

Executive Summary

This year, the scheduling team met to discuss approaches to strategic scheduling and provide tactical responses to current scheduling and enrollment challenges. Strategic Scheduling is situated under Goal #5 in our Strategic Plan: Secure Institutional Sustainability and Capacity. The metric for this goal is annualized budget-related FTE, with the target of moving from our current rate of 14,000 to 18,000. The SLCC strategic plan sets the stage for a scheduling strategy by pointing out, "Too many students struggle to find the courses they want when they want them. We can do more to strategically develop a course schedule that better fits student needs, incentivizes higher credit loads, and improves retention." The ongoing focus of the scheduling team is to help SLCC build a course schedule that fits student needs.

Talking points:

- **Technology**: Continue to leverage technology to assist our strategic scheduling efforts:
 - College Scheduler use growing but not sufficient, and it isn't providing us the data we need to effectively inform our scheduling efforts.
 - o DegreeWorks Plans usage also needs to grow.
 - DSA built an academic dashboard that should assist departments in strategic scheduling.
- **Program prioritization**: Strategic scheduling depends upon effective program and course prioritization. Programs and courses are the raw materials of scheduling. Are we getting in our own way with the quantity of courses and credentials? What is the right amount given our size?
- **Process improvement**: Some of our scheduling challenges can be tackled through process improvement: departments getting edits back on time; following the bell schedule, and so on.
- **Site-based scheduling**: Site based scheduling efforts should be intensified, starting with a rededication to creating viable pathways at West Valley. The Herriman campus will also become important for site based, strategic scheduling.
- Leadership: SLCC needs a more centralized and representative group (the Strategic Scheduling Committee) to monitor, analyze, and direct scheduling efforts and to continue to develop more general knowledge and expertise around scheduling best practices.

Charge and Background

Charge for 20-21: As the strategy lead, you are responsible for strategy implementation to include the following:

- Assess the implementation of College Scheduler and increase usage. Set a target for usage by Fall 2021.
- Develop and implement strategies to implement the scheduling guiding principles. This includes finding ways to balance FTE and student needs. Explore the expansion of broadcast lecture as a potential way to meet both of these needs.
- Propose and implement analytical tools for scheduling stakeholders. Integrate scheduling metrics into this tool.
- Assess institutional performance under this strategy. Working with the data science and analytics office, identify and analyze key metrics and how they align to the larger institutional goals.
- Identify and present critical, strategic decisions that must be made by College leadership to successfully implement the strategy. Please surface these with me so that we can schedule a time to discuss in cabinet or SLT meetings.
- Engage stakeholders to ensure participation, collaboration, and clear communication.
- Maintain the internal communication with regular updates on the work accomplished. This should include a minimum of three written updates per academic year.

Background: The Scheduling Office is poised to move back into the Provost office, under Curriculum and Academic Systems. The move presents the college with an opportunity to better align the work of scheduling with our overall curricular processes.

Approach

The strategic scheduling group membership:

- Jason Pickavance, Associate Provost for Academic Operations
- Michelle Hardwick, Director of Data Science and Analytics
- Katrina Green, Director of Scheduling and Academic Support
- Tom Hansen, interim Associate Dean Social and Behavorial Sciences
- Erica Wight, Dean of Health Sciences, Deans Council Chair
- Angie Walker, Director of eLearning
- Ryan Farley, Associate Vice President
- Kathy Bell, Biology Faculty and Senate representative
- Liz Butler, Administrative Assistant, Scheduling Office

We divided our discussions into tactical and strategic components. The pandemic brought a unique set of tactical challenges that the group felt it should respond to, particularly scheduling with respect to course delivery type: broadcast, online, and hybrid delivery models took center stage this last year with mixed success. But we also leveraged the group's collective attention on the schedule and enrollment to effectively communicate with various departments needed adjustments to the schedule, particularly when we needed to open more sections. Having those message come from the Provost office proved to be an effective approach.

Broadcast/Internet-Lecture Pilot

SLCC began exploring Broadcast/Internet-lecture (Broadcast for short) as a course delivery type in response to the COVID pandemic and the immediate need to transition lecture courses to online delivery. While the success of this modality was uneven, many faculty and students discovered that Broadcast proved to be an effective blend of online instruction with real-time instructor presence.

Broadcast has been approved by the Provost office as an available course delivery type through 2023. We will be conducting a more formal pilot of Broadcast as a course delivery type next academic year with the broad goal of learning more about best practices. (We're also hoping to give come up with a more attractive name than Broadcast/Internet-Lecture.)

Challenges and Limitations

There are three main challenges when it comes to strategic scheduling at SLCC: having sufficient data to make truly data-informed decisions, the process of building the schedule, and finally the quantity of courses and program offerings at SLCC.

- **Insufficient data**: The data we use to build the class schedule is retrospective rather than predictive. We base future decisions on past enrollments, and while that does provide some reliable guideposts for building a schedule, the danger is that we also repeat the same errors of judgment without really having the opportunity to analyze and propose novel approaches. The potential increased use of College Scheduler and the implementation of the academic administrator dashboard should assist with the data challenge going forward.
- **Process improvement**: No matter how much technology we introduce, the process of building the schedule will always be encumbered by human personality, ingenuity, and whim. Repositioning scheduling under the Provost for Academic Affairs should assist with the process improvement challenges.
- **Program and course quantity**: We should continue to think about the relationship between our overall bank of programs and courses and our strategic scheduling efforts. Does our overall quantity of program and course offerings hinder our strategic scheduling efforts?

It is worth pointing out that departments generally do a good job of working with the scheduling office to build schedules that satisfy student need and fulfill the college mission, but we can do better.

Progress and Recommendations

Assess College Scheduler

Although the initial usage of College Scheduler was low, the most recent data shows a promising trend as new students use it at a higher rate. Forty one percent of students who registered for spring 2021 used it at least once. We expect to see usage grow as student become familiar with the tool. New students now encounter the tool in orientation.

However, only seventeen percent of students were using the full functionality of College Scheduler, like searching for courses. And the data promised by College Scheduler falls well short of what we were expecting. We need to continue to push usage of College Scheduler among students and we need to work with the vendor to improve the data export.

Guiding Principles

Perhaps this is obvious, but a class schedule is where the College's promise of open access is most concretely realized. We must therefore optimize the schedule to satisfy student need. But we must also recognize that student need is a construct built largely out of the programs a college decides to offer. The question becomes, do we have a bank of programs that allows for effective scheduling? How many programs is enough? How many is too much?

Analytical Tools for scheduling stakeholders with integrated metrics

Data science and analytics developed a dashboard that provides academic administrators real time data on their course schedules. Administrators can access this data any time they want without having to make a data request through the scheduling office or DSA. The aim with this tool is to make academic administrators more data informed in their scheduling practices and readier to adjust the schedule based on trends. We will need to figure out how to effectively embed the tool into our practices when it comes to scheduling and responding to enrollment trends.

Key metrics

There are a few obvious metrics for measuring the effectiveness of a schedule: course fill rates and overall space utilization rates should always be used when assessing the class schedule. But there are also some more global indicators that can be used as more indirect measures of strategic scheduling. Are students taking more credits on average as a result of improvements in the class schedule? And do we see students course taking patterns mirror their stated plans in Degree Works?

Strategic Decisions

Leadership should make a few key decisions on scheduling. First, it should make the Strategic Scheduling group an official committee out of the Provost office and empower it to monitor, analyze, and direct scheduling efforts. College leadership. Second, site-based scheduling should become more of a priority. And this is where strategic scheduling may overlap with guided pathways reform. The campus or the site can become the platform for effectively curating choice and, therefore, assisting strategic scheduling efforts.

Charge	Report
Assess College Scheduler	 More new students using it—41% of students who registered for spring 2021 used it at least once (we should see more usage with new students; embedded in orientation). Only 17% using functions like searching for courses. Students who are struggling seem to be using the tool more. A promising tool, but we need to continue to look for opportunities for improvement. Doesn't give us the data we want yet. Data export is manual; vendor needs to improve the data part of the tool.
Guiding Principles	 Optimizing the schedule for students Effective strategic scheduling depends upon effective program and course prioritization. Academic courses have priority over everything else when it comes to space utilization.
Analytical Tools	 DSA developed an academic administrator dashboard. Provides administrator data on scheduling trends, more real time access to scheduling data. Administrator can access it any time they want. How do we ensure administrators use this tool and build it into their process for planning for the next term? Scheduling committee monitors data and checks in with departments.
Key Metrics	 Changes in average student credit load Improved fill rates Improved classroom utilization Degree works to actual schedule—what if we used degree works plans (if sufficient usage) to prescribe course schedule. Continue to analyze bell schedule and effectiveness.
Strategic Decisions	 Continue with Strategic Scheduling committee; empower committee to be somewhat more directive. Site-based scheduling/pathways More directive scheduling and a little less program/department autonomy Schedule edits and changes completed by the deadline. Data guides scheduling, not department preference

Summary of Recommendations

- Form a permanent Strategic Scheduling Committee out of the Provost office with the power to monitor, analyze, and direct scheduling efforts and to develop more general knowledge and expertise related to scheduling best practices.
- Push usage of Degree Works plans and College Scheduler so that we have better data.
- Work with the vendor to improve the data we get out of College Scheduler.
- Give scheduling committee access to the dashboard so we can work with departments on scheduling adjustments.
- Support campus/site-based approaches to scheduling.
- Use low demand times (late afternoons) as an opportunity to experiment.