LEADERSHIP ACADEMY FOR STUDENT SUCCESS
Pathways Project Implementation Memorandum

TO: Laura Rittner, Executive Director, Success Center – OACC
FROM: Amanda Bylczynski, Drew Felberg, Lori McKee, Dee Dee Pfister
RE: Creating Course Schedules with Student Voices – Alignment with Pillar #1
DATE: September 2, 2020

EXECUTIVE SUMMARY/INTRODUCTION

The method in which community colleges create course schedules, in general, does not provide a fool-proof mechanism for student success and completion. Some community college scheduling inefficiencies that create barriers to student success and completion include:

1) A lack of integrating student feedback into creating course schedules
2) A heavy reliance on utilizing historic scheduling patterns versus utilizing forecasting data (i.e. rolling schedules)
3) A heavy reliance on utilizing traditional delivery methods and modalities
4) A lack of interdepartmental faculty and dean scheduling collaboration

The OACC Leadership Academy Group #3 was charged to focus their project work on Pillar #1 and explore ideas to create course schedules that align with program maps and delineate the course sequences that include critical courses, embedded credentials, and progress milestones. The OCAA Leadership Team #3 proposes integrating a collaborative method to course schedule creation that addresses both the aforementioned challenges and the ideals of Pillar #1. This proposal would allow for the integration of student feedback data to determine needs/student demand for offering alternative delivery models and modalities. More specifically, OACC team #3 proposes the development of a data collection portal/mechanism for student feedback/voice to make course scheduling more efficient, customized to meet student needs, and, ultimately, improve student success and completion.

RELEVANT LITERATURE REVIEWED

Creating a schedule which will best serve students must be developed based on the student population. However, the community college population is ever-changing and has many sub-groups with varying needs. Therefore, community colleges must examine multiple perspectives in order to serve their students. According to a report by Hanover Research (2018), course scheduling must be viewed in terms of institutional effectiveness. In their research, they note that the method of carrying over the schedule from one term to another is not efficient because colleges must react to the student demographics well in advance. They found 40% of colleges schedule courses term to term, or "just in time" scheduling, which

Hanover cites as a threat to both student and institutional success. Hanover Research proposes several solutions, including (1) having a team responsible for tracking and analyzing enrollment data and (2) utilizing this same team to share data with faculty to create more efficient schedules. Additionally, the research notes the importance of flexibility to include multiple modalities and terms in schedule offerings. Students today are more inclined to enroll in institutions with more flexible and accelerated schedules. Therefore, colleges should study the possibility for having multiple types of scheduling within a term. Lastly, they found that student success rates for students in courses held one day a week or three days a week were less successful than students in courses that meet two days a week.

The findings of Hanover Research are echoed in other studies. According to Kasworm (2003), examined how accelerated programs can increase student completion rates. In a qualitative study of students in accelerated programs, he found that students in a supported, preplanned schedule were the most successful. Students were more likely to enroll and complete a program where the entire schedule was preplanned and locked because students would know all dates for the entire program from the time of enrollment. By creating a cohort in this method, the students supported each other like family having attend each class together and allowed students to mold the timeline into their daily lives.

Studies on course length were also conducted by Austin and Grustafson (2006) and Sloan (2017). Austin and Gustafson (2006) found that students taking courses in accelerated mode also saw improved grades in comparison to students in traditional semesters. This study recommends colleges to compare their accelerated summer enrollment and student performance to their traditional semesters to examine the difference in student success. Additionally, the findings of Sloan (2017) found significant benefits to 8-week courses in community colleges. In his report, Sloan (2017) noted a study for Austin Community College which found that both withdraw rates and grades above a C were higher in 8-week formats than in other formats including the traditional 16 weeks. This was also found at Santa Monica College, who offer courses in 6, 8, and 16-week formats. As shown in Figure 1, Santa Monica found the same outcomes as Austin Community College.

Figure 1: Student Success Compared to Course Length
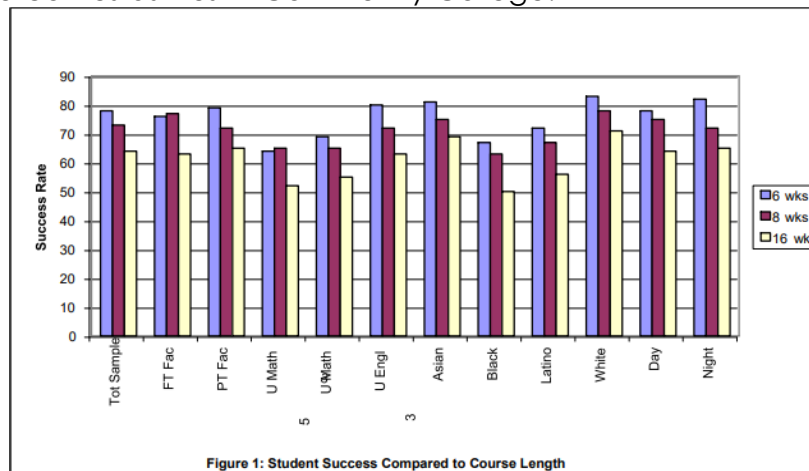
Sloan's (2017) findings support the points of the Hanover Research which stress the need to reexamine course scheduling in terms of institutional effectiveness through listening to students and creating schedules around the students' needs.

DATA EXAMINED

Data Collection: What Ohio Community Colleges Report about Course Scheduling

In order to learn how community colleges in Ohio create their schedules, OACC team #3 created a survey for faculty and administrators who were responsible for course scheduling at their respective institutions. Thirteen of the twenty-three community colleges responded to the survey. Of those respondents, those responsible for course scheduling building were deans, department chairs/coordinators, and program directors. While all colleges reported using 8- and 16-weeks schedules, only 6 reported other formats such as 5- and 10-week schedules. Half of the colleges also reported that they built their schedules one term in advance, while the other half built year-long schedules. The survey also found that the majority of community colleges are using enrollment reports and past enrollment histories as their guidepost to creating course schedules. However, a few colleges cited they used faculty information about student needs for graduation for schedule building, and only two colleges reported using surveys or other techniques to collect student input. All of the colleges however, reported that information that would be helpful for schedule building would be: (1) When students want courses offered, (2) student schedule conflicts, and (3) preferred modality and delivery methods. Overall, colleges stated that if they had a way to collect student voices, they would use that as part of their schedule build planning. The respondents also stated that if they could collect student data that emailed surveys would be the best method for data collection. Only two institutions stated that use of student voices in schedule building would not be useful.

Data Collection: The Case Study of Edison State Community College

In order to understand the student voice in student scheduling, we took the case study approach and surveyed one community college's students, Edison State Community College. Utilizing elements from the surveys used at Palm Beach Community College, The University of Southern Maine, Mendocino College, and the College of the Redwoods to collect student voice on course scheduling, Team #3 created a survey to test the desire for students to participate in course scheduling at Edison State Community College and to glean scheduling preference data. This survey was administered with the permission of the Dean of Arts and Sciences. The survey similar questions asked in the aforementioned college surveys. The survey was administered to a total of 69 students in four history and one sociology (traditional and hybrid) courses in spring 2020. This optional survey was delivered via two methods: (1) by paper (for traditional courses) and (2) submitted into the faculty's mailbox for anonymity or through SurveyMonkey. The purpose of this delivery method was due to the report of College's preference for emailed surveys and to ensure the student's choice of completion method. The goal of this survey was not actually to gather information about students' needs to create a schedule, but to examine their interest in providing student voices to schedule creation. Students in the course were told about the project by the group to understand the purpose of the survey prior to completing.

Seventy percent (48 students) of the students in the aforementioned courses chose to complete it; 89% on the Survey Monkey and 11% through paper surveys[1]. Of the students completing the survey, the average number of courses they were currently enrolled in was 10 credits. Fifty one percent of the students stated that they preferred traditional (face-to-face)

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[1] It should be noted here that this was distributed March 1, 2020 just prior to the pandemic, therefore, many chose the online option due to the inability to drop off the form online.

courses, 40% hybrid, and 9% online courses. Overwhelmingly, the students also stated they preferred two-day a week schedules classes held between 7:00 a.m. and 3:00 p.m. as shown in figure 2. The respondents also stated they would be interested in accelerated formats, especially those in the courses that were in business and social services meta majors. When asked which type of accelerated schedules they would be interested in, 20% stated they would be interested in 4-week, 17% in 5-week, 36% in 8-week and 49% in 10-week. Half of the students also stated they would consider taking a 4-week course in between main semesters.

When asked for feedback about what scheduling preferences should be considered for the next academic year, the most common student responses included adding weekend classes, adding more sections at different times for class sections that only have one time offered, and break classes that are scheduled for one day a week into two days a week. Many students had no opinions or stated they were happy with the current schedule.

The findings of the survey show students are willing to give their voice to their needs when asked and having an avenue to collect and analyze the data would be beneficial when planning schedules within guided pathways.
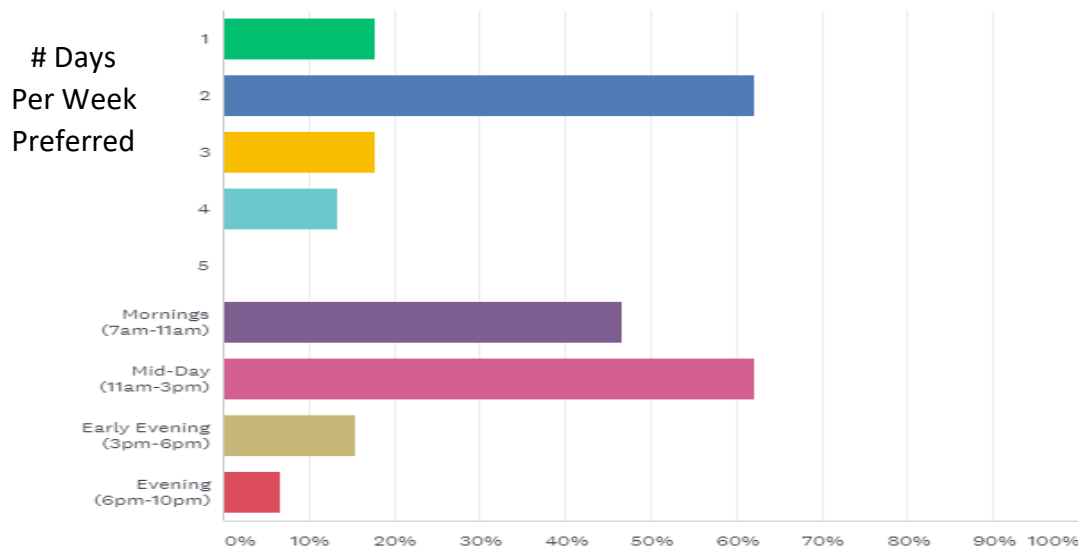
Figure 2: Scheduling Preference of Surveyed Edison State Community College students

PROPOSED CHANGES/REFORMS TO BE ADOPTED
Project Solution – Data Collection Tool
OACC team #3 proposes a two-phased process to implement a data collection tool which will enhance student success and course schedule efficiency by using student voice. The first recommended phase is a less technical option and involves surveying students to elicit feedback. As seen by the case study at Edison State Community College, students are highly likely to provide information regarding schedule building via surveys. Surveying students prior to creating the next semester's schedule will ensure that the courses align not just with the pathways, but the student needs. The recommendation though is not to survey the entire student body with one survey, but to administer surveys based on meta-majors. With this approach, the institution will be able to design the course schedule for students in specific programs/meta majors rather than looking at the student body as a whole. This phase would be a good starting point for an institution to gather information and to peak student interest in

participation. This phase can be done simply with a survey platform such as SurveyMonkey. The survey information could then be shared with those program managers, deans or faculty in the specific meta majors to refine the course schedule based on student need.

The second phase in the process would add another level of sophistication and integrate technology via a current or new student data warehousing system, degree planning/registration or Learning Management System to track and analyze student scheduling preference feedback.

Adding intentional touchpoints in student advising/counseling process where students can regularly share scheduling needs via a technology system would allow the institution to have real-time student scheduling need data. OACC team #3 recommends that the proposed process should start with the prospective student at the time of application, in order to meet scheduling needs from the start of their journey at the community college.

Embedding this type of technology tool would allow administration to automatically download information to use with the schedule creation without having to survey students every semester. This technology would also help institutions to move to creating and forecasting a year-long schedule and allow students to plan long term and create more cohesive collaboration between general education and technical programs, which would ultimately contribute to student success and completion.

If an institution's technology is insufficient to collect this type of data, one consideration could be to create an advising or new student orientation course in the LMS which can send messages or other communications to remind students to update their scheduling preferences.

Timeline
Year 1: Gage student interest through basic data collection and explore technology capabilities. Steps for an institution to take include:
- Use questions in sample surveys and developing questions personalized with the school's needs to create a survey
- Have surveys posted on the LMS systems for students or through email for examining student interest in providing a voice.
- Explore the capabilities of the student planning technology used by the institution for adding number times, days, and locations to plans for the student's pathway
- Explore other technology to gather this such as a LMS site for advising if student planning is insufficient

By completing these steps, the institution can both learn what works with their student population and the degree of interest from the students to provide their voice for scheduling. While future students would use the technology, this will enhance the possibility of current student involvement.

Year 2: Pilot and Implementation. This second year would be to pilot the technology usage to examine if students upkeep their information on the system and if it is more efficient than surveys for data collection.

- Initiate data collection method. Include how to manage the student voice information in orientations and first year courses as training and showing students how it works.
- Create a schedule using both enrollment history and student voices on when they need their classes.

Year 3: Analyze. This year will see the institution continue collecting the information, but will also analyze how the student voice being taken into consideration affected the enrollments.
Analyze the student input - was it more informative than surveys?
- This will include doing a formal review of the student degree plan and the times they stated they needed classes with the actual enrollment.
- The goal is to determine the depth of the student voice and its impact on enrollment and completion.

IMPLEMENTATION CHALLENGES
Barriers and Challenges
With evidence presented in the aforementioned research on course scheduling, the student voice is a key to success. In order to create schedules in a guided pathways program, Dadgar, et. al. (2017) argue that students must be involved in the process. They found that by talking to students, the colleges were better able to understand the needs of students. Community colleges serve populations well beyond traditional students. According to the National Center for Educational Statistics report cited by Ross-Gordon (2011), 73% of community college students in the country have one or more of the following characteristics:

1) Having dependents
2) Entering college after a hiatus from high school
3) Being a single mom
4) Employed full time
5) Financially independent
6) Attending college part time

Due to these student characteristics, community college students are more likely to be juggling multiple roles in life creating challenges for students to balance school and with their other responsibilities. For college administrators, this also means the challenge of creating a schedule that will work with the busy lives of their students.

However, what works for one institution is not going to fit all institutions. As supported by the Hanover Research (2017), institutions must collect data and analyze what best works for their institution. Collecting student data creates another barrier. Challenges facing community colleges to examine how to approach course scheduling through student driven data includes:

1) What technology should be used to collect data?
2) How should the data be collected?
3) For schools with multiple student technology systems (degree audit systems, LMS, student data warehouse, how does an institution determine what system will

most effectively collect real time data and integrate seamlessly into the scheduling system?
4) How does an institution ensure that all students are engaging with the feedback system?
5) Who should serve on the data analysis teams?
6) Does the institution have the financial resources to implement a technology system to track student feedback on scheduling needs?
7) Does the institution have the human resources to implement a technology system to track student feedback on scheduling needs?
8) How is success measured?

These aforementioned items are some significant challenges to colleges to implementing a system whereby students voices are integrated into the schedule build process. When looking at the aforementioned research, some data was collected through student focus groups requiring minimum technology, however the student groups were a small sample of the population. Other colleges have moved to entering student data for schedule availability in their degree audit systems and others use surveying techniques through options such as Survey Monkey.

CONCLUSION
The OACC Leadership Academy Group #3 targeted this project on Pillar #1 and explored ideas to create course schedules that align with program maps and delineate the course sequences that include critical courses, embedded credentials, and progress milestones. Our proposal of integrating a more collaborative method of creating course schedules with the student's voice at the forefront could allow institution's course scheduling efforts to be more efficient, cost-effective, tailored to student's individual needs, and improve student success and completion.

References

Austin, A.M. & Gustafson, L. (2006). Impact of course length on student learning. *Journal of Economic and Finance education. 5(*1), pp. 26-36.

Best practices in course scheduling. (2018). Hanover Research. Retrieved from https://www.cmich.edu/colleges/se/Documents/Hanover%20Research%20-%20Best%20Practices%20in%20Course%20Scheduling.pdf

Dadgar, M., Arrillaga, E.S., Buck, D. Sinclair, B., Fisherhall, C. Brown, K. (2017). Bringing student voices to guided pathways inquiry and design: Findings from focus groups at two California community colleges. *Career Ladders Project.* Retrieved from https://www.careerladdersproject.org/wp-content/uploads/2017/08/Bringing-Student-Voices-to-Guided-Pathways-Inquiry-and-Design.pdf

Kasworm, C.E. (2003). From the adult student's perspective: Accelerated degree programs. *New Directions for Adult and Continuing Education 97*, pp. 17-27.

Office of Academic Assessment (2013). Course scheduling and area of interests survey responses. *University of Southern Maine.* Retrieved from https://usm.maine.edu/sites/default/files/assessment/USM%20Student%20Preference%20Survey-By%20Age.pdf

Office of Institutional Effectiveness (2001). Class scheduling satisfaction survey: Student and faculty reassessment. *Palm Beach Community College.* Retrieved from https://www.palmbeachstate.edu/ire/Documents/reports/2001rp03.pdf

Office of Institutional Research. (2015). Class scheduling preference survey results. *College of the Redwoods.* Retrieved from https://evoq.redwoods.edu/Portals/61/Documents/Surveys/SchedulingSurveySummary-Eureka.pdf

Ross-Gordon, J. M. (2011). Research on adult learners: Supporting the needs of a student population that is no longer nontraditional. *Peer Review 13(*1), pp. 26-29.

Sloan, R. (2017). Improving student outcomes utilizing 8-week courses: Considering its feasibility for Ivy Tech Community College. Retrieved from https://www.sanjac.edu/sites/default/files/Iv-Tech-8-Week-Courses-Study-Paper.pdf.

Student class scheduling survey (2014). Mendocino College. Retrieved from https://www.mendocino.edu/docs/accreditation/2014/standard1a/asmc-scheduling-survey-results.pdf

APPENDIX
Sample Survey- Case Study from Edison State Community College

Sample Survey - Used in Edison State Community College Case Study

*1. What area are you planning to major in or are you majoring in?

○ Transfer degree: Arts and Humanities (includes Social Sciences, Arts, English, etc...)

○ Transfer degree: STEMM (Includes Math, Science, Engineering, etc...)

○ AAB Business Pathways (All business areas)

○ AAS Engineering (2 year at Edison only, no transfer for a 4-year degree)

○ Health Sciences (All Health areas)

○ Social Services (Early Childhood Education, Criminal Justice, Social Services, et... 2 year at Edison only, no transfer for a 4-year degree)

○ AAB Information Technology (includes all computer areas 2 year at Edison only, no transfer for a 4-year degree)

*2. How many classes are you taking this semester?

○ 1

○ 2

○ 3

○ 4

○ 5+

*3. What delivery mode do you prefer?

○ Hybrid (Flex) with part in class meetings and part online

○ Traditional classroom meetings

○ online only

*4. If you had to take on-campus classes - What days of the week would your perfect schedule hold classes on? Also, how flexible is your schedule (Select all that apply)

☐ Monday/Wednesday

☐ Monday/Wednesday/Friday

☐ Tuesday/Thursday

☐ Wed/Fri
☐ Saturday or Sunday
☐ I have a flexible schedule and can change my work hours around school
☐ I have a fixed schedule and must fit classes around my schedule

*5. If you had to take on-campus classes - How many days a week would you prefer your courses be held on and during which time periods? (Select one from the # of days and one from the time periods)
☐ 1
☐ 2|
☐ 3
☐ 4
☐ 5
☐ Mornings (7am-11am)
☐ Mid-Day (11am-3pm)
☐ Early Evening (3pm-6pm)
☐ Evening (6pm-10pm)

*6. Which of the following schedules would you be more interested in seeing the college use? Circle all that apply
☐ 4 week accelerated schedules
☐ 5 week accelerated schedules
☐ 8 week accelerated schedules
☐ 10 week accelerated schedules
☐ Other

*7. Would you take an accelerated 4-week course held between the main semesters (for example Dec-Jan between Fall and Spring semesters)?
Very Unlikely   Maybe   Very Likely

*8. How soon after registration opens do you register?
○ Within the first week
○ In the first few weeks of registration

     ○ A couple weeks prior to the start of the semester

     ○ Right before the semester starts

*9. How would you describe your understanding of what courses you need for your major and what order they should be taken in?

Not Confident	Somewhat Confident	Very Confident

*10. Please answer each of the following questions

How well is the schedule you have this semester working with your life-school balance? _____

What was your greatest scheduling challenge when choosing your classes for this semester? _____

What have been your greatest scheduling challenges overall during your time at the college? _____

What positive experiences have you had with scheduling?

_____

What suggestions do you have to help as the school builds the schedule for next year? _____