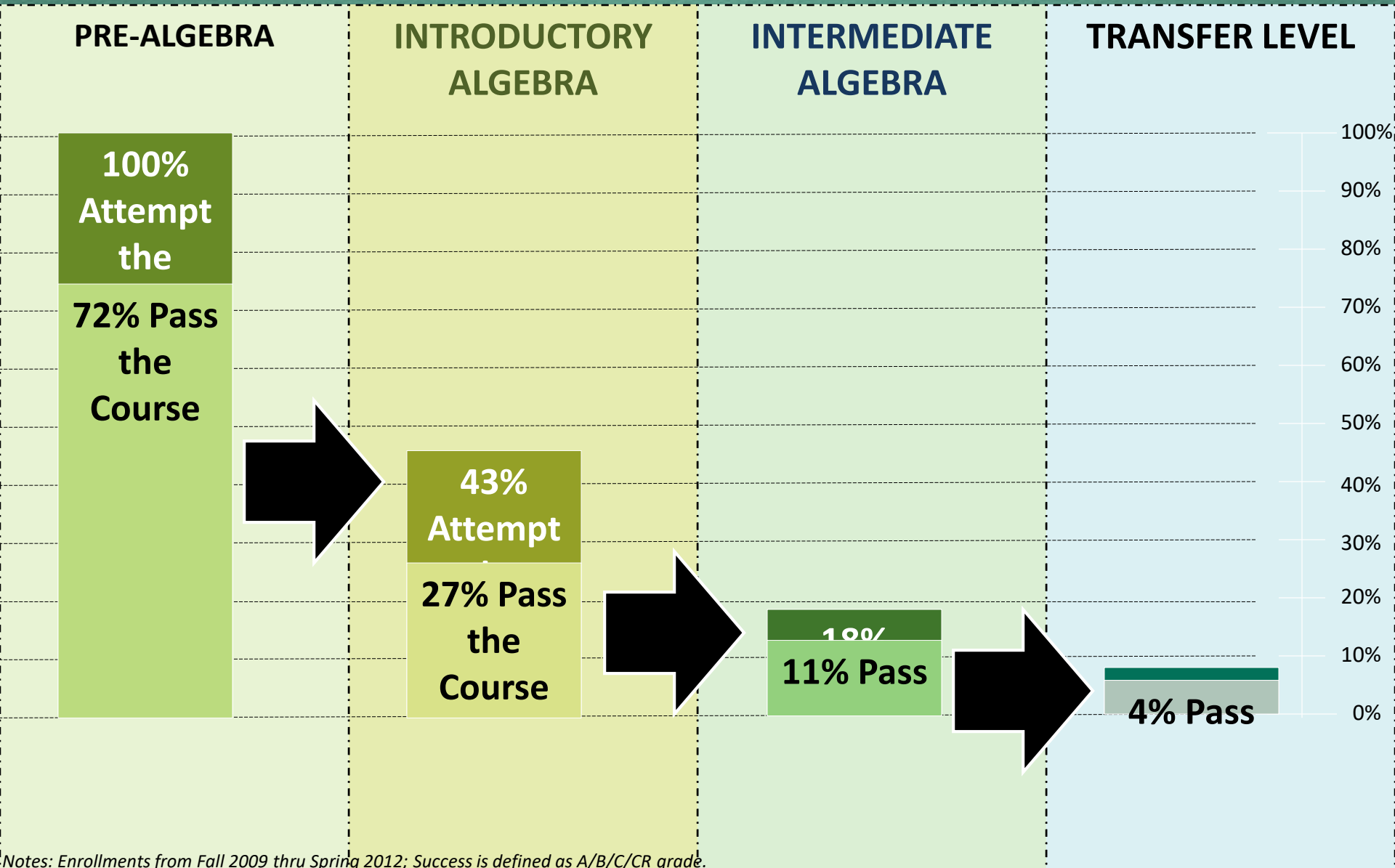
100%  
90%  
80%  
70%  
60%  
50%  
40%  
30%  
20%  
10%  
0%



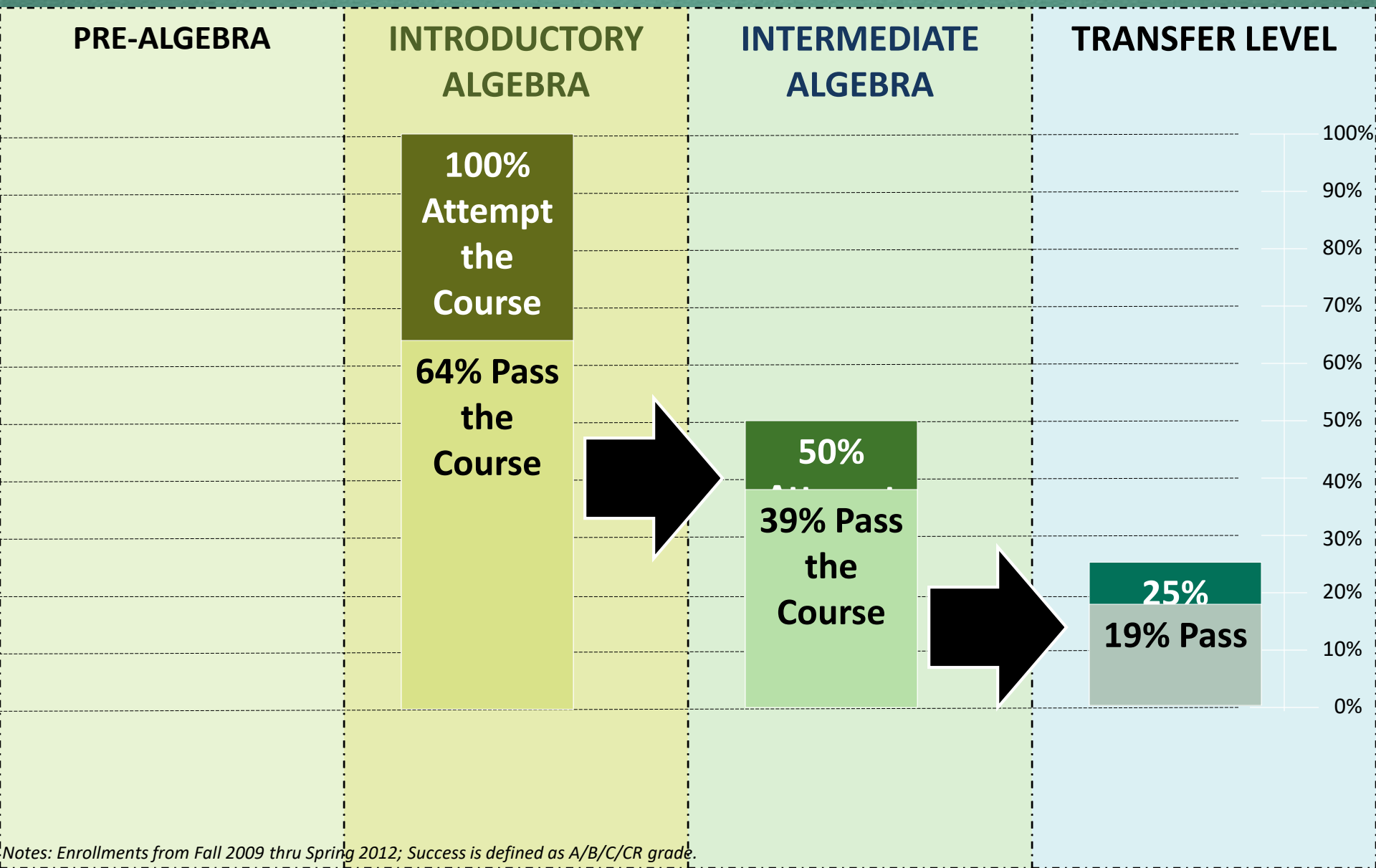
# **Progress Example 2: Developmental Education Cohort Tracking**



# Math cohort tracking starting in Pre-Algebra

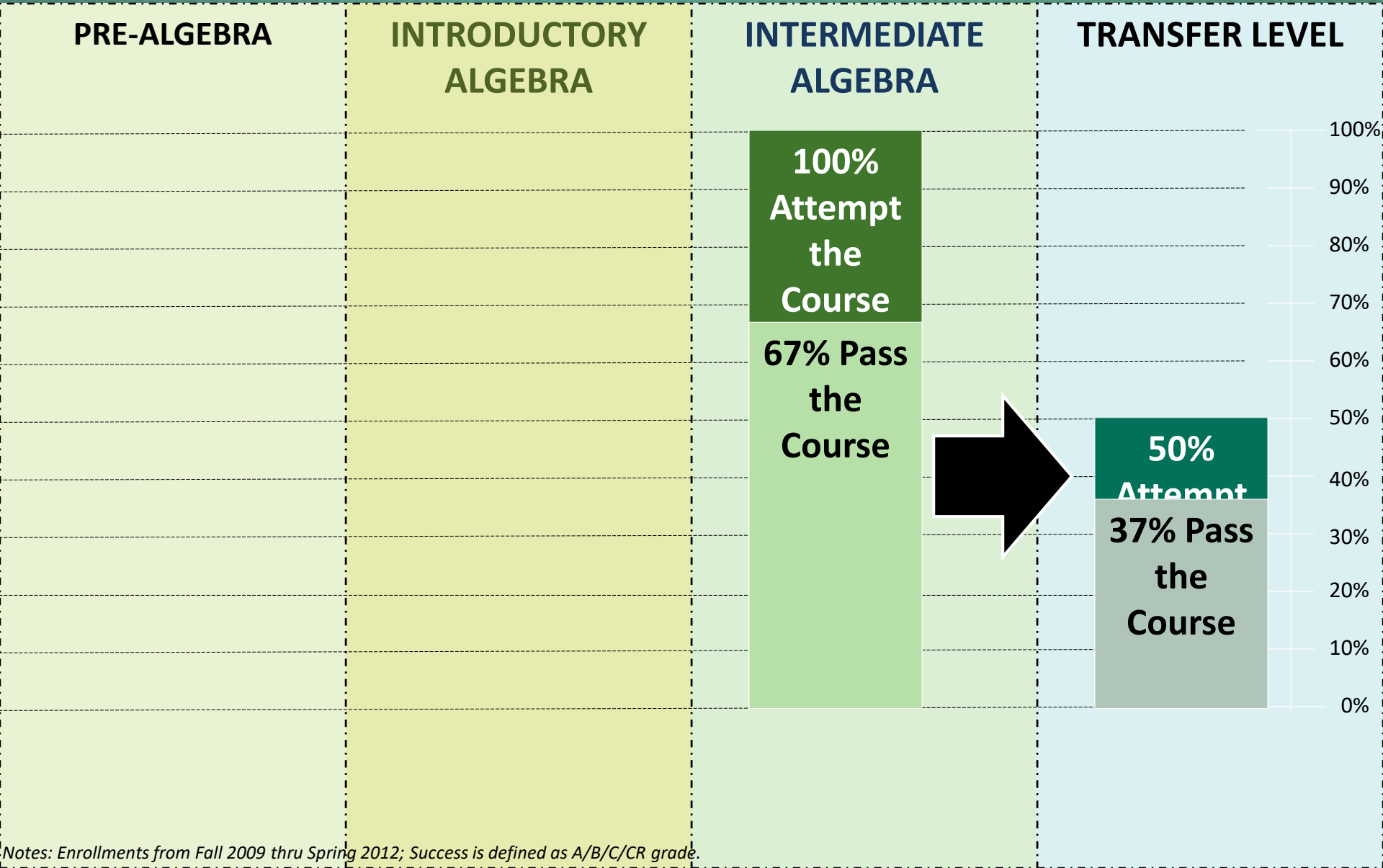


# Math cohort tracking starting in Introductory Algebra

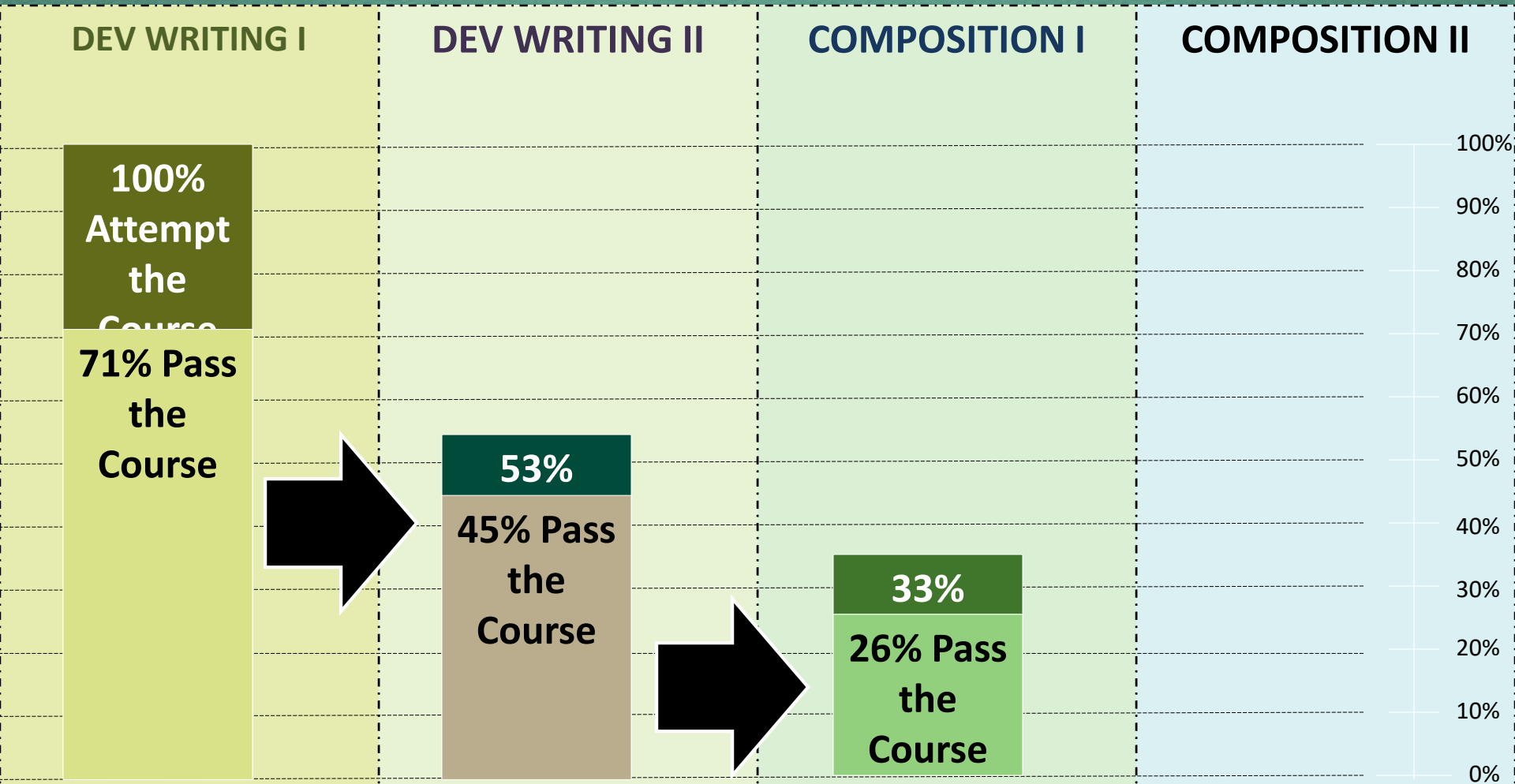




# Math cohort tracking starting in Intermediate Algebra

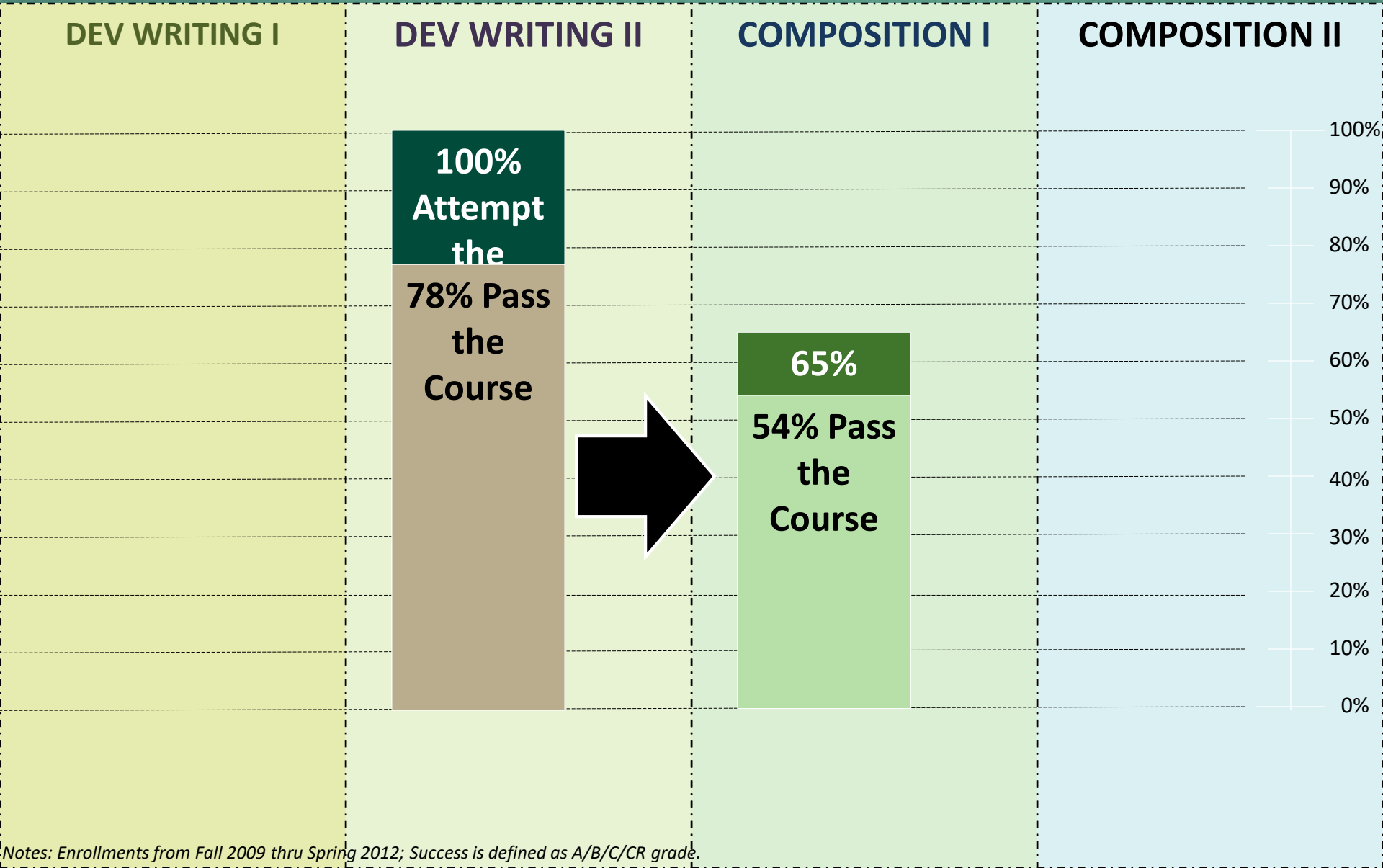


# English Writing cohort tracking starting at Developmental Writing I



Notes: Enrollments from Fall 2009 thru Spring 2012; Success is defined as A/B/C/CR grade.

# English Writing cohort tracking starting at Developmental Writing II



Notes: Enrollments from Fall 2009 thru Spring 2012; Success is defined as A/B/C/CR grade.

# Progress Example 3:

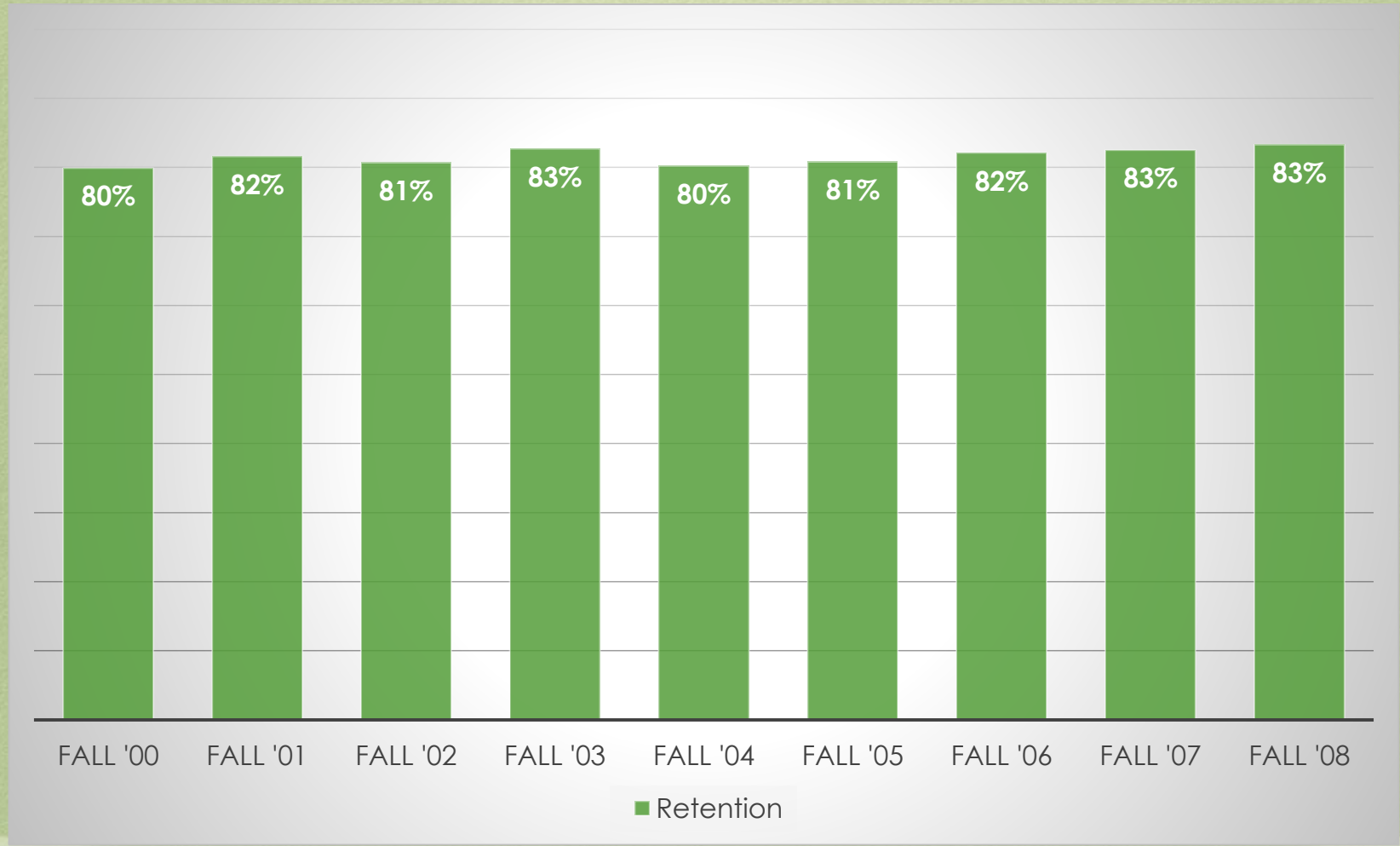
Look for Examples from Four-Year Schools:

Retention & Progress at Georgia State

[http://www.edtrust.org/higher\\_ed\\_practice\\_guide](http://www.edtrust.org/higher_ed_practice_guide) for more examples

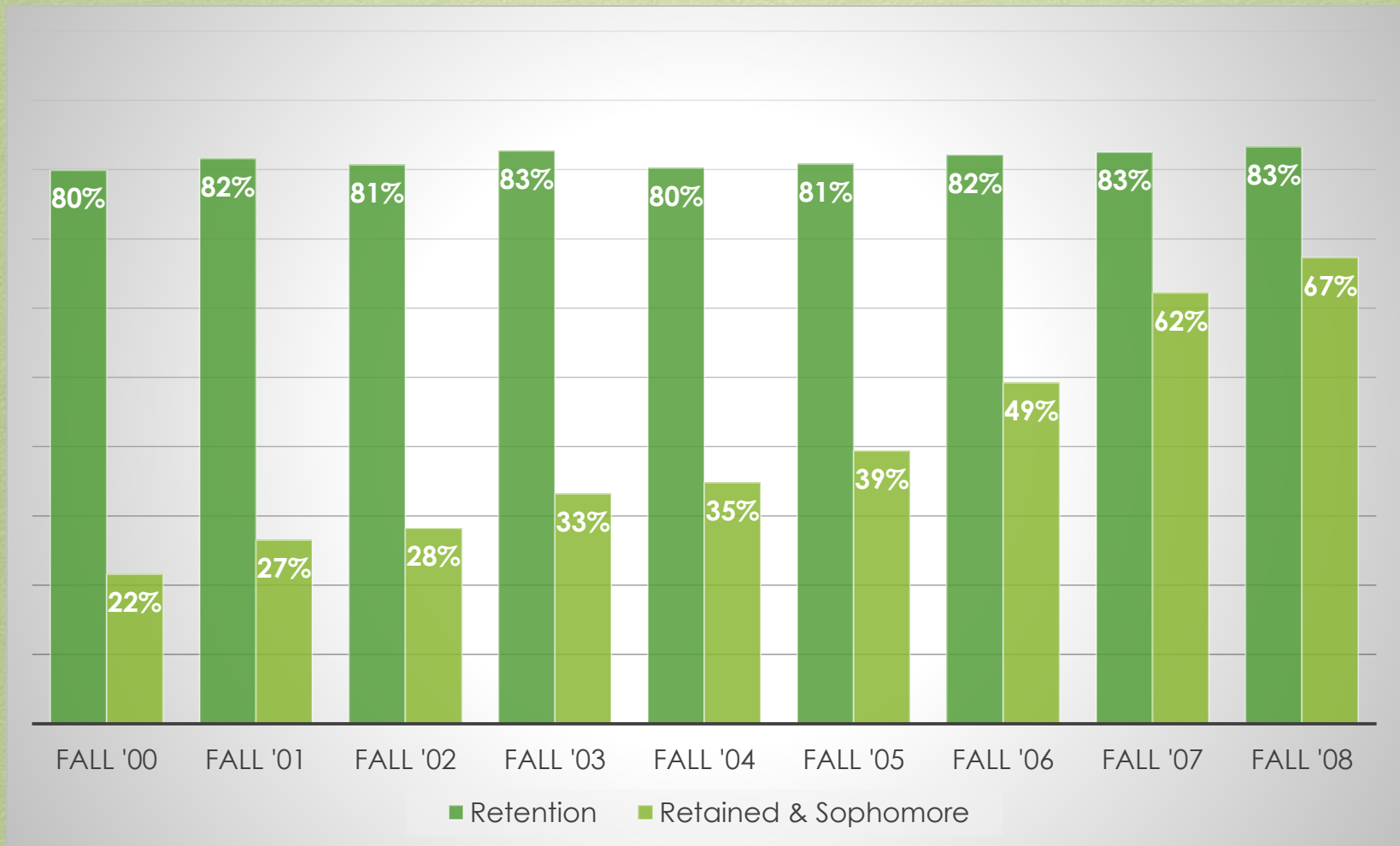


# First Year to Second Year Retention, Georgia State University





# First Year Retention & Progression Rates - Georgia State University





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# Labor Market Outcomes Data: A Quick Look



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# Labor Market Outcomes

## Example 1:

### CollegeMeasures.org ESM

### for Program-Level LMI Data

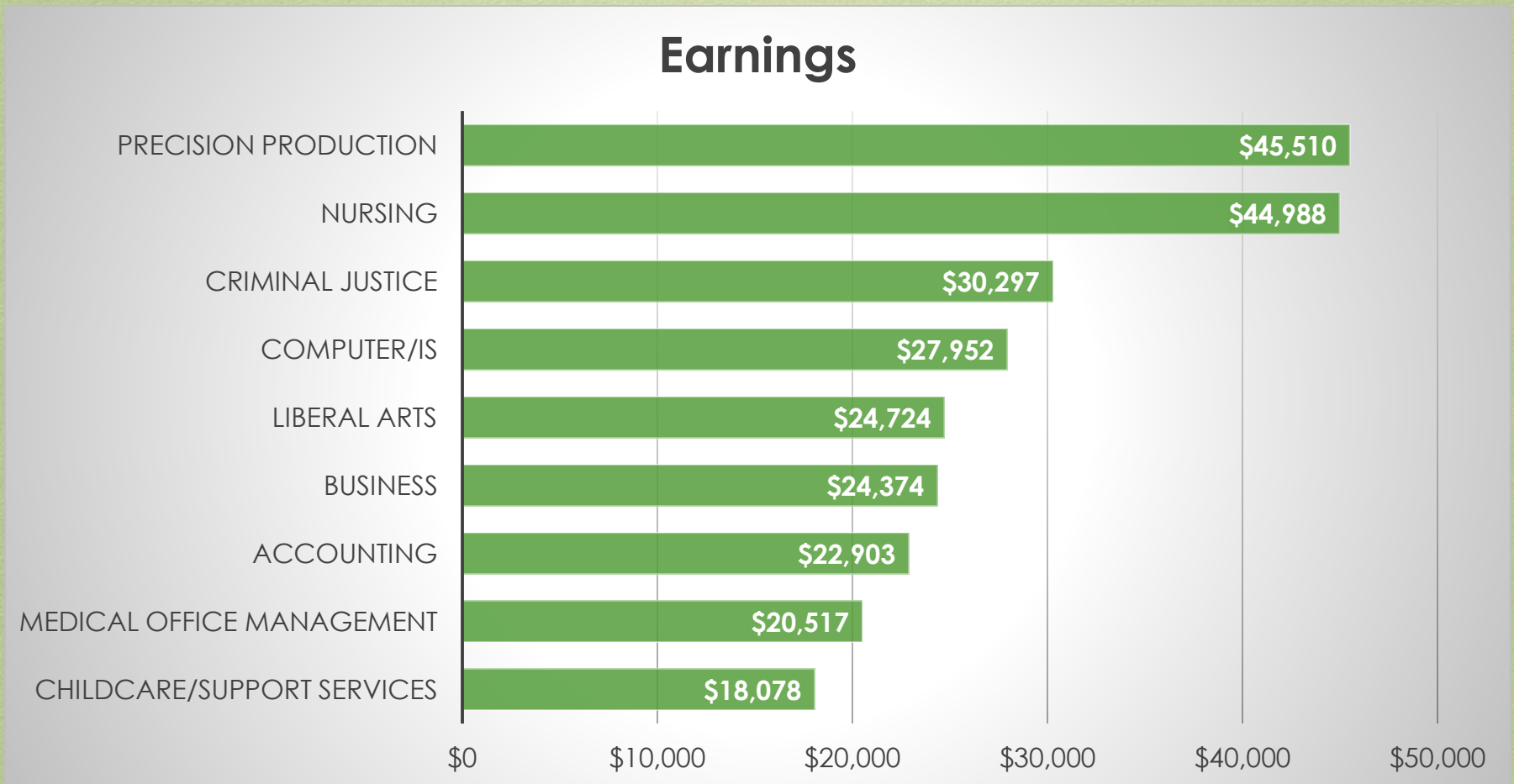


# CollegeMeasures.org is one possibility to get LMI data

- Collaboration between the Lumina Foundation and AIR
- Six states currently signed on - AR, CO, FL, TN, TX, VA
- Any state can theoretically participate
- Check it out:  
<http://www.collegemeasures.org/esm/>



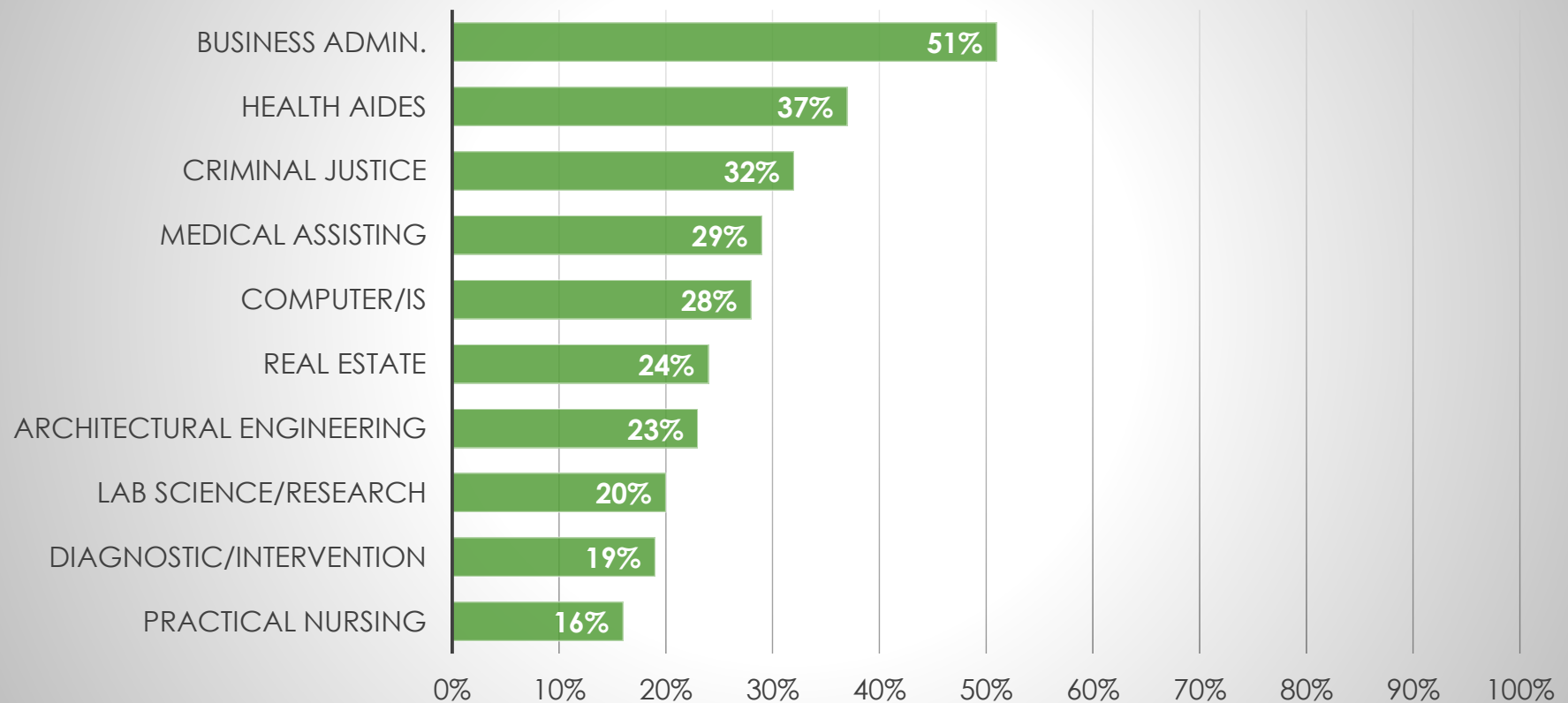
# Wages of Individual Degree Programs at an Arkansas CC





# Wage Earning Rate of Individual <1 Year Certificate Programs at a Colorado CC

## Wage Earning Rate



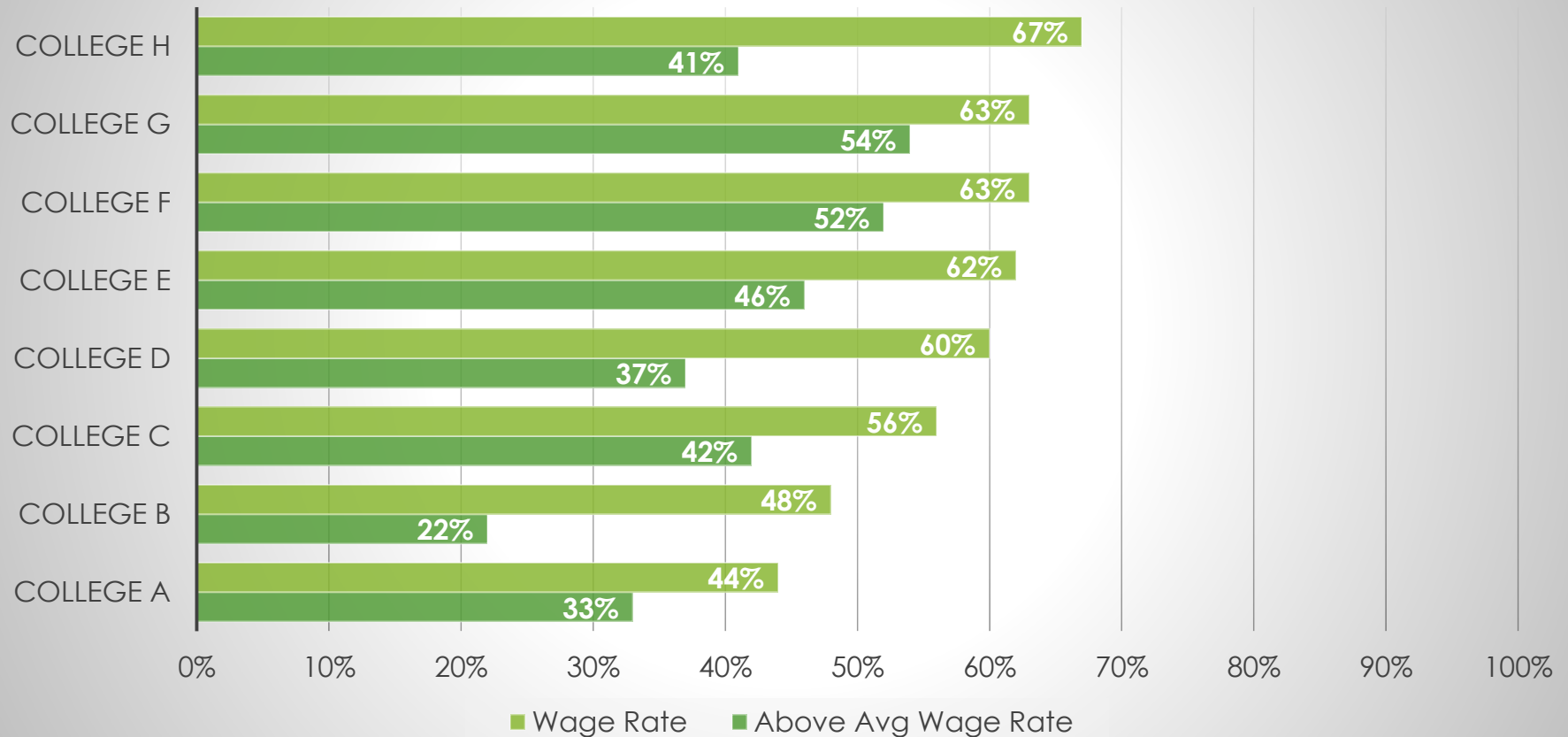


# Wages for AA Degrees in Business / Mgmt / Marketing in Tennessee, By College



# Wage Earning Rate of Licensed Vocational Nurses in Virginia, By College

## Wage Earning Rate



# Labor Market Outcomes

## Example 2:

### Aspen Prize's Approach for Comparing Labor Market Outcomes



# Aspen Prize Sample Model Comparing Labor Market Outcomes

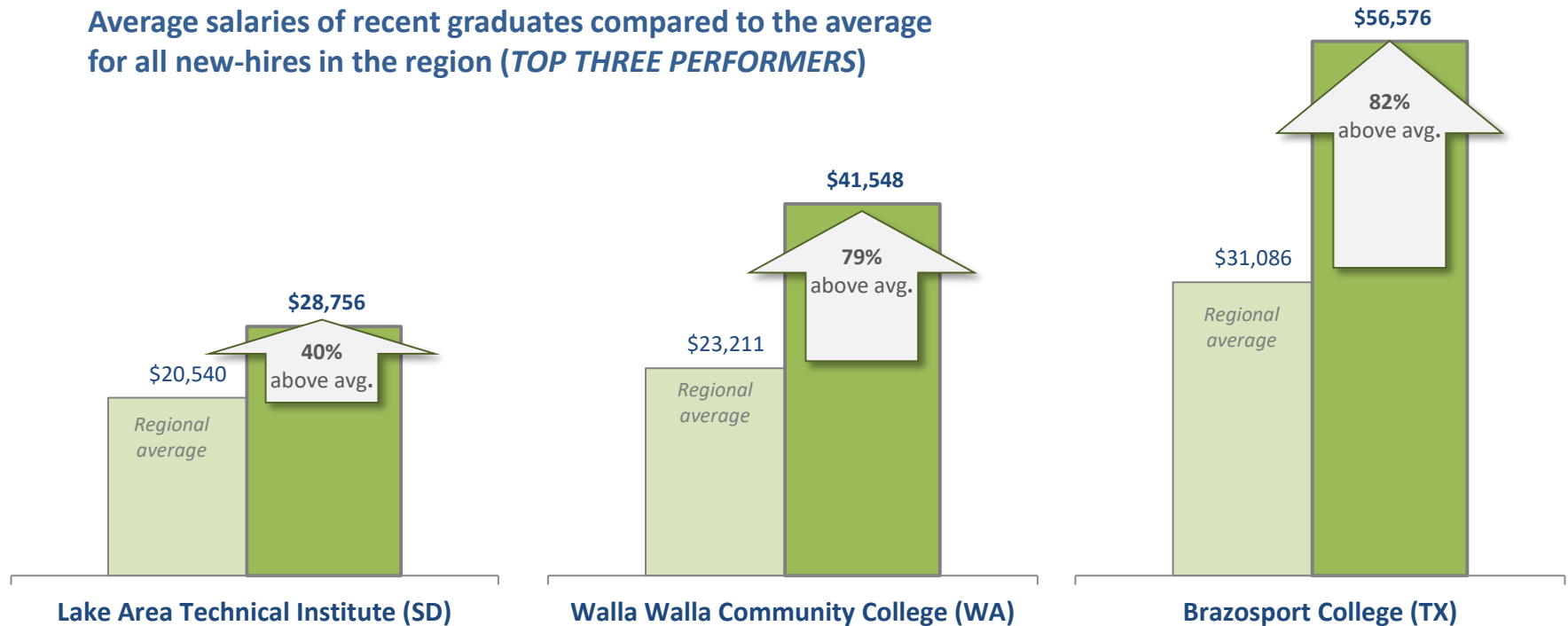
Institution	Employment Metrics		Earnings and Wage Metrics				County-level Economic Context Metrics		
	Class of 2011 Composite Employment Index	Class of 2006 Composite Employment	Annualized Salaries and Wages for 2011 Employed Graduates	Class of 2011 Relative Wages	Annualized Salaries and Wages for Employed 2006 Graduates in 2011	Class of 2006 Relative Wages	County Civilian Workforce Participation Rate	2011 County Unemployment Rate	County 5 Year Employment Growth Rate
County Community College	239	209	\$55,784	180%	\$79,204	161%	76%	8.4%	7.0%
Peer College 2	176	182	\$24,969	85%	\$48,130	102%	80%	9.0%	-8.1%
Peer College 3	175	154	\$20,304	89%	\$29,475	89%	67%	7.5%	1.4%
Peer College 4	153	151	\$21,637	77%	\$41,894	99%	76%	9.5%	9.9%
Peer College 5	218	208	\$28,353	138%	\$36,830	100%	86%	4.2%	0.9%
Peer College 6	137	157	\$27,533	101%	\$43,973	91%	77%	8.6%	-3.0%
Peer College 7	175	170	\$23,483	96%	\$38,429	89%	77%	7.6%	-7.5%
Peer College 8	147	120	\$22,919	68%	\$34,005	76%	46%	10.4%	1.6%
Peer College 9	164	181	\$40,966	177%	\$58,470	151%	72%	7.5%	5.0%
Peer College 10	184	146	\$21,227	84%	\$35,818	86%	72%	8.3%	-2.5%
Peer-group average	177	168	\$28,717	109%	\$44,622	105%	73%	8.1%	-1.4%



# Outcomes of Prize finalist colleges:

*Exceptional short-term labor market outcomes for graduates*

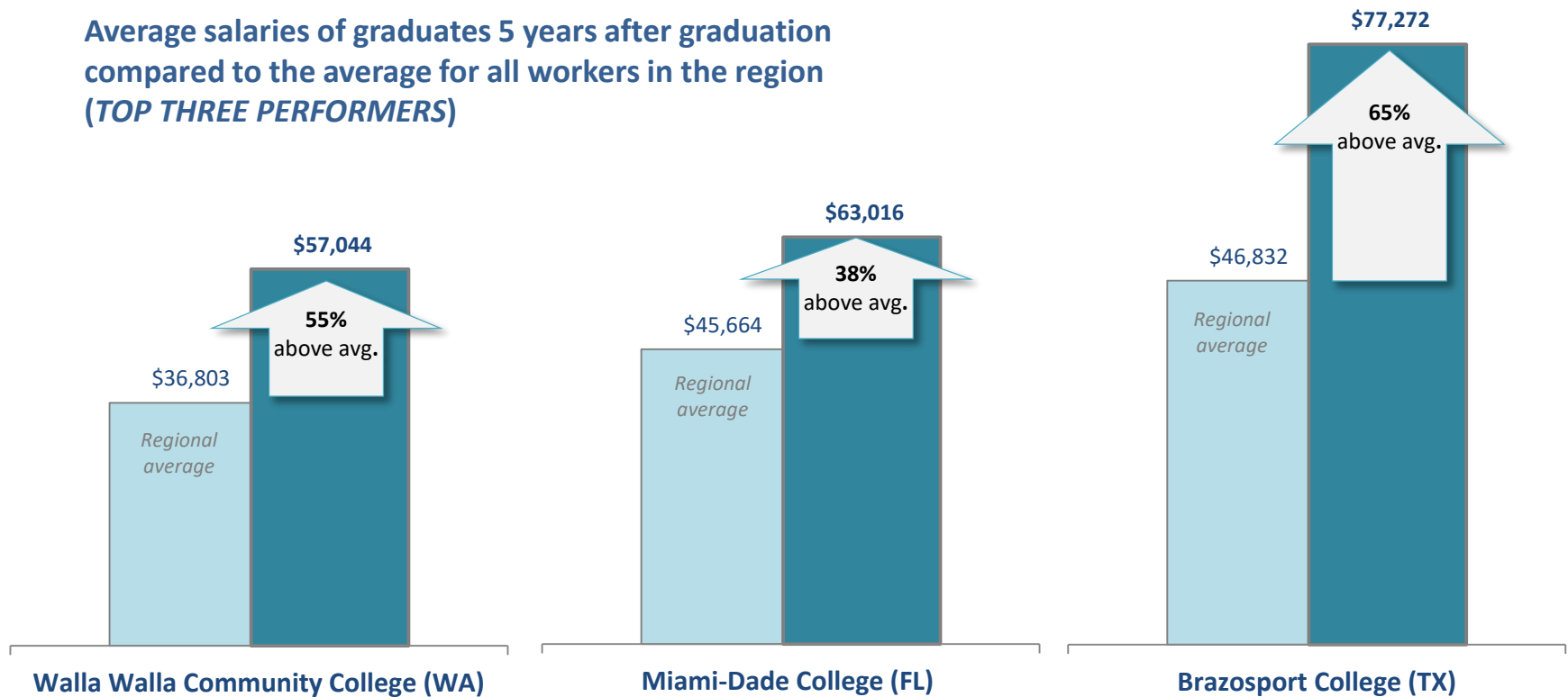
Average salaries of recent graduates compared to the average for all new-hires in the region (**TOP THREE PERFORMERS**)



# Outcomes of Prize finalist colleges:

*Exceptional long-term labor market outcomes*

Average salaries of graduates 5 years after graduation  
compared to the average for all workers in the region  
(TOP THREE PERFORMERS)





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# Learning Outcomes Data: A Quick Look



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# Goals of Learning Outcomes Assessment

- **An ideal Learning Outcomes Assessment process:**
  - ✓ **Focuses on authenticity vs. compliance**
  - ✓ **Is driven & supported by the practitioners tasked with improvement**
  - ✓ **Leads to the generation of insight that is woven into improvement efforts**
  - ✓ **Creates campus conversations about student success and improving outcomes**



# Learning Outcomes Assessment Thoughts

- **Lots of outcomes to assess:**
  - ✓ **Institutional Learning Outcomes**
  - ✓ **General Education Learning Outcomes**
  - ✓ **Program Learning Outcomes**
  - ✓ **Course-level Learning Outcomes**
- **Challenging & complex – but critical to work on generating insight and improvement at all levels**





# Learning Outcomes Assessment Thoughts

- Not many nationally normed LOA models aside from standardized tests (e.g. CLA & CAP) – many local models that are good
- Accreditation focus on LOA has resulted in a massive collection / reporting effort – taking away from the actual use of data for improvement...



# Learning Outcomes Assessment Thoughts

- Check out how CCBC's Executive Summaries at [link](#) tell the assessment & improvement story at the course level
  - ✓ My favorite all-time story is Chem 108 – tells how an attempt to improve outcomes actually made it worse, but then further redesign achieved very high levels – tells that LOA is a journey to improvement story
- CCBC also strong on LOA at GE levels through a rubric assessment model – see [link](#) for more info





# Learning Outcomes Examples

- Alverno College

- ✓ The gold standard example of LOA – check out the student, community, and faculty responses in addition to the mechanics - [link](#)

- Valencia College

- ✓ detailed program level assessments, excellent sharing of LOA outcomes with peers – [link](#)

- Santa Barbara City College

- ✓ closing the loop by focusing on improvement plans – [link](#)

- West Kentucky Community & Technical College

- ✓ overall approach to student learning; significant gains in reading based on LOA assessment – [link](#)





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# Equitable Outcomes: A Quick Look



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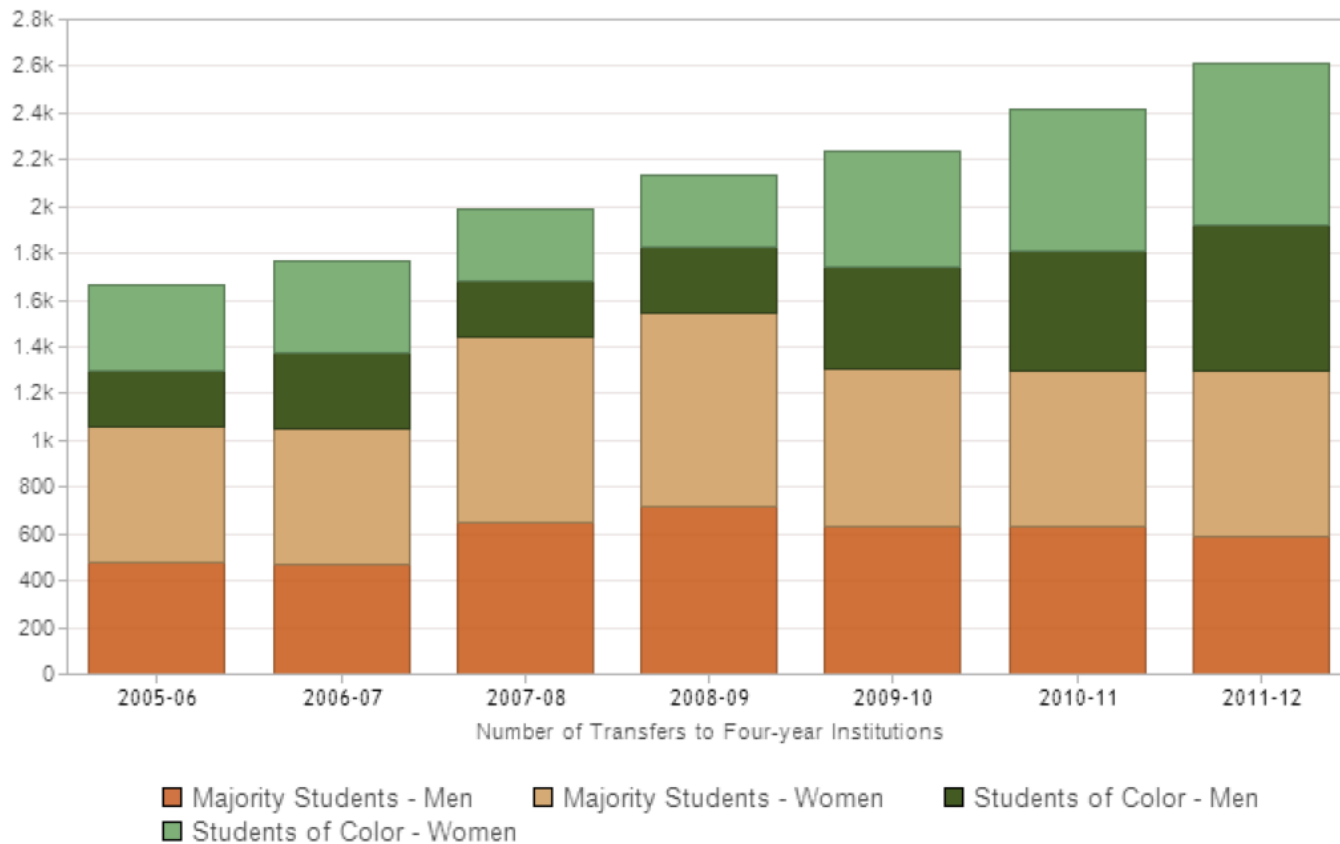
# **Equitable Outcomes**

## **Example 1:**

### **Northern Virginia CC & Transfers to George Mason University**



# Northern Virginia Community College Students Transferring into George Mason University 2005–2012



Source: SCHEV 2014

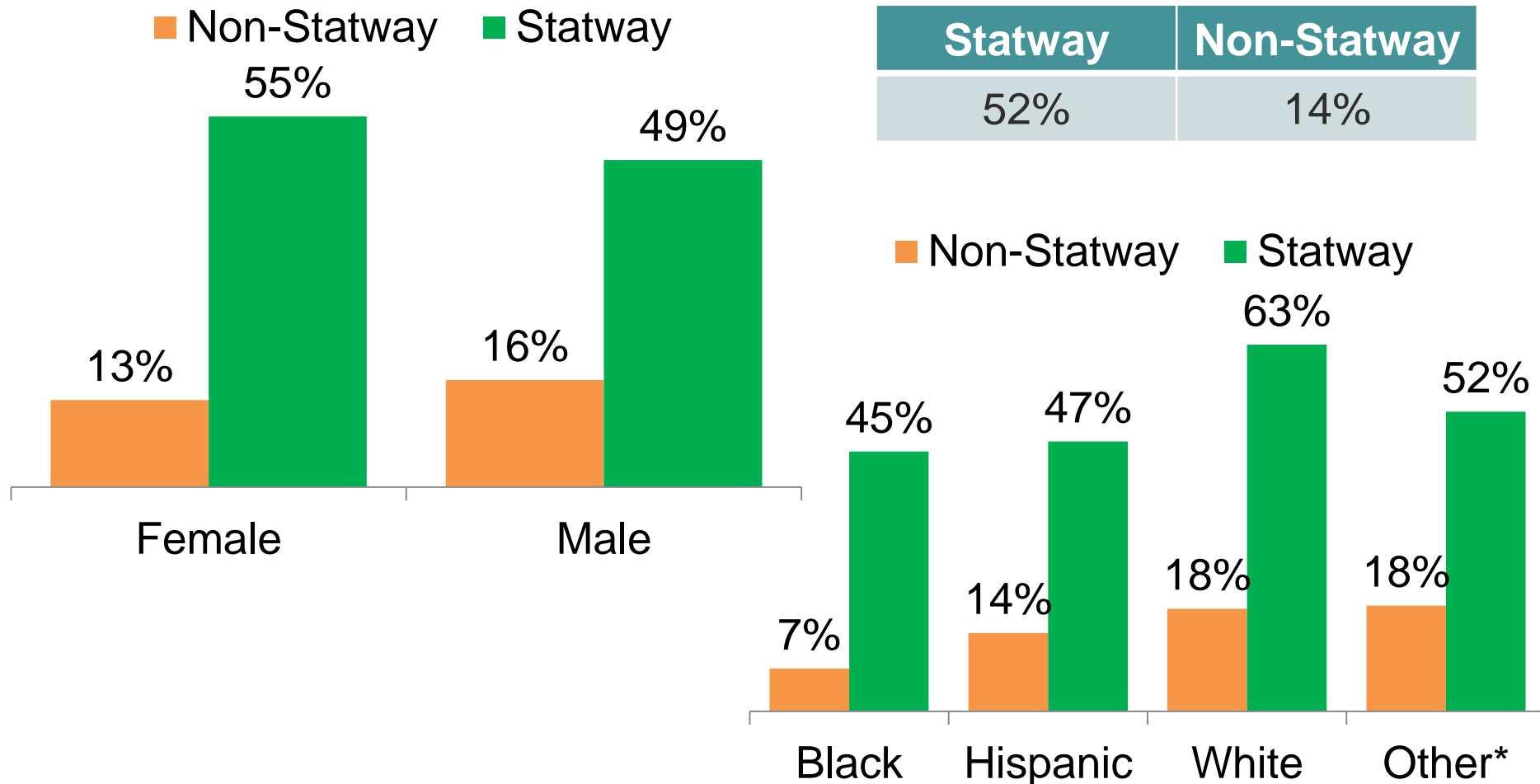
# **Equitable Outcomes**

## **Example 2:**

**Statway / Quantway looks at  
Program Effects by Gender & Race**

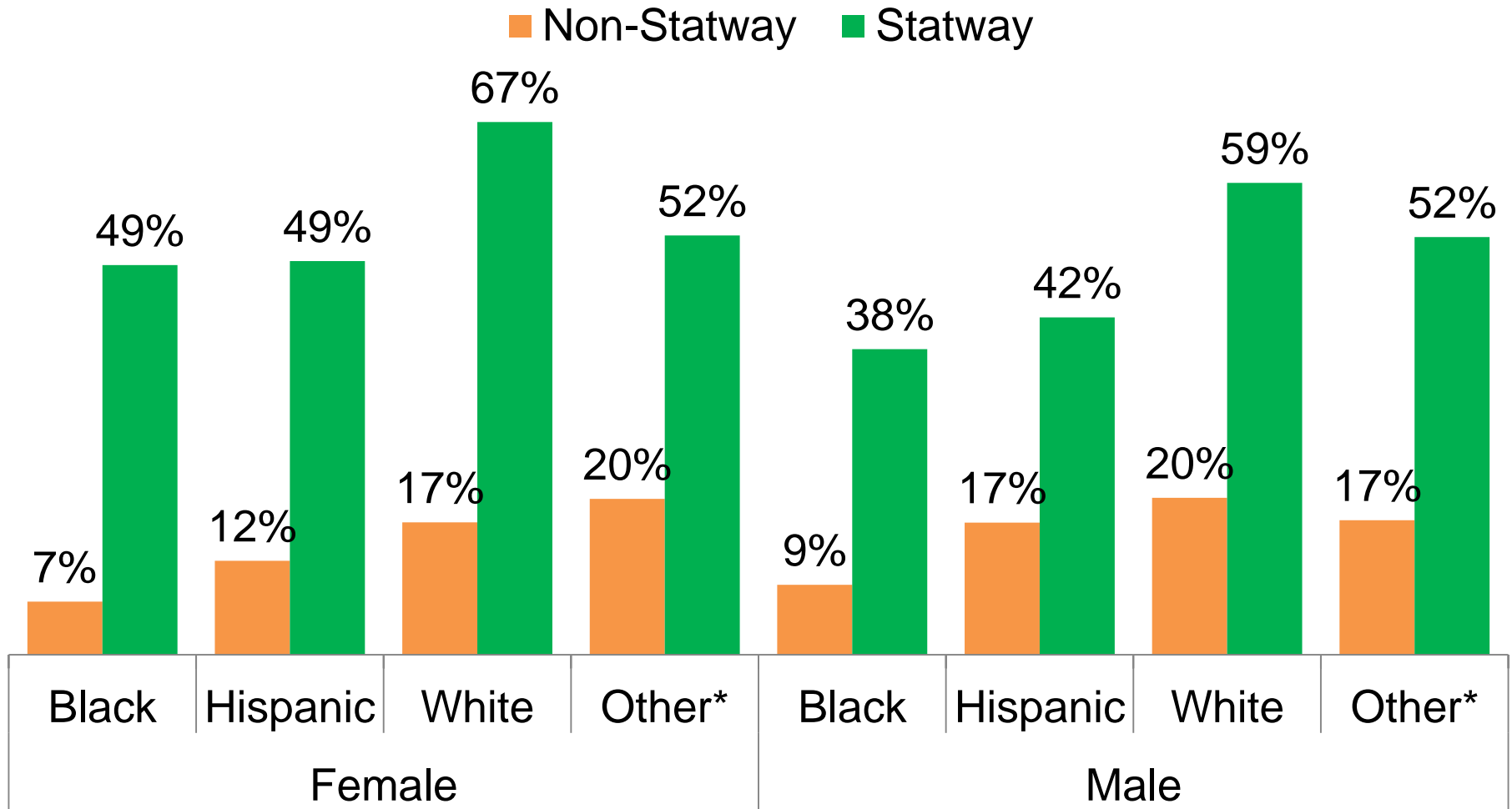


# Statway looks at Pathway thru Algebra Success by Gender & Ethnicity



**Note.** Data from unknown gender status were not presented; very few were unknown.  
“Other” also contains data from unknown status.

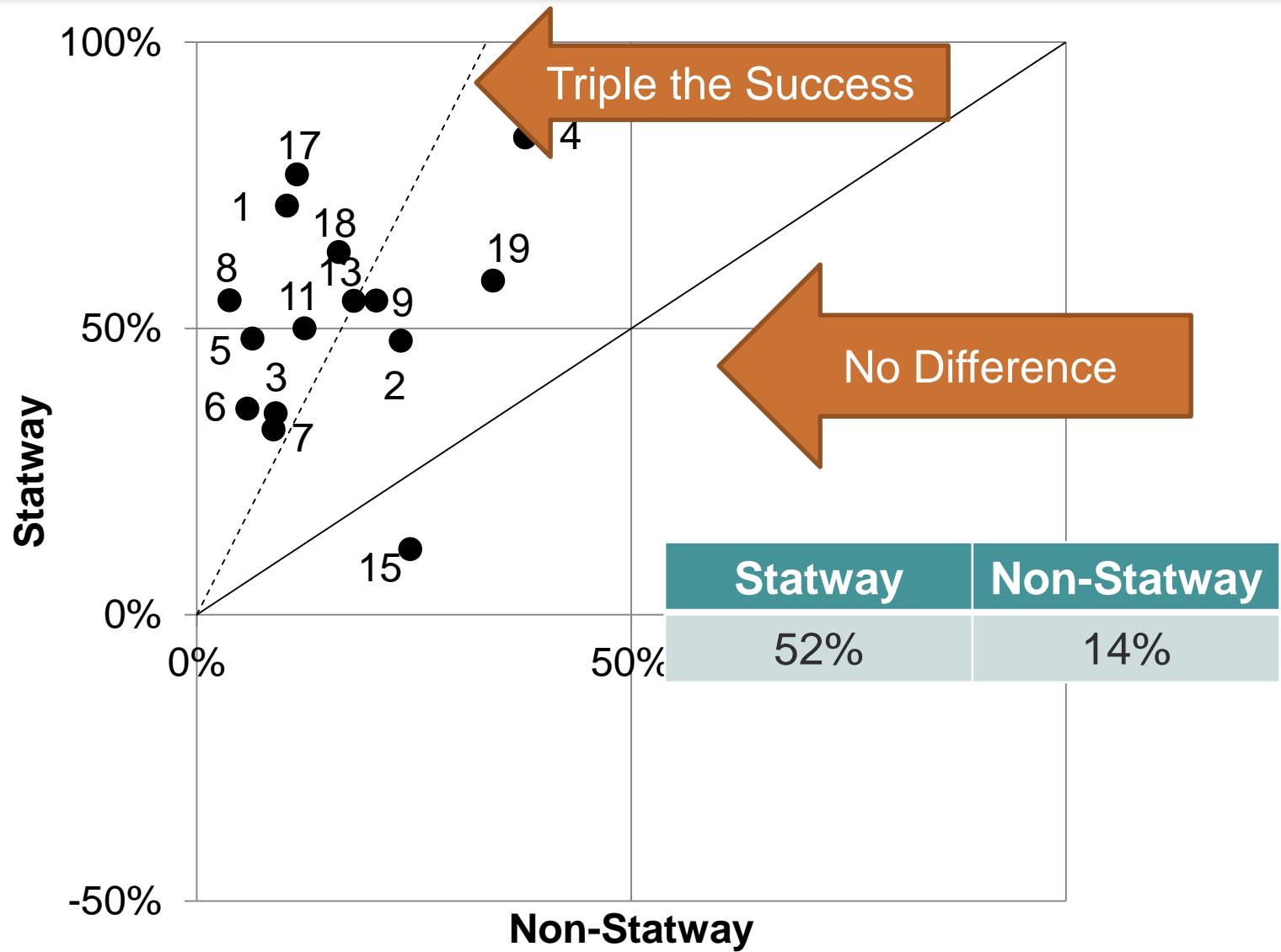
# Gender and Race/Ethnicity



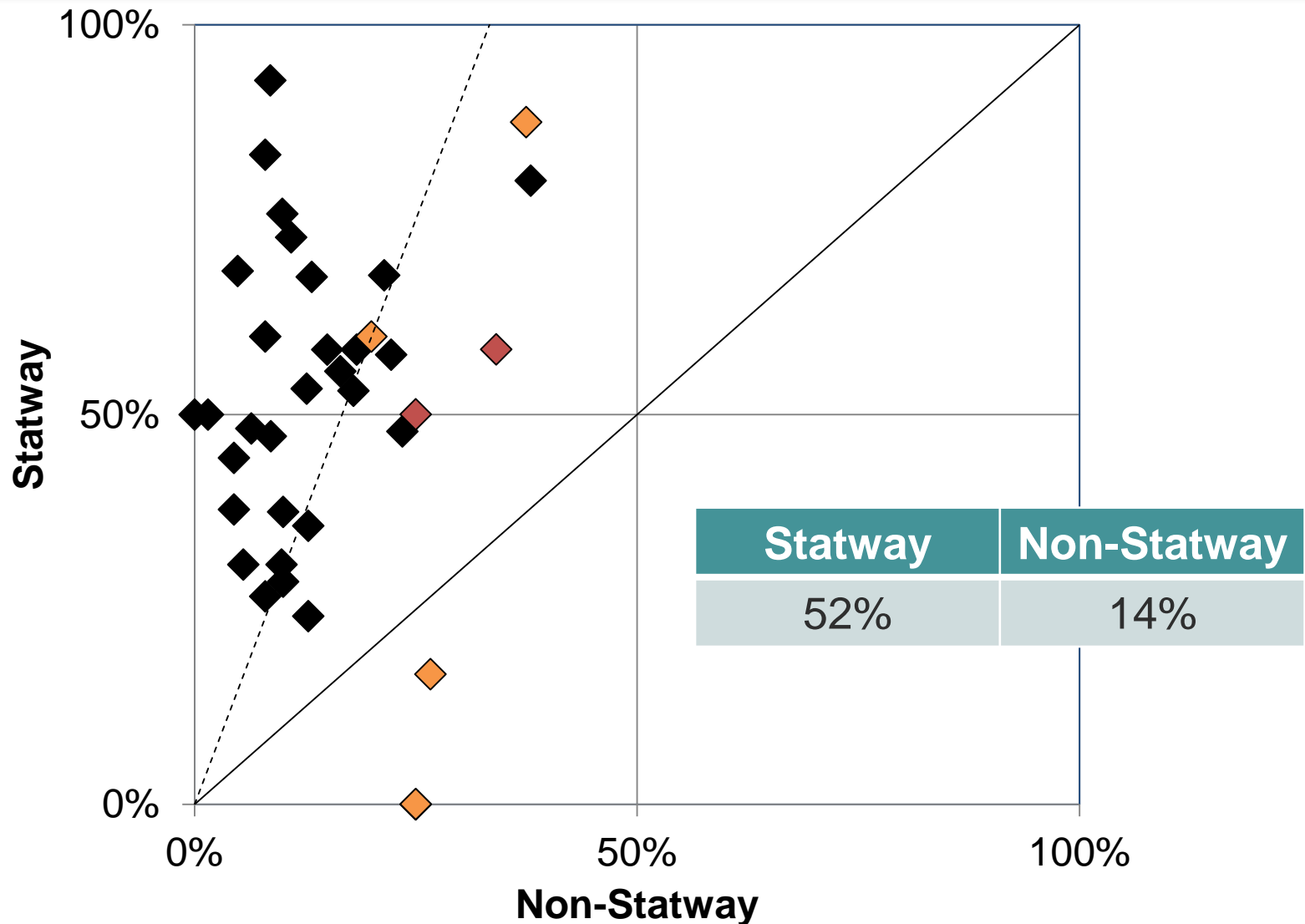
**Note.** Data from unknown gender status were not presented; very few were unknown. "Other" also contains data from unknown status.



# College Level Math Success By College



# College Level Math Success - Faculty



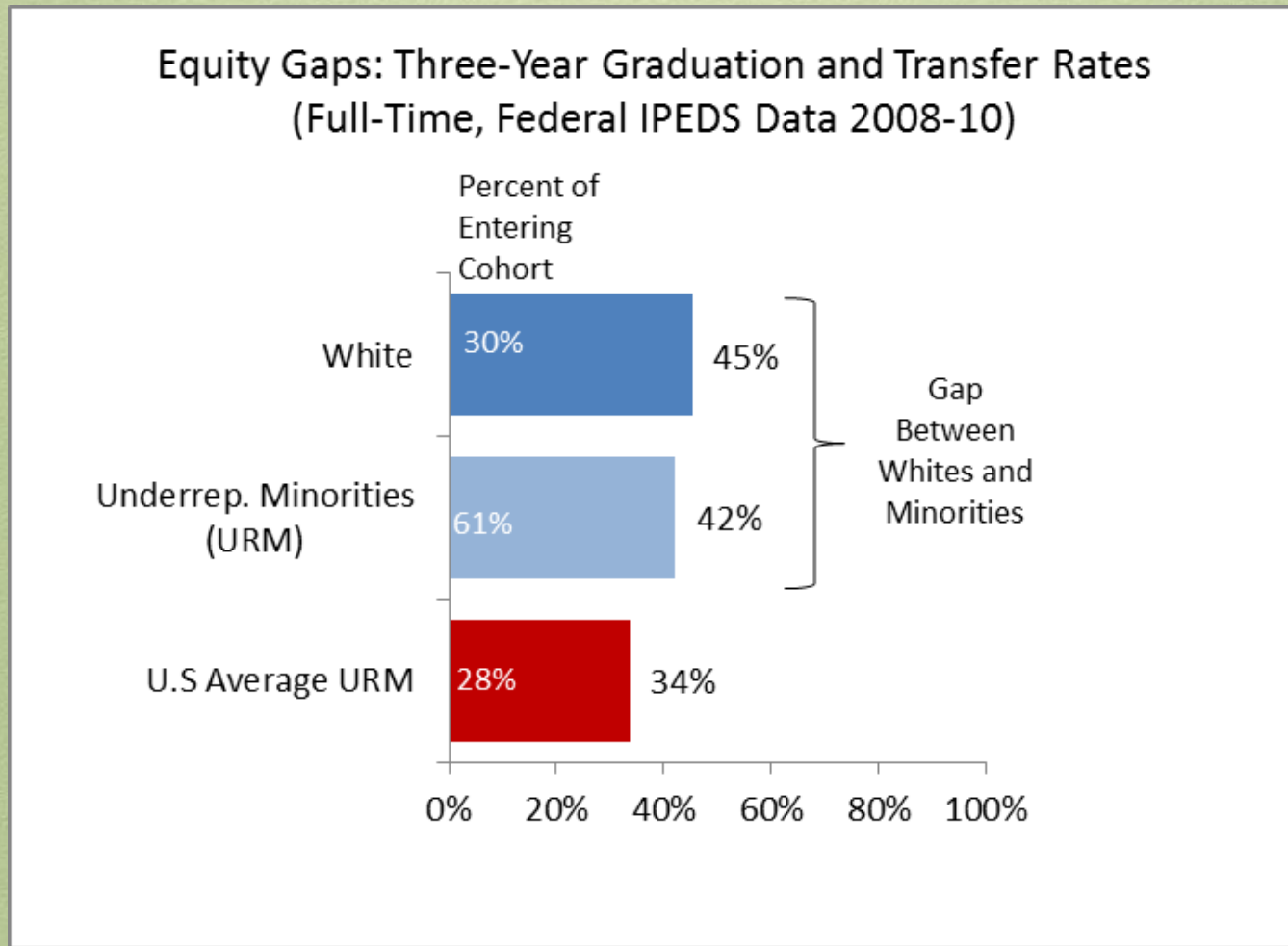
# Equitable Outcomes

## Example 3:

**Aspen Prize's Approach for Comparing  
Equitable Outcomes at the College Level**



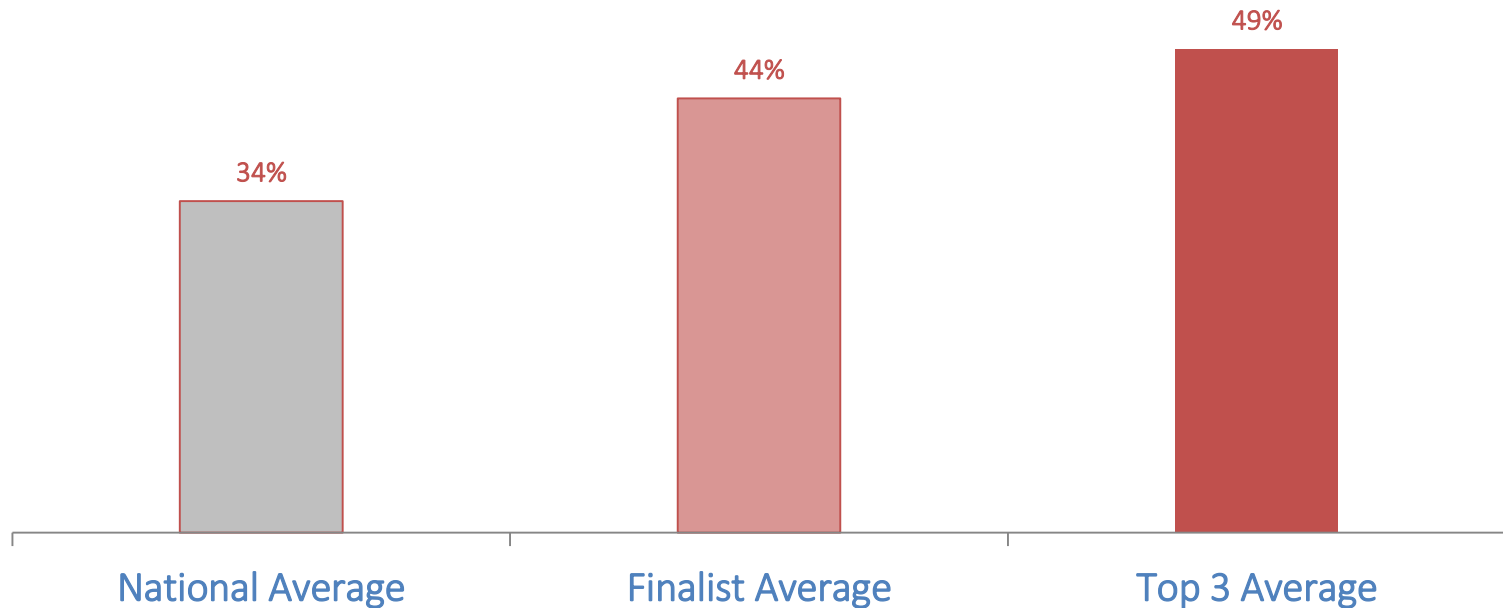
# An Aspen Prize Finalist Achieves Near Equity in Outcomes



# Outcomes of Prize finalist colleges:

*Far greater equity in outcomes than the national average*

Three-year completion and/or transfer rates for *underrepresented minority students* compared to the national average



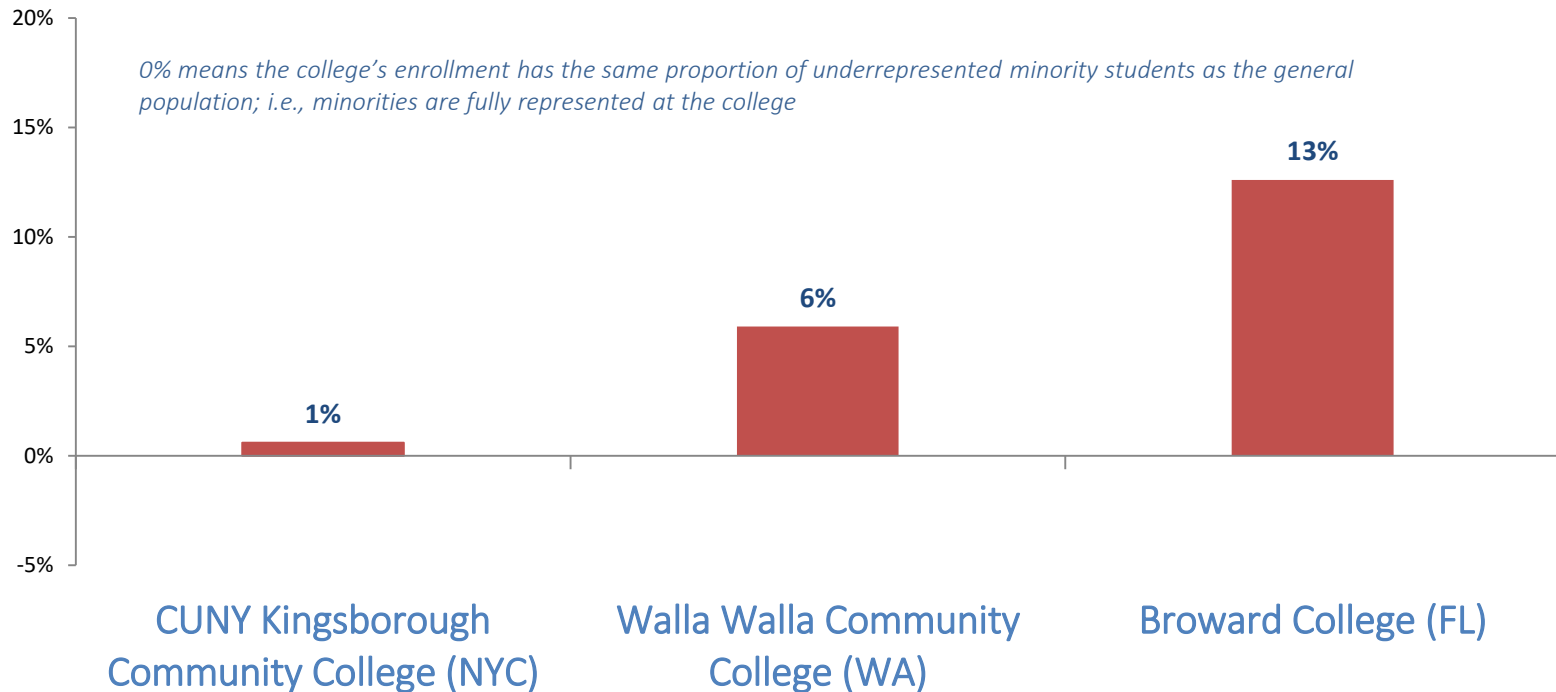
- Brazosport College (TX)
- Santa Barbara City College (CA)
- Santa Fe College (FL)



# Outcomes of Prize finalist colleges:

*Exceptional equity in access for underrepresented populations*

**% Difference between underrepresented minority enrollment in institution and percentage of the population in the college's service area (*TOP THREE PERFORMERS*)**



# Find Out More

- **The National Center for Inquiry & Improvement website**  
[www.inquiry2improvement.com](http://www.inquiry2improvement.com)
- **Dr. Rob Johnstone, Founder & President**  
[rob@inquiry2improvement.com](mailto:rob@inquiry2improvement.com)
- **CBD Inquiry Guides on Applied Inquiry & Nuances of Completion:**  
<http://www.inquiry2improvement.com/publications-resources>

