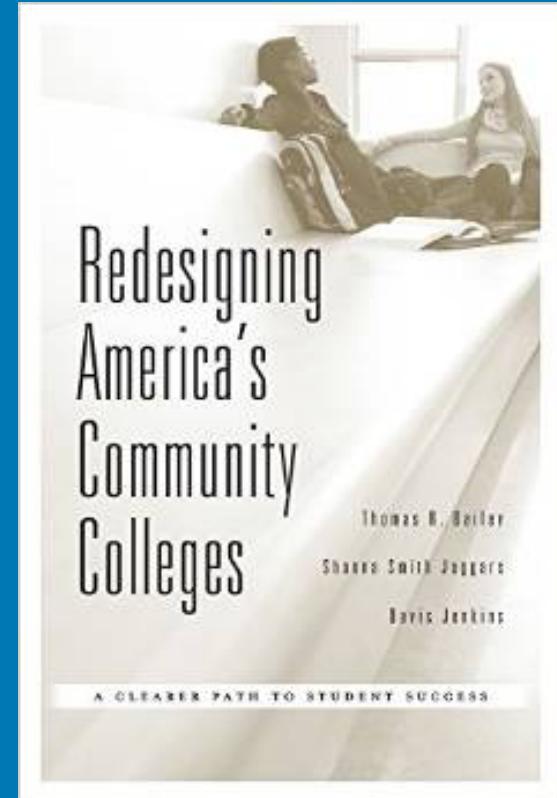


# Redesigning America's Community Colleges

## An Overview

**Thomas Bailey**  
**Director, CCRC**

@Baileyccrc  
@Communityccrc  
#redesigningccs



Learner-Centered Institutions: The Future of Higher Education  
New England Board of Higher Education  
Boston, MA  
October 26, 2015

## Two Observations

“Flavor of the month” reforms don’t change institutional performance even if they “work”

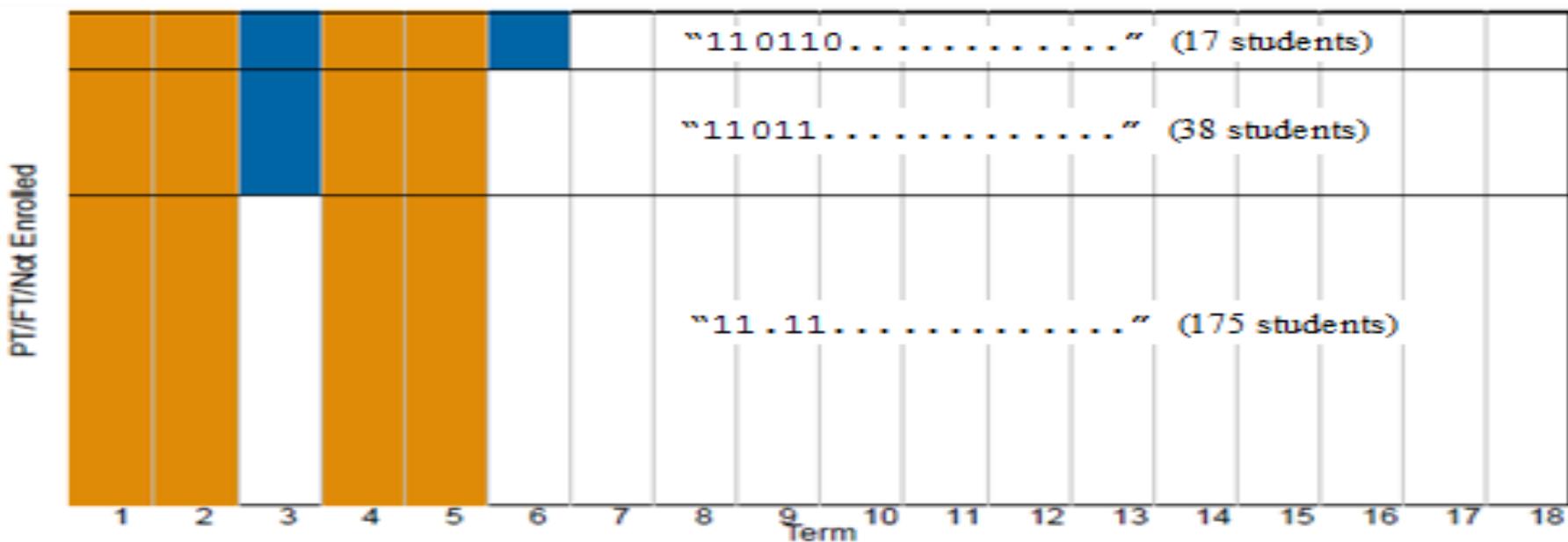
Our colleges don’t seem to operate in the ways that are consistent with their design

# Traditional Model of Reform

Pilot-to-scale model—  
horizontal scaling

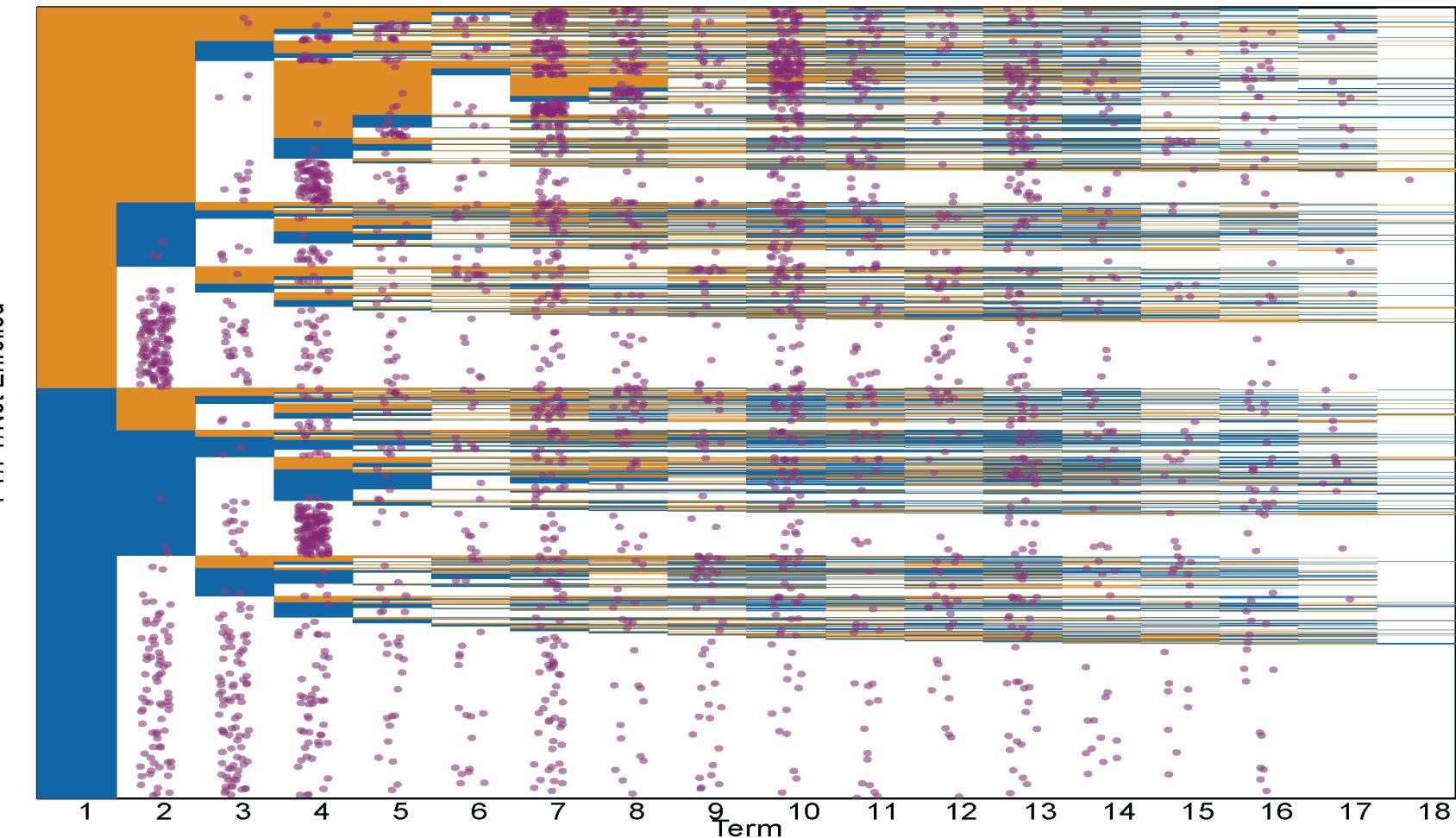
Vertical scaling

# Ideal CC Student Pathways

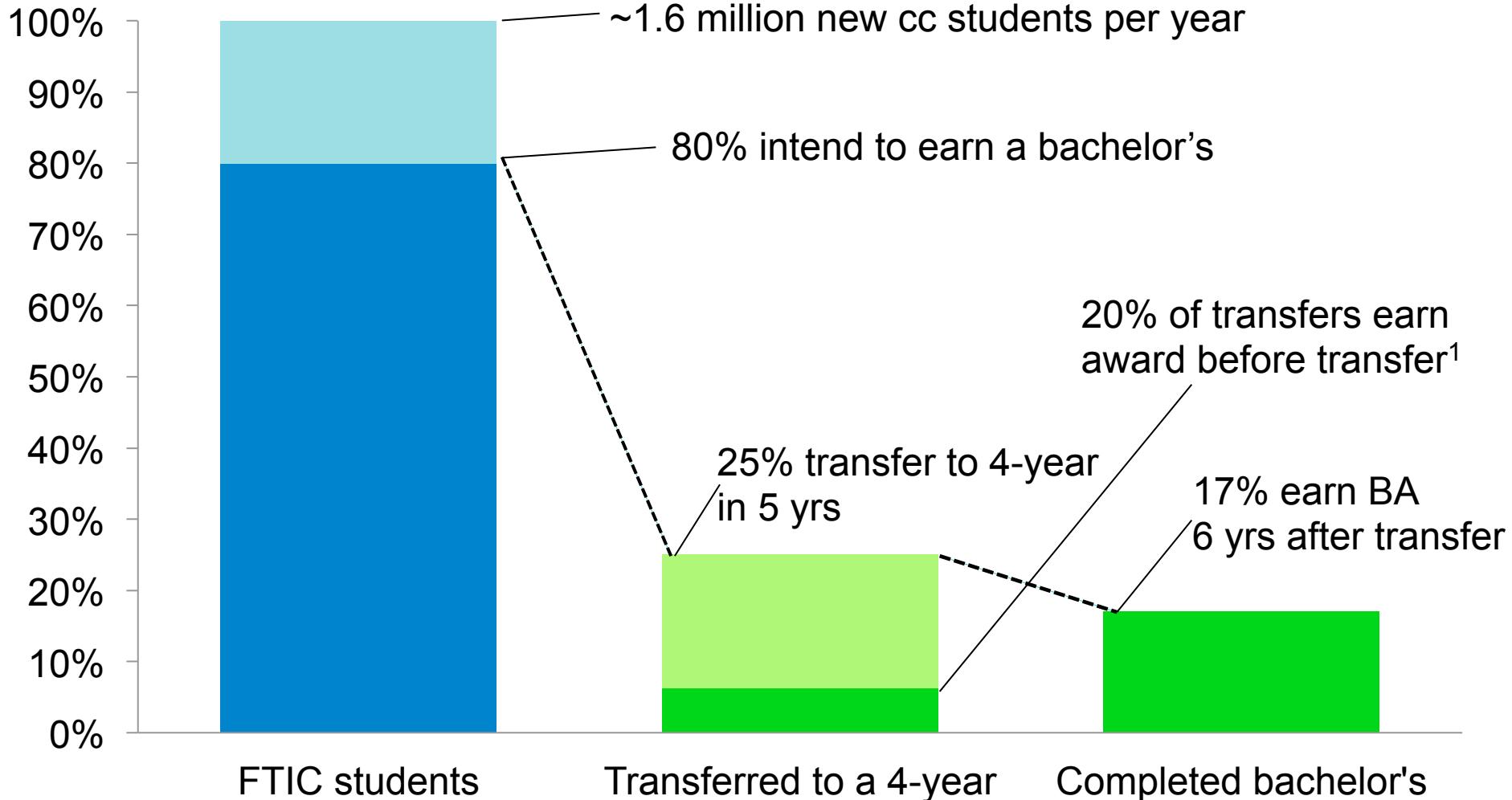


Source: Crosta, 2013.

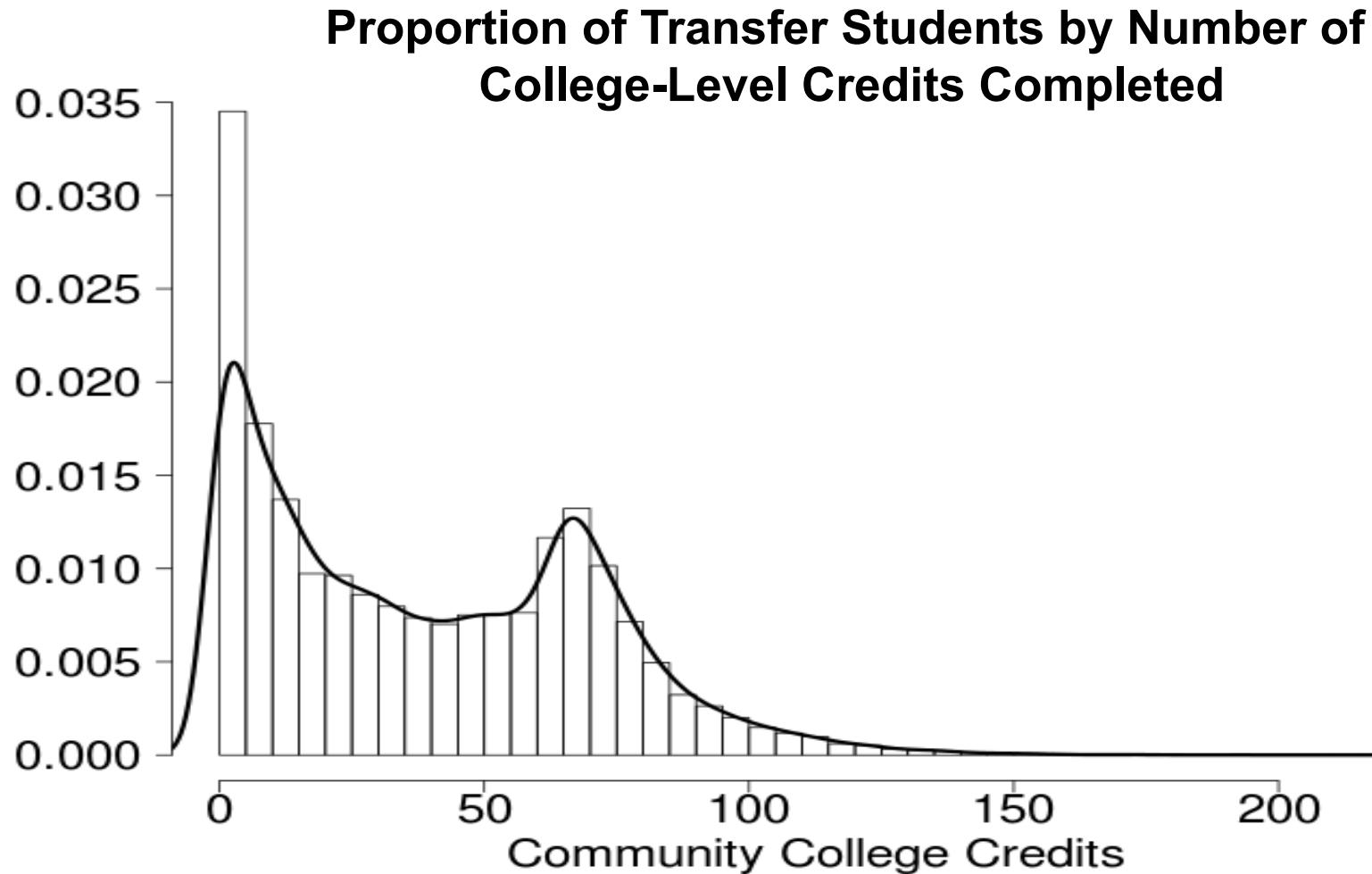
# Actual CC Student Pathways



# Unfulfilled Expectations



# Transfer Student Timing



# GENERAL EDUCATION REQUIREMENTS

## (Select 12 courses from this list of more than 300)

### ***Basic Liberal Studies Requirements: [2 courses must include the Diversity (D) overlay]***

***English Communication:*** 6 credits; 3 credits must be in a writing course

Writing (ECw): ELS 112, 122 (nonnative speakers); HPR 326; WRT 104, 105, 106, 201, 227, 235, 302, 303, 304(D), 305(D), 333.

General (EC): COM 100(D), 110(D); LIB 120; PHL 101.

***Fine Arts and Literature (A): 6 credits; 3 credits in Fine Arts and 3 credits in Literature***

Fine Arts: ARH 120(D), 251(D), 252(D); ART 101, 207; FLM 101(D), 203(D), 204(D), 205(D); HPR 105, 124, 201A, 202A, 324; LAR 201; MUS 101(D), 106(D), 111, 292(D), 293(D); PLS 233; SPA 320(D); THE 100, 181, 351(D), 352(D), 381, 382, 383.

Literature: AAF 247(D), 248(D); CLA 391(D), 395(D), 396(D), 397(D); CLS 160(D); ENG 110(D), 160(D), 241(D), 242(D), 243(D), 247(D), 248(D), 251(D), 252(D), 260(D), 262(D), 263(D), 264(D), 265(D), 280(D), 300(D), 302(D), 303(D), 304(D), 317(D), 355(D), 357(D), 358(D); FRN 309(D), 310(D), 320(D), 391(D), 392(D), 393(D); HPR 105, 125, 201A, 202A; RUS 391(D), 392(D); SPA 305(D), 306(D), 307(D), 308(D); WMS 317(D).

***Language/Culture (FC): 6 credits***

- Demonstration of competence through the intermediate level by examination or successfully completing through 104 (living language) or 302 (classical language)
- Two-course sequence (or one course at the 113 level) in a previously studied language through at the appropriate level (all D): ARB 103, 104; CHN 103, 104; FRN 103, 104; GER 103, 104; GRK 301, 302; HBW 103, 104; ITL 103, 104, 111; JPN 103, 104; LAN 193, 194; LAT 301, 302; POR 103, 104; RUS 103, 104; SPA 103, 104, 111, 113, 210.
- Two-course sequence (or one course at the 111 level) in a language not previously studied (or studied for less than two years in high school) through the beginning level: ARB 101, 102; CHN 101, 102; FRN 101, 102; GER 101, 102; GRK 101, 102; HBW 101, 102; ITL 101, 102; JPN 101, 102; LAN 191, 192; LAT 101, 102; POR 101, 102; RUS 101, 102; SPA 101, 102.
- Study abroad in an approved program for one semester
- Major in a foreign language
- Formerly registered international students, students with recognized immigrant status, or naturalized citizens (at Dean's discretion)
- Two courses in Cross-Cultural Competence: CPL 300(D); FRN 309(D), 310(D), 320(D), 391(D), 392(D), 393(D); HIS 132(D), 171(D), 172(D), 180(D), 311(D), 327(D), 374(D), 375(D); HPR 201F, 202F; LET 151L(D), 151Q(D), 151R; NRS 300; PHL 331(D); RLS 131(D); SPA 320(D), TMD 224(D); six credits of a full-semester approved Intercultural Internship in a foreign country through the Office of Internships and Experiential Education

***Letters(L): 6 credits***

AAF 150(D), 201(D), 355(D), 356(D); APG 327; BGS 392(D); CLS 160(D), 235; EGR 316(D); ENG 110(D), 160(D), 243(D), 251(D), 252(D), 280(D), 355(D), 356(D); FRN 391(D), 392(D), 393(D); HIS 111, 112, 113(D), 114(D), 116, 117, 118(D), 130(D), 132(D), 141(D), 142(D), 145(D), 146(D), 150(D), 160(D), 171(D), 172(D), 180(D), 304, 305, 310(D), 311(D), 314, 323(D), 327(D), 332(D), 333(D), 340(D), 341(D), 346(D), 351(D), 355(D), 356(D), 374(D), 375(D); HPR 107, 201L, 202L, 307; JOR 110(D); LAR 202(D); LET 151L(D), 151Q(D), 151R(D); NUR 360(D); PHL 101, 103, 204, 210(D), 212(D), 215, 217(D), 235, 314, 316(D), 321, 322, 323(D), 325(D), 328(D), 331(D), 346, 355; PSC 341, 342; PSY 310; RLS 111(D), 125, 126, 131(D); WMS 220(D), 315(D), 320(D)

***Mathematics(MQ): 3 credits satisfied by MTH 141***

BUS 111, CSC 101, 201; HPR 108, 201M, 202M; MTH 106, 107, 108, 109, 111, 131, 141; PSC 109; STA 220.

***Natural Sciences(N): 6 credits; satisfied by PHY***

APS 190, 210, 211; APG 201(D); AST 108, 118; AVS 101(D); BCH 190; BIO 101, 102, 105, 106, 286(D); BPS 201; CHM 100, 101, 103, 112; GEO 100, 102, 103, 110, 113, 120; HPR 109, 201N, 202N; MIC 190; NFS 207; NRS 190; OCG 110, 123, 131; PHY 109, 111, 112, 140, 185, 186, 203, 204, 205, 273, 274, 275; PLS 150, 190; TMD 113

***Social Sciences(S): 6 credits***

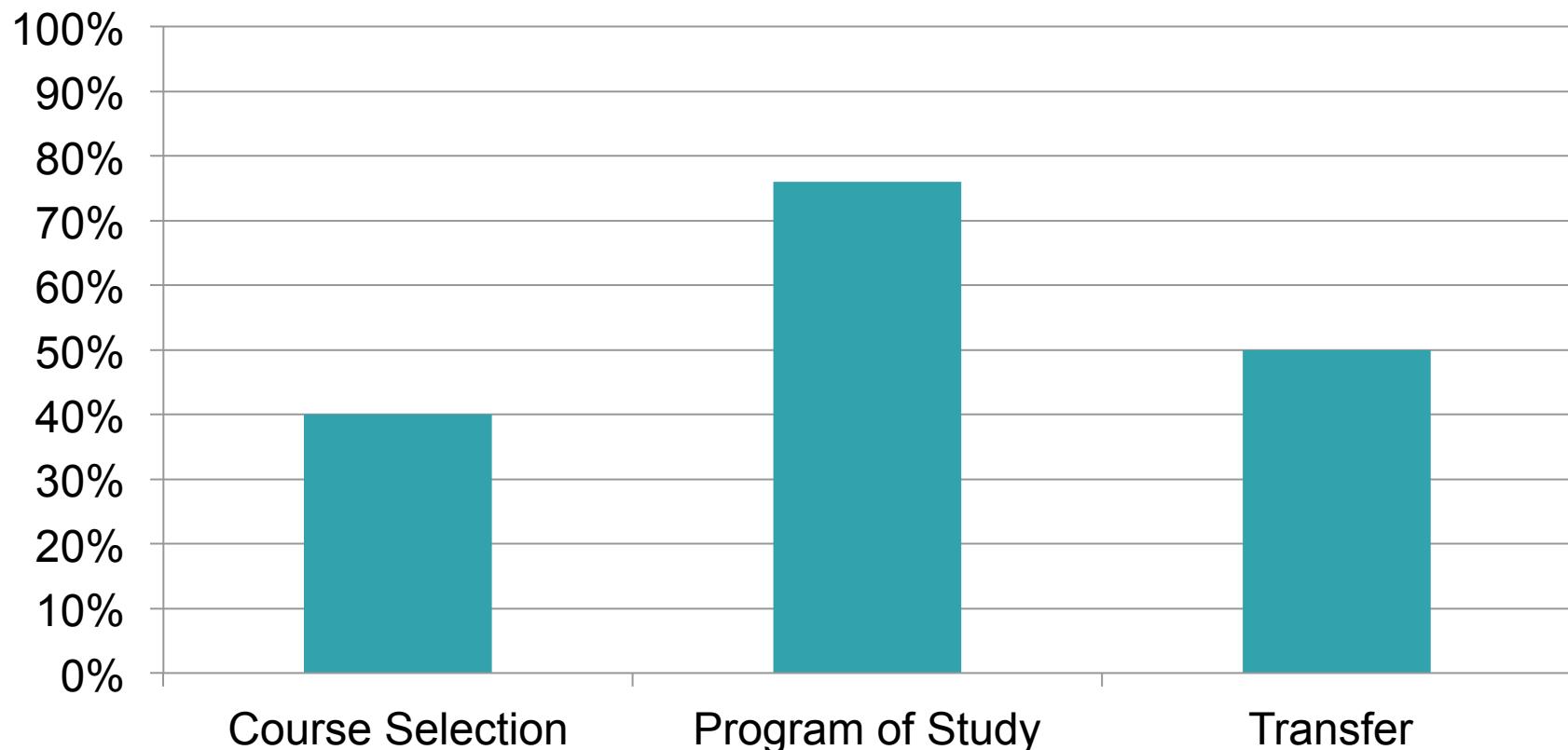
APG 200(D), 202, 203(D), 301(D); CPL 202(D); ECN 100(D), 201, 202, 306, 381(D); EDC 102(D); EEC 105, 310, 356; GEG 101(D), 104(D), 202(D); HDF 225; HPR 110(D), 201S, 202S; HSS 130; JOR 110(D); KIN 123(D); LIN 200(D); MAF 100; NUR 150(D); PSC 113(D), 116(D), 274(D), 288; PSY 103(D), 113(D), 232(D), 235(D), 254(D), 255(D); SOC 100(D), 212(D), 230(D), 240(D), 242(D), 274(D); TMD 224(D), WMS 150(D)

# Online Self-Advising



# Student Performance on a Self-Advising Task

**Proportion of Items Correct**



# Exercise: Choosing a Transfer School

- Put yourself in the place of a student at your college (“Community College”), who wants to transfer to a four-year school in Journalism.
- Take 30 minutes to use your own website (including your college’s student portal / electronic advising tools) and any relevant links from your website to other sites, to answer the questions on page 2.
  - *If you don’t have a laptop / tablet, partner up with someone who does, and focus on their college’s website*
- When you get to the final two questions...

# Student Experience of Transfer

## Problems

- Confusion about programs, requirements, pathways leads to excess credits, time, cost
- Transfer credits count only as electives
- Many decide on majors too late

## Recurring Themes

- Information inaccurate, inaccessible
- Well-meaning but overwhelmed advisors
- Dysfunctional communication within/ among 2- and 4-years
- Students blame themselves

# Pathways Analysis Summary

Chaotic student enrollment patterns

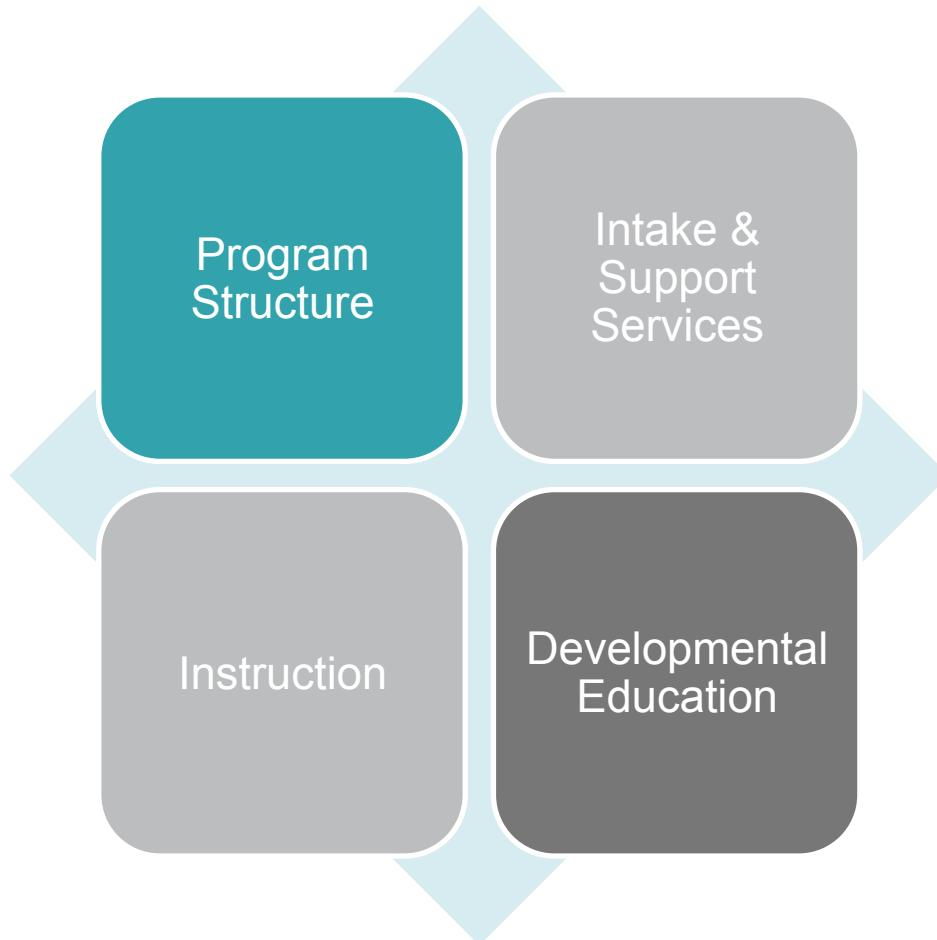
Pathways misaligned, roadblocks

Students say they are confused

# Lost in a Maze



# Four Structural Components



# Behavioral psychology/ economics

Maps

Defaults, “Active choice”

Feedback, Reminders

# Making Sense of Complex Institutions

Behavioral  
psychology/  
economics

- Maps
- Defaults, “active choice”
- Feedback, reminders

# Status Quo Pathways

- Limited upfront career and college planning
- Too many choices; requirements confusing
- Paths unclear, poorly aligned with end goals
- Developmental diversion
- Students' progress not monitored
- Limited on-going feedback and support
- Poor alignment with hs and other feeders

# Guided Pathways

- ✓ Career/college goal-setting from the start
- ✓ Required plans using default program maps
- ✓ “Exploratory” majors for undecided
- ✓ Predictable schedules
- ✓ Academic support integrated into program gatekeeper courses (not just MATH & ENG)
- ✓ Progress tracking, feedback and support
- ✓ Bridges to college programs from feeders

# Pathway Models Compared

Self-Directed (Status Quo)	Guided Pathways
Optional career / college planning	Required plans, exploratory majors
Paths unclear, too many choices	Default, full-program maps
Students not building skills across curriculum	SLOs aligned with end-goal requirements
Assessment used to sort students	Assessment used to diagnose areas where support needed
Pre-requisite remediation focused on Algebra & English composition	Integrated, contextualized academic support for program “gateway” courses
Students’ progress not monitored, limited feedback	Proactive progress tracking, feedback, support

# Four Big Ideas for Redesign

1. Mapping Paths to Student End Goals
2. Helping Students Get on a Path
3. Keeping Students on a Path
4. Ensuring that Students are Learning

# Program Structure

Self-Service (Status Quo)	Guided Pathways
Confusing array of choices	Clearly-defined, manageable choices (e.g., “meta-major”)
Open-ended exploration	Guided exploration
Disconnected courses	Sequenced & connected courses
Checking off requirements	Building up to clearly-defined learning outcomes
Poor alignment with further goals	Clear roadmaps to student end goals

# How faculty create program maps: Miami Dade

## Planning group: 27 faculty

- Initially targeted 4 disciplines: 80% of enrollees
- Disciplinary faculty supported by gen-ed faculty, IR department
- Draft maps vetted by over 200 faculty

## Four design guidelines:

- Enable seamless transfer in target bachelor's programs at key destinations
- Integrate opportunities to master MDC's 10 gen-ed learning outcomes
- Satisfy state gen-ed core requirements with most-relevant electives
- Create variants for full-time, part-time, and developmental students

# City Colleges of Chicago

## Academic/Career Focus Areas



ADVANCED  
MANUFACTURING

HEALTHCARE



BUSINESS AND  
PROFESSIONAL SERVICES

INFORMATION  
TECHNOLOGY



CONSTRUCTION  
TECHNOLOGY AND DRAFTING

LIBERAL ARTS



CULINARY ARTS  
AND HOSPITALITY

LIFE AND PHYSICAL  
SCIENCES



EDUCATION

TRANSPORTATION,  
DISTRIBUTION, AND LOGISTICS

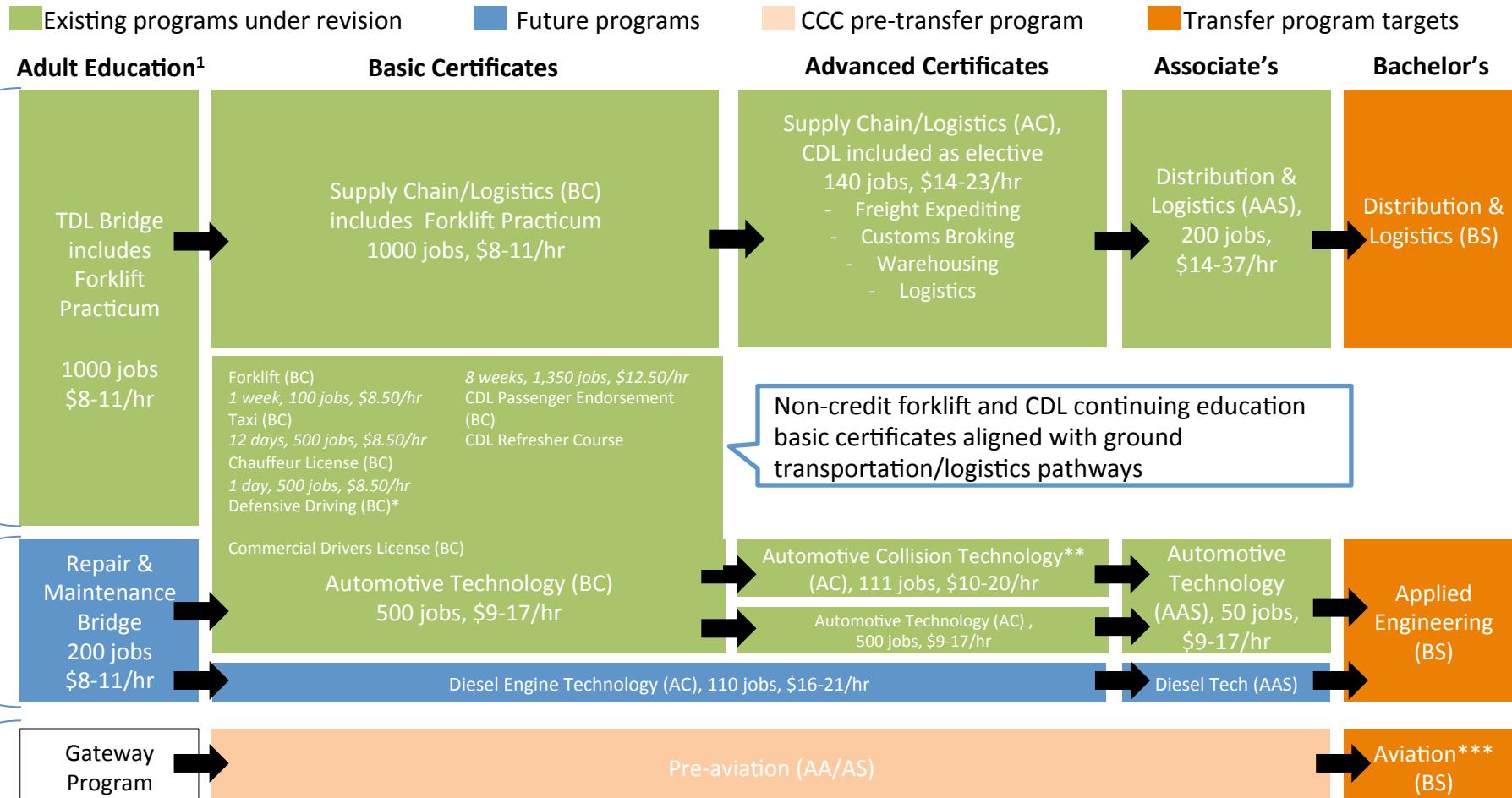


# Example Pathway: TDL focus on warehousing, logistics, auto and diesel repair and transfer opportunities in aviation

110,000 job openings in Cook County projected over the next decade

Annual job openings and starting wages shown for each program

CCC central store to offer hands-on experience across Logistics pathway



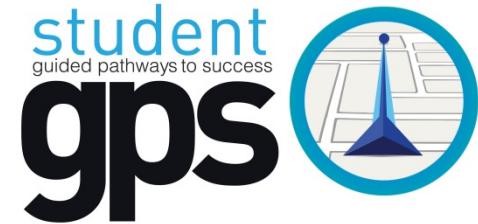
\*non-WIA eligible

\*\*KKC only \*\*\*Current articulation agreement with Lewis University in Air Traffic Control Management, Aviation Administration

Source: CCC Academic Catalog, 2011-2012; Team analysis, EMSI Q2 2012 Jobs: approx. annual Cook County projected openings 2012-2022, wages: 10<sup>th</sup> percentile through median

(1) Bridge programs prepare adult education and foundational students for college transition by providing intensive contextualized instruction and supportive services, while in many cases preparing students for entry level employment.

# We then developed collateral to help educate students on each Focus Area



## Focus Area Overview: Business & Professional Services

From the corner bakery to a Fortune 500 company, every successful business is the result of many professional disciplines

working in tandem. Someone must work with the accounts, analyze data to interpret trends, create a marketing strategy, and manage the overall business plan. Whether you prefer keeping track of numbers or you want to let your creativity shine, all of these things can happen in the right business role. If you are interested in accounting, management, marketing, real estate, or starting your own small business, this is the right focus area for you.

### Certificate and Degree Pathways Offered:

#### Harold Washington College Emphasis

	Basic Certificate	Advanced Certificate	Degree
Accounting (All but MX – HW emphasis)	X	X	X
Business Administration – General Business (DA / TR)		X	
Business/Economics (ALL – HW emphasis)			X
Insurance (HW)			X
Library Technical Assistant (WR)	X		X
Mgmt./Marketing (All but MX – HW emphasis)	X	X	X
Paralegal (WR)	X		X

Students in the Business and Professional Services focus area are likely to take classes like the following:

MATHEMATICS 125	Introductory Statistics <small>May require taking math readiness courses</small>
BUSINESS 111	Introduction to Business
ECONOMICS 201	Principles of Economics I
BUSINESS 181	Financial Accounting

### From College to Career

Some career opportunities CCC prepares students for are listed below:

#### Bookkeeping, Accounting, and Auditing Clerks

Starting Salary: \$25,646.00

Compute, classify, and record numerical data to keep financial records complete.

#### Manager of Retail Sales

Starting Salary: \$23,899.20

Directly supervise and coordinate activities of retail sales workers in an establishment or department. Duties may include management functions, such as purchasing, budgeting, accounting, and personnel work, in addition to supervisory duties.

Some careers in Business require education beyond an associate degree. Below are the regional four year schools with the highest graduation rates for students in Business:

- University of Illinois at Urbana-Champaign
- University of Wisconsin-Madison
- Bradley University
- Indiana University
- Illinois State University
- DePaul University
- University of Illinois at Chicago

## Brief Focus Area Overview

## Sample Career Options

## Specific CCC Program Offerings

## Recommended Transfer Options

## Sample Courses

# Pathway maps in our just-released 2014 Academic Catalog provide default schedules



D	AC	BC	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
●	●	●	Business 182 – Managerial Accounting (4)	Required Program Core	<b>COMPLETION</b> of Basic Certificate in Management/Marketing <b>DO THIS</b> – Meet with advisor to discuss Advanced Certificate, Associate of Applied Science, and four-year transfer options
●	●	●	Business 231 – Marketing (3)	Required Program Core**	
●	●	●	Business 236 – Advertising (3)	Program Elective	
●	●	●	Business 237 – Selling (3)	Program Elective	
●	●	●	Business 258 – Small Business (3)	Program Elective	
●	●	●	Computer Information Systems 123 – Introduction to Spreadsheets (3)	Program Elective	
<b>19 CREDIT HOURS</b>					

D	AC	BC	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
●	●	●	Business 211 – Business Law I (3) <b>OR</b> Business 212 – Business Law II (3) <b>OR</b> Business 214 – Legal and Social Environment of Business (3)	Required Program Core	<b>COMPLETION</b> of Advanced Certificate in Management/Marketing <b>DO THIS</b> – Apply online for advanced certificate <b>DO THIS</b> – Meet with advisor to confirm courses for completion of Associate of Applied Science degree
●	●	●	Business 241 – Introduction to Finance (3)	Required Program Core	
●	●	●	Business 269 – Principles of Management (3)	Required Program Core**	
●	●	●	Program Elective (3)	Program Elective	
●	●	●	Program Elective (3)	Program Elective	
●	●	●	Speech 101 – Fundamentals of Speech Communication (3)	Required Program Core*	
<b>18 CREDIT HOURS</b>					

# Since the start of Reinvention, we have seen progress on the goals



## 1 Increase the number of students earning college credentials of economic value

### Completion within three years

Class of 2009



### Number of degrees awarded

FY2009



## 2 Increase the rate of transfer to bachelor's degree programs following CCC graduation

### Number of Fall new students that transfer to 4-year institution after earning 12 credits

- Increase in articulation agreements with local four-year colleges have been established to make it easier for CCC students to transfer credits
- 42% transfer post-completion rate for FY2013



## 3 Drastically improve outcomes for students requiring remediation

### Percent full-time students persisting past 15 credits

- Nearly 90% of students come to CCC with developmental education needs.
- Majority of attrition occurs in developmental education sequence.



## 4 Increase the number and share of ABE/GED/ESL students who advance to and succeed in college-level courses

### Adult ed. students who transition to at least one credit course after one semester

- Created adult education pipelines into occupational and transfer programs
- Recent enrollment increases in high-need communities, particularly via off-sites



# Exercise: Program Structure and Advising Checklist

- The first step in implementing guided pathways is to understand the magnitude of the change required.
- Assign points for each program structure / advising policy based on whether the practices are in place at your institution.
  - 2 points = present
  - 1 point = somewhat present
  - 0 points = not present
- Take 10 minutes to complete the checklist and sum up your score. Point browser to [sjaggars.participoll.com](http://sjaggars.participoll.com)

# What was your score?

- A. 0-7
- B. 8-15
- C. 16-23
- D. 24-30

# Academic Maps: Four essential components—the narrative, sample schedule, milestones, and employment opportunities

The narrative explains the **use of academic maps** and any specific information about **degree requirements**, including admissions requirements

The sample schedule outlines **which courses** should be taken in **which specific term** in order to **satisfy all requirements**

List of Representative Job Titles and Potential Employers

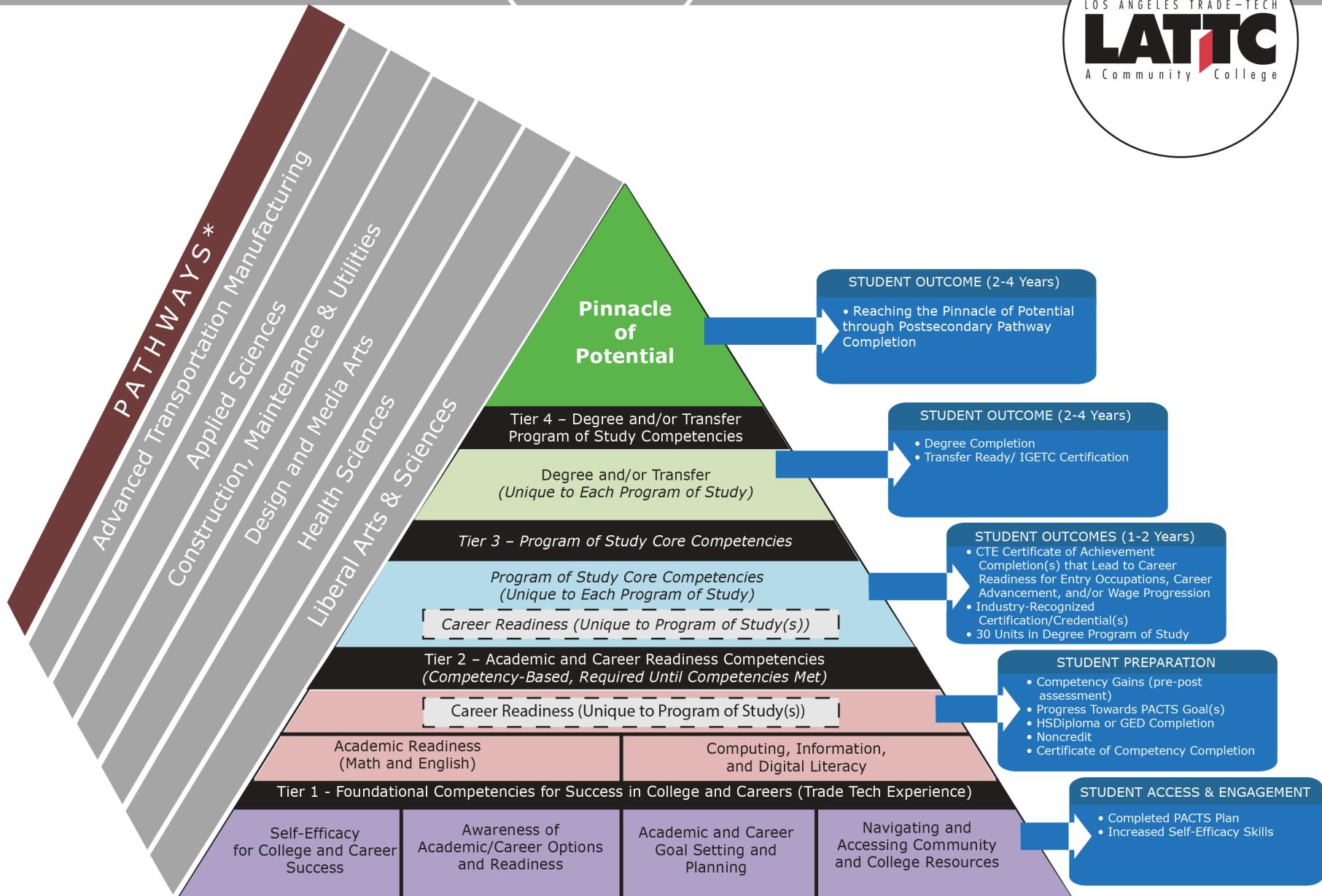
Criminology/Criminal Justice is an interdisciplinary field of study. Included are the contributions and approaches of many of the social and behavioral sciences, as well as areas of study such as law and ethics, as they relate to the phenomenon of crime. The criminology/criminal justice major prepares students for employment in a wide variety of criminal justice agencies, under local, state and federal jurisdictions, as well as the private sector. This major can also serve as a foundation for graduate study in criminology, law, social work, sociology, psychology, and government including public administration.

Sample Schedule		Milestones
TERM 1	Hrs.	TERM 1
ENC1101	3	Complete ENC1101
LS Math	3	GPA ≥ 2.0 and in good academic standing
LS Natural Science w/Lab	4	
Elective/minor	3	
Elective	1	
Total hours	14	
TERM 2	Hrs.	
ENC1102 or other second English	3	
LS Math (STA1013/2122)	3	
LS History/Humanities/Fine Arts	3	
CGS2060	3	
Elective/minor	3	
Total hours	15	

The **milestones** identify **critical courses** for timely progress and the last semester in which they can be completed for **on-time graduation**. **Critical grades for Milestone courses may be included.**

Complete LS Mathematics course  
GPA ≥ 2.0 and in good academic standing

# Pathways to Academic, Career and Transfer Success (PACTS)



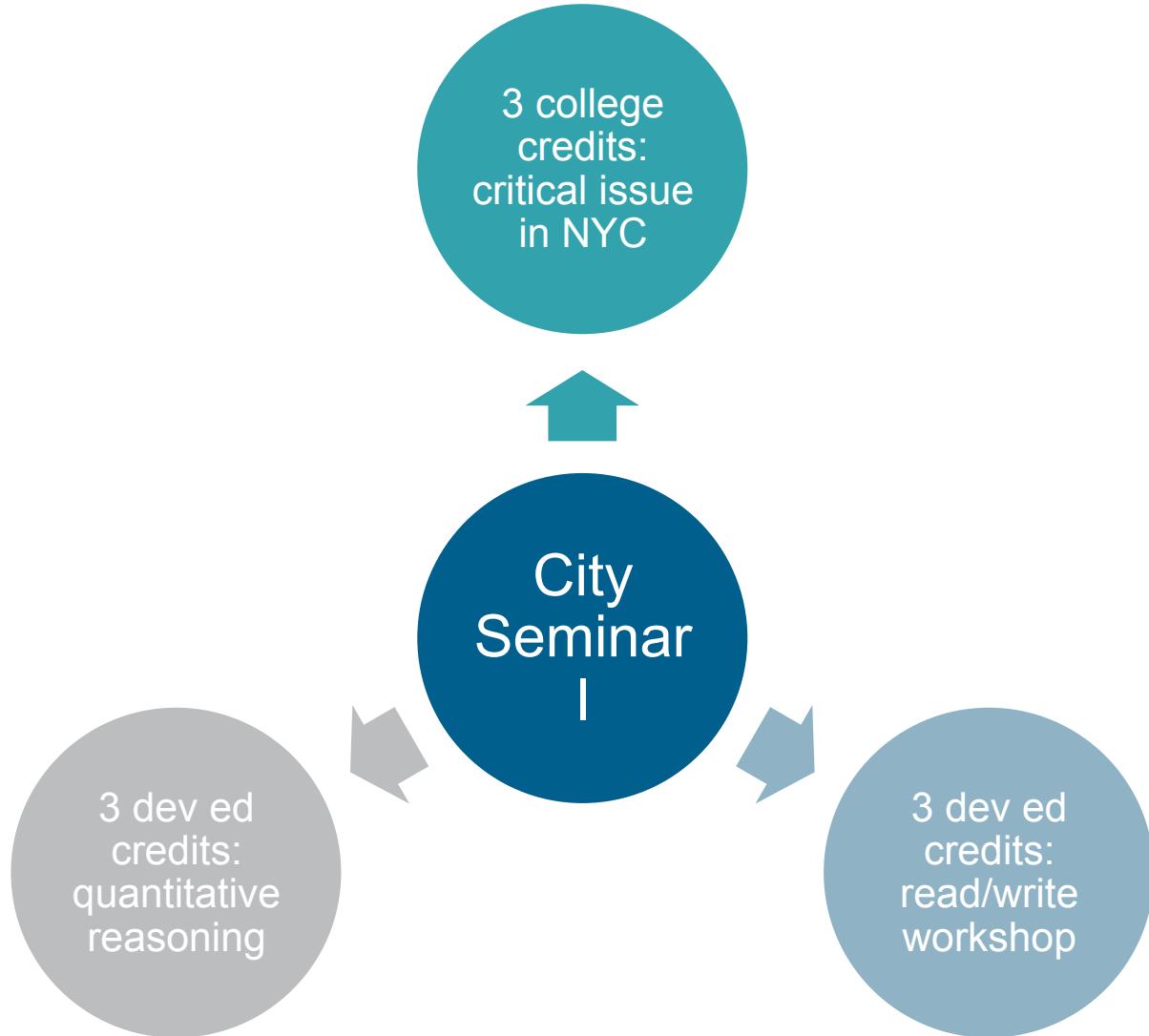
\*Four Additional Pathways Programmed for 2014-2016

November 12, 2014

# Intake & Student Supports

Self-Service (Status Quo)	Guided Pathways
Little connection to local high schools	Strong partnerships with local high schools
Intake info: placement exams	Intake info: HS info, placement exams, goals/interests, non-cognitive test
Short registration-oriented advising session for all	Based on intake info, triage: online vs. intensive face-to-face advising
Student success course optional	Based on intake info, student success course may be required
“Opt-in” career and college planning	Required academic plans
Students’ progress not monitored	Progress tracking, regular feedback & support

# Guttman CC's developmental education



# Empirical Evidence

# Relevance: I-BEST

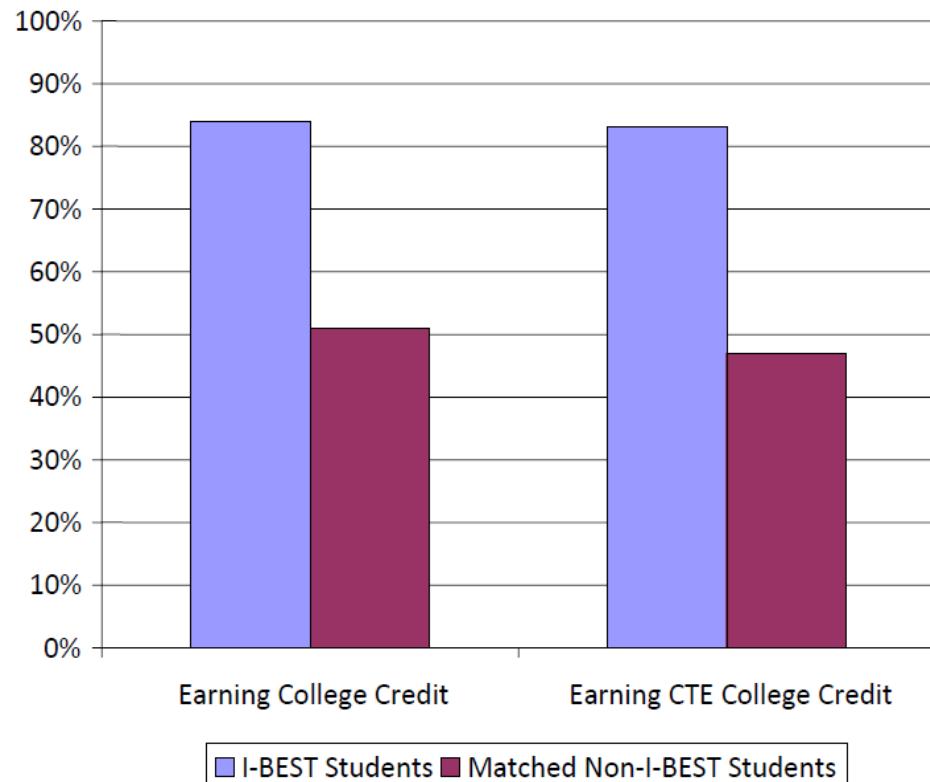


- Basic skills students enroll directly into college-level coursework
- Remedial instruction integrated into career-technical course using co-teaching model
- Structured pathways to credential and career
- Cohort design

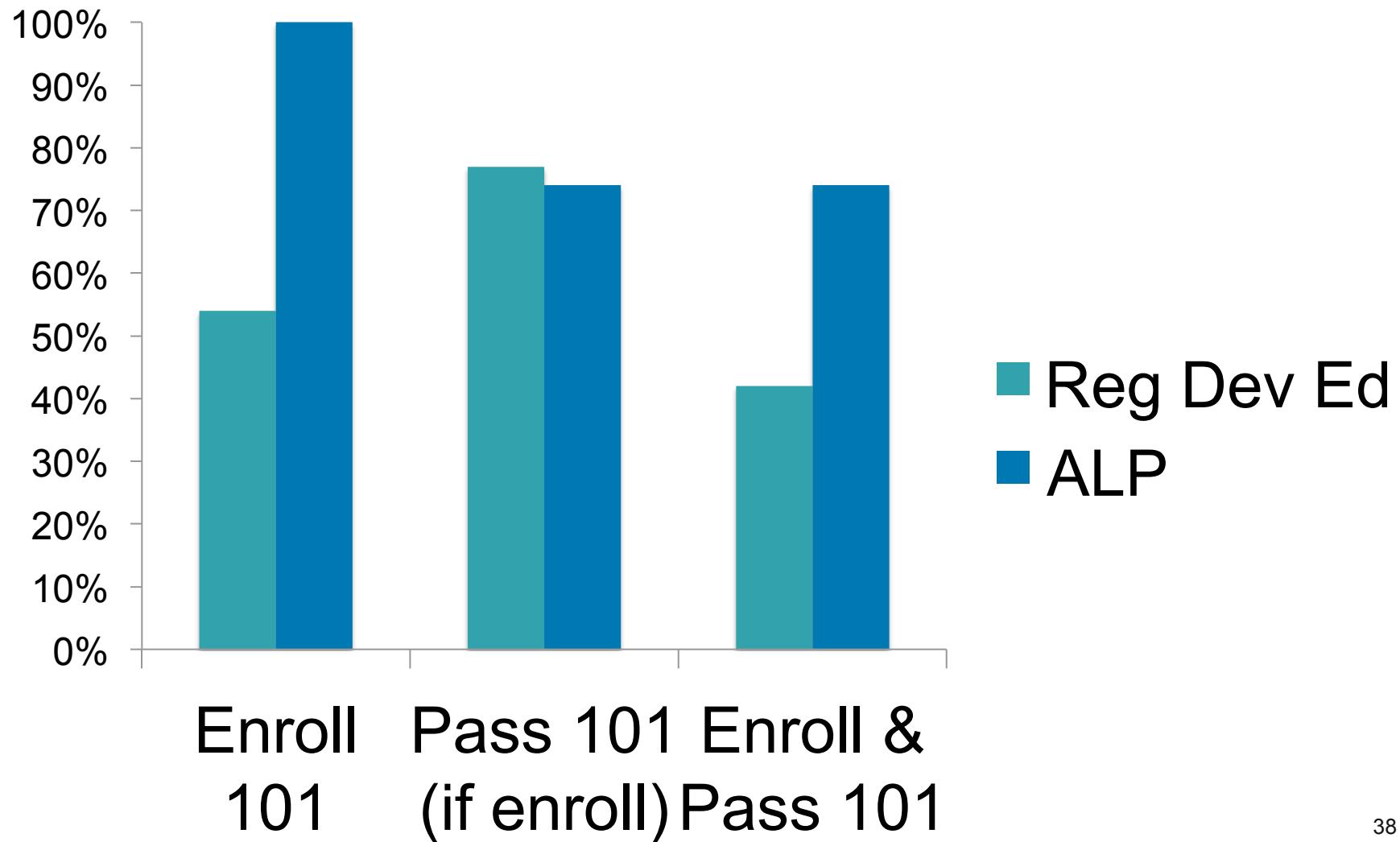
# Earning College Credit



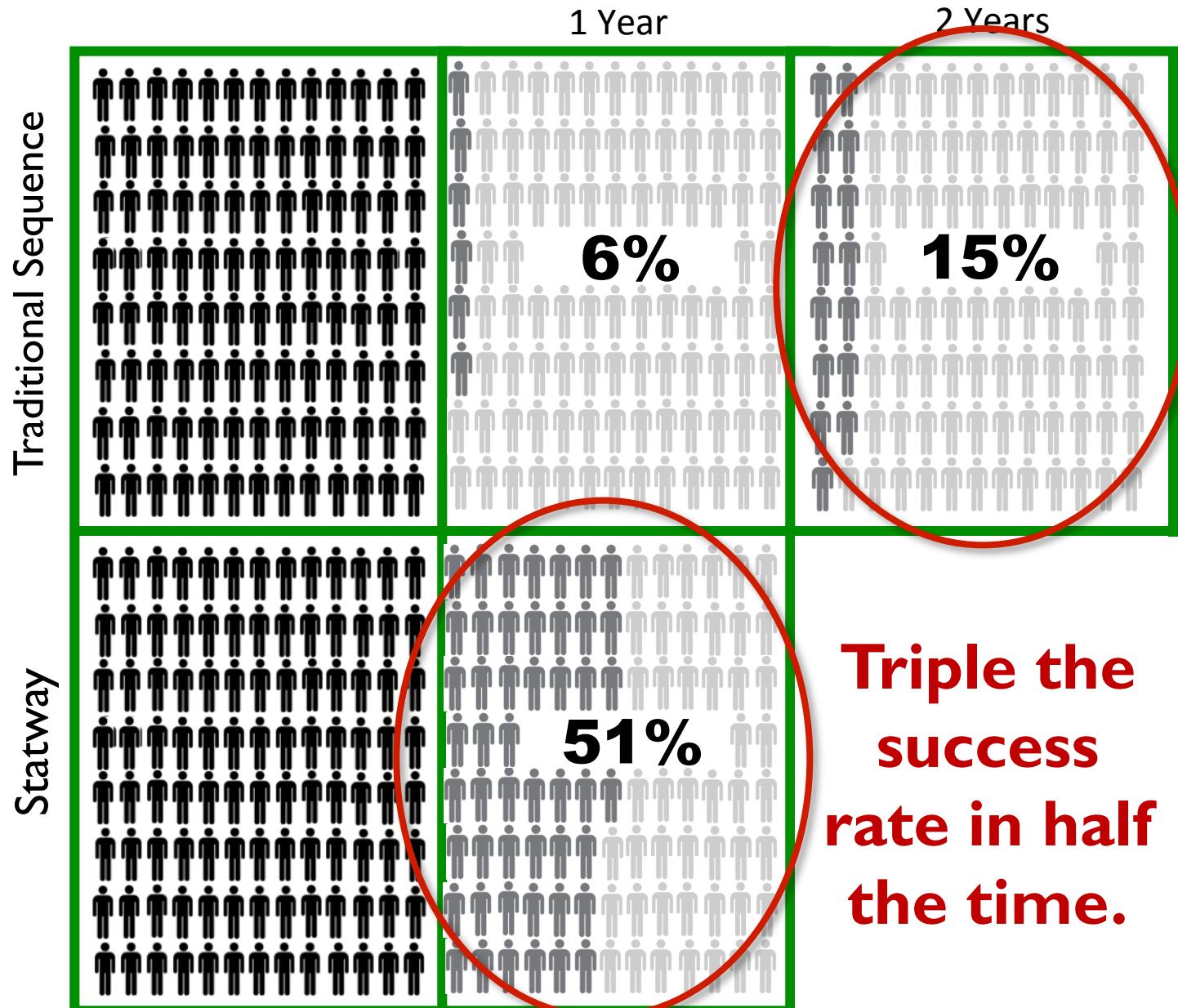
Estimated Probabilities of Earning College Credit or CTE College Credit,  
I-BEST Students and Matched Non-I-BEST Students, From Propensity Score Matching



# CCBC ALP (1 year follow-up)



# Effects: Time to Complete a College Level Math Course



# Florida State U Case Study

## Challenge

- Students **could not enroll** in the courses they needed
- Students **lack a clear path** to graduation
- Students continued to take courses that were **not “on map”**

## Solution

- Built **Demand Analysis** to monitor need and open sections for students
- **Introduced maps** for all majors
- Added **Milestone courses** with hold on registration and required students to select **area of interest or major** upon entering

## Results

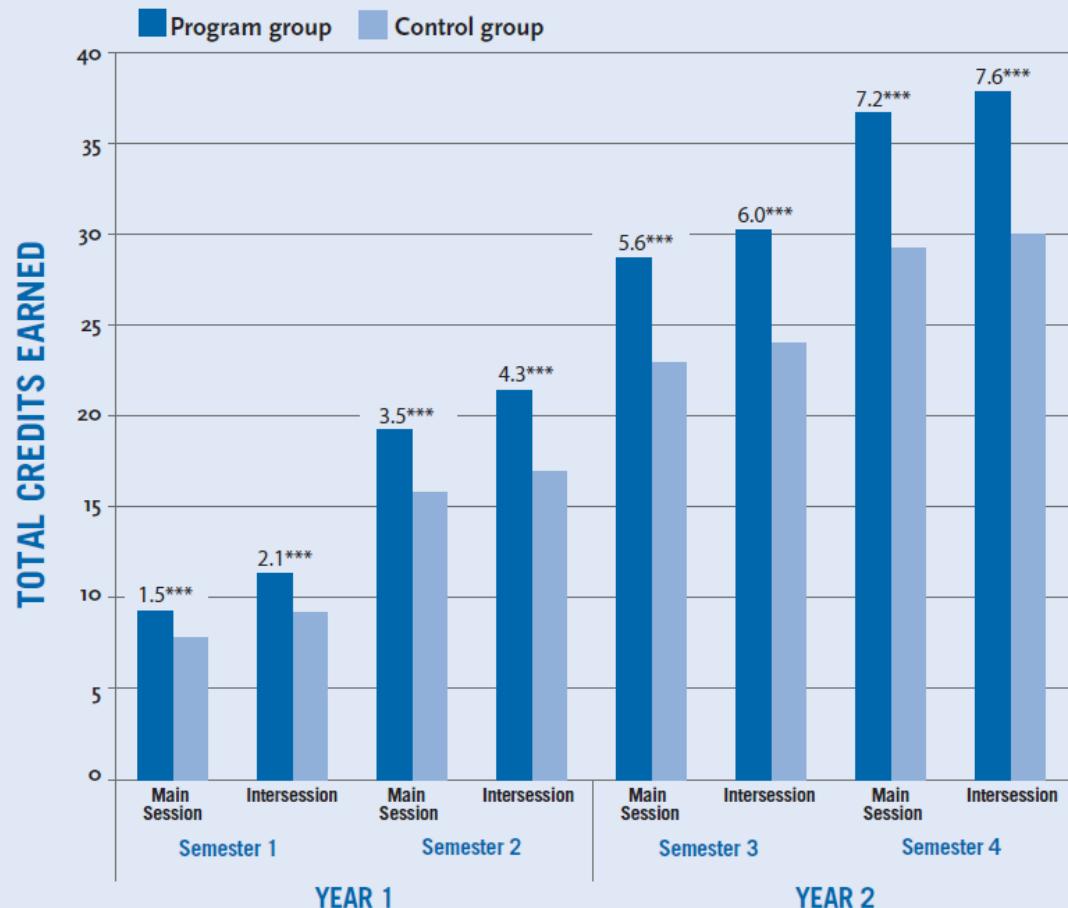
- Small improvement in retention and graduation; **no reduction** in excess hours
- Slight improvement in retention/graduation; **no reduction** in excess hours
- **6% point** increase in retention, **17% point** increase in 4-yr grad rate; number of students with >120 hours decreased from **30%** to less than **5%**

# Comprehensive Reform: ASAP



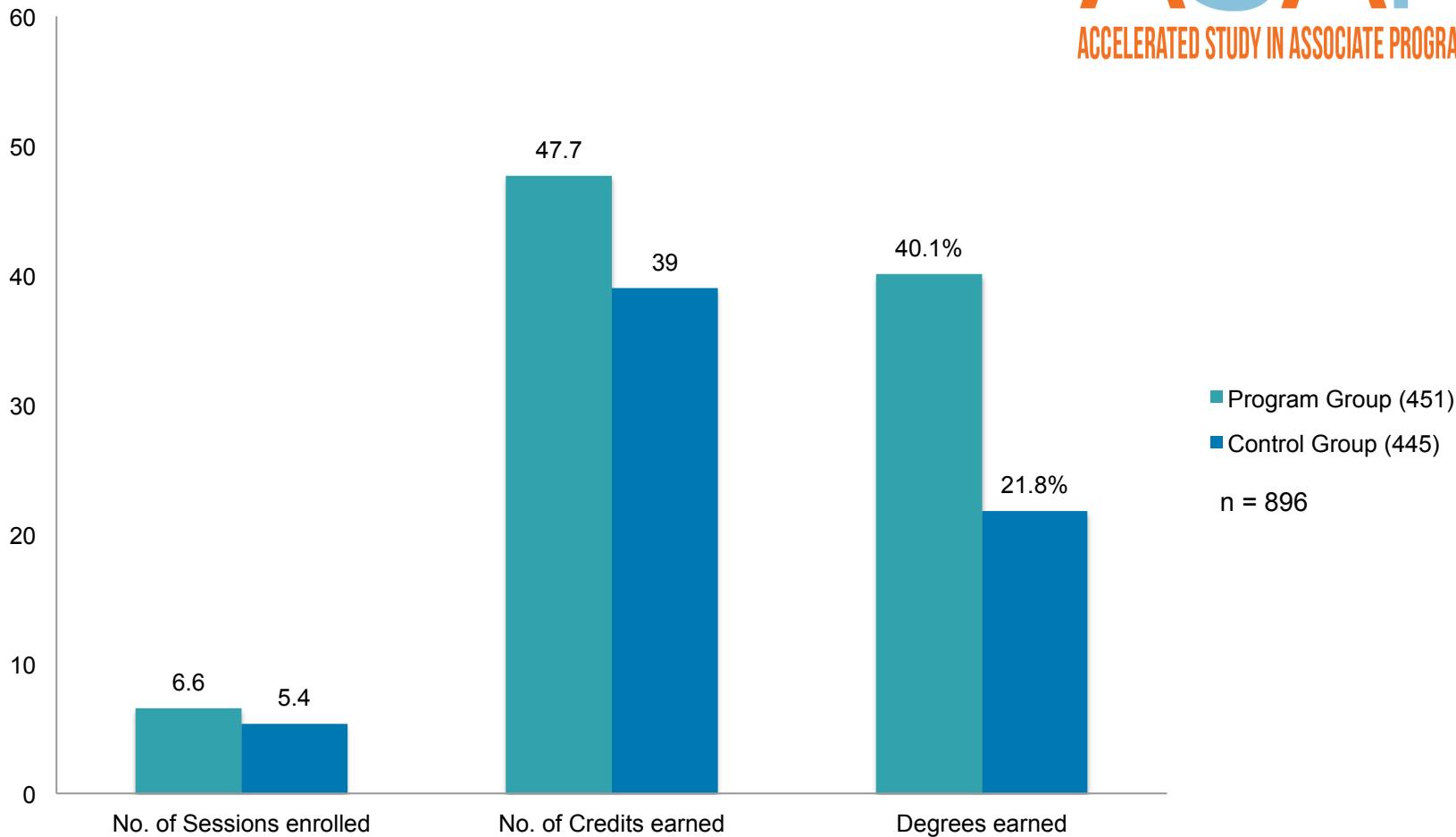
- Financial incentives: tuition waiver, free textbooks, monthly transit cards
- Consolidated full-time schedule
- Cohort design
- Regular structured advisement for courses and careers
- Extra academic assistance: mandatory tutoring for students deemed at-risk

# Credits Earned Over Two Years



# Impact Over Three Years

## Three Year Summary Table





**GUTTMAN**  
COMMUNITY COLLEGE

- CUNY three year graduation rate for first-time full-time students—14%
- Guttman three year graduation rate—49%

# More Supporting Evidence

Targeted research

- CUNY ASAP (MDRC)
- Acceleration (CCBC ALP)
- Alternative math pathways (Mathway, etc.)
- Contextualization (I-BEST)
- Guttman Community College

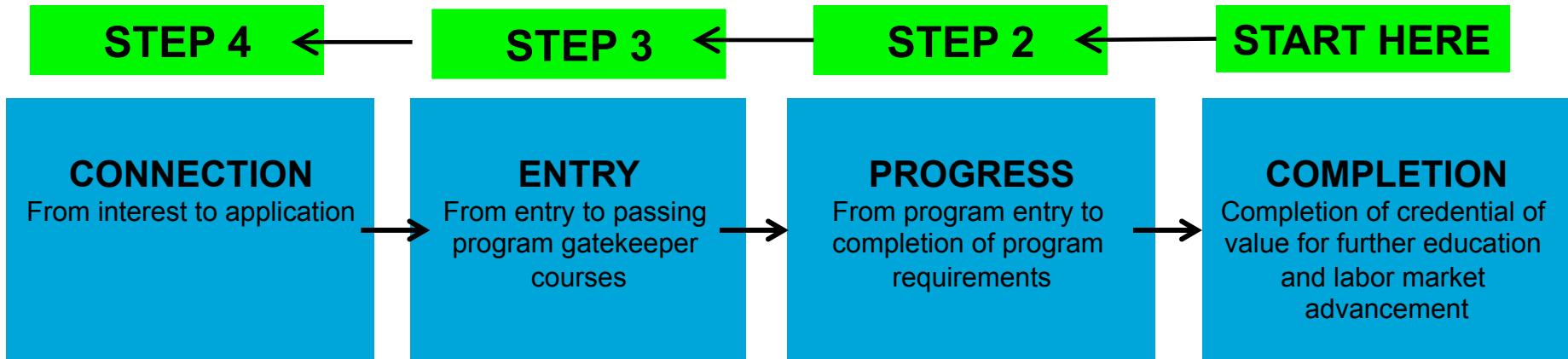
# Guided Pathways Examples

Universities	Community Colleges
<ul style="list-style-type: none"><li>▪ Florida State</li><li>▪ Univ. of Central Florida</li><li>▪ Georgia State</li><li>▪ Arizona State</li><li>▪ TN State Universities</li><li>▪ Florida International</li></ul>	<ul style="list-style-type: none"><li>▪ Queensborough (CUNY)</li><li>▪ Guttman College(CUNY)</li><li>▪ City Colleges of Chicago</li><li>▪ ASAP (CUNY)</li><li>▪ TN community colleges</li><li>▪ St. Petersburg College</li><li>▪ Valencia College</li></ul>

# Clarifying Curricular Paths

1. Are our programs well-designed to prepare students to enter further education and employment in fields of importance to our region?
2. How clearly are programs mapped for our students – especially to the common transfer institutions?
3. Do students know what courses they should take in what sequence?
4. Are the courses critical for success in each program clearly identified?

# Focus on the Entire Student Pathway



- Market program paths
- Build bridges from high school and adult ed. into program streams (e.g., strategic dual enrollment, I-BEST)
- Help students choose program pathway and track entry
- Build prescribed “on-ramps” customized to largest program streams
- Clearly define and prescribe program paths
- Monitor students’ progress and provide feedback and supports JIT
- Incentivize progress
- Align academic program outcomes with requirements for success in further education and (for CTE programs) in the labor market

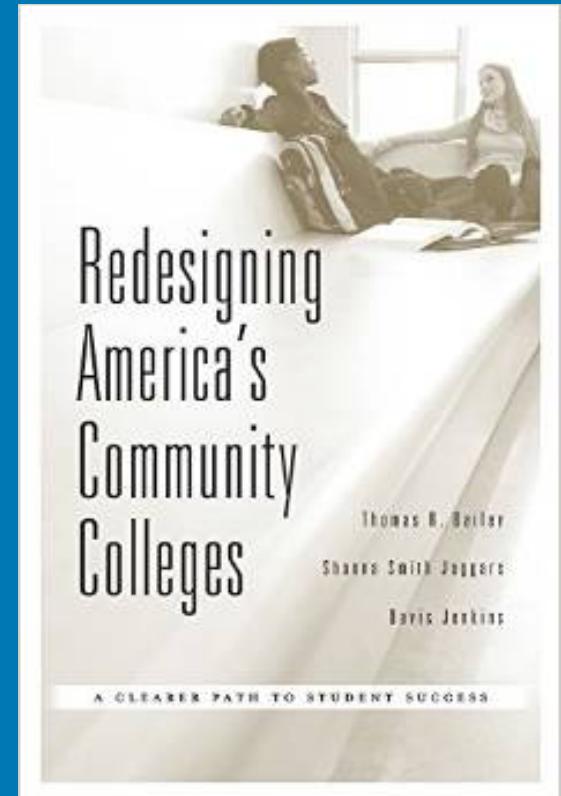
# Takeaways

- ✓ Restructuring taking account of the entire student experience, not just a segment
- ✓ Build reform around simplified and coherent college level programs of study, including transfer
- ✓ Redesign intake with goal of helping students choose and successfully enter a POS

# Redesigning America's Community Colleges

## A Clearer Path to Student Success

- Thomas Bailey, Director, CCRC
- Shanna Jaggars, Asst. Director, CCRC
- Davis Jenkins, Sr. Research Associate, CCRC



# For more information

Please visit us on the web at

<http://ccrc.tc.columbia.edu>

where you can download presentations, reports, and briefs, and sign-up for news announcements.

We're also on Facebook and Twitter.

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