



# Optimizing Course Capacity Management Amid Pathways Reforms

Activating Guided Pathways Reform, Part I

Community College Executive Forum

# Managing Your Audio



2

## Use Telephone

The screenshot shows a window titled 'Audio' with a minus sign icon in the top left corner. Under the heading 'Audio Mode:', there are two radio button options: 'Use Telephone' (which is selected with a green dot) and 'Use Mic & Speakers'. Below these options, the text 'Dial: +1 800 555 1212' is displayed, followed by 'Access Code: 141-607-114' and '(and additional numbers ..)' in parentheses. At the bottom, a green message states 'You are connected to audio'.

If you select the “use telephone” option, please dial in with the phone number and access code provided.

## Use Microphone and Speakers

The screenshot shows a window titled 'Audio' with a minus sign icon in the top left corner. Under the heading 'Audio Mode:', there are two radio button options: 'Use Telephone' and 'Use Mic & Speakers' (which is selected with a green dot). Below these options, there is a status bar containing a microphone icon, the word 'MUTED' in red, a speaker icon, and a series of ten zeros. At the bottom, there is a blue link labeled 'Audio Setup'.

If you select the “mic & speakers” option, please be sure that your speakers/headphones are connected.

# Managing Your Screen



## Questions:

To ask the presenter a question, please type into the question panel and press send.

## Questions panel

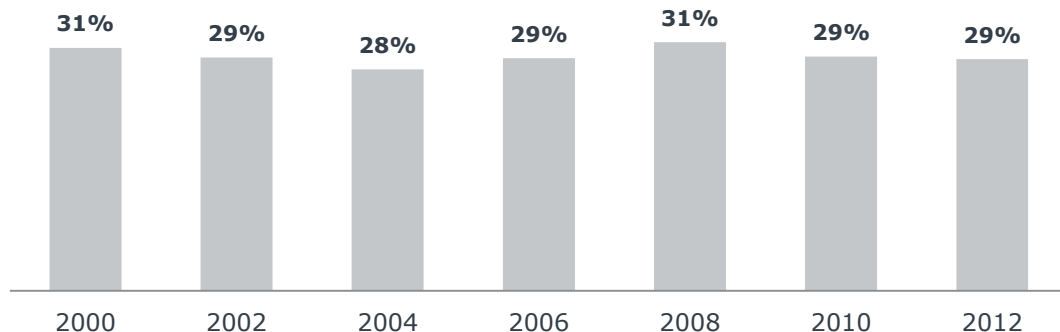
The screenshot shows the GoToWebinar interface. At the top is a menu bar with 'File', 'View', and 'Help'. Below it is the 'Audio' panel, which includes 'Audio Mode' with radio buttons for 'Use Telephone' (selected) and 'Use Mic & Speakers'. It also displays 'Dial: +1 800 555 1212', 'Access Code: 227-984-025', and 'Audio PIN: 70'. Below the audio panel is the 'Questions' panel, which features a large text input area with the placeholder text '[Enter a question for staff]' and a 'Send' button at the bottom right. At the very bottom of the interface is a footer section titled 'How to Schedule a webinar?' with 'Webinar ID: 202-981-365' and the 'GoToWebinar™' logo.

# Running to Stand Still

Despite Significant Investment, Graduation Rates Remain Stubbornly Flat

## Completion Metrics Not Budging

*NCES Three Year Community College Graduation Rate, 2000-2012*



## Massive Investments Fail to Inflect Completion Outcomes



**\$2B+**

Estimated annual spend on developmental education



**\$890M**

California grant allocation for student success

Source: National Center for Education Statistics, "Beginning Postsecondary Students (BPS)," *Datalab*, Accessed June 7<sup>th</sup>, 2017; Gordon L, "California 'Student Success' Initiative Slow to Increase Community College Completion Rates," EdSource, Apr., 2017; EAB interviews and analysis.

# Serving an “At Risk” Population

## Growing Percentage of Students Associated with Stop Out Attributes

### Characteristics of Students Most Likely to Stop Out



Low-income



Full-time employment while enrolled



First-generation



Developmental education need



Part-time enrollment

### Enrollment Driven by Students From Highest Risk Tiers

**+91%**

*Growth in Pell Grant recipients enrolled in CCs, 2006-07 to 2011-12*

**41%**

*Part-time students working full-time*

**36%**

*CC students who are first-generation*

**68%**

*CC students enrolled in at least one dev ed course*

**61%**

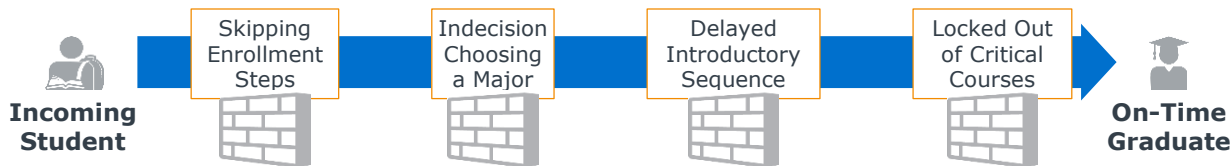
*Students enrolled part-time in Fall 2016*

Source: "New Pell Grant Numbers Trend Well for Community College Students," American Association of Community Colleges, September 11, 2012; "2014 Fact Sheet," American Association of Community Colleges; "What We Know About Development Education Outcomes," Community College Research Center, January 2014; "Enrollment and Employees in Post-Secondary Institutions, Fall 2015," National Center for Education Statistics; EAB interviews and analysis.

# A Problem of Our Own Making

## Self-Inflicted Barriers Caused by Complex College Structures

### Common Roadblocks on Path to Graduation



### What We Heard From Student Research



#### Help Me Find My Way

*"The first few days are so overwhelming, I almost felt like quitting before I got started. I just wish there was more help."*



#### I'm Struggling to Set Goals

*"There are so many [program] choices, I don't know which I'm supposed to pick. What if I pick wrong? How would I know?"*



#### My 'Plan A' Fell Through

*"I thought I could do it all, but then I ran into money problems and needed to pick up extra shifts at work. I felt desperate."*



#### Give Me What I Want

*"The college bureaucracy is frustrating. But if I get what I need from this experience, this will all be worth it."*

# Guided Pathways, The Path Forward?

## A Condensed History of Guided Pathways

### Steady Progress Towards Acceptance and Adoption

**1960s-1990s**



"Cafeteria" model prevades, encouraging broad access to CCs at expense of completion

**2011**



Completion by Design lays out principles forming basis for Guided Pathways

**2016**



AACC conducts first Pathways implementation institute for 30 colleges from 17 states

**2009**



President Obama announces American Graduation Initiative setting goal of adding five million credential holders

**2015**



CCRC's *Redesigning America's Community Colleges* solidifies national conversation around Guided Pathways

Source: Bailey T, et al, *Redesigning America's Community Colleges: A Clearer Path to Student Success*, CCRC, 2015; Barack Obama, "Investing in Education: The American Graduation Initiative," Obama White House Achieves, 2009; AACC, "The Movement Towards Pathways," 2016; EAB interviews and analysis.

## Where We Must Focus Our Attention to Implement Guided Pathways



**Can we steer students to productive credits while preserving exploration?**



**Can we ensure seat availability without costly excess capacity?**



**Can we improve our advisory delivery model without breaking the bank?**



**Can we make offerings more flexible to match reality of students' lives?**

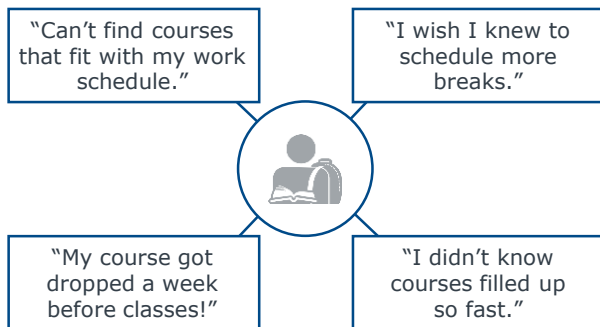


# Guided Pathways Ups the Scheduling Ante

Students and Administrators Already Frustrated by Scheduling Challenges

## Feeling Like They Must “Learn the Hard Way”...

*Select Quotes from EAB Focus Groups*



## ... Despite Considerable Effort From Administrators

“Our students tell us scheduling is their number one pain point, which is surprising to our administrative team. We’ve done quantitative work with IPEDS, collected qualitative data on the student experience. We’ve turned on waitlists, eliminated late registration, embedded major advisors, and created a digital catalogue for our nine pathways, so how can this be?”

*J. Michael Thomson,  
President of East Campus  
Cuyahoga Community College*

## Risk and Reward of Guided Pathways



Makes student course demand more predictable

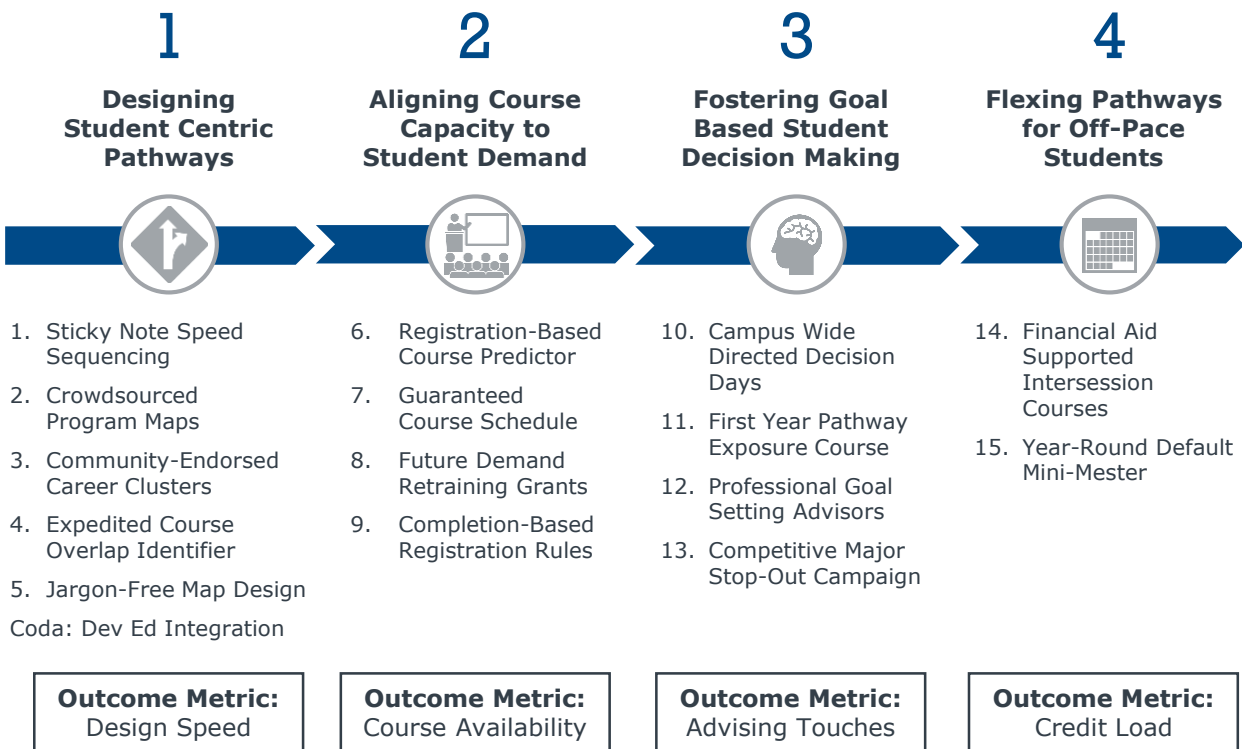


Increases chances of gateway course bottlenecks



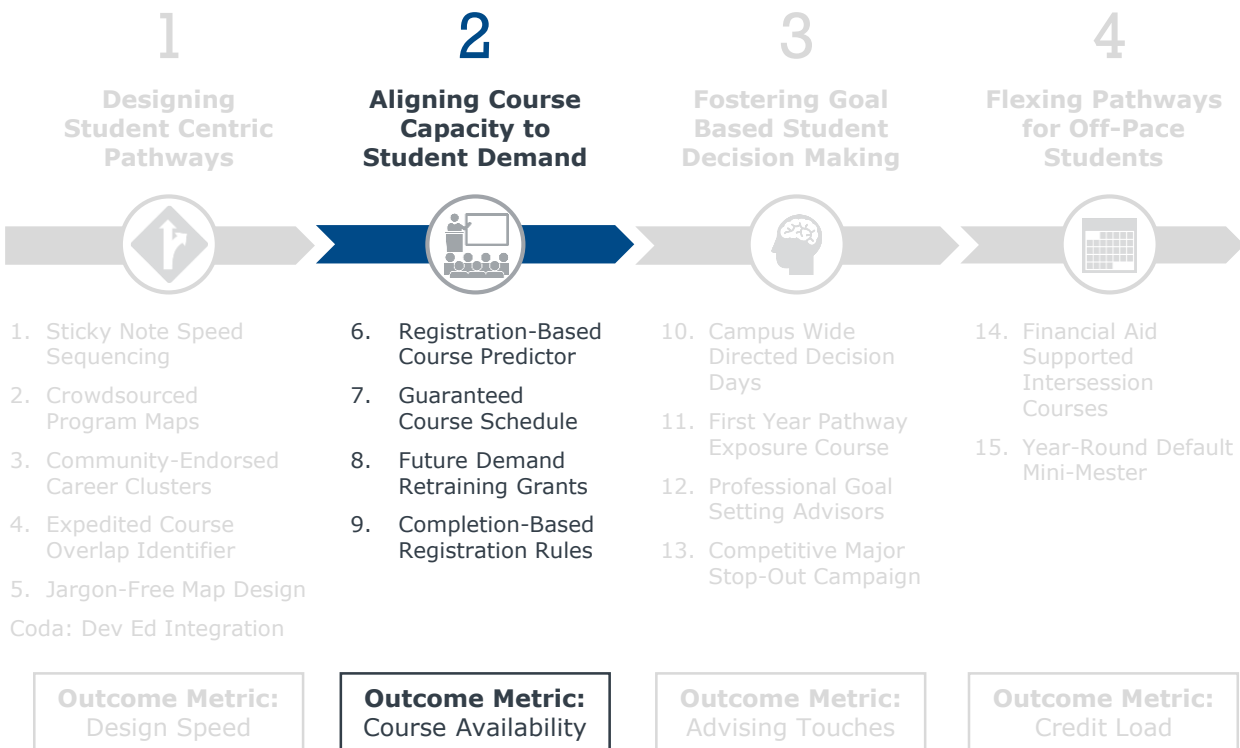
# Achieving Pathways Goals

## A Roadmap for the Study



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## A Roadmap for the Study



# Another Wrench in the Works

## Course Scheduling Already Incredibly Complex Before Guided Pathways

### Two Questions Seemingly Impossible to Answer...

#### 1 | *What Courses Do Students Want?*



##### **Hard to Predict**

Unstructured course progression prevents downstream predictions

### ... So Many Just “Roll-Over” Last Year’s Calendar



Convenient for faculty



No window into student demand

#### 2 | *When Do Students Want Them?*



##### **Shifting Preferences**

Students frequently change their registrations until the deadline



##### **Multiple Competing Demands**

Registrar offices must also balance faculty and space availability



“We’ve had an excellent assessment of our master schedule, but our biggest issue is so many of our students register late. It’s hard to plan if we don’t know they’ll be here.”

*Kimberley Collins  
Assistant Vice President of Academic Affairs,  
Monroe Community College*

# Great Opportunity... With Some Strings Attached



## Guided Pathways Can Make Scheduling Predictable or Congested



### Promise



### Peril



*Guided  
Pathways*

#### **Sequence Predictability**

Academic maps allow departments to reliably predict what students will want

#### **Downstream Projection**

Consistent registration patterns allow colleges to schedule courses further into the future

#### **Stabilize Supply**

Colleges provide students with guaranteed course schedule in terms of time and location

#### **Course Convergence**

Increased demand for same gateway courses and default general education requirements

#### **Capacity Constraints**

Not enough instructional or space capacity to accommodate increased demand

#### **Self-Inflicted Bottlenecks**

Risk of students being prevented from registering for critical courses

# Determine What Courses You Need Each Term

Use Pathway Maps to Clarify Where Students Will Register Next








## Pair Maps and Registration Data to Predict Downstream Demand

- 1 Upload Degree Maps Into SIS:**  
 Each map stored in Degree Works so any office or department can access the information
- 2 Query SIS to Find Enrollment:**  
 Automated report pulls number of students who have not completed each course within each degree map
- 3 Add Flex Capacity:**  
 Registrar adds "shadow sections" or surplus sections to scheduling platform to match hypothetical registration need

## Shows Where They'll Register Next

*Hypothetical Seat Projection for Chemistry*

| Course Sequence   | Enrolled Ratio  | Needed Seats |
|---|-----------------|--------------|
|  CHE 151<br>General College Chemistry I  | 1,452/<br>1,788 | 336          |
|  CHE 152<br>General College Chemistry II | 1,377/<br>1,788 | 411          |
|  CHE 251<br>Organic Chemistry I          | 1,001/<br>1,788 | 787          |
|  CHE 252<br>Organic Chemistry II         | 324/<br>1,788   | 1464         |



# Another Wrench in the Works

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*Kimberley Collins  
Assistant Vice President of Academic Affairs,  
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# Uncovering Students' Scheduling Needs

## Forthcoming Toolkit Addresses Barriers to Obtaining Student Input



### No Small Feat Soliciting Student Input



### Improve Student Insight Collection

*Survey and Focus Group Tools*



#### Finding Representative Students

Hardest to reach students often the most critical to reach



#### Maintaining Consistent Participation

Busy and conflicting schedules prevent continuous input



#### Producing Actionable Results

Answers often conflict and difficult to segment



#### Achieving Pathways Goals with Student Centered Design

Implementation Toolkit

Community College  
Executive Forum

#### Gather Reliable Information

- Incent participation from representative cross section of students

#### Turn Preferences into a Playbook

- Translate student responses into scheduling segments



# Can't Get Their Fill

## Students Frustrated by Scheduling Variability and Changes

### Courses Already Filled

- Students find essential courses have already reached enrollment cap

### Lack of Predictable Offerings

- Working students unable to schedule beyond one term

### Last Minute Cancellations

- Courses do not meet fill rate and cancelled at the last minute



*Under-Appreciated Completion Barrier*

### Students Must Wait a Year

- Gateway courses not offered every term so students must delay degree progression

# Relying on Student Data, Not Faculty Instinct

## Three Step Process Ensures 18 Month Schedule Stability



1

### Develop Base Schedules



#### Extract Course Data from SIS

Tri-C placed all 35 necessary categories of scheduling data (e.g., time, modality, campus, etc.) into online data warehouse



#### Pull Data into Online Tool

Data team's tool auto-populates online warehouse data to help departments easily add or remove courses



#### Build Department Schedule

Individual departments create a "base schedule" or first draft of where, when, and what format a course will run

2

### Adjust to Student Demand



#### Test with Likely Student Profiles

Assemble likely categories of students to check viability of base schedule; likely variables include:

- Part-time
- Online
- Evening
- Campus location



#### Invite Experienced "Schedulers"

Advising staff and faculty members from small, medium, and large departments offer practical input for how to modify the schedule



#### Finalize in Dean-Level Meeting

Academic leaders adjust and trade traditional course times during once per term, four hour "schedule smoothing" conversations

3

### Set Guarantees



#### Set Threshold for Guarantee

Lock essential pathway courses that meet 80% fill rate (though deans can negotiate exceptions on individual basis)



#### Update Course Catalogue

Special seal signifies a course's content, campus, timing, and modality are guaranteed with no minimal enrollment



#### Encourage Faculty Adoption

Deans offer "re-assign scheduling time" to faculty to provide enough flexibility to implement course changes

# Clarifying More than Just Course Times

## Predictable Schedules Cause Fewer Dropped Classes

### Unexpected Institutional Benefits of Guaranteed Schedule

- ✓ Consolidated outdated legacy systems into single process
- ✓ Discovered and eliminated excess course sections
- ✓ Illustrated concrete impact of pathways reforms to faculty
- ✓ Helped to secure adjunct instructors further in advance

### Moving Towards Schedule Certainty

*Outcomes Captured Between 2015 and 2016*

**60%**

Percentage of Guaranteed classes 18 months in advance

**4.1%**

Percentage point drop in cancelled classes

### Pillar of Stability for At-Risk Students

“Beyond the quantitative impact, we’re hearing from advisors that students are feeling more certain about their non-academic schedules. The key variable is life uncertainty and a guaranteed schedule is a great way to reduce that for our students.”

*J. Michael Thompson, East Campus President, Cuyahoga Community College*

# Teaching Supply Lags Behind Pathways Demand

## Pathways-Led Changes to Enrollment Costs Institution

### Bottlenecks Arise from Demand Mismatch...

*Sample Instructor Assignment, Related Disciplines*

| Program                 | Sociology | Psychology |
|-------------------------|-----------|------------|
| Pre-pathways enrollment | 800       | 1100       |
| Post-pathways enrolment | 675       | 1300       |
| Current instructors     | 14        | 18         |
| Needed instructors      | -2        | +3         |

### ... But Cannot Easily Adjust Full Time Faculty Teaching Supply



Faculty not trained or licensed to teach in new discipline



Faculty unwilling or unable to finance training themselves



Faculty do not want to enter new field unrelated to experience

### Even Single Mismatch Can Add Up Quickly

**\$14K**

Average cost per course not taught by full time faculty<sup>1</sup>

+

**\$3K**

Average cost for adjunct

1) Assumes \$72,000 median salary and 15 credit course load

# Repositioning Pathway-Displaced Faculty

## Retraining Grants Help Full-Time Faculty Adjust to New Course Demand



### Learning From Past Reform Experience

“Since we started developmental education reform about ten years ago, enrollment dropped by 75%. When we started Guided Pathways reform, **we knew that we needed to take proactive steps to minimize faculty displacement in response to curriculum and scheduling change.**”

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*Kathleen Cleary  
Associate Provost  
for Student Completion  
Sinclair Community College*

### Steps for Offering Retraining Grants



#### Check Licensure

Some faculty already possess the right credential to teach in-demand discipline



#### Determine Minimum Training

Identify the necessary courses faculty need to take to teach in new discipline



#### Pay for Graduate Coursework

Encourage faculty to take coursework at closest four-year institution

### EAB Estimate for Retraining Savings



**\$1.5K**

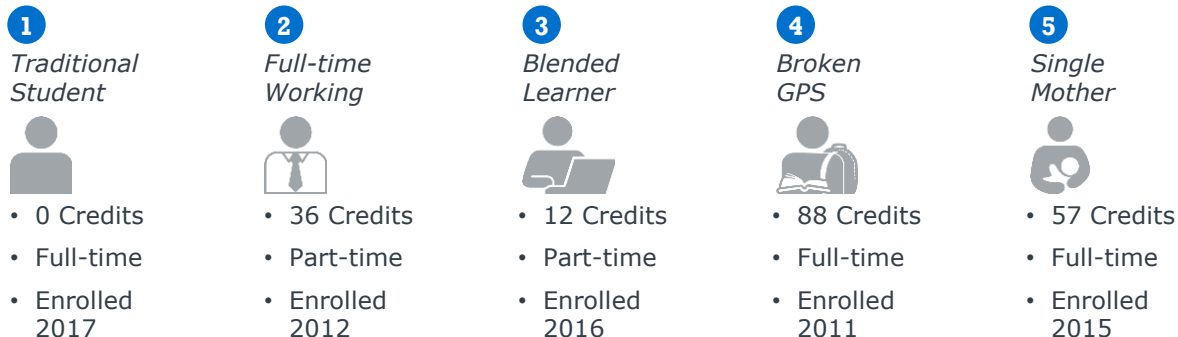
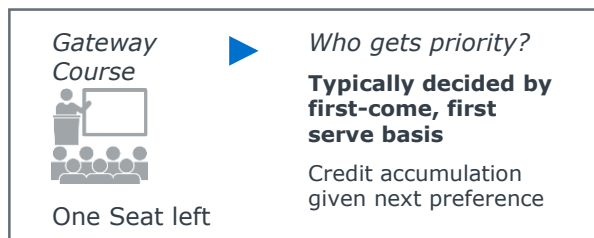
Average saved per course  
vs. hiring an adjunct

# New Fairness Criteria Needed for Waitlist?

## Pre-Pathway Students Now Compete With Pathways Students For Seats

### Variety of Students Need Same Gateway Courses

*Order and Profile of Student Registering for Essential Pathway Course*



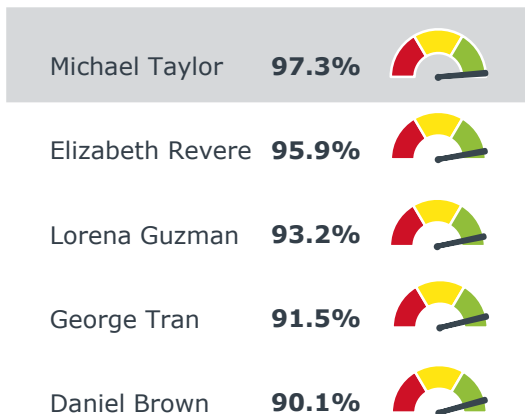
# Taking Lessons from Four-Year Pathways

## Assign Priority by Pathway Completion, Not Pure Credits



### Registration Priority Assigned by Academic Plan Completion

*Closest to Completion Gets Registration Priority*



- Only needs one course to graduate
- Gets earliest registration priority

### Helping Students and Administrators Track Progress



#### Easy-to-Read Progress Meter

Academic progress speedometer reflects percent of degree applicable credit completed to date



#### Student-Segmented Dashboards

Administrators, advisors, and faculty can monitor the progress of individual students and classes



#### Hosted in Web-Based Dashboard

PolyData Dashboards use an Oracle platform to store, aggregate and display degree progress data

# The Multiplier Effect

## Adopting Navigate to Improve Key Areas of Opportunity Further



Build culture of pride to **make students feel like they belong**



Streamline curricular requirements to **ease path to transfer**

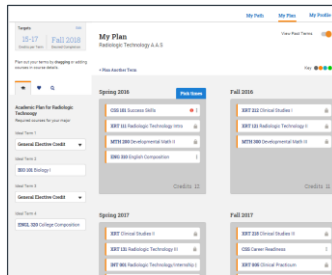
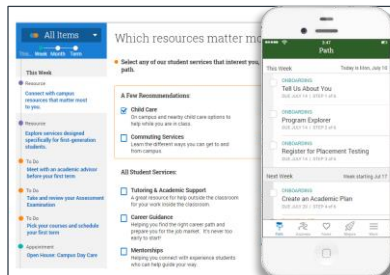


Nudge students toward good decisions via **proactive advising**

### Making **Onboarding** Meaningful for Students

### Creating **Academic Plans** for Transfer and Success

### Empowering **Advising** Conversations with Data



- Single Source of Truth
- Simplified UX Interface
- Dynamic Updates
- Mobile-Optimized

- Program Suggestions
- Course Recommendations
- Term-to-term updates
- Customized to college

- 360-degree student page
- Intake survey results
- Scaled outreach tool to personalize email/texts



## Our Upcoming Fall and Winter Offerings

### Providing Continuous Pathways Support

1

#### **Optimizing Course Capacity Management amid Pathways Reform**



*September 13, 3-4pm ET*

Best practices for creating schedules that prioritize course availability based on student completion

2

#### **Driving Intentional Academic Decisions**



*September 28, 1-2pm ET*

Steps to proactively guide students to their best decisions throughout career and program selection

3

#### **How to Build Student-Led Program Maps**



*October 5, 1-2pm ET*

Step-by-step guidance on creating program maps and meta-majors with student outcomes at the center of design

4

#### **Increasing Faculty Engagement in Guided Pathways**



*December (TBD)*

Best practices to increase individual faculty participation and committee effectiveness in pathways reform

# Sign Up for Our 2017 Meeting Series

Unparalleled Source of Innovative Strategies and Practices

## Paving Pathways to Excellence



State of the Sector



Achieving Pathways Goals  
with Student-Centered Design



Becoming an Employer-Responsive  
Community College



Roundtable Breakouts – Networking  
and Hot-Topic Discussions

## Save the Date

### Cabinet Leadership Summits

- September 22, 2017;  
Washington, DC
- October 13, 2017;  
Marina del Rey, CA

[Sign Up for the  
Next National Meeting](#)

"I can't wait to bring these  
practices back to campus.  
Everything we covered is exactly  
what I'm working on now."

*President, Mid-Atlantic  
Community College*

"Great value! The research  
presented was relevant and  
easy to digest."

*President, Northeast  
Community College*

"Enormous amount of  
quality, food for thought,  
and action. Well done!"

*President, Mountain West  
Community College*

# Providing Continuous Pathways Support



## Activate Guided Pathways on Your Campus



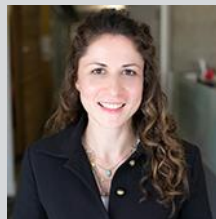
### Achieving Pathways Goals with Student-Centered Design

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Community College  
Executive Forum Forum

- Full publication contains all 15 Guided Pathways best practices
- Includes corresponding tools to facilitate implementation
- Unlimited copies available to members

## Questions on Today's Material?



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*Practice Manager*

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