Course Scheduling

A Strategy to Support Student Success Outcomes

A Playbook for Capacity, Infrastructure & Integration

Credit: City University of New York Lehman College

Brought to you by:

AASCU — American Association of State Colleges and Universities

In partnership with:

Ad Astra

About the Playbook Production Partners

AASCU

The American Association of State Colleges and Universities (AASCU) is a Washington, D.C.-based higher education association of 350 public colleges,universities, and systems whose members share a learning- and teaching-centered culture, a historic commitment to underserved student populations,and a dedication to research and creativity that advances their regions' economic progress.

Ad Astra

Through data-informed planning and course scheduling, we empower institutions to remove barriers to students degree completion while ensuringprogram financial sustainability.

Sova

Sova focuses on improving the quality and accelerating the pace of complex problem-solving in the areas of higher education and workforce development. Animated by a core commitment to advancing equitable socioeconomic mobility for more Americans, Sova pursues its mission through distinctive approaches with strategic planning, will-building, implementation support, and program design and improvement. By applying cross-disciplinary insights and expertise in stakeholder analysis and engagement, implementation science, process engineering, and deliberative democracy we help our clients take advantage of the untapped insights of the people they depend on to make significant, lasting change. For organizations working to improve student success outcomes, we help leaders avoid pitfalls as they move from strategy to action, from solution to implementation, and from pilot to scaled intervention.

Acknowledgments

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Credit: Fresno State University (CA)

Playbook Overview

Introduction

One of the most essential elements to a student's academic success is obtaining the necessary courses to complete a degree. However, research indicates that the course schedule has become a structural barrier to success at most institutions (Keil & Partell, 2002, as cited in Ad Astra, 2018). AASCU is helping its members address this structural barrier and ensure that access to required courses is not a barrier to success, especially for low-income students and students of color.

This playbook has been informed by AASCU's Academic Planning for Equitable Student Success project, funded by the Ascendium Education Group. This cohort of eleven regional public universities has identified actionable strategies to close equity gaps, improve **course scheduling** practices, and align academic resources with student needs and **academic pathways**. Engagement with this cohort has informed several resources that will be helpful to any institution, regardless of its mission. We hope insights from participating AASCU institutions and partners will support other institutions in reimagining course scheduling policies, practices, and behaviors.

> " **Helping our member institutions reengineer their course scheduling policies and practices to put students at the center is a critical component of AASCU's strategy to scale student success. The course schedule is the engine of degree completion. You simply cannot drive better outcomes without a course schedule designed with student success in mind.**
>
> *- Vice President of Academic Innovation and Transformation, AASCU*

Why Course Scheduling is a Vital Strategy To Support Student Success

Recent interest in offering students more flexible course modality options has made course scheduling even more complex. Overall, class section sizes at most institutions are either well below enrollment caps, overfilled, or closed to students who need them. Classrooms are used for only 40% of available hours; even when classrooms are in use, only 60% of the seats are typically used (Ad Astra, 2024).

The common practice of "rolling over" the previous term's schedule means repeating inefficiencies from term to term. This practice hurts learners most disadvantaged by the current system, including those who need to work and balance complicated lives. The result is a system of higher education that continues to exacerbate opportunity gaps rather than find student-centric solutions that can bridge the divide.

The course schedule is one of the most challenging structural obstacles. Preliminary data suggest that students of color are disproportionately affected by inefficient course schedules not aligned with their needs or academic program requirements (Ad Astra, 2024).

Because students' progress to a degree depends on their ability to complete courses in the proper **course sequence** and on time, a college or university will significantly increase **degree velocity**, retention, and graduation rates by developing a more student-centered, data-informed approach to managing their academic operations (Hanover Research, 2018).
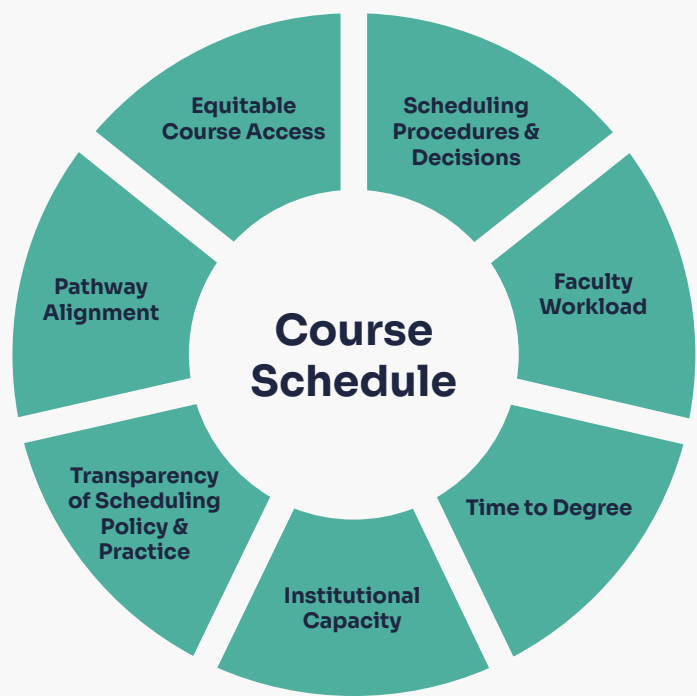
While not always evident, course scheduling represents a powerful catalyst for change—including tactical and transformational actions that are part of a broader change management strategy focused on student success. At this critical moment in higher education, institutional thought leaders must explore course scheduling as a viable student success strategy (Figure 1).

SCHEDULING FACTS

- More than two-thirds of courses in a typical schedule are not balanced, or 70 to 95%full.
- Nearly one-quarter of course sections (23%) are overloaded (exceeding the 95% enrollment ratio threshold).
- About 45% of all sections are underutilized (the **enrollment ratio** is less than 70%).
- Scheduling imbalance presents a significant opportunity to improve student success. Institutions that improve their enrollment ratio have improved retention by about one-half percent.

(Ad Astra, 2024)

Figure 1. Areas Impacted, Advanced, or Elevated by the Course Schedule

Course Schedule

- Equitable Course Access
- Scheduling Procedures & Decisions
- Faculty Workload
- Time to Degree
- Institutional Capacity
- Transparency of Scheduling Policy & Practice
- Pathway Alignment

Purpose of the Playbook:
How to Use It and Foundational Elements

Creating an intentional course scheduling strategy involves several phases to drive sustained innovation and momentum across scheduling policies, practices, and behaviors. These phases include preparation, reflection, prioritization, action, and ongoing monitoring. AASCU, in partnership with Ad Astra, has jointly developed this playbook, informed by member institutions through an extended engagement of technical assistance support, group dialogues, and case studies.

This playbook emphasizes field insights and experiences to amplify key lessons, build institutional knowledge, offer actionable steps to support an equity-centered course scheduling strategy, and encourage team and individual reflection.

Relevant Terminology

Academic Pathways: A sequenced list of courses that either must be taken or are recommended to be taken to complete a program of study. Also referred to as degree maps, advising guides, course sequences, four-or two-year plans, etc.

Advising Guides: A tool used to outline course sequences and pathways.

Course Scheduling: The process of generating a course schedule, including determining the number of sections to offer; the size, location, and modality of those sections; the days and times sections will be offered; and the specific rooms assigned to sections.

Course Sequence: The order in which courses are intended or must be taken as recommended in the program pathway.

Degree Velocity®: An in-process metric that measures the number of productive credit hours a student earns. It is calculated by taking the number of productive credits a student completes in a year and dividing by the annual productive credit hour goal.

Enrollment Ratio: The overall average fill rate for course offerings is calculated as census enrollment divided by enrollment capacity.

Integration Capacity: The maximum effort available to combine course scheduling with the institution's student success strategies divided by the maximum effort available to connect technologies to support course scheduling strategy.

Lagging Indicators: These are measures of past performance or outcomes. Lagging indicators can be used to confirm trends or changes in trends.

Leading Indicators: These are in-progress measures that give early indicators of progress toward a goal.

Momentum year: An approach designed by Complete College Georgia to track key student behaviors in a student's first year of college strongly correlated with an increased likelihood of degree completion.

Overloaded Course Ratio: The percentage of unique courses offered that are difficult for students to register for because they have an Enrollment Ratio greater than 95%.

Student Information Systems: Database systems housing student records, course sections, and associated room data (e.g., Banner, Peoplesoft, Colleague, Workday, etc.).

Underutilized Course Ratio: The percentage of unique courses offered that are an inefficient use of faculty and classroom resources because they are under-enrolled, is defined as having an Enrollment Ratio of less than 70%.

Audience

This playbook guides institutional teams in managing the course schedule. The playbook offers relevant key performance indicators and an approach for leading change efforts aimed at centering the course schedule as a lever toward equitable student success. Institutional teams of the chief academic officer, deans, associate deans, department chairs, registrars, advisors, and others who support course scheduling will find applicable information, how-tos, and reflection questions.

Approach

To support a sustained strategy that encompasses both the tactical and transformational dimensions of change, adopting a phased approach to course scheduling is crucial to support equitable student success outcomes. An intentional and comprehensive strategy must consider multiple phases and institution-specific contextual factors, including **integration capacity** and **student information systems**. A comprehensive strategy incorporates four necessary phases, each serving a distinct function or purpose and providing the necessary scaffolding for sustained momentum.

PHASE ONE: PREPARE

Conduct a self-assessment to identify areas of strength and opportunities for improvement. This exercise helps clarify the rationale for change.

PHASE TWO: REFLECT

Collect data and conduct benchmarking to assess leading and lagging indicators and critical measurements of the course schedule, degree velocity, capacity, course offerings, enrollment health, momentum year, and financial health.

PHASE THREE: PRIORITIZE & ACT

Based on reflections and data recommendations, prioritize expected outcomes through an action plan. Apply components of change management while addressing critical elements of course scheduling effectiveness, such as **academic pathways** design, schedule refinement, enrollment health, instructional capacity, infrastructure, and financial health.

PHASE FOUR: MONITOR

Codify and integrate, where appropriate, scheduling processes, practices, and policies to ensure sustainable practice. This includes a reporting cadence to monitor course scheduling key performance indicators. Incorporate a continuous improvement framework to regularly monitor and assess progress, roadblocks, and outcomes, which inform real-time adaptations.

Credit: Western Kentucky University

Design & Delivery Principles

These design principles provide a lens for preparing, reflecting, prioritizing, acting, and monitoring for continuous improvement.

LEAD WITH ASSET-BASED FRAMING

Course scheduling data must be examined using an asset-based approach. This means that improvement strategies are designed to build on the institution's strengths and the strengths of the target population(s) instead of relying on assumptions or misconceptions about the reasons/rationale for outcomes. Explore root causes of challenges in the course schedule and scheduling behavior.

GIVE ATTENTION TO CHANGE MANAGEMENT & SUSTAINABILITY

The course schedule relies on coordination across the university (e.g., academic units, student services units, and operational units) because of its centrality to the core mission of the institution. Therefore, addressing the cultural changes necessary to improve course scheduling practices and intentionally incorporating steps to ensure sustainability is imperative.

INCORPORATE CONTEXT & ARRIVE AT SPECIFICITY

When evaluating the influence of specific factors on change efforts, situate findings and improvement strategies within the institutional context, including historical trends, culture, and climate. Consider strategic priorities, student population, governance, budgetary constraints, state and institutional policies, institutional readiness, and readiness of interested parties to engage in equity-minded sensemaking.

INTEGRATE WITH EXISTING INSTITUTIONAL EFFORTS

Identify course scheduling improvement areas that support larger institutional success goals and desired outcomes. This helps guard against initiative fatigue and increases the likelihood of sustainability following the project's end.

ENSURE REPRESENTATION & CENTER VOICE

Include various campus partners, including students, to identify challenges, barriers, and solutions.

> **From the perspective of a provost, dean, or faculty member, rethinking the course schedule poses a daunting challenge. The schedule is, after all, the foundation upon which all students' educational experiences rest. Any solution to improve how the schedule operated would impact the day-to-day activities of faculty, students, and administrators. It would have to center on the core of our higher education institutions: instructional activity.**
>
> *- Ad Astra, 2018, p. 5*

Credit: Portland State University (OR)

SECTION 2

Project Phases

PHASE ONE: PREPARE

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PHASE TWO: REFLECT

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Prepare

Conduct self-assessments for areas of strength and opportunity within course scheduling practice. This phase clarifies the rationale for change and leverages cross-functional teams to inform course scheduling reform.

Developing a Change Management Philosophy & Approach

According to an AACRAO survey (Kilgore, 2022), 76% of institutions roll forward the schedule from like term to like term. In many ways, this roll-forward methodology was required to build schedules and make them available for registration more easily. Now, the changing needs of a diverse student population require us to use data to make more comprehensive adjustments to the course schedule than ever before. Addressing changes in course scheduling policy and practice can seem like an overwhelming task. The course schedule centers an institution around its mission, and courses represent how institutions fund departments and programs, award degrees, and receive state appropriations. All students must take and pass requisite courses for their degrees, so courses represent a commonality among students. For most institutions, each department must manage the complexity of the courses needed, appropriate days and times, instructor availability, student availability, room availability, and financial sustainability.

To begin change efforts focused on something this complex, higher education leaders must guide change with curiosity and a posture for learning. Grounding the philosophy of change in this way makes space for recognizing strengths while positioning opportunities to improve the course schedule as a mechanism to meet the needs of interested parties. The following section outlines a process for the change management strategy to improve course scheduling.

> **Like all other campuses, the demographics of our students have changed over the last 10 years. Most of our students work, are helping at home, and are struggling financially. A flexible schedule is important. This is a huge equity issue.**
>
> *- Assistant Provost, Western Kentucky University*

Credit: University of Guam

Conduct Self-Assessments To Understand Current Course Scheduling Infrastructure

To more thoroughly understand the existing course scheduling infrastructure and readiness for change, campus leaders must conduct a formal assessment or audit on existing campus conditions. The self-assessment can help identify strengths and areas for growth. Furthermore, it can help clarify goals, develop and decipher key action steps, elevate potential barriers and risks, and serve as an accountability measure.

To more thoroughly understand the existing course scheduling infrastructure and readiness for change, campus leaders must conduct a formal assessment or audit on existing campus conditions. Doing so can help identify strengths and areas for growth. Furthermore, it can help clarify goals, develop and decipher key action steps, elevate potential barriers and risks, and serve as an accountability measure.

The self-assessment process should not create a sense of paralysis. It is intended to foster dialogue and help move the conversation from anecdotal examples to a body of evidence that helps drive meaningful change. (**Appendix A, Course Scheduling Diagnostic**)

COLLECT DATA ON:

- course scheduling practices
- perceptions of course scheduling
- equitable course access

> ❝ **Too often, we admire the problem instead of trying to figure out how to make change.**
>
> *- Associate Provost, University of North Georgia*

Form & Engage A Strategic Scheduling Team

Effectively managing a large-scale change effort in course scheduling requires building a team of invested parties. To capitalize on the diversity of perspectives, experiences, and expertise each member brings, team leads must foster an environment that values information sharing, eliminates unnecessary bureaucracy, and fosters alignment.

Institutional experiences suggest that it is crucial to have the provost or another senior executive-level leader serve as a sponsor for a strategic scheduling team. Institutions may even require that the group be chartered by the provost. Support from an executive sponsor lends credibility to the group and signals the importance of their work. The executive sponsor would also receive any formal recommendations for improvement and could authorize the implementation of those recommendations.

Once identified, the sponsor convenes the strategic scheduling team. Consider existing campus committees or groups that could assume or be repositioned for this function. If no group exists, draw a representative cross-campus group that considers positional authority, leadership, expertise, and credibility.

Consider less conventional partners, which could help the team understand the incoming class and provide projections for impacts on scheduling and updates on capital projects and changes to building and/or room availability. Identify roles within the workgroup, including data wrangler, to help with validation and benchmarks. Conduct a kickoff meeting to welcome members, hear from the project sponsor, discuss initial growth opportunities, and establish a meeting cadence and tentative project timeline.

Develop a Strategic Communications Plan to Establish Scheduling as a Driver of Student Success

A comprehensive strategic communications plan will help clarify goals identified in the previous steps. The plan consolidates and refines messaging to ensure targeted communication—including nuances across different stakeholder groups—while fostering transparency, accountability, and buy-in.

The strategic communication plan will specify the channels, methods, cadence, and content for delivery. For instance, methods might include campus presentations, policy memos, or town halls. The messengers are just as important as the message itself; teams must select appropriate messengers to deliver key information, such as representatives from the strategic scheduling team, associate deans, or the provost. To streamline communication efforts, the team will create a shareable communications calendar highlighting key content delivery dates.

When making the case for change, use relevant data to clarify areas for improvement and guide teams toward specific solutions to address these areas.

STRATEGIC SCHEDULING TEAM ROLES

- communicating the why to the campus community,
- managing key stakeholder expectations,
- identifying risk mitigation strategies,
- working with people across all levels and functions with respect and energy,
- promoting and ensuring transparency and
- data-informed action, and defining metrics to track and measure progress.

CHAMPIONS TO SUPPORT STUDENT-ALIGNED SCHEDULES

- undergraduate program directors
- academic advising leadership
- first-year programming experts
- athletics
- faculty
- administration
- registrar's office
- student success representatives
- enrollment management
- other applicable departments or divisions

Credit: University of North Georgia

Phase One Insights and Recommendations

Setting Expectations

Redesigning the course schedule to achieve intended outcomes while adhering to desired timelines involves multiple considerations. Take time early in the project to draft a set of agreed-upon expectations. Change efforts will take time, so persistence and patience are crucial. Manage expectations by assessing people's capacity to dedicate time to support change efforts and recognize the role institutional culture has in determining how amicable the campus is to change. Engage a broad group of campus stakeholders and identify early adopters or champions who will be essential to help communicate the project's rationale, the proposed changes, and how people will be involved or impacted by these changes.

KEY STEPS FOR SETTING EXPECTATIONS

- Determine people's capacity to support change.
- Discuss and align shared expectations.
- Engage a broad group of stakeholders to communicate the project's rationale and goals.

Data & Case-making

From a change management perspective, case-making is necessary to advance change. Case-making is anchored in a shared vision, balancing a sense of urgency to act with shared ownership of the problem to be solved. To advance case-making efforts, draw on multiple data sources and evidence as a way of building buy-in and momentum. To create a compelling narrative for change, leverage quantifiable data and heart stories demonstrating the impact of the course schedule on everyday students and communicate about proposed changes. Develop nuanced messaging specific to key audiences and consider multiple channels and methods to deliver messages. It is important to consider input from various stakeholders, including students and faculty. Leverage the executive sponsor to help champion the project and signal the project's importance to the broader campus community. Ensure the IT team is onboarded early, given the critical role of data. Articulate project goals early; efforts must be part of a more comprehensive communication strategy.

RECOMMENDATIONS FOR USING DATA FOR CASE-MAKING

- Lead with a shared vision.
- Create a sense of urgency and ownership.
- Leverage data and stories to inspire change.

Stakeholders

Charging a team from across the institution with continuous improvement of the course schedule has several strategic functions. Leaders must bring together a diverse group that can offer different perspectives, including those most impacted by the course schedule: students. Include and encourage student voice and diverse perspectives throughout all phases of the work. To gather and leverage diverse perspectives, go where stakeholders regularly convene and provide multiple outlets for feedback. Recognize team members' roles and include key champions who can communicate the need for change and the reasons behind any proposed modifications.

STAKEHOLDER CONSIDERATIONS

- Identify key groups that can provide insights and perspectives.
- Center the voice of students.
- Create multiple opportunities and platforms to provide feedback.

Feedback

Feedback is valuable in a continuous improvement framework and as a change management tool. Feedback helps identify blind spots or gaps, improve processes and enhance decision-making. Offering regular opportunities for input strengthens relationships as people feel they are being heard during considerable change. Regularly gathering feedback can lead to greater transparency, engagement, and accountability. To gather, acknowledge, and incorporate feedback, first ensure no constituencies have been left out, then aggregate key themes and discuss a plan to incorporate feedback promptly. Circle back to those individuals or groups that took the time to provide feedback and update them on how their feedback was incorporated for meaningful change.

ENCOURAGING FEEDBACK

- Determine individuals or groups who can provide feedback.
- Establish a cadence for gathering feedback. Work to aggregate feedback and make necessary adjustments.
- Share how feedback informed or enhanced change efforts.

Credit: Western Kentucky University

Reflection Questions

Use these reflection questions for individual and group reflection in the early stages of preparation for course scheduling systems change.

Contextual Factors

- What are the current course scheduling practices and policies of the institution, college, or department?
- What are the existing institutional, college, or departmental course scheduling pain points and areas for growth?
- Are constituents aware of the available infrastructure to support course scheduling and changes? (e.g., student information systems, dashboards and data, documented course scheduling policies, and procedures) If not, how will the team orient constituents to these tools and resources?
- Are constituents trained to use available tools and resources? If not, how will they receive training?
- How will the team foster a strengths-based and equity-minded approach to data interpretation?

Goals & Objectives

- What are the objectives to be addressed by course scheduling improvements?
- Which students benefit most from changes to course scheduling policies, practices, and behaviors?
- What will those benefits be, and what challenges will changes address?

Transparency & Communication

- How will the plan for course scheduling reform be shared to ensure a transparent and clear understanding of the process, expectations, and intended outcomes?
- How will decisions about formative learnings and feedback be addressed to the broader campus community with consideration for strengths-based and equity-minded data interpretation?

Stakeholders & Audience

- Which stakeholders will be involved in or impacted by potential changes?
- Does the team's composition reflect diverse experiences, seniority, role, functions, and perspectives necessary to ensure a holistic understanding of course scheduling challenges and potential solutions?
- What data are available to illuminate current course scheduling health, identify areas of opportunity, enhance case-making efforts, and allow ongoing monitoring, with consideration for strengths-based and equity-minded data interpretation?
- How can data be leveraged to engage diverse stakeholders?
- Are there gaps in the way the team understands the data, or are there gaps in the data that have been collected? If so, how will we address these gaps?

Reflect

TOP LINE TAKEAWAY

Through data collection and benchmarking, assess key measurements of the course schedule, degree velocity, capacity, course offerings, enrollment health, and financial health.

Understanding Institutional Culture & Climate: Connecting Data Insights to Viable Strategies

Strengths-Based Data Interpretation

After collecting and analyzing data, the strategic scheduling team will interpret the findings through a strengths-based and equity-minded approach that balances institutional strengths and assets with growth areas. Interpret findings within the context of institutional culture, climate, and student population. Once findings are understood, the strategic scheduling team must work to identify the primary drivers.

Drivers are the forces behind the outcomes or behaviors identified in the analysis and will eventually inform possible solutions. Contextual factors include institutional culture, strategic priorities, student population, governance, and budgetary constraints. Dedicating time to understanding relationships between contextual factors and chosen solutions can highlight assets and support risk mitigation strategies to address issues such as budget constraints, available resources, resistance to change, and conflicting priorities.

> **This is an important aspect of this project and cannot be overstated. Before this project, awareness of the tool and requisite course scheduling training was minimal and surface-level at best. As a direct result of being a part of this project, there is an increased awareness and knowledge sharing of best practices related to course scheduling.**
>
> *- Associate Vice Provost, Texas A&M San Antonio*

Identify Areas For Examination & Exploration

Effective course scheduling has several categories. These include course offerings, space utilization, seat fill, and meeting patterns. Each has a set of metrics that demonstrate the schedules' strengths and opportunities. The strategic scheduling team must identify metrics that are relevant, accessible, and illustrative of the schedule's ability to facilitate or hinder student progression. As metrics are evaluated, teams might consider formulating questions to interrogate the current effectiveness of the course schedule and for whom it is or is not effective. Questions should push team members to consider the impacts of the current course schedule on student progress. For instance, does the current course schedule restrict progression for students in specific majors, enrollment statuses, or identity groups? Answers will direct the scheduling team toward potential areas of improvement.

EXAMPLE QUESTIONS TO EXAMINE EFFECTIVENESS OF COURSE SCHEDULES

- African-American males are more likely to take fewer credits per term. Are they also more likely to be in certain programs?
- Are those programs more likely to offer courses online than on-ground?
- Do African-African males prefer on-ground classes?
- Should we consider changes to our course schedule to ensure access to on-ground, conflict-free classes in certain programs?

REFLECT: STEP 2

Interpret The Data

After collecting and analyzing the data, the strategic scheduling team will convene to thoroughly interpret the findings, considering how the institution's distinct culture, climate, and student populations may influence these results. Examine any patterns, trendlines, or outliers to compare data points across the specified areas for examination established in Step 1. This must be done with a strengths-based and equity-minded data interpretation approach. Ultimately, the goal is to distill meaningful insights and knowledge from the raw data and then connect that information to actionable strategies to improve course scheduling policies and practices.

REFLECT: STEP 3

Present the Findings

Providing access to data for additional stakeholders, such as department chairs and deans, fosters institutional transparency and accountability. However, it's essential to establish clear parameters for sharing the data. This includes consideration for the audience, data availability, data disaggregation, storage issues, understanding communication preferences, and determining the appropriate data-sharing format. In addition, the strategic scheduling team should meet with the campus community to review data and findings and provide necessary context on how and why specific data were collected. These collaborative meetings are an opportunity to ensure data and findings are meaningful and relevant to decision-makers who will leverage them to drive improvements.

Credit: City University of New York Lehman College

Phase Two Insights & Recommendations

Data-Informed Decision-Making

Use data to support strategic change and inform decisions by highlighting strengths and identifying opportunities for improvement, including resource limitations that hinder change efforts. Prioritize actions based on data to achieve desired outcomes. Institutions must consider relevant metrics to inform their understanding of and decisions about course schedule changes.

Incorporating Diverse Stakeholder Perspectives

Since the course schedule is complex, diverse perspectives are crucial for discovering drivers and guarding against solutions aimed at assumed drivers. Course scheduling changes can affect different groups in various ways. Therefore, utilizing existing data and gathering information from multiple sources is essential to understand the nuances across diverse groups, such as faculty, students, and unions. Ultimately, the work is highly relational, so building relationships to help mitigate any challenges and identifying an executive sponsor to champion the work is important. Actively encourage and engage diverse perspectives throughout all steps.

RELEVANT METRICS

- **Enrollment ratios**
- **Overloaded course ratios**
- **Underutilized course ratios**
- Seat fill rates and utilization
- Single section offerings
- Classroom utilization
- Meeting patterns and adherence to established meeting patterns
- **Momentum year**

CONSIDERATIONS FOR INCORPORATING STAKEHOLDER PERSPECTIVES

- Gather input from multiple sources.
- Remember the work is relational.
- Identify an executive sponsor.

Reflection Questions

Use these reflection questions for individual and group reflection during the data collection and analysis stages of course scheduling systems change.

Centering Students

- Are the executive sponsor and strategic scheduling team considering student demographics as part of course scheduling changes and redesign?
- How will the executive sponsor or strategic scheduling team foster an environment that supports intentionally disaggregating data and interrogating assumptions about the drivers behind observed outcomes to center students and promote equity? Equity-focused data interpretation resources can be found in **Appendix B**.
- How will the strategic scheduling team seek out and incorporate student voice?

Data Availability & Utility

- What data fields are stored in available systems?
- How will accessible and understandable data be made available to campus partners?
- What will be the appropriate data-sharing format?
- What has been learned about the effectiveness of the current course schedule?
- What new questions have emerged and how will they be explored?
- How will the team communicate with campus stakeholders about data findings?

Credit: Texas A&M University–Corpus Christi

Based on reflections and data recommendations, apply action planning to address and prioritize key elements of course scheduling effectiveness, such as pathways design, schedule refinement, enrollment health, instructional capacity, infrastructure, and financial health.

PHASE THREE
Prioritize & Act

Developing & Executing A Strategy:
Establish a Detailed Action Plan

In this phase, leaders must identify, prioritize, and translate critical drivers for change into short-term improvement projects corresponding to detailed action plans, considering priorities, tasks, and project milestones. This plan provides clarity of roles and responsibilities, establishes accountability structures, and creates a clear timeline for when and how specific tasks will be accomplished. It helps move from the broader macro level to specific actions. The action plan guides and supports implementation efforts; however, the strategic scheduling team should remain flexible and adaptable, recognizing that internal and external factors impact the project timeline. Throughout this phase, the scheduling team must maintain transparent communication with key stakeholder groups and report progress and opportunities for feedback, ensuring the team can accomplish identified goals. The **Academic Planning for Equitable Student Success** website provides a series of resourceful case studies demonstrating potential solutions to common challenges. Although there are promising practices to address many of the common challenges associated with course scheduling, institutional context will inform the feasibility and success of those solutions.

" **When prioritizing strategies for improving course scheduling, it's important to consider the impacts changes will have on students, faculty, and current scheduling processes. You could design a 'Barbie Dreamhouse' but it's important to consider institutional norms and culture, technical systems supporting scheduling, student population, and factors such as standard time usage and space utilization to ensure the chosen strategy doesn't create additional problems and that you are being good stewards of your academic space.**

-Assistant Vice Provost & Registrar, Middle Tennessee State University

PRIORITIZE & ACT: STEP 1
Identify Drivers

When considering the key drivers for change, the strategic scheduling team will likely go through a process of forming, storming, and norming. To navigate these stages and prioritize drivers, a practical approach is to use continuous improvement and related tools. For example, the driver diagram can help identify primary drivers for change, especially when coupled with the available data discovery process in the reflect phase. Ideally, the strategic scheduling team will reach a consensus around three to five drivers; more than five may become overwhelming and lead to stagnation or inaction.

The driver diagram is a visual aid that illustrates the relationship between activities that drive change—root-cause connections. This tool is invaluable as it breaks down the larger goal into smaller, manageable components. The drivers should align with an overall specific, measurable, achievable, relevant, and time-bound (SMART) goal, such as increasing student retention by a certain percentage by a specific time. Driver diagrams enhance goal clarity, alignment, and connectivity. Drivers are high-impact areas, like student retention, and are influenced by secondary drivers that show *where* the change happens, such as the course schedule. These drivers are then supported by smaller steps or solutions (activities) focusing on *what* needs to change. For example, overlapping meeting patterns or scheduling grids might be contributing to schedule compression and/or "waste" in the course schedule. These outcomes could be mitigated by implementing policy to restrict off-grid scheduling. Additional information on drivers can be found in **Appendix C**.

PRIORITIZE & ACT: STEP 2
Explore Potential Solutions

The strategic scheduling team must adopt an asset-based framing approach when determining potential solutions. This involves considering the existing strengths, capacities, and resource availability that can support short- and long- term solutions. Feasibility considerations such as time, current workloads, and alignment with existing projects must be considered. Diverse perspectives are crucial during this step to ensure a wide range of ideas, challenge biases or blind spots, and establish realistic expectations. The team's goal is to start by identifying broad, numerous solutions. As the strategic scheduling team compiles its list of potential solutions, it must continually verify that these proposed solutions align with the drivers identified in the previous step. Once the team believes it has reached a list of acceptable solutions, it can proceed to Step 3, where it can distill the list to a handful of critical solutions per driver.

Credit: Portland State University (WA)

PRIORITIZE & ACT: STEP 3

Prioritize Solutions

Prioritize considerations specific to the institution and understand any gaps in the available data. Determine who can interpret the data or be trained to support data mining efforts.

Understanding the campus culture, mission, and institutional complexity, will help facilitate more focused and thorough recommendations. These factors influence the solutions the strategic scheduling team considers. Important areas to examine include the role of unions, the composition of the student body, relevant student success metrics, sustainability indicators (e.g., enrollment and financial health and resources), current classroom scheduling practices or policies, the nature of the schedule block and whether it is balanced or compressed, existing student information systems, faculty scheduling practices, and physical limitations related to space constraints.

PRIORITIZE & ACT: STEP 4

Identify Assets & Risks

Conducting a formal asset mapping activity can identify resources and capabilities to bolster the project's success and long-term sustainability. An example of such assets could be stakeholder knowledge, specifically student insights. Students can provide valuable input into their preferred teaching modalities when scheduling courses and identify individuals who can access and interpret necessary data.

To effectively manage risk and mitigate potential challenges, engage in a strategy session to identify potential risks, limitations, or capacity restraints and devise comprehensive strategies to overcome barriers. See the Leadership Context Reflection Questions Worksheet beginning on page 32 of the Change Leadership Toolkit located in **Appendix D**. Developing a risk mitigation strategy helps identify potential risks and enables proactive measures to minimize their impact. A thoughtful strategy also contributes to maintaining project momentum and continuity, sound decision-making, instilling project confidence, and ensuring prompt, responsible stewardship of institutional resources. Some areas that require in-depth examination and discussion include the data-sharing timelines, working across a multi-campus system where resource disparities may be unevenly distributed, and physical limitations that could impact specific actions by the strategic scheduling team.

PRIORITIZE & ACT: STEP 5

Implement Tactical Solutions to Drive Change

The strategic scheduling team is encouraged to work with diverse stakeholders to support specific tasks, such as coordinating with particular schools and colleges regarding their course offerings, dates, times, and teaching modalities. When creating the project timeline, consider campus events, the academic calendar, and windows of opportunity. Balance realistic expectations about the time and effort necessary to accomplish particular tasks identified in the action plan with existing workloads, allowing committee members to schedule enough lead time. Another consideration is the use of the 30-60-90-day plan. Chunking the timeline into segments makes the workload manageable. Ninety-day cycles are long enough to see progress but short enough to stay focused and keep momentum. Shorter timelines also make it easy to test ideas and use formative feedback loops to make real-time improvements. These considerations play a significant role in the project's ultimate success. Action plans are detailed and specific, containing more detail than the identified drivers cited above. Ultimately, they serve as a roadmap to help teams break down complex change management projects into manageable bite-size pieces.

Phase Three Insights & Recommendations

Developing an Action Plan

When developing a project plan, several factors must be considered. Teams must identify critical tasks,milestones, and stakeholders that need to be involved at each project stage. An essential aspect of the timeline is determining the resources required throughout the project's duration, such as funding and personnel. Teams should assume that resources are limited and prioritize accordingly to maximize effectiveness.

KEY TASKS

- Balance tasks and milestones.
- Establish a timeline.
- Consider assets, resources, and capabilities.

Focusing On The Short-Term Wins & Long-Term Gains

Prioritizing actionable steps to advance a project can feel overwhelming. Project teams must leverage accessible data, such as overloaded courses and schedule compression, to inform decision-making and challenge existing assumptions about course scheduling processes. To build momentum, look for opportunities to connect existing projects and priorities to the course scheduling improvement goals. These connections identify overlapping strategies that support common outcomes.

KEY TASKS

- Consider feasible actions.
- Connect existing projects and priorities to improvement goals.
- Build on small wins to gain momentum.

Reflection Questions

Use these reflection questions for individual and group reflection during the strategy development and implementation stages and, of course, scheduling systems change.

Communication & Case-making

- Are there student stories or personas that can help explain the opportunity to enhance course scheduling practices, policies, and behaviors?
- Are the executive sponsor and strategic scheduling team transparent about the proposed course scheduling changes and potential solutions?
- What data will be used as the standard operating procedure to monitor progress?
- Who are the key stakeholders, and what will their level of involvement be?

Momentum & Capacity

- Are there short-term wins that can be achieved to support and sustain momentum?
- Are existing or anticipated costs and expenditures tied to the articulated project priorities?
- How will the executive sponsor and strategic scheduling team celebrate key milestones?
- How will the strategic scheduling team create a realistic timeline considering essential performance tasks, milestones, and capacities?
- Are there existing priorities or initiatives that share common goals or outcomes?

Contextual Considerations

- How can the course schedule promote timely progress for students?
- Are there existing promising practices that work and can be leveraged to support course scheduling changes? Can the team build on them?
- What are existing capacity constraints?
- Are there union considerations the executive sponsor or strategic scheduling team should consider?
- Are there existing room cap mandates from external sources?

Timeline Considerations

- Are there important factors to consider when developing a project timeline?

Credit: University of North Georgia

Monitor

Codify scheduling processes, practices, and policies to ensure sustainable practice, including identifying necessary reporting cadence to monitor course scheduling key performance indicators.

Ensuring Continuous Improvement and Long-Term Sustainability

Codifying Policies & Practices

Sustaining course scheduling improvement hinges on the ability to codify policies and practices. Establishing policies to guide practice helps to ensure that the course scheduling process is transparent, creates a greater sense of accountability and fairness, and ensures uniform application across the campus community. Policy becomes increasingly important when there is a leadership or staff transition and supports the elimination of inefficiencies or ambiguities.

Key considerations for the establishment of policy and scaling of practices include determining who will be involved in the creation and approval processes, establishing where policies will reside, understanding how policy and practice changes or enactments will be communicated, and instituting a reporting cadence.

> **Clearly articulated policies with transparent enforcement ensure that the needs of all concerned parties— faculty, administrators, and students—are taken into account. This leads to shared expectations and greater predictability, and more measurable outcomes from a balanced schedule.**
>
> *- University Registrar, CUNY College of Staten Island*

MONITOR: STEP 1

Establish Who Will Be Involved

Determining who is responsible for creating, approving, and documenting specific policies and practices is vital for campus buy-in, support, credibility, and trust to ensure effectiveness and maximize efficiencies. Consider various factors such as experience, expertise, and decision-making authority when identifying who will be part of the process. The strategic scheduling team should assess if they can leverage an existing committee or group that can support this phase of the work.

Determine Storage and Maintenance of Policies and Practices

The documentation, storage, and maintenance of policies and practices guards against disruption during employee transitions and leadership changes.

Determine storage and maintenance responsibilities for all scheduling related policies and practices. This critical step ensures easy access to important documents and historical knowledge/information for current and future committees and employees. Additionally, it helps improve efficiency, streamline processes, and promote transparency.

Initiate How You Will Communicate Changes

To further the strategic scheduling team's agenda, have strategic communication regarding changes to course scheduling policies and practices. This process involves various steps, including establishing a time to meet or consult with colleges and departments to discuss proposed changes and determine the flow of information and critical audiences. Additionally, the strategic scheduling team needs to consider how information will be shared, including in-depth reports, memos, 1:1 support, or town hall meetings. Each engagement may require additional training or technical support to help acclimate individuals to updates and revisions. The team must show how new or revised policies and practices align with existing efforts within the university, college, or specific job functions and duties. By making these connections, the team can mitigate against minimization of proposed changes or ambiguity about the proposed change's impact on broader change efforts.

Set Up A Reporting Cadence

The strategic scheduling team must prioritize performance indicators and data elements that require regular monitoring. Ideally, these data elements will map back to those identified in the reflect phase. When deciding on a reporting schedule (e.g., by semester or annual review), consider the course schedule planning cycle and critical decision periods during the cycle for the strategic scheduling team. During this process, the team must consider whether it has the necessary data systems and how long it takes to gather and analyze data. Strategic scheduling team members need to look into whether existing software tools can help identify what resources exist, assess how they work together, and determine any reporting gaps.

Credit: Western Kentucky University

Phase Four Insights & Recommendations

Revisit Data Identified in the Reflect Phase

Revisit the data collected during the reflect phase, ensuring input reflects the perspectives of diverse stakeholders, including students, faculty, and frontline staff. Additionally, consider relevant data points such as schedule compression in prime time windows, the percentage of override requests, and the number of classes substituting for requirements due to scheduling constraints. Evaluate whether additional perspectives are needed now that implementation has occurred and new data are available. The monitor phase should include an ongoing assessment of key performance indicators to support the reevaluation of goals, their measurability, and to establish methods of reporting changes or impacts based on real-time data. Ask and reflect on how the strategic scheduling team keeps the student at the center of its collective decision-making.

STEPS IN THE MONITOR PHASE

- Revisit data collected in the reflect phase.
- Evaluate if new perspectives are needed.
- Reassess goals.

Communication

Effective communication of ongoing progress is essential to maintaining a project's momentum and success. Consider how to share meaningful data and establish a regular reporting cadence. Collaborate with those who understand the data, as they can be critical stakeholders in championing the project and communicating its success, recognizing that some people do not consider the course schedule a crucial part of the student's success. Be open and transparent with the data, demonstrating how it guides decision-making during the monitor phase. Keep stakeholders informed about timeline tasks, key milestones, progress to date, and adherence to deadlines. Talk about the small wins that lead to substantial change.

KEY CONSIDERATIONS

- Effective communication is vital to project momentum and success.
- Focus on how and when information will be shared.
- Be transparent in your communication about the data. momentum.

Resource Repository & Codification

Consider creating a repository where policy, reporting, and practice information is easily accessible, has a clear structure or file pathway, and is user-friendly. Determine who will have access to the repository, the process for uploading or moving documents, and the types of documents or file formats (e.g., FINAL PDF). This will help with the accuracy of records. Evaluate the appropriate platform, such as a current cloud-based storage platform. Establish the structure for consolidating files by common course scheduling themes (e.g., data, reporting cadence, workgroups). Ensure that documents are easily searchable and user- friendly to the intended audience while adhering to user permissions. Address monitoring, evaluation, and training when designing and creating the repository.

KEY TASKS

- Ensure the repository is accessible and user-friendly.
- Determine who will have access.
- Establish a storage platform and storage structure..

Credit: Fresno State University (CA)

Reflection Questions

Use these reflection questions for individual and group reflection during the monitor phase and ongoing improvement stages of course scheduling systems-change.

Cadence

- How will periodic review of scheduling practices be conducted to ensure the schedule continues to serve students and meet their needs?

Continuous Improvement Approach

- How will the strategic scheduling team develop and align metrics for success?
- How will reports/dashboards be made available to scheduling partners and on what timeline?
- How have course scheduling changes impacted student success outcomes?
- How will the executive sponsor and strategic scheduling team exercise patience, self-care, and openness to learning throughout change?
- What are some of the unintended consequences of course scheduling decisions, and what lessons can be learned to inform future efforts?
- How have priorities shifted, or have new priorities emerged based on data or changing on-the-ground conditions?

Credit: Texas A&M University-San Antonio

Conclusion

Ultimately, course scheduling represents a powerful catalyst for change as part of a broader change management strategy and can help address equity gaps for students of color, for whom inefficient course schedules are one of the greatest structural barriers to student success.. Making changes to the course schedule and scheduling practice is challenging due to the scope and reach of such an undertaking. Yet, course scheduling improvements are possible. Cultivating a culture that centers on students during the course scheduling process is critical to removing barriers to degree completion.

Work to improve course scheduling is an ongoing process, and higher education leaders can leverage incremental changes that have high returns to inspire invested parties.. Change agents within institutions can highlight the relationship between course completion and degree completion by linking the role the course schedule plays as a facilitator or barrier in important student behaviors and outcomes like credit load, degree velocity, retention, and graduation.

Throughout the process, communicating wins will demonstrate improvements are having the intended effect. The comprehensive strategy outlined in this playbook, guides institutions through multiple phases—with consideration for contextual factors—toward equitable success outcomes.

References

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Credit: Texas A&M University Corpus Christi

SECTION 4

Resources

Appendix A

- **Course Scheduling Diagnostic**

Appendix B

Equity-focused data interpretation resources

- **Looking at Data Through an Equity Lens** (Bocala and Boudett, 2022)
- **Democratizing Data with an Equity Lens** (Gold)
- **USC Equity Institutes**
- **Center for Urban Education Equity Tools**

Appendix C

- **Driver Diagram**

Appendix D

- **Change Leadership Toolkit Worksheets** (Elrod, S., Kezar, A., Gozalez, A., Holcombe, E., 2024)

Credit: Fresno State University (CA)