Ad Astra

If Scheduling Were Easy….

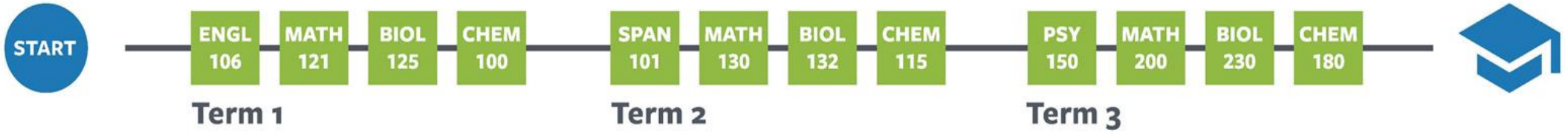
A discussion on what makes scheduling so difficult and how it impacts student retention

Why is Scheduling Hard?

- Program Requirements (options, substitutions, equivalencies)
- Faculty Preferences (when they would like to teach)
- Space Issues (not enough of the right kind of space)
- Student Availability (morning, afternoon, evening)
- Student Preferences (online vs classroom)
- Faculty Qualifications and Resources
- Lack of Data

Three Takeaways

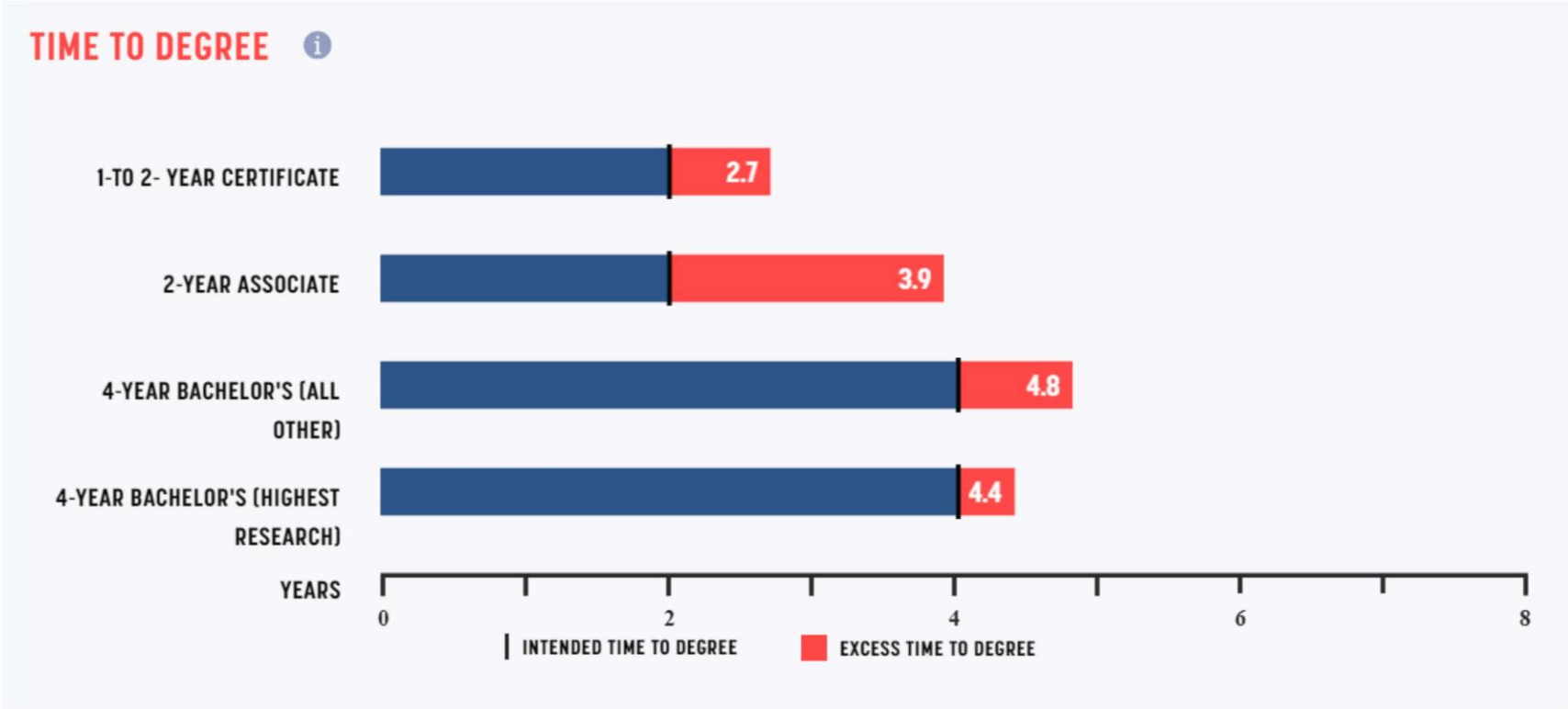
- Effective scheduling can improve retention
- Waste matters – particularly during your Prime Time
- Break down schedule into manageable parts



The big idea: Time is the enemy of college completion.

This historic data have revealed a common thread—and an animating principle to guide our work to boost college graduation:
The longer it takes, the more life gets in the way of success.

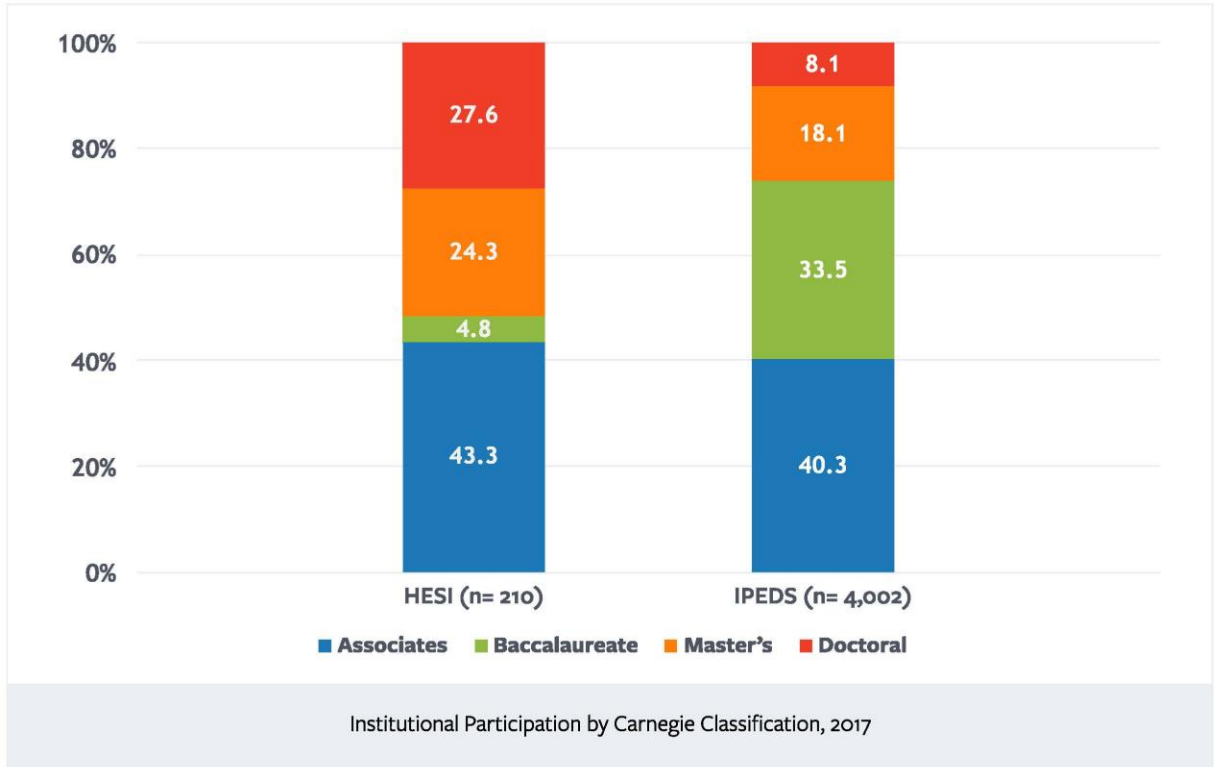
SCHEDULING IS TOUGH



Content from Complete College America

HESI & Bending the Curve Report

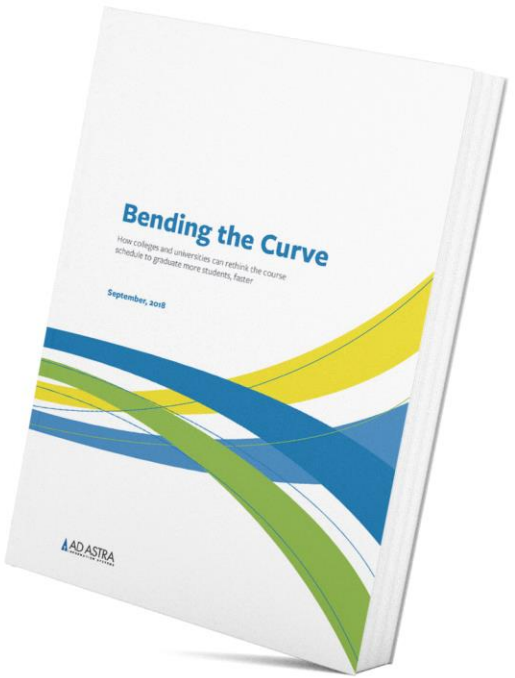
Who's a Part of the HESI Database?



Institutional Participation by Carnegie Classification, 2017

HESI Report

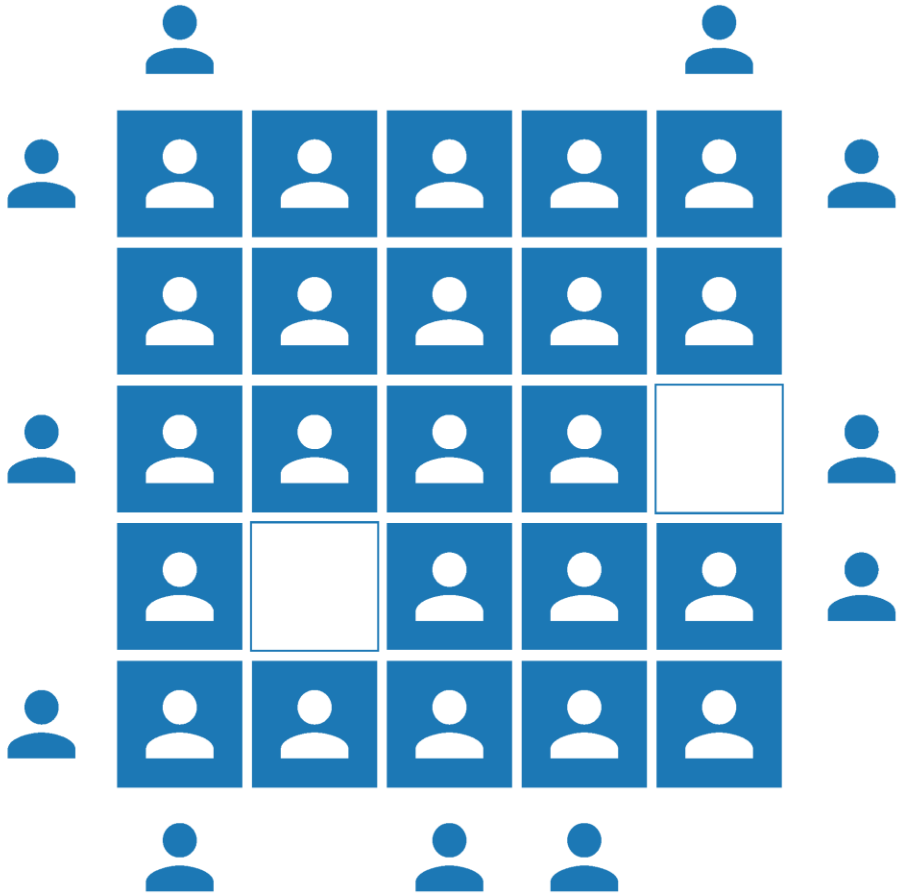
- The course schedule can be utilized to improve student retention, time-to-completion, and graduation: and in the process save money.
- Effective course scheduling can improve institution scheduling
- Waste matters—institutions that reduce waste can improve graduation rates



Enrollment Ratio

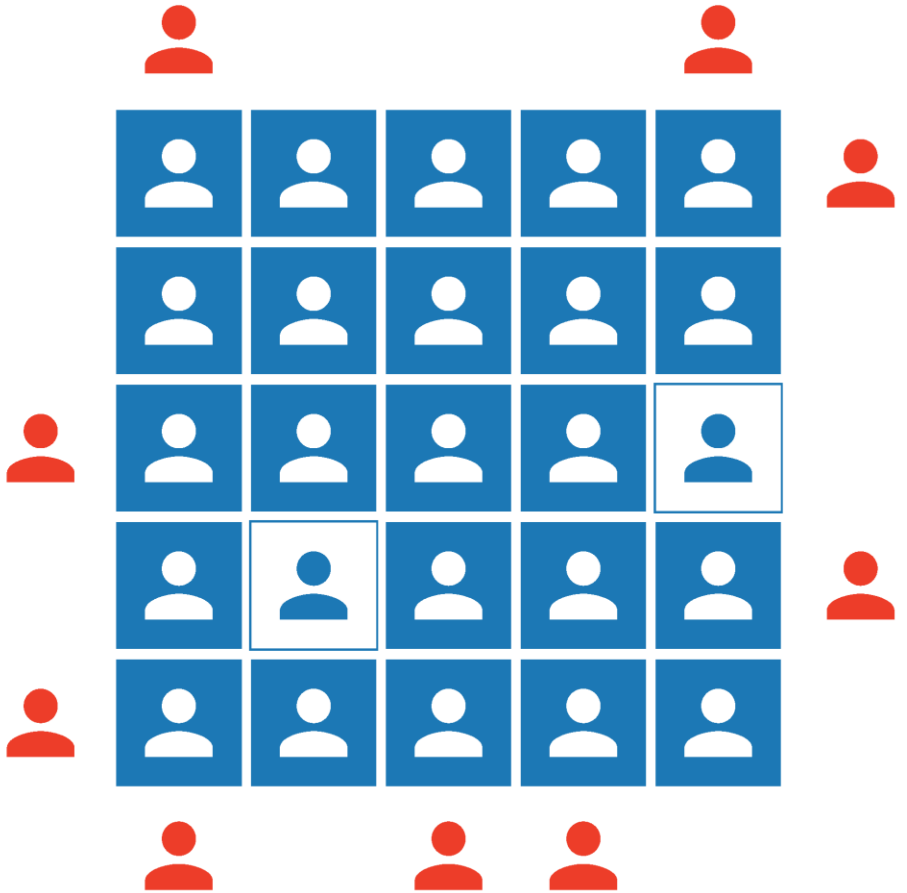
Census enrollment compared to seats offered

Overloaded Courses



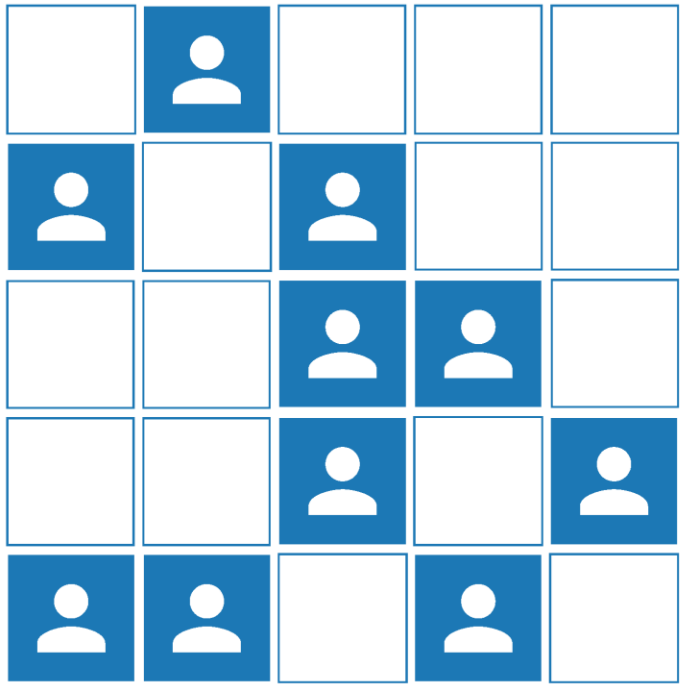
Overloaded Courses

Courses which have an enrollment ratio/seatfill of **over 95%**

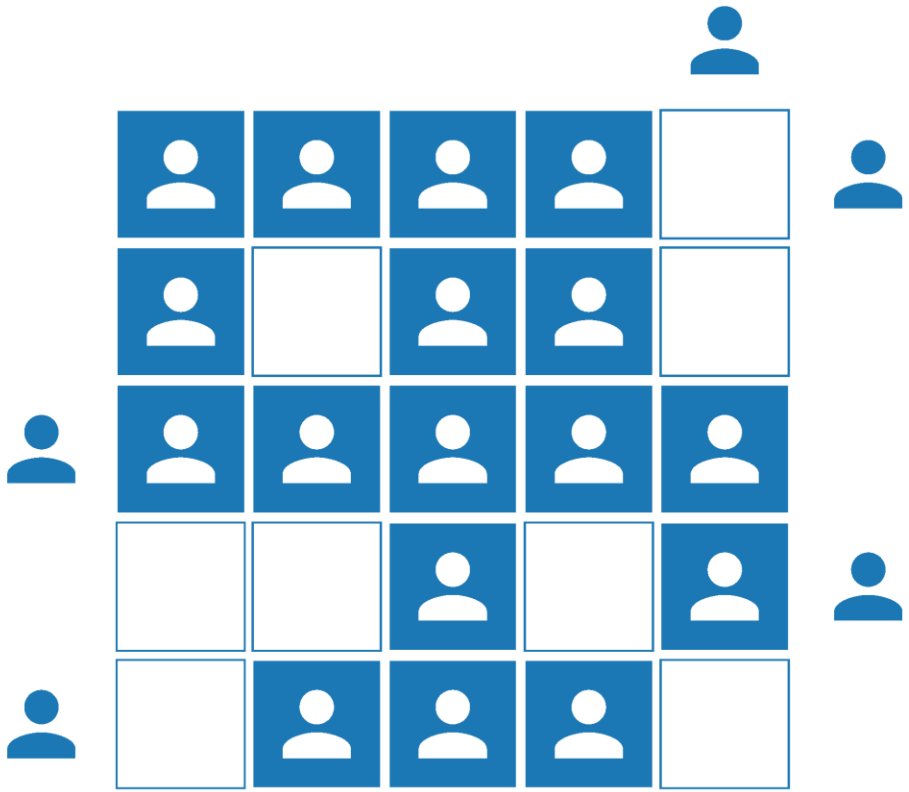


Underutilized Courses

Courses which have an enrollment ratio/seatfill **less than 70%**

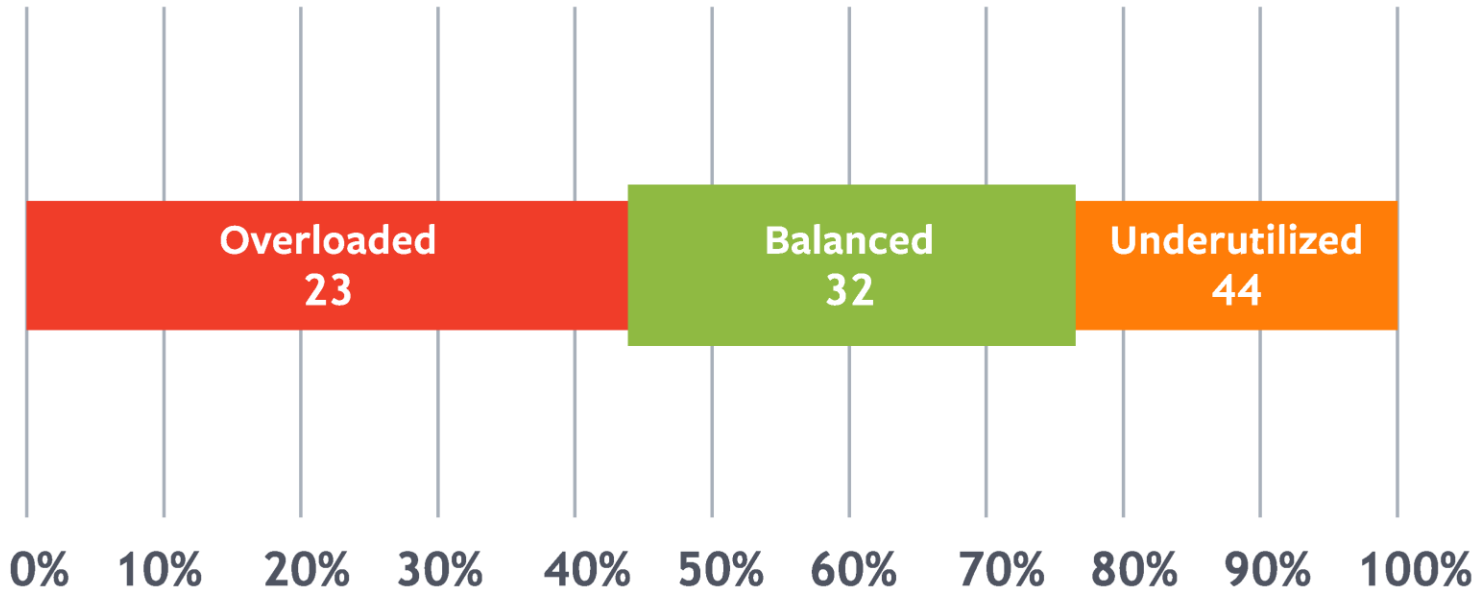


Balanced Courses



Balanced Courses

Courses which have an enrollment ratio/seatfill **between 70-95%**

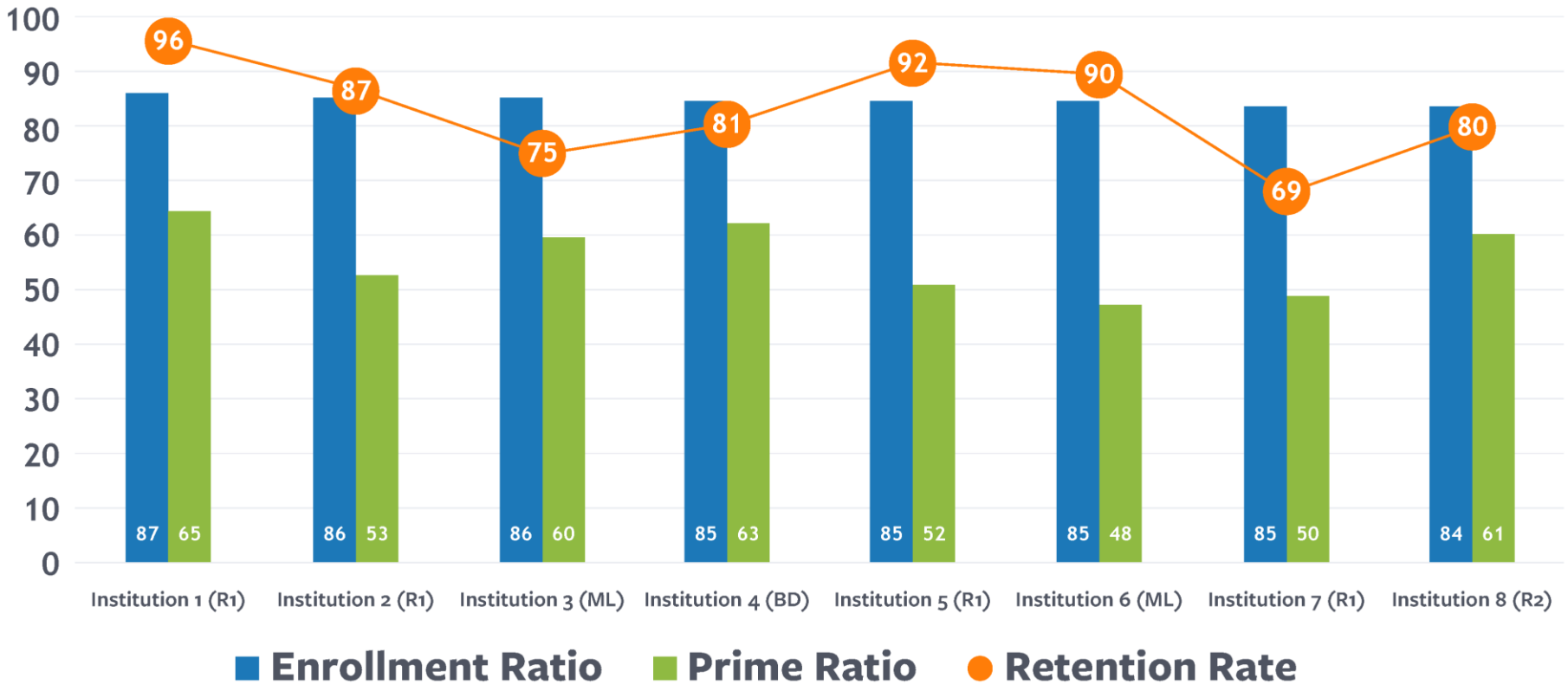


Due to rounding and data abnormalities, data may not equal 100%

Enrollment Ratio Sweet Spot

When you effectively manage your enrollment ratios, there is a positive corelation in retention

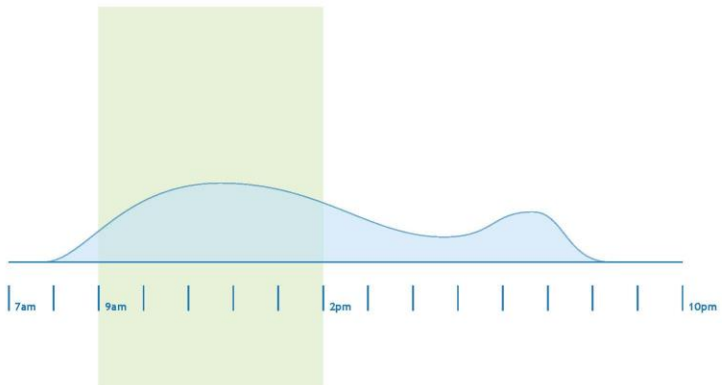
HESI & BENDING THE CURVE REPORT



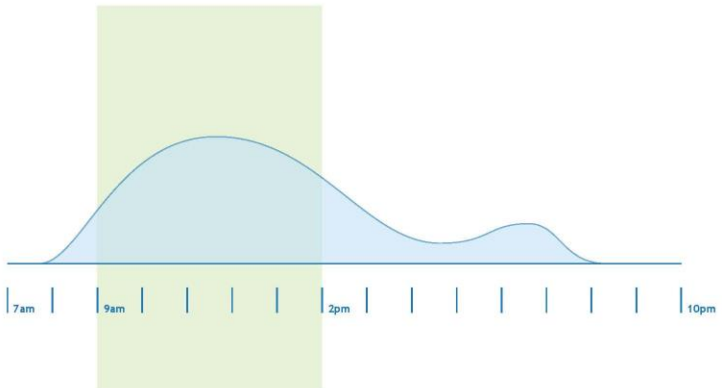
Prime Ratio

- Percentage of hours scheduled during primetime
- **Primetime:** The peak hours where student demand is the highest

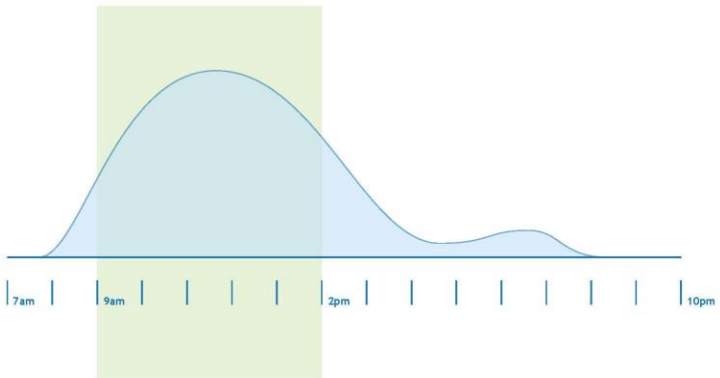
Student Segments



Student Segment 1

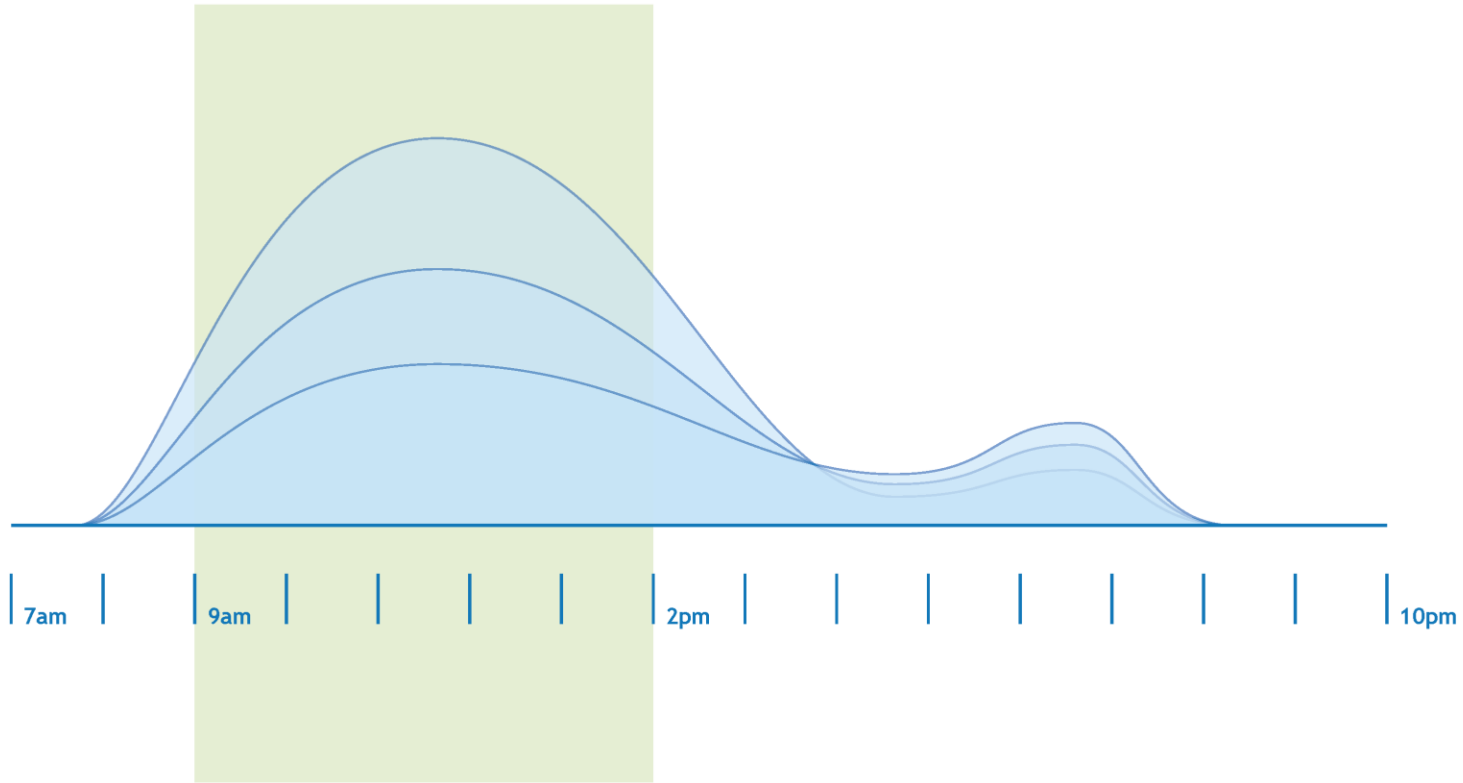


Student Segment 2

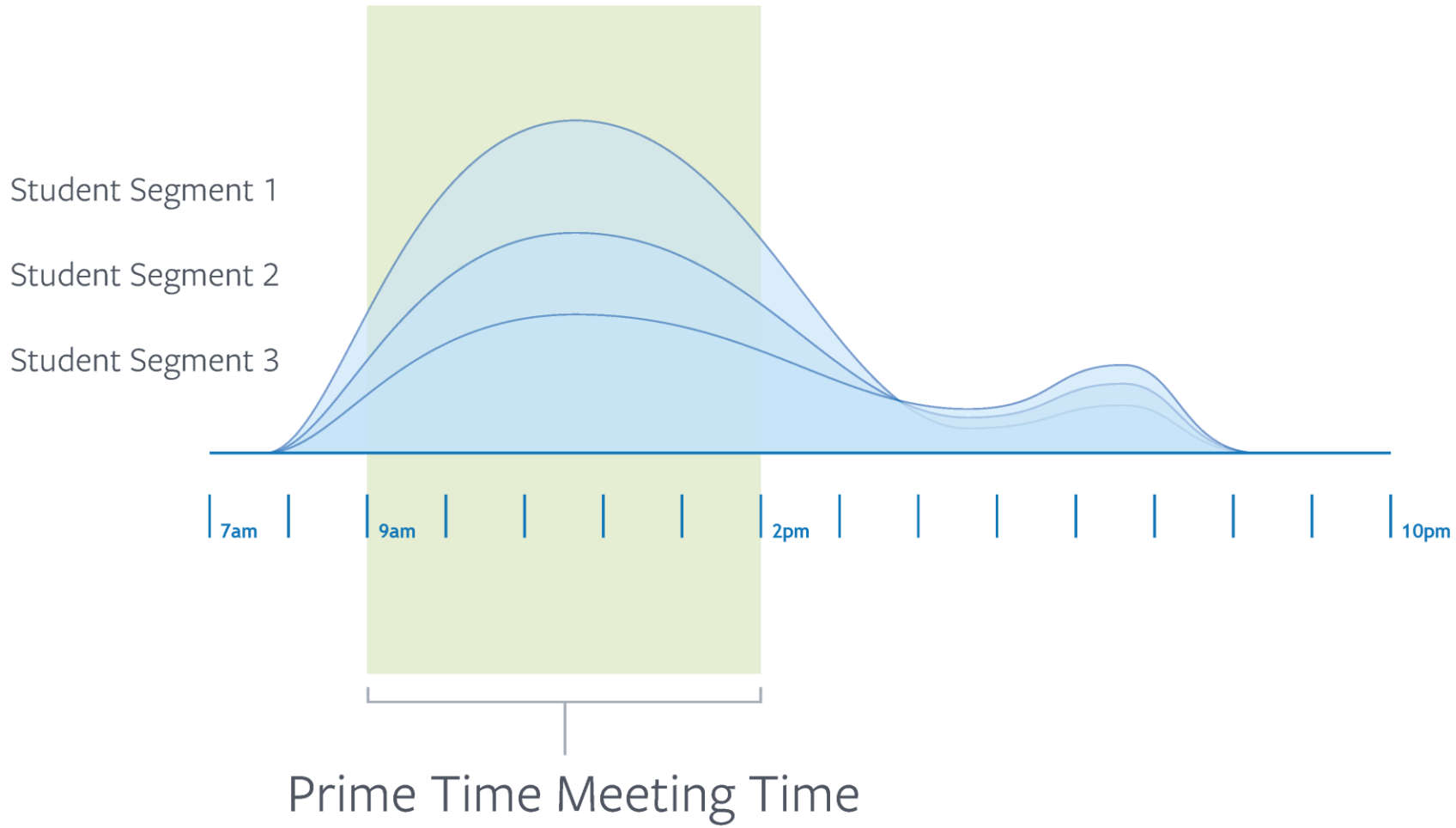


Student Segment 3

All Student Segments



All Student Segments



Course Enrollment

+.533% Enrollment Ratio

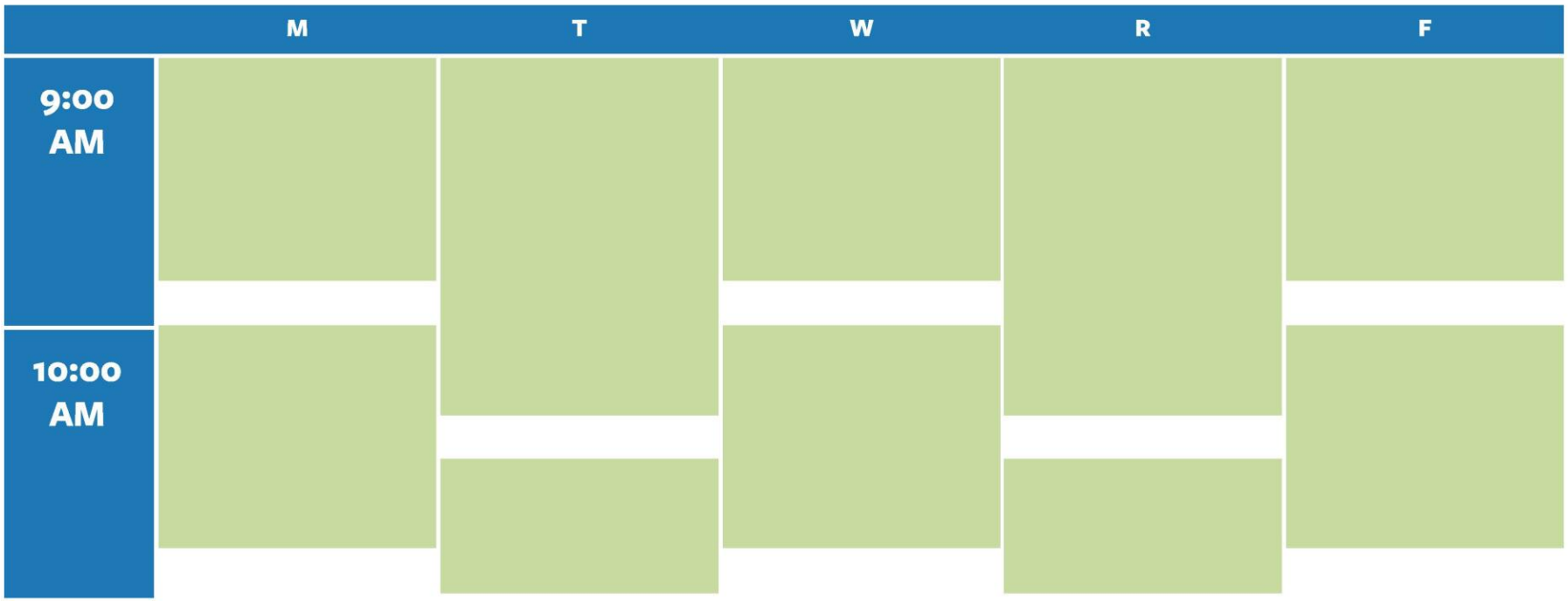
Selectivity

+.936% SAT Math

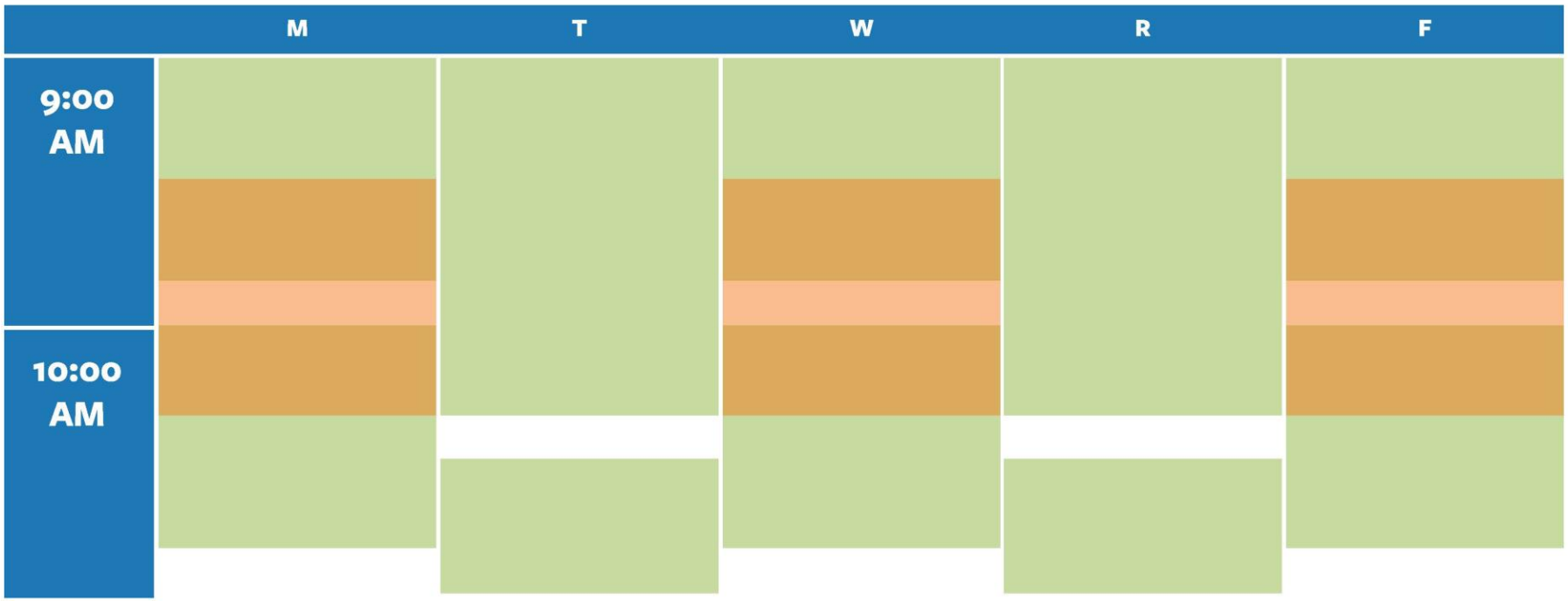
Waste

The total number of hours that are unusable because of off-grid scheduling

On Grid Meeting Pattern



Off Grid Scheduling



Off Grid Waste

Off Grid Waste

-.189%

Six-Year Graduation Rate
(All Four Year)

Off Grid Scheduling

-.194%

Six-Year Graduation Rate
(All Four Year)

Off Grid Scheduling

-.387%

Six-Year Graduation Rate
(Carnegie: Master's)

Pathways

Optimizing Pathways for Scheduling and Student Success

Defining Pathways
Laying the Groundwork

- Create model/sample pathways tempates for desired programs
- Refine course sequences using data analytics
- Identify key milestone courses

Analyzing Pathways
Initial Scale Implementation

- Ensure pathways are digitized or imported
- Analyze pathways for alignment to scheduling practices
- Recommend key changes that may be necessary to support scale implementatio of pathways

Scheduling for Pathways
Improved Scale Implementation

- Use pathways/planner demand to align pathways with scheduling
- Add simulated students for planning
- Evaluate initial scale implementation for improvement

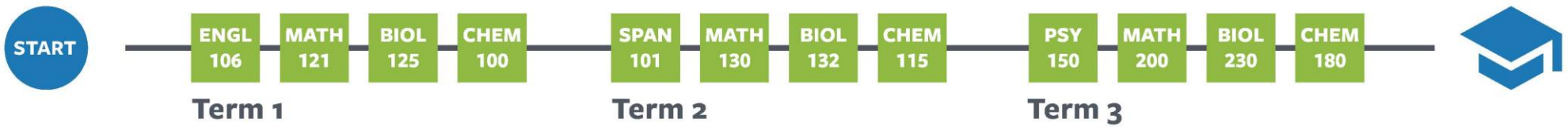
Pathways Ecosystem
Ongoing Improvement

- Integrate advising, scheduling, and registration
- Ensure continuous improvement through data analysis (first year momentum, productive credits)

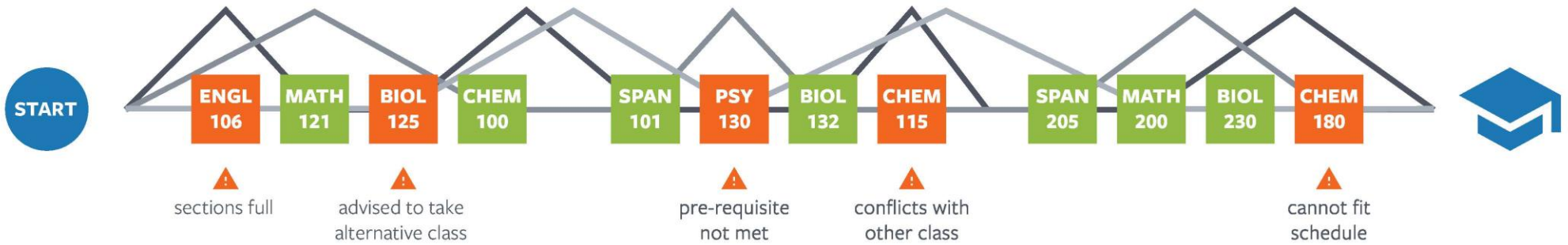
Value Propositions

- Accelerate institutional migration to pathways through consulting
- Suggest targeted schedule change candidates to align pathways with scheduling
- Add simulated students (students who are not available in student infomration systems or planning systems at the time of analysis)
- Increase early momentum through course access
- Track momentum and productive credits by student population (pathway/cohort)
- Provide insights to imrove faculty and space allocation
- Update student progress analysis for planning systems that do not auto update with changes

Perceived Pathway



Actual Pathways



Implications and Considerations

- Effective Scheduling can improve retention
- Waste matters when it comes to graduation
- Break down schedule into manageable parts and forster change

Additional Resources

Additional Resources

- Stephen F. Austin Optimizes Course Schedule to Add Faculty Lines That Paid for Themselves
- Many College Courses Are Either Overloaded or Underfilled. That May Be Hurting Retention.
- Momentum: The Academic and Economic Value of a 15-Credit First-Semester Course Load for College Students in Tennessee
- The Effect of Class Size on Student Performance and Retention at Binghamton University

Questions?