



EAB

# Building a Data-Informed Course Completion Initiative

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APS Course Completion Toolkit

Academic Performance Solutions

# Academic Performance Solutions

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# Introduction

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# Introduction

## Steps and Tools to Guide Your Institution's Course Completion Initiative

Supporting student progress is on every institution's list of priorities. The course completion rate, which is the percentage of attempted credits that were earned per course, is a key indicator in measuring student progress.

This toolkit includes six tools to embed Academic Performance Solutions (APS) data in initiatives that promote improved student outcomes. Get started by using the five principles below.

### Five Principles for Addressing Course Completion



1

#### Size the Opportunity

Analyze the data to pinpoint which courses have low course completion rates and high DFW rates.



2

#### Identify Root Causes

While it's important to consider factors outside the classroom, like student characteristics and preparedness, instructor variation is one cause of low course completion that can be easily monitored.



3

#### Prioritize Resources

Consider courses with high DFW rates, enrollment, and absolute number of credit hours lost, as well as gateway courses and courses where leaders and instructors are excited about improvement.



4

#### Engage Faculty

Since faculty are ultimately responsible for what happens in the classroom, engage directly with instructors to support their work and help eliminate barriers they may face, such as lacking time to evaluate new pedagogical approaches.



5

#### Measure Results

After implementing a new initiative, measure its results to assess its success and proactively plan for the next initiative.

#### Interested in more information?



Download *The Course Completion Playbook* [online](#) to learn more about these five principles.

Throughout this toolkit, you'll find six tools to support your institution's endeavor to launch and implement a new initiative.

✓ **Tool 1:** Milestones

✓ **Tool 2:** Talking Points

✓ **Tool 3:** E-mail Templates to Introduce New Initiative

✓ **Tool 4:** How-to Guide for Identifying Opportunities in the APS Platform

✓ **Tool 5:** Tactics for Course Completion Improvement

✓ **Tool 6:** Reflection Guide



# Milestones

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Use this timeline to guide and track your progress as you design and implement a new initiative.

1

# Milestones

The high-level set of milestones provides guidance for key steps to build and implement a new course completion initiative. Opportunities for improvement may be identified either centrally or at the unit level. Some institutions may have an analysis performed by their Strategic Leader, typically resulting in two to three departments identified as needing additional support. Other institutions may find success directing leaders to pinpoint specific courses in their own departments for improvement.

Use either set of templated milestones as guidance for implementing a new initiative. Please reach out to your Strategic Leader to create a more detailed and customized plan for your institution.

## Centrally-Led Initiative

Opportunities identified through a centrally conducted analysis can pinpoint which departments require additional support. After the initial analysis, engage department leaders to help develop and implement the initiative.

Phase	Milestone	Who	Target Date	Actual Date
Planning (1 month)	Determine goals and ownership	Provost's office		
Data Analysis (2 months)	Analyze data in the APS platform to pinpoint opportunities for improvement ▶ <i>Tool 4: How-to Guide for Identifying Opportunities in the APS platform</i>	Provost's office and APS Strategic Leader		
Launching Initiative (1 month)	Introduce objectives of the new initiative and discuss the opportunities with department leaders ▶ <i>Tool 3: E-mail Templates to Introduce Initiative</i>	Provost's office		
Tactic Selection (1-2 months)	Collaborate with your institution's student success organizations to pinpoint available resources to support students and discuss tactics that will be used ▶ <i>Tool 5: Tactics for Course Completion Improvement</i>	Provost's office, department leaders, and student success leaders		
Execution (5-6 months)	Implement tactics and strategies	Department leaders		
	Measure results during the following term and communicate them to appropriate leaders, such as the provost and dean	Department leaders		
Reflection (1 month)	Reflect on the initiative's process and results ▶ <i>Tool 6: Reflection Guide</i>	Provost's office, department leaders, and APS Strategic Leader		

## Milestones cont.

### Unit-Led Initiative

Opportunities may be identified at the unit-level when department leaders analyze their department's data to identify specific courses for improvement.

Phase	Milestone	Who	Target Date	Actual Date
Planning (1-2 months)	Determine goals and ownership	Provost's office		
	Communicate objectives of the new initiative to department leaders, as well as share resources about surfacing opportunities in the APS platform and selecting tactics <ul style="list-style-type: none"> <li>▶ <i>Tool 3: E-mail Templates to Introduce Initiative</i></li> <li>▶ <i>Tool 4: How-to Guide for Identifying Opportunities in the APS platform</i></li> </ul>	Provost's office		
Data Analysis (2 months)	Analyze data in the APS platform and discuss opportunities with instructional staff <ul style="list-style-type: none"> <li>▶ <i>Tool 4: How-to Guide for Identifying Opportunities in the APS platform</i></li> </ul>	Department leaders and APS Strategic Leader		
Tactic Selection (1-2 months)	Collaborate with your institution's student success organizations to pinpoint available resources to support students and select tactics to implement <ul style="list-style-type: none"> <li>▶ <i>Tool 5: Tactics for Course Completion Improvement</i></li> </ul>	Department leaders and student success leaders		
Execution (5-6 months)	Implement tactics and strategies	Department leaders		
	Measure results during the following term and communicate them to appropriate parties, such as the provost and dean	Department leaders		
Reflection (1 month)	Reflect on the initiative's process and results <ul style="list-style-type: none"> <li>▶ <i>Tool 6: Reflection Guide</i></li> </ul>	Provost's office, department leaders, and APS Strategic Leader		





# Talking Points Worksheet

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2

Once your institution has established goals and ownership for the new initiative, fill out the worksheet to prepare for questions you may receive.

# Talking Points Worksheet

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When launching a new initiative, it is critical to gain buy-in and understanding among involved leaders from the start. Complete this worksheet as a starting point for crafting your talking points addressing anticipated questions about the new initiative.

## “Why are we using APS data?”

*Consider: The APS platform includes multiple relevant metrics regarding enrollment and course completion at the department level. By using a single source, we will ensure that everyone is looking at the same information.*

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## “Which types of courses will we prioritize?”

*Consider: We will prioritize courses where improvement will have the greatest potential outsized effect on student outcomes. There are three specific types of courses:*

- 1 High Enrollment** Courses in which a high number of students are enrolled, which consequently produce a large number of attempted student credit hours
- 2 General Education** Courses that students are required to complete, often gateway courses, that span major academic disciplines
- 3 Prerequisites for Majors** Courses that student majors are required to complete in order to declare a specific major, typically needing to earn a specific grade to move forward

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# Talking Points Worksheet cont.

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## “Which metrics will we use to help inform the new initiative?”

*Consider: The metrics we will use are based on the types of courses we will prioritize. The metrics will help us understand student impact and lost credit hours. It is important to analyze both the course completion rate and the absolute number of credits lost due to failing or withdrawing. Often a very large course with a relatively high completion rate will impact more students than a very small course with a low completion rate. We can also use the APS platform to look for outliers, which are either courses with low course completion or with a large proportion of A grades.*

### Absolute Number of Credit Hours Lost

Difference between the number of attempted and earned student credit hours, or the number of unearned student credit hours.

### Course Completion Rate

Percentage of attempted credits that were earned per course. Only registered, gradable, and non-transfer coursework records are included in this metric.

### Course Completion Rate Benchmark

Cohort weighted average of overall course completion rate, aggregated by institution within the cohort. The value for each institution is weighted by the ratio of the institution's attempted credits to the total attempted credits of the cohort.

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# E-mail Templates to Introduce New Initiative

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To ensure a new initiative is positively received across campus, it is important to first introduce the topic and use of data in person. This allows for discussion and clarification, which can be difficult to achieve over e-mail. After the verbal introduction, we recommend sending an e-mail in follow up.

# E-mail Template: Centrally-Led Initiative

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From: Dean (suggested)

To: Department leaders (suggested)

Subject line: New initiative to support student progress

Dear [Names],

I am thrilled to share more details about a new initiative to support students by prioritizing resources for courses where students frequently struggle and fail to receive credit. This initiative is the result of in-depth analysis of course-level data, as well as qualitative feedback from students and instructors.

As we discussed the other day, we have identified [number] opportunities for this initiative. [Please customize list with your institution's opportunities. Here are a few that may be applicable.] I encourage you to review the data within the Academic Performance Solutions (APS) platform using the [attached](#) guide.

- High section variation in course completion rates in [course name]
- High DFW rates in [course name]

We believe tackling these opportunities will help students struggling to earn course credit and are eager to get our efforts underway. Starting [Date], [Names] and I will hold meetings with each department to discuss strategies to implement the new initiative. To prepare for this meeting, please read the *Course Completion Playbook* ([attached](#)) and come with ideas.

I am looking forward to meeting with each of you. Until then, please reach out to [[designated contact](#)] or me with any questions.

All the best,

[Name]

## E-mail Template: Unit-Led Initiative

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From: Dean (suggested)

To: Department leaders (suggested)

Subject line: New initiative to support student progress

Dear [Names],

As you know, we've been focused recently on embedding data into decision-making across the institution. One area where I expect you will find an opportunity to be data-informed is promoting student progress. The data available in the Academic Performance Solutions (APS) platform will help you with the prioritization of resources for courses where students frequently struggle and fail to receive credit.

To support you in surfacing opportunities, I have **attached** a guide to help you navigate critical analyses in the APS platform. Once you have identified opportunities, we'll discuss what resources we can invest in to support students in the prioritized courses. To start the conversation, please review the strategies and tactics in the **attached** *Course Completion Playbook*.

I look forward to discussing this initiative with you over the next few months. Please reach out to [**designated contact**] or me with any questions.

All the best,

[Name]



# How-to Guide for Identifying Opportunities in the APS Platform

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Use this guide to pinpoint opportunities to support student progress at your institution. If your institution selects metrics different from the ones included in this guide, work with your Strategic Leader to determine the best ways to use analyses in the APS platform.

# Identify Course Completion Opportunities in APS

## Get Started: Recommended Filters

- Department Name: Select a department name
- Course Division: Select Lower Division to focus on general education and prerequisite courses
- Course Type: Remove course types that might skew course data, such as *Individual Instruction*, *Practicum*, and *Studio*
- Student Classification: Select student classification(s) of interest, such as Freshman

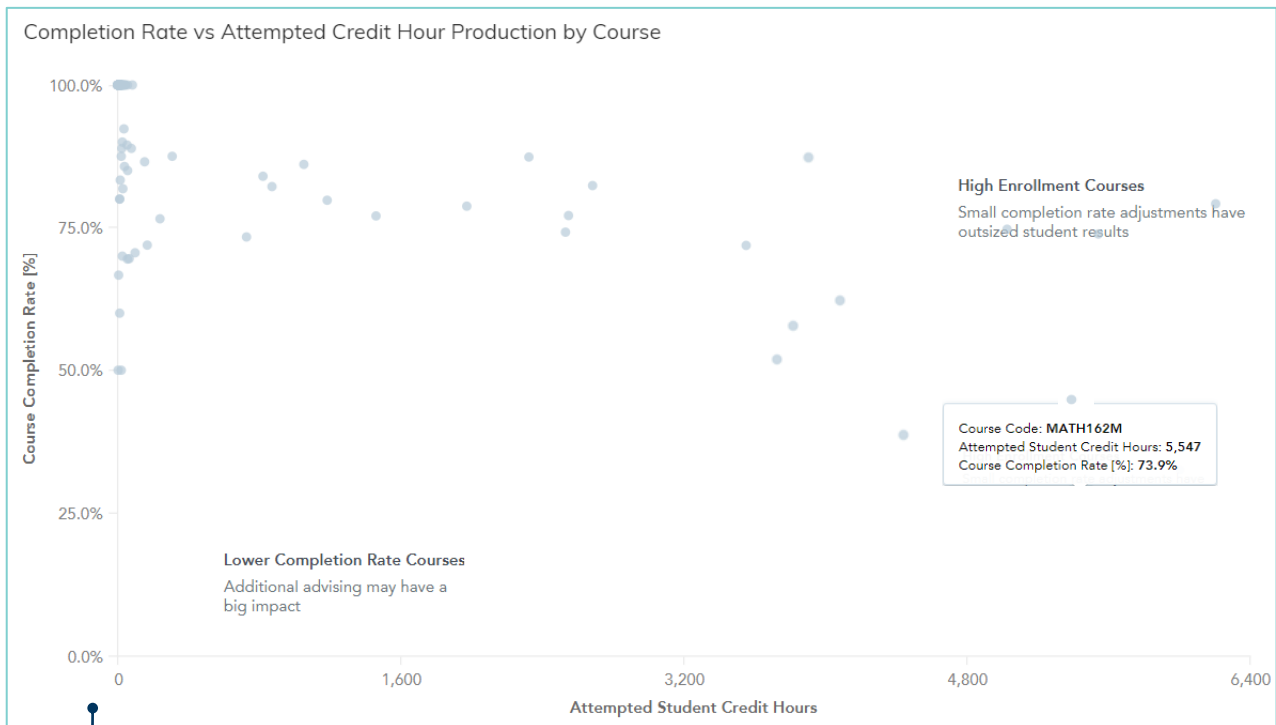
*Note: Filters in the Partner Benchmarks dashboard contain standard benchmarking values*

### 1 Completion Rate vs. Attempted Credit Hour Production by Course

**Find it:** Department & College Analytics dashboard, Course Completion tab

**Use it to:** Analyze courses with both high enrollment and low course completion rates, signifying a large impact on students

Use the chart to view completion rates compared to attempted credit hours for each course in the department. To determine which courses your institution should prioritize, focus on courses in the lower right of the chart. These courses have high enrollment and lower course completion, so improvement efforts will have an outsized effect on students.



### Focus on Courses That Affect the Most Students

Which courses have both high enrollment and low course completion rates?



## 2 Courses with Highest Unearned Credit Hours

**Find it:** Department & College Analytics dashboard, Course Completion tab

**Use it to:** Identify courses with the highest number of unearned credit hours

Use the table to identify courses with the highest number of unearned credits and lowest completion rates. In the Course Code column, click on a course code to open a drill-in report to view section-level data. Identify if there is variability in course completion rates across sections. Prioritize course completion improvement efforts by improving the consistency of student experiences across sections of the same course, such as by standardizing assessment materials.

Course Code	Course Name	Attempted Credits	Unearned Credits	Completion Rate [%]
MATH162M	MATH162M	5,547	1,449	73.9%
STAT130M	STAT130M	6,210	1,293	79.2%
MATH103M	MATH103M	5,031	1,272	74.7%
MATH211	MATH211	3,556	1,000	71.9%
MATH200	MATH200	2,535	654	74.2%
MATH212	MATH212	2,552	584	77.1%
MATH102M	MATH102M	2,688	474	82.4%
MATH163	MATH163	1,977	420	78.8%
MATH312	MATH312	1,464	336	77.0%
MATH101M	MATH101M	2,328	294	87.4%
MATH307	MATH307	1,188	240	79.8%
STAT330	STAT330	732	195	73.4%
MATH316	MATH316	876	156	82.2%

**Understand Potential Impact of Your Improvement Efforts**

- Which courses have the highest number of unearned credit hours?
- Of these courses, which courses have the lowest completion rates?

**Identify Variability in Course Completion Rates Across Sections**

- How much variability in course completion rates exists between sections of the same course?

## 3 Earned Credits and Final Grades by Course Code

**Find it:** Department & College Analytics dashboard, Course Completion tab

**Use it to:** Find courses with high DFW rates and courses with high section variation in course completion

Use the chart to calculate the DFW rate and understand the percentage of students not earning credit for critical courses, such as general education courses and prerequisite courses for majors. To calculate the DFW rate, use the Final Grade filter to select any grades where students will not earn credit for the course – typically any D grades, F grades, and withdrawals. The '% Students Receiving Selected Grade(s)' column shows the DFW rate.

Course Code	Course Name	# of Sections	# of Students	% of Students Earning Credit	% of Students Receiving Selected Grade(s)
BIO195	BIO195	2	3	66.7%	100.0%
BIO117N	BIO117N	5	190	71.1%	44.2%
BIO229	BIO229	16	34	64.7%	38.2%
BIO112N	BIO112N	1	110	77.3%	36.4%
BIO110N	BIO110N	2	183	85.8%	34.4%
BIO121N	BIO121N	5	644	80.3%	33.9%
BIO103	BIO103	3	420	78.1%	29.0%
BIO105N	BIO105N	7	119	86.6%	21.8%

**Pinpoint Courses with Poor Student Outcomes**

- Which courses have the highest percentages of DFW rates?
- Does the course have multiple sections?

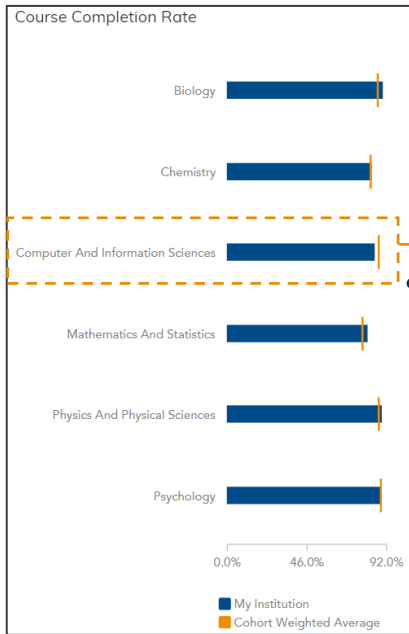
Source: Academic Performance Solutions.

## 4 Course Completion Rate Benchmarks

**Find it:** Partner Benchmarks dashboard, Course Completion tab

**Use it to:** Pinpoint departments in which course completion rates are lower than the cohort benchmark

Use the chart to compare course completion rates for departments to your institution's selected cohorts. Focus on departments that are lower than the cohort benchmark.



Institution vs Cohort [Comple... » Computer And Information Scie... ⌵

Standard Department Name	Department Name	Cohort Weighted Average	My Institution	Difference (My Inst - Cohort)
Computer And Information Sciences	Computer Science	87.9%	85.7%	-2.2%
Rollup		87.9%	85.7%	-2.2%

**Focus on Departments That are Below the Benchmark**  
Which departments have course completion rates below the cohort median?



# Tactics for Course Completion Improvement

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TOOL

5

Choose and employ tactics to accomplish the new initiative's goals. Not every tactic works for every institution or every opportunity, so it is critical to identify which ones are right for you.

# Tactics for Improving Course Completion

## Excerpt from the Course Completion Playbook

There are many different ways to support student progress. Some practices are more resource-intensive, technology-focused, or require strong relationships. Not every practice will be right for your institution. Below are a few tactics your institution may consider for improved student outcomes.

1

### Early and Frequent Low-Stakes Assessment

Courses that rely on large summative assessments, like a midterm exam, are not effective in helping students to measure their progress. Instead, use frequent, low-stakes assessments that permit students to check their progress and instructors to identify at-risk students early.

2

### Active Learning

Traditional stand-and-deliver lectures often don't engage students and obscure struggling students. By incorporating active learning pedagogies in the classroom, instructors can better support underprepared students, engage well-prepared students, and improve student mastery of content.

3

### Standardized Assessment

When sections of the same course lack coordination and standardization, this results in varied experiences for students. A set of shared materials, assessments, and objectives can reduce this variation.

4

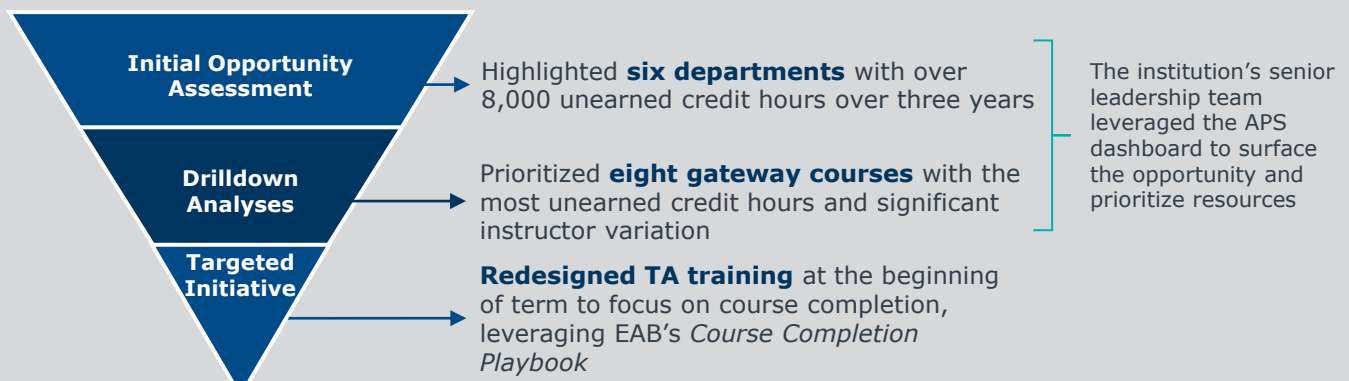
### Course Behavior Alerts

Without a central way to track potential at-risk student behavior and performance, students may not receive the support they need. Track and flag these concerns to ensure interventions and support services can be deployed before it's too late.

► [Download](#) the *Course Completion Playbook* for more information on these and other tactics, as well as accompanying resources and case studies.

## Tactic in Practice: Illuminating Impact Through APS Drilldown Analyses

At a public doctoral research university, administrators used Academic Performance Solutions (APS) analyses to identify significant instructor variation among sections of eight gateway courses and provided training workshops for graduate teaching assistants. The term immediately following the training saw **almost 2% increase in course completion rates** for the prioritized courses.



Source: Academic Performance Solutions. EAB interviews and analysis.



# Reflection Guide

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Once your institution has implemented the new initiative and measured results, use this guide to reflect on the process. This will help you proactively prepare for your next initiative.

## Reflection Guide

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Once your institution has completed the initiative and measured results, use this guide to reflect. This will help you proactively prepare for your next initiative.

*Ask the following questions to gather feedback from academic stakeholders who were involved in the process. To promote honest candor, we suggest you request anonymous responses.*

- 1 How effective do you think communication about and throughout the process was to academic leaders, such as yourself?
- 2 Did you understand why you were asked to provide specific data points, and could you interpret the data given the resources you were provided?
- 3 Would you have found any additional resources to help clarify our institution's new process, the data points involved, and expectations? If so, what resources?
- 4 Did you understand the goals of this new process and why our institution did it? Do you think we accomplished our goals?
- 5 Which parts of the process do you think went well? Not so well?
- 6 How would you grade the entire process? In what ways could that grade be improved for next year?

*To inform strategy for your next course completion improvement initiative, answer the questions above and use the collected feedback. Additional questions for initiative leaders are below.*

- 1 How did the proposed and actual timelines compare?
- 2 In what ways would you change your strategy, regarding communication, training, and resources provided to users?
- 3 What would you like to share internally with your institution's senior leadership about this initiative?



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