# SALT LAKE COMMUNITY COLLEGE CONCURRENT ENROLLMENT 2020-2021 ANNUAL REPORT



SLCC.EDU/CONCURRENTENROLLMENT

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## CONCURRENT ENROLLMENT WHAT WE DO & WHY WE DO IT

The SLCC Concurrent Enrollment Department partners with high schools to deliver a college experience that prepares high school students with the skills and courses they need to navigate the challenges of higher education and complete a meaningful degree or certificate.

· RONR

It is going to help me save money in college. Also, this is better to take in high school because I have access to help from my teacher, peers, and parents if I need it. That would be a lot harder to do in college and I could become more stressed if I couldn't get the help I need. This is overall the best option there is. J

- CE STUDENT

OVERALL PROGRAM STATS

2020-21 TOTAL STUDENTS PARTICIPATING 9424

0.9% INCREASE IN THE NUMBER OF STUDENTS PARTICIPATING BETWEEN 2019-20 AND 2020-21

2020-21 TOTAL ENROLLMENTS 21,244

0% INCREASE IN NUMBER OF ENROLLMENTS BETWEEN 2019-20 AND 2020-21

**51 PARTNERING HIGH SCHOOLS IN 2020-21** 

112 COURSES OFFERED IN 2020-21

**396 HIGH SCHOOL INSTRUCTORS APPROVED TO TEACH** SLCC CLASSES FOR 2020-21 **321** TAUGHT CLASSES

**1105 CONCURRENT ENROLLMENT SLCC CLASS** SECTIONS TAUGHT IN THE HIGH SCHOOLS

- Concurrent Enrollment is one of the hardest things I've ever done, and it's helping me to become the person that I want to be.
  - CE STUDENT

## RACE & ETHNICITY

SLC

BRUINS

I personally like CE more than AP as the entirety of whether or not you get your credits rely on a single test at the end of the year. It's also given me more insight into what college classes will look like.

- CE STUDENT

and the

ETHNICITY	SLCC CE 2020-21 DATA	SALT LAKE COUNTY 2018 DATA	HIGH SCHOOL 2020-21 DATA
African American	1.19%	1.87%	2.39%
Asian	3.55%	4.22%	3.53%
Caucasian	71.89%	70.4%	62.13%
Hispanic/Latino/Latina	14.98%	18.6%	25.43%
More Than One Race	3.38%	2.68%	3.04%
Native American	0.32%	0.49%	0.74%
Pacific Islander	0.74%	1.49%	0%
Undeclared	3.89%	0.27%	2.74%



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# 2021-22 ACTION STEPS

Finalize admission/registration process improvements, monitor improvements, and develop a control plan to ensure that the improvements stick.

Develop and implement program and process improvements for the CE Advising Program in order to more effectively reach a larger percentage of students who are accumulating significant numbers of CE credit. Develop measures to monitor impact and identify problems and opportunities.

Complete and assess the Project:Launch pilot and determine longterm feasibility of the program.

is the Works and the Months

Complete NACEP re-accreditation.

Part No.

<sup>41</sup> Over my entire high school career I have taken many concurrent enrollment classes, because I feel like the provide higher opportunities and learning advantages through a teenagers high school career. They have opened my mind to new concepts and ideas that are pushing me to know what I am to expects and experience in college. I feel as though they are a great representation for us on what college and life after school could look like. Because they are college classes we are able to expand our way of thinking and I feel as though the teachers treat us with more respect and we are more adults rather than high schoolers in those classrooms. I have never felt more like I was respected and treated like a proper adult until I stepped into a concurrent enrollment class.

- CE STUDENT

A MARY PROPERTY AND

Mr.A.M



**IN PROGRESS** Continue working on refining and implementing student process improvements for both the advising processes and the admission/registration processes.

During the 2020-21 Academic year we made significant progress on improving the admission and registration processes in the high schools and will likely have all improvements ready to implement by the first part of July 2021. During 2021-22 we will work on refining those improvements and developing a control plan to ensure that the improvements persist.

Due to high staff turnover in the Admissions Recruitment and Concurrent Enrollment Advising Program we were unable to focus on improving the advising process as soon as we had hoped. Once we began the improvement process, it became apparent that we needed to take a step back and take a more serious look at, not just the structure of the advising program, but the purpose as well. During the first part of June 2021, CE Advisors and Concurrent Enrollment staff came together to begin the process of reshaping the Concurrent Enrollment Advising and Recruitment Program. Over the 2021-22 academic year advising program improvements will be our primary focus.

**COMPLETE** Monitor instructor and liaison processes to ensure that the changes made continue to result in high levels of compliance and meet NACEP accreditation standards .

During the 2020-21 academic year we made huge strides in implementing and controlling our process improvement changes in our instructor and liaison processes. As we execute the process improvements and track the data, we can see significant improvements in the level of compliance in all of our instructor and liaison processes. At this point the project is considered complete and closed.

**TABLED** Finalize CE Transition Game (web-based, incentive game designed to help students strategically learn the soft skills they need to have a smooth transition to college) development and pilot the game at several participating high schools .

Due to COVID, a necessary system migration for our MyCE system that created new technical challenges, and other process improvement priorities, we decided to table this project for the 2020-21 academic year. Once MyCE is functioning and the migration is complete, we will look at reviving this project. **COMPLETE** Launch SLCC Concurrent Enrollment "Under the Hood" YouTube Show to help other CE programs across the nation who are experiencing growing pains and/or looking for improvement ideas understand how an established program operates .

The "SLCC Concurrent Enrollment Under the Hood" YouTube show is a deep-dive look at ins and outs of how the SLCC Concurrent Enrollment Program functions. During the 2020-21 academic year we collaborated with the National Alliance of Concurrent Enrollment Partnerships to begin releasing an episode each week. Our final episode was released in May of 2021. To date the show has received nearly 700 views. The show is available on the SLCC Concurrent Enrollment YouTube Channel at https://youtube.com/ playlist?list=PLhDSYyAnxRvBkIZ-4xMSpOjB7nLlz8lBn.

- I believe that [the SLCC CE Program] does a great job of trying to build relationships with their participating schools and that they are constantly trying to improve the system. It is a difficult task staying up to date with all of the ever changing parameters and they do an effective job.
  - HIGH SCHOOL ADMINISTRATOR



#### Overall Enrollment Growth

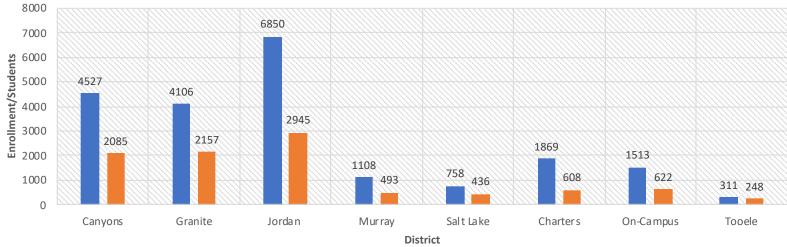
Overall the SLCC CE Program saw a 2.1% increase in enrollments from Fall 2019 to Fall 2020 and a -2.8% decrease in enrollments from Spring 2020 to Spring 2021 and a **0% OVERALL INCREASE** in enrollments from 2019-20 to 2020-21. This represents an -8 student enrollment decrease.

## Overall Unique Student Participation Growth

Overall the SLCC CE Program saw an **0.9% INCREASE** in the number of students participating between 2018-19 and 2019-20, from 9338 to 9424. This represents an 86 student increase. Additionally, those students seem to be taking fewer CE classes on average.

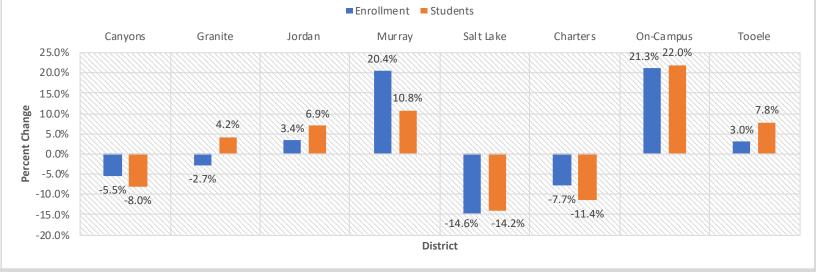


#### SLCC Service Region Program Size by District



Enrollment Students

SLCC Service Region Enrollment and Student Growth from 2019-20 to 2020-21 by District



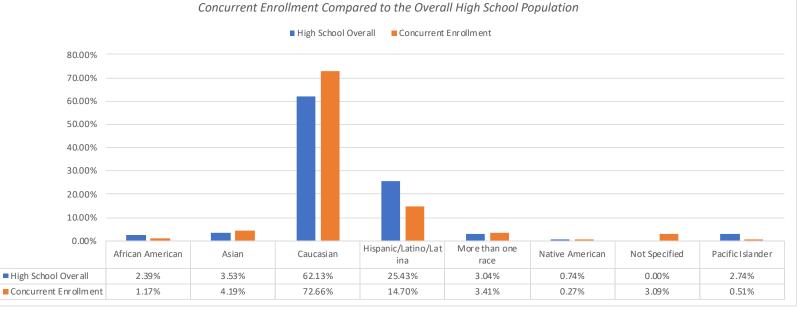
### Overall SLCC CE Race & Ethnicity Trends

While the overall distribution of race and ethnicity in CE closely mirrors the county demographic, and those numbers tend to fluctuate up and down slightly each year, when you compare the percentages of each race and ethnicity participating in concurrent enrollment to the overall population of each racial and ethnic group within each high school, the numbers are concerning.

In every high school the number of Caucasian and Asian students participating in concurrent enrollment is roughly 10% to 25% more than the percentage of Caucasian and Asian students within the school population, while Hispanic and other races participating in CE are anywhere from 25% to 50% lower than the percentage of Hispanic and other race students at the high school.

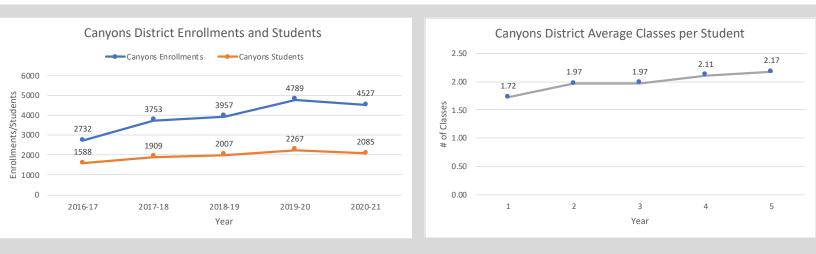
Because SLCC has very little influence or ability to address this problem alone, during the 2021-22 academic year the SLCC CE Department will be working with both high school and SLCC administrators to discuss and explore ways we can potentially work together to address this problem.

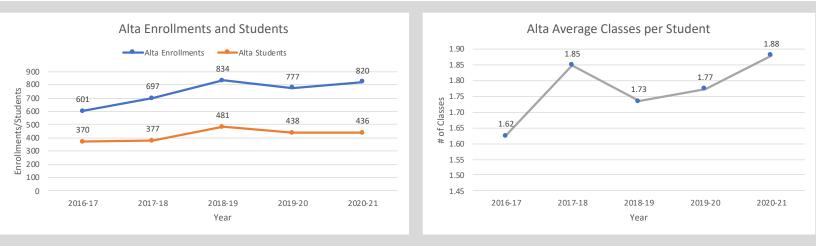
SLCC Service Region Race/Ethnicity



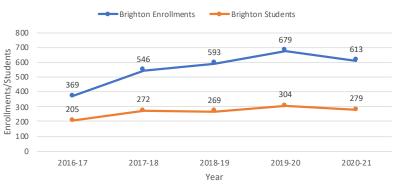
#### DISTRICT ENROLLMENT REPORTS: Canyons District

The Canyon's School District saw a -5.5% decline in total CE enrollments and a -8% decline in the number of unique students participating between 2019-20 and 2020-21, from 4,789 enrollments to 4,527 and from 2,267 students to 2,085.

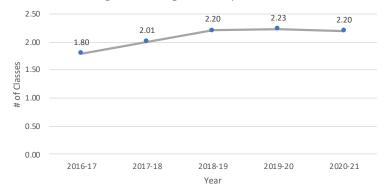


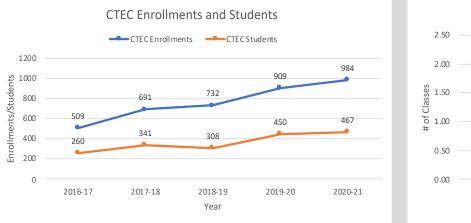


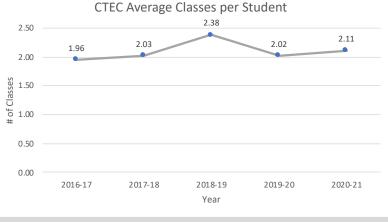
Brighton Enrollments and Students

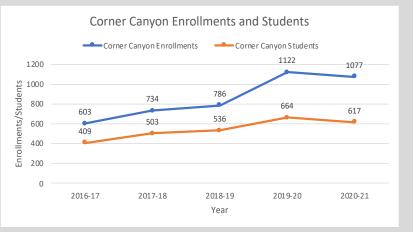


Brighton Average Classes per Student

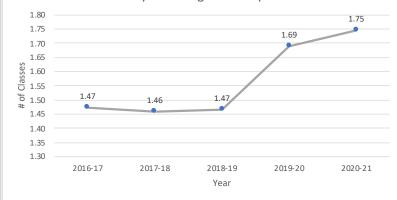


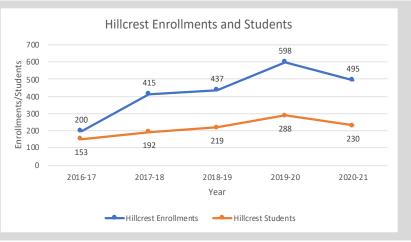


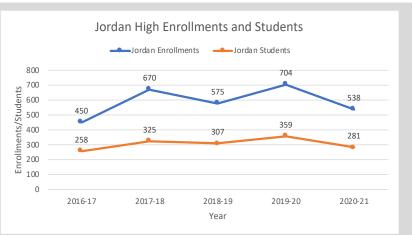


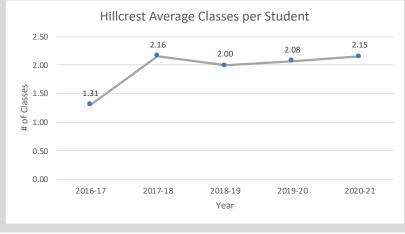


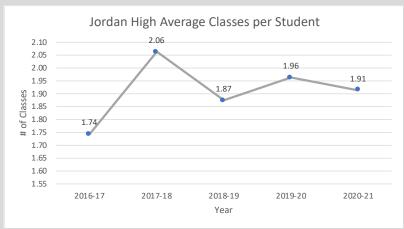
Corner Canyon Average Classes per Student





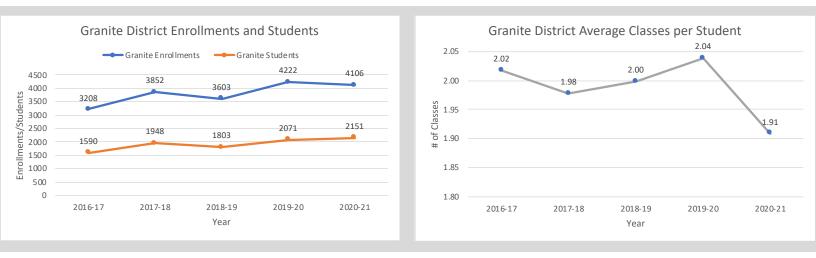


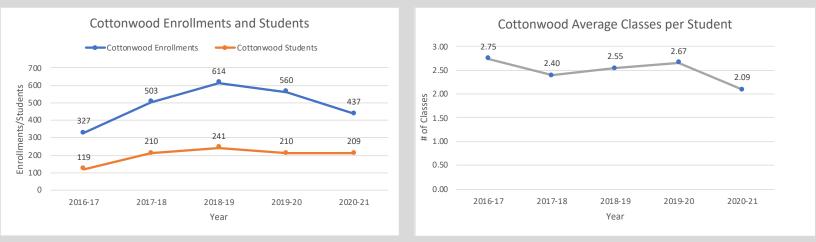




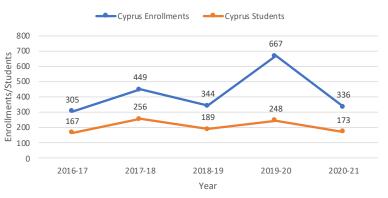
#### DISTRICT ENROLLMENT REPORTS: Granite District

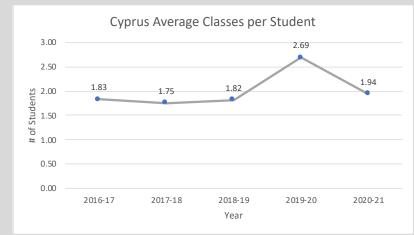
The Granite School District saw a -2.7% decline in total CE enrollments and a 4.2% decline in the number of unique students participating between 2019-20 and 2020-21, from 4,222 enrollments to 4,106 and from 2,071 students to 2,157.

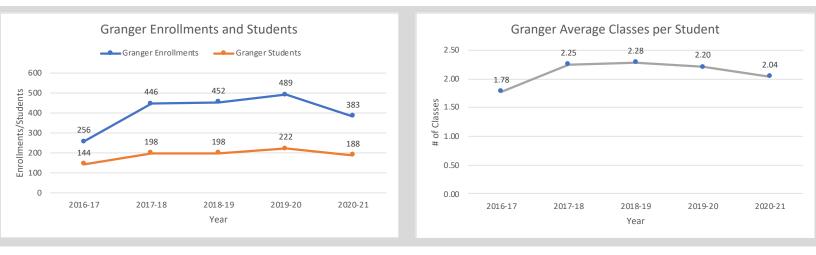


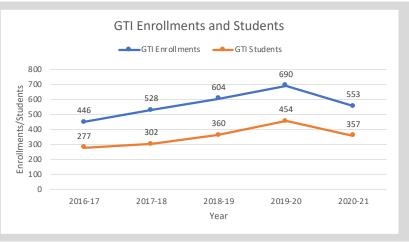


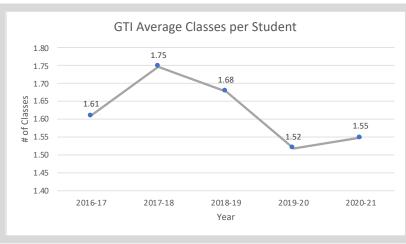
Cyprus Enrollments and Students

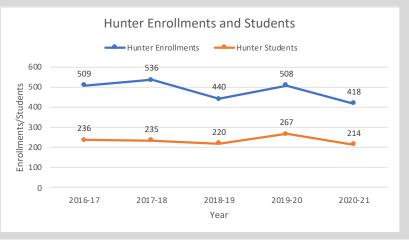


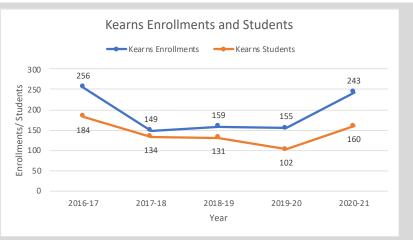


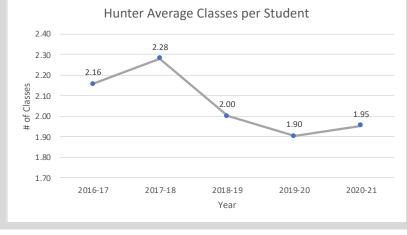






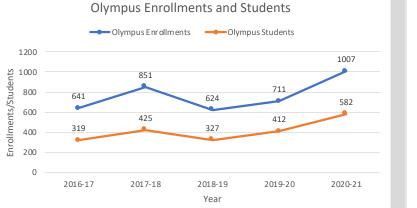


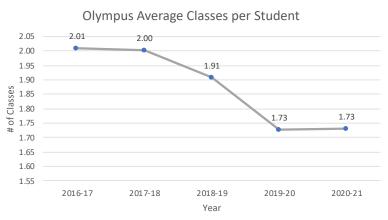


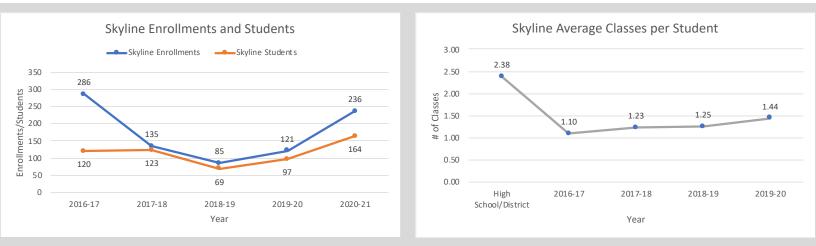


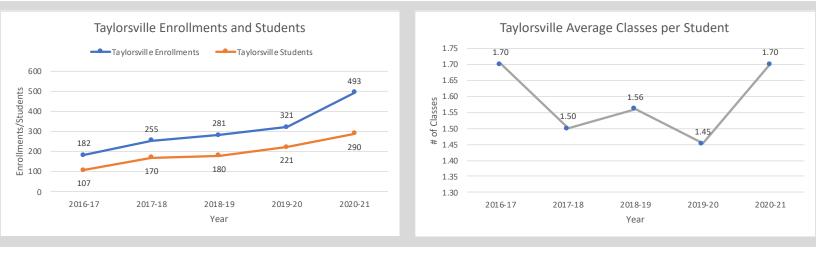
Kearns Average Classes per Student 1.52 1.52 1.60 1.39 1.40 1.21 1.11 1.20 # of Classes 1.00 0.80 0.60 0.40 0.20 0.00 2016-17 2017-18 2018-19 2019-20 2020-21

Year







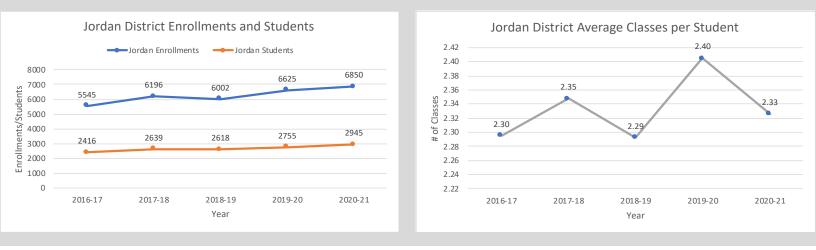


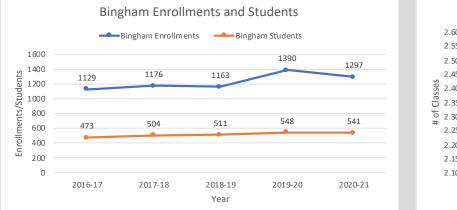
I believe everything always has room for improvement. This program is always going to need to make changes to stay with the change of pace in education. The CE office staff is outstanding and I am so thankful for the way they work with the high schools. I would rate them an Excellent for sure.

#### - HIGH SCHOOL CE COORDINATOR

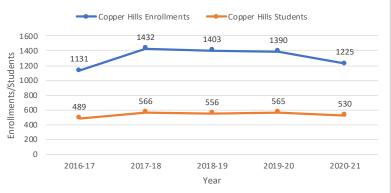
#### DISTRICT ENROLLMENT REPORTS: Jordan District

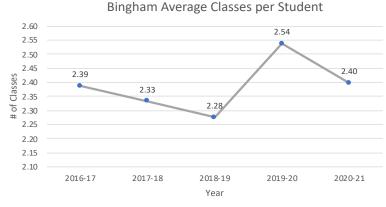
The Jordan School District saw a **3.4% increase in total CE enrollments** and a **6.9% increase in the number of unique students participating** between 2019-20 and 2020-21, from **6,625 enrollments to 6,850** and from **2,755 students to 2,945.** 

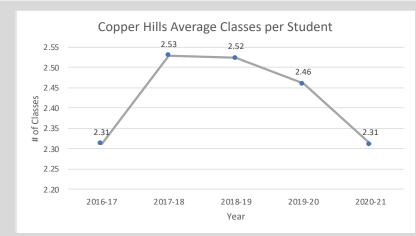


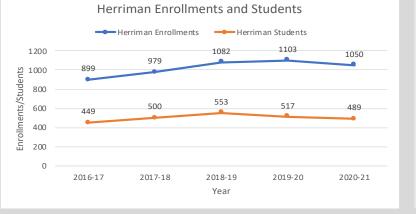


Copper Hills Enrollments and Students

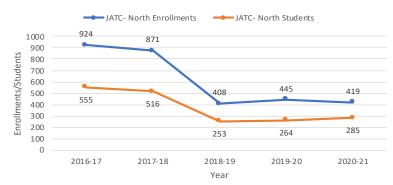




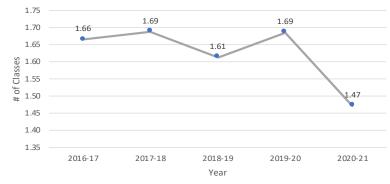


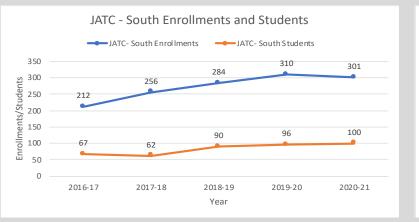


JATC - North Enrollments and Students

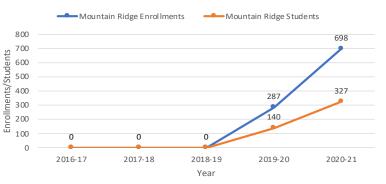


JATC - North Average Classes per Student

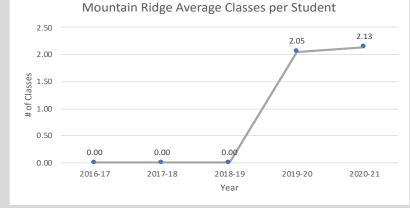


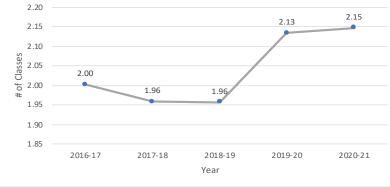


Mountain Ridge Enrollments and Students



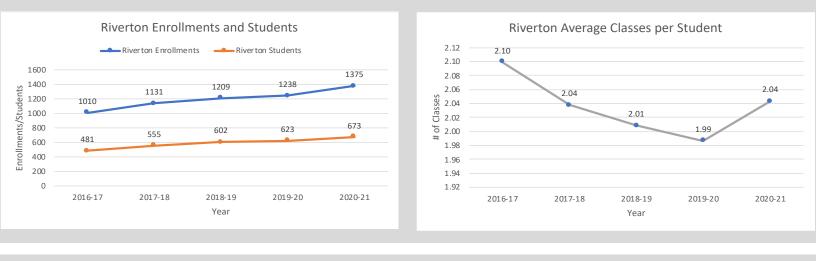
JATC - South Average Classes per Student 4.50 4.13 4.00 3.23 3.50 3.16 3.16 3.01 3.00 # of Classes 2.50 2.00 1.50 1.00 0.50 0.00 2016-17 2017-18 2018-19 2019-20 2020-21 Year





Herriman Average Classes per Student

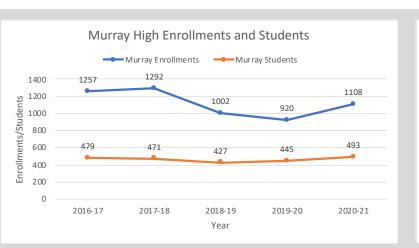
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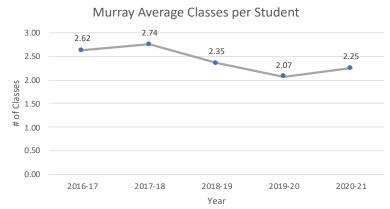




#### DISTRICT ENROLLMENT REPORTS: Murray District

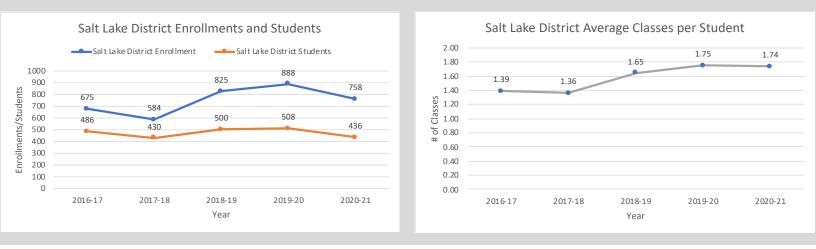
The Murray School District saw a 20.4% increase in total CE enrollments and a 10.8% increase in the number of unique students participating between 2019-20 and 2020-21, from 920 enrollments to 1108 and from 445 students to 493.

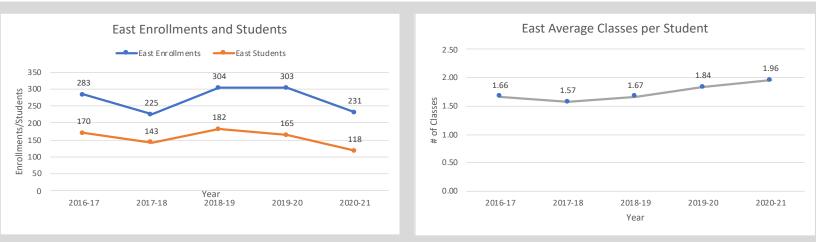




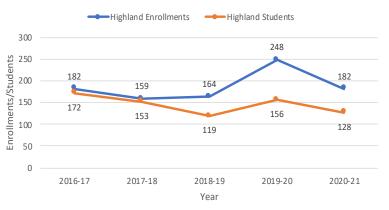
### DISTRICT ENROLLMENT REPORTS: Salt Lake District

The Salt Lake School District saw a -14.6% decline in total CE enrollments and a -14.2% decline in the number of unique students participating between 2019-20 and 2020-21, from 888 enrollments to 758 and from 508 students to 436. Because Innovations does not have its own in-house CE program, Innovation's CE enrollments are counted with other SLCC On-Campus Program enrollments.

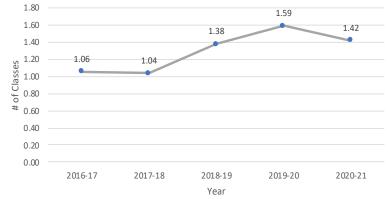


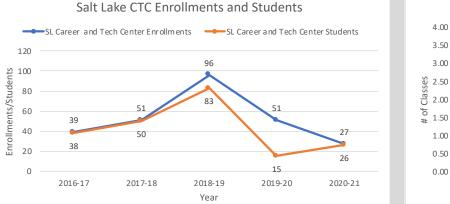


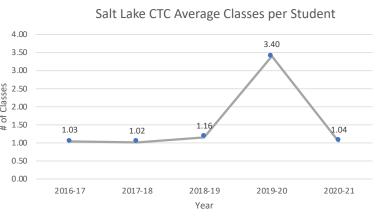
Highland Enrollments and Students

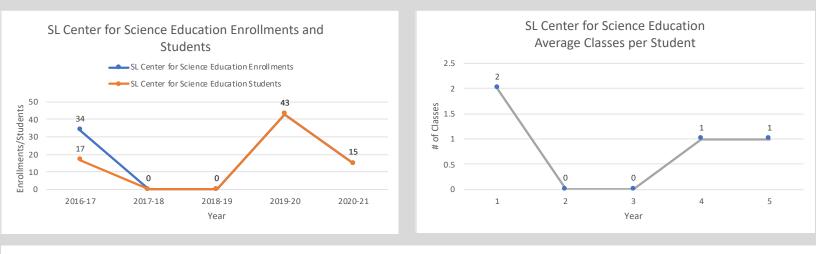


Highland Average Classes per Student





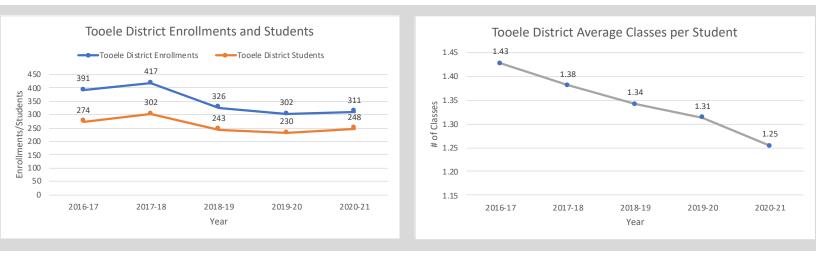


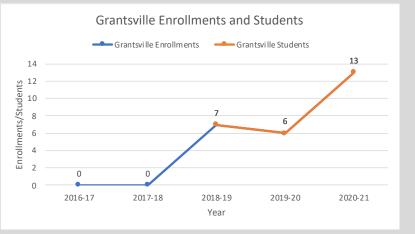


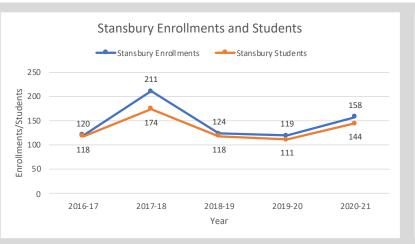


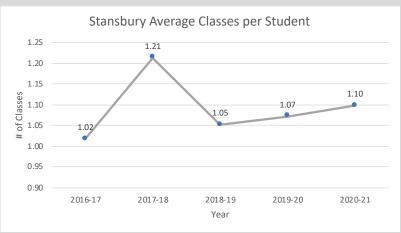
#### DISTRICT ENROLLMENT REPORTS: Tooele District

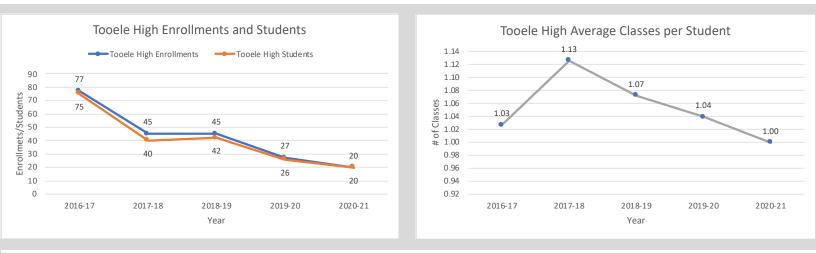
The Tooele School District saw a 3.0% increase in total CE enrollments and a 7.8% increase in the number of unique students participating between 2019-20 and 2020-21, from 302 enrollments to 311 and from 230 students to 248.

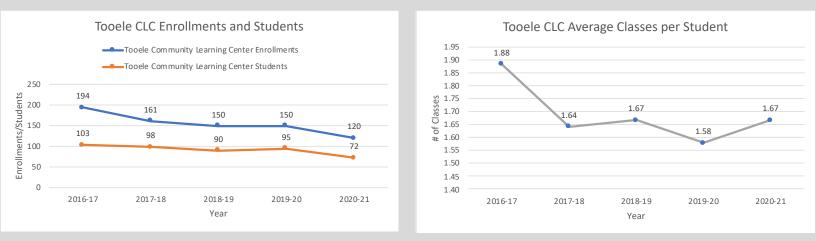










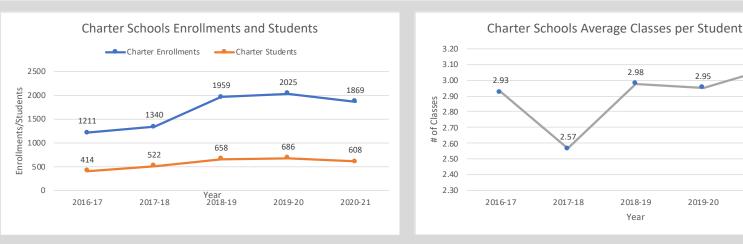


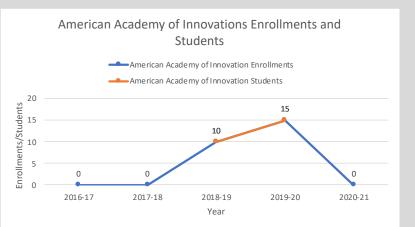
- I love the CE program, and as I'm sure many will say, this year was a difficult experience. Yet teaching these classes was something of a bright spot, and my students stepped up for the most part.
  - CE INSTRUCTOR

#### DISTRICT ENROLLMENT REPORTS:

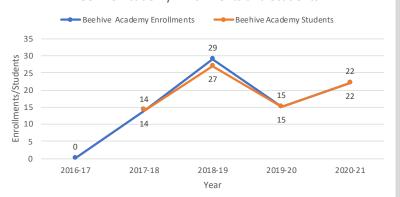
### Charter Schools Offering CE Classes at Their Schools

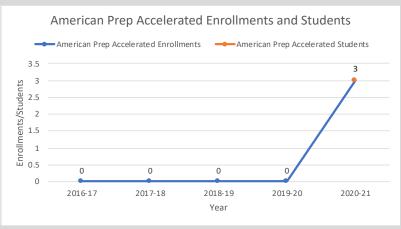
Charter schools that offer concurrent enrollment at their schools saw a **-7.8% decline in total CE enrollments** and a **-11.4% decline in the number of unique students participating** between 2019-20 and 2020-21, from **2,025 enrollments to 1,868** and from **686 students to 608**.





Beehive Academy Enrollments and Students

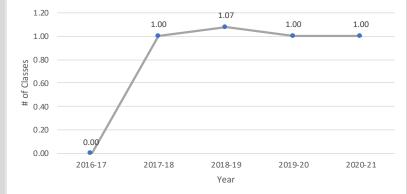


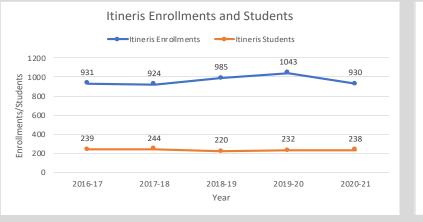


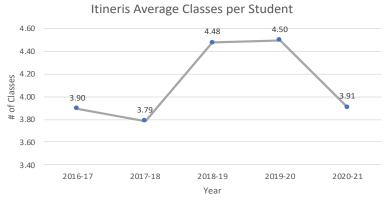
3.07

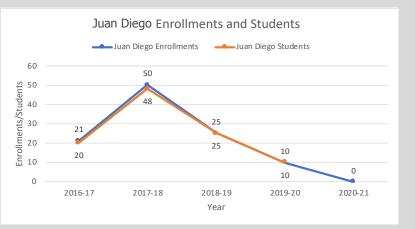
2020-21

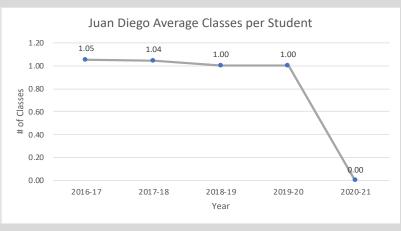
Beehive Academy Average Classes per Student

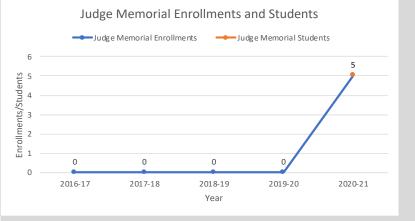


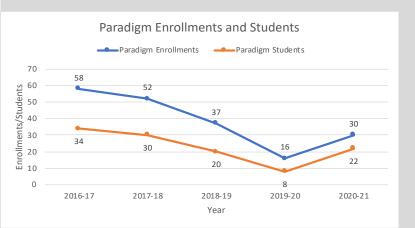


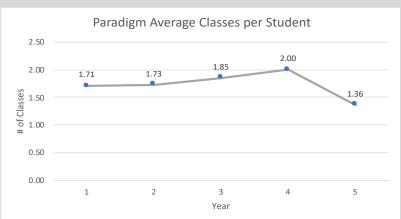


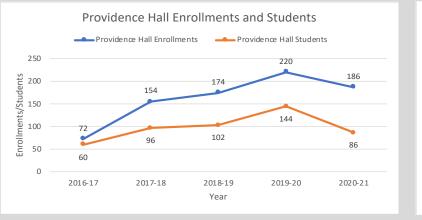


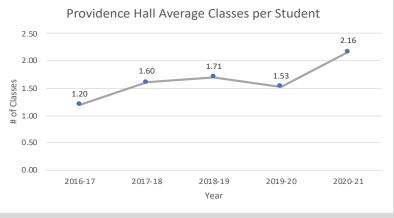


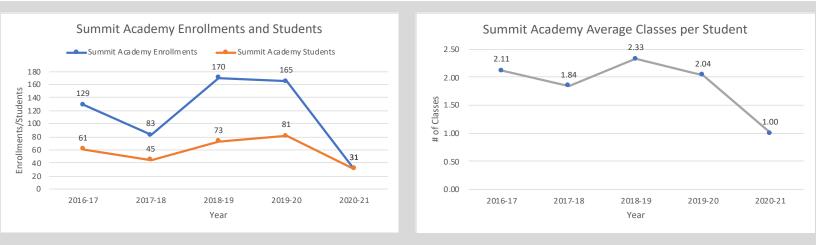


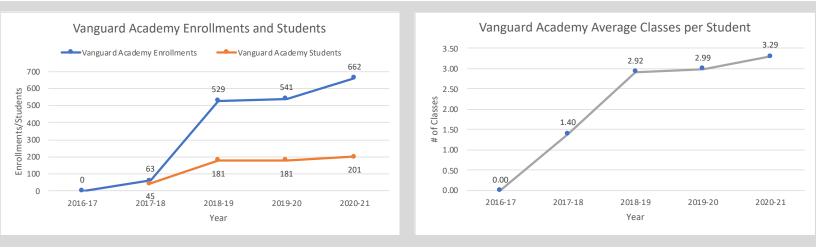










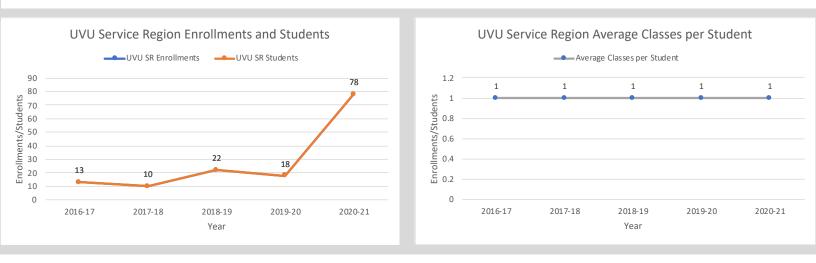


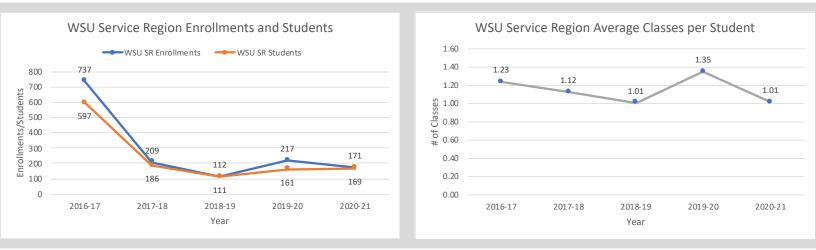
SLCC Concurrent Enrollment department has been very responsive to the needs of the High Schools in our district and have listened and made adjustments to make the process for our students better in applying, registering and participating in CE courses. Communication from SLCC Concurrent Enrollment is regular and detailed.

- DISTRICT ADMINISTRATOR

#### DISTRICT ENROLLMENT REPORTS: Out of Service Region Districts

The UVU service region saw a 333% increase in both CE enrollments and in the number of unique students participating between 2019-20 and 2020-21, from 18 students and enrollments to 78. WSU on the other hand saw a -21.5% decline in total CE enrollments and a 5% increase in the number of unique students participating between 2019-20 and 2020-21, from 217 enrollments to 171 and from 161 students to 169.

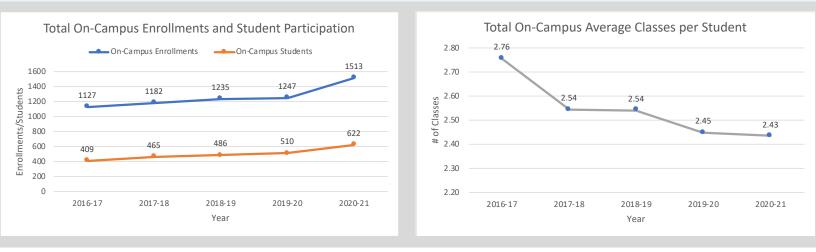


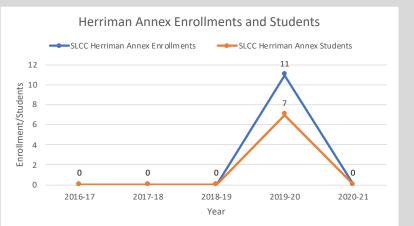


#### DISTRICT ENROLLMENT REPORTS:

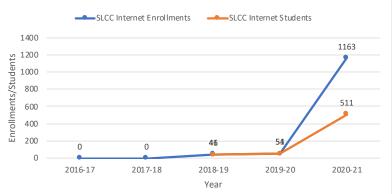
### Concurrent On-Campus Program

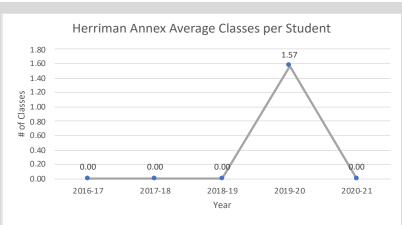
The Concurrent On-Campus Program saw a significant 21.3% increase in total CE enrollments and a 22% increase in the number of unique students participating between 2019-20 and 2020-21, from 1,247 enrollments to 1,513 and from 510 students to 622.





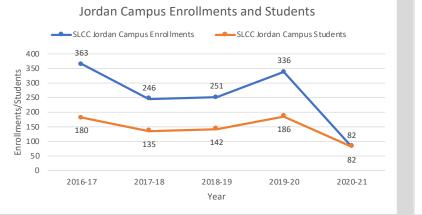
SLCC Online Enrollments and Students

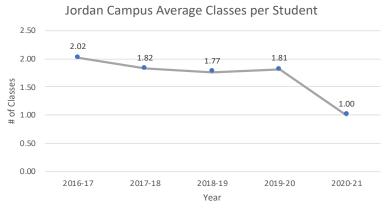




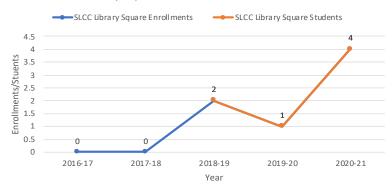
SLCC Online Average Classes per Student 2.50 2.28 2.00 # of Classes 1.50 1.12 1.06 1.00 0.50 0.00 0.00 0.00 2016-17 2017-18 2018-19 2019-20 2020-21

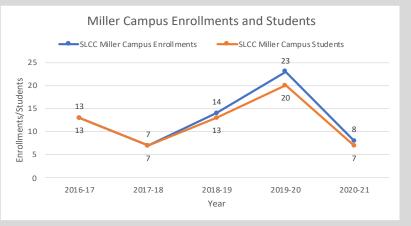
Year

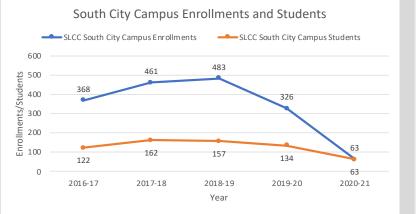


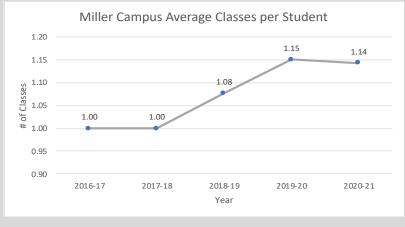


#### Library Square Enrollments and Students

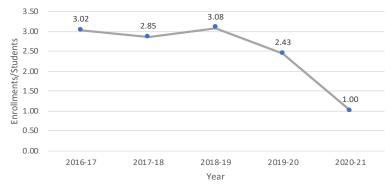


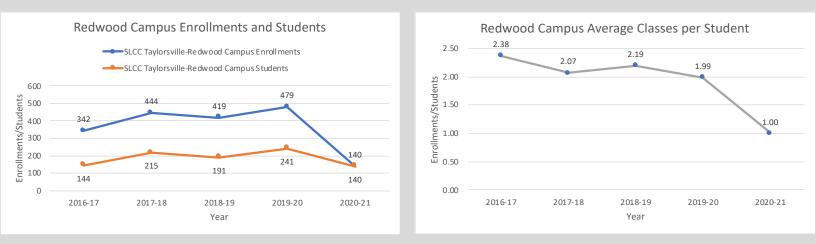


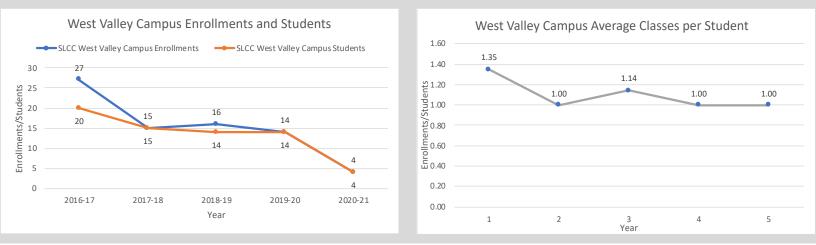


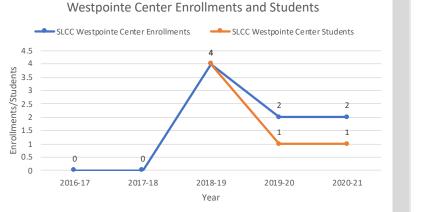


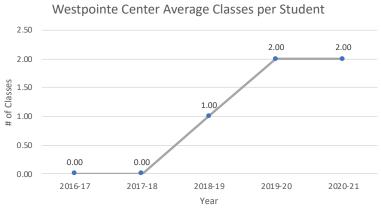
South City Campus Average Classes per Student







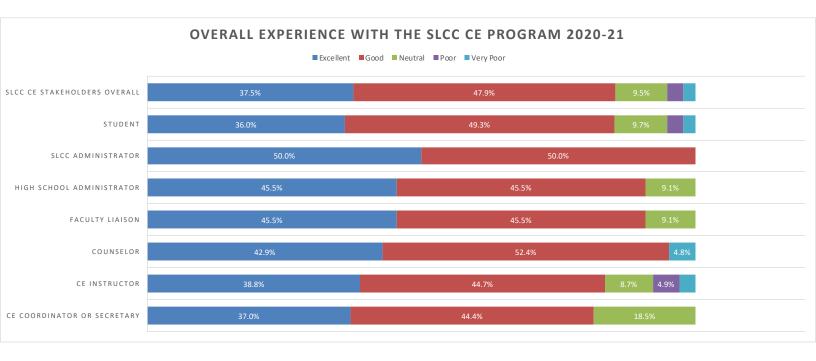






### Summary/Methodology

At the end of the 2020-21 academic year, the SLCC Concurrent Enrollment (CE) Department administered a climate survey to all SLCC CE stakeholders including, students (278 responses), CE instructors (103), high school administrators (11), college administrators (2), counselors (21), and program coordinators (27). Overall, 85% of those who responded rated their experience with the CE Program as good or excellent, and another 10% as neutral. These ratings correlate very closely with our student course evaluations where we ask students to rate their experience overall with their instructor. 90% of 2300 students who responded rated their instructor as excellent or good and an additional 6% gave their instructors a neutral rating.



The 2020-21 climate survey was administered using a Microsoft Form and was distributed via email to 8898 CE stakeholders and received a total of 453 responses for a 5% response rate. Generally speaking, responses to the climate survey seem to be reflective of conversations we have had with individual stakeholders over the past year.

## Instrument/Data

In order to identify problems and opportunities we didn't know existed, we kept the survey short and open-ended. CE stakeholders were asked the following questions:

- What is your role?
- Why do you participate in the concurrent enrollment program?
- What does the SLCC CE Program need to do in order to better serve your needs?
- Overall how would you rate your experience with the Concurrent Enrollment Program this year?
- Why did you rate your experience as such?

Below you will find a summary of responses by role.

#### **STUDENTS**

#### Why do you participate?

- To earn college credit
- To save money
- To get a head start on my major or career
- To better prepare for college
- To challenge myself
- To save time
- To test the waters for college
- Because the class seemed interesting or fun
- Better future
- Easier than AP
- Students are more mature
- Heard good things about CE
- Smaller class sizes

#### What can the SLCC CE Program do better?

- Nothing
- More class options

- Better instructors
- Get rid of ePortfolio requirement
- Easier to navigate and less buggy SLCC IT systems
- Better instructions and information for students on how to navigate college
- Create a guide/checklist for students of things they need to do
- Create a contact list for students of who they need to call for different situations
- Send out more informational emails.

- Great teachers explained things well
- Overall positive experience with the program
- Poor instructor or class/online organization/management
- COVID made this year challenging

## **CE INSTRUCTORS**

### Why do you participate?

- To give my students the opportunity to earn college credit and help them better prepare for college and life
- To teach the more academically prepared and motivated students
- I love the curriculum and teaching the class
- It's better than AP because it doesn't require a high stakes final exam
- I was hired or forced to do it
- I get to teach more of the classes I love
- Experience as a SLCC adjunct instructor

- Nothing. I feel supported and the program works well.
- Better resources for helping students transition to college and understand what the college experience means to them.
- Better resources for helping students understand the importance of taking CE

- Better resources to help students know and meet deadlines
- Stop micromanaging and trust us to enhance the curriculum
- Don't make any big Canvas or system changes until June
- Make the registration process easier
- Better course curriculum and content resources
- Better Google doc integration
- Talk to my administrator to let me teach more CE sections
- Lighten up on security requirements that create barriers for students and parents
- Sooner access to Canvas for CE students
- More course options
- Send SLCC professionals to our classes at the beginning and end of the semesters
- Make CE website easier to navigate
- Choose a different ePortfolio platform
- Improve professional development, the current PD is not helpful
- More content-specific communication
- Opportunities for students to come to a SLCC campus and experience a day in the life of a college student.
- More interaction with my liaison
- More networking with other CE instructors in my discipline
- Highlight the college experience through a live presentation by SLCC staff

- The students are great
- CE is a fantastic program
- I haven't had any problems
- COVID adaptations were challenging
- Great support from CE representatives
- Good communication/bad communication and quick/slow responses
- There is always room for improvement
- There was a lot of flexibility and support from SLCC during COVID

- The course workload was too overwhelming for students
- Technology issues were problematic
- Poorly designed/well designed course resources
- CE doesn't seem to listen to high school instructors
- I feel babied and not trusted by the CE department
- Too many hoops to jump through
- Confusion between CE training and academic department training
- Evaluation system was degrading
- Students were constantly lost and behind all the time
- Academic department was supportive
- SLCC focuses on the student and not on the processes
- Students were successful even during difficult times
- Lack of support and incentives for high school instructors to teach CE classes
- I have to babysit some CE students in on-campus classes
- Students need to understand the commitment they are making by taking a CE class
- I learned something new from my coordinators and mentors

## **CE COORDINATORS & SECRETARIES**

### Why do you participate?

- To help students get a head start on college and understand that higher education is attainable
- Help students learn the skills to be successful in college
- To save students time and money
- It's a big part of my job

- Nothing. Out of the three colleges we work with SLCC is by far the best and easiest to work with.
- Work out technology issues and time-consuming holds
- The program gets better each year

- Appreciate the email updates
- Provide students more evening and online options on-campus
- Don't make changes mid-year
- More flexibility in approving instructors

- CE staff is easy to work with, very helpful, and great support
- Technology issues
- Struggles due to COVID
- Issues resolved in a timely manner
- CE Program changes too much
- The CE program is always going to need to make changes to stay with the change of pace in education
- Teacher wasn't approved even though their credentials were the same as the previous instructor

## HIGH SCHOOL COUNSELORS

### Why do you participate?

- This is a great opportunity for students to earn college credit in high school and save time and money
- It challenges students
- It's a part of my job
- Seeing student excited when they pass a college class
- A great chance for students to grow and progress

- Registration is challenging
- More outreach to students
- More literature about the difference between AP and CE
- More information about how CE classes transfer out of state

- Ideas on how to more easily register students
- Eligibility and high school prerequisites do not line up well
- More clarity on deadlines for admission and registration
- List course offerings on the CE homepage
- Offer more CE classes
- Communication with instructors and counselors about deadlines
- Don't penalize students for not having AP scores

- Ran smoothly. No complaints or problems and I feel supported by SLCC.
- CE is an incredible opportunity for students
- College advisors need to reach out more. Students were given the runaround.
- It was just a hard year
- The registration process is difficult
- SLCC needs a recalibration of their tone and treatment of students and a more reasonable response to challenges

## HIGH SCHOOL ADMINISTRATORS

#### Why do you participate?

- CE is a great opportunity and high value-add for students
- CE gives students access to college courses
- It gives students a reason to come to my school

- Keep doing an excellent job
- Ease requirements to teach CE
- Ongoing and improved support, communication, cooperation, resources, and materials from the academic departments.
- Increased autonomy for CE instructors to determine what students need
- Improve process to get approved to teach CE

- Align instructor qualifications to USBE standards
- Revisit course standards to make sure the align with the high school class
- Allow MATH 1010 again

- Great customer service from the CE office. Academic departments are a little harder to work with
- I would like to pursue new courses to offer through CE
- Communication is regular and detailed
- There are significant, understandable barriers at SLCC and SLCC needs to work with USHE to fix those

## **FACULTY LIAISONS**

### Why do you participate?

- To promote my program
- I was assigned to and no one else in my department will take on this responsibility
- To connect with the high schools
- I enjoy mentoring the high school instructors
- To ensure the high school instructors are teaching our content according to our standard
- Service assignment
- To help high school students have access to college

- Nothing. Great support from the CE Department.
- The website and MyCE is cumbersome for me
- More support for creating professional development
- Access to the CE instructors' Canvas pages
- Appreciate the improvements and modifications to the content liaison role over the years

• Clearer route to the liaison site on the CE web page

#### Why did you rate your overall experience the way you did?

- Amazing support from the CE Office
- I always get quick responses from the CE Office
- MyCE is better, but some instructions or process are not clear or are different from the way there were in the past
- Didn't appreciate when my AD was contacted regarding items I hadn't competed, which I actually had completed, but they were lost in the MyCE migration process.
- CE office is helpful, organized, and respects CE instructor and liaison autonomy and expertise.
- Teachers are very enthusiastic and show great efforts doing an excellent job and being part of a team
- Our program is struggling to meet state requirements
- There are some fantastic classes and others that need improvement
- COVID made support difficult
- I appreciate the reminders for the different tasks I need to accomplish as well as academic department support in doing the liaison work

## **SLCC ADMINISTRATORS**

### Why do you participate?

• To support high school student and teacher interest in our programs as well as training and development activities throughout the year for them.

### What can the SLCC CE Program do better?

• Provide a calendar with due dates for required documentation.

### Why did you rate your overall experience the way you did?

- I think having a lead teacher set up Canvas sites for CE instructors is great.
- I would like to see a more proactive approach to managing CE, a greater partnership with the CE department.

## Lessons Learned

As has been the case over the past several years, there are very few stakeholders whose overall experience with the Concurrent Enrollment Program is poor or very poor. For students, a poor experience is most often related to their experience with a particular instructor or the class workload. For instructors, it often has to do with their relationship with the SLCC academic department and the course content. And for counselors, it is often a result of a student not following instructions and being ineligible for an exception, which results in the courselor having to deal directly with the student and parent to relay the bad news.

Because so many are having a good experience with the program there were very few suggestions for improvement beyond the standard requests we hear over and over that are extremely difficult to change (lower qualifications for CE instructors to teach, removal of holds and lengthy password requirements, integration of SLCC Canvas with the high school Canvas, final exam flexibility, etc.). There were some suggestions for fixes and changes we are currently working on. Suggestions we are currently working on include:

- Improvements to MyCE and the CE website. Note: Improving the website for all CE stakeholders is challenging because of the fact that we serve so many different stakeholders who all prioritize key information differently. Note: MyCE encountered a lot of technical issues this past year that we have mostly resolved at this point.
- Better training and support from SLCC academic departments.
- Improved admission and registration processes. Especially admissions term update.

Suggestions we hadn't thought to consider moving forward, but that may be worth pursuing include:

- Tools or resources to help students better prepare for the concurrent enrollment experience. Also better assistance for students at the beginning and end of the semester.
- Encourage academic departments to work with CE instructors in planning and developing professional development so that it is useful and relevant to the CE instructors.
- Offer more evening and online concurrent enrollment on-campus classes.
- More SLCC recruiting representation in the high school classrooms to help students understand how to transition to SLCC.
- There is a lot of frustration around ePortfolios, both the system and the concept. Many students and instructors are not convinced that ePortfolios have any value to them and see ePortfolio as busywork.
- SLCC IT needs to take into account concurrent enrollment class schedules when making major systems updates.

- More regular content-specific communication from SLCC academic departments to CE instructors.
- Offer a day-in-the-life-of-a-SLCC-student tour of campus that CE instructors can schedule to bring their students to
- Access to the high school instructors' Canvas site, for SLCC faculty liaisons, so that they can more easily monitor the course curriculum.
- Better support and training/information for faculty teaching on-campus CE classes.



## Summary/Methodology

Prior to 2017-18 there was a belief that concurrent enrollment students who participated in online classes generally performed poorly, resulting in relatively high failure rates. However, there didn't seem to be any data to support that and there were very few, if any, online classes es offered for concurrent enrollment students.

During 2017-18 and Fall of 2018 we received approval from the Criminal Justice, Communications, Family and Human Studies, Business, History, and ESL departments to offer a few sections of their courses online for concurrent enrollment students.

102 students participated in the pilot during 2017-18. High schools whose students participated in the pilot were required to ensure those students attended a designated period at their high schools where they could work on the class.

Students registered for the classes the same way students register for concurrent on-campus classes; they had to submit a request through MyCE and verify that they met all prerequisite requirements. If they did, the Concurrent Enrollment Office would unlock the class section so they could register themselves for the class.

Additionally, during 2017-18 we required all students participating in the pilot to attend an orientation to online classes. During Fall of 2018, however, we did not require the orientation in order to see if an orientation would possibly contribute to the student's overall success in online courses.

During Spring of 2019 we met with the academic departments who participated in the pilot to review the results and determined that we would gradually roll-out online classes to high school students through the concurrent on-campus program, without the above mentioned safety parameters to ensure student success.

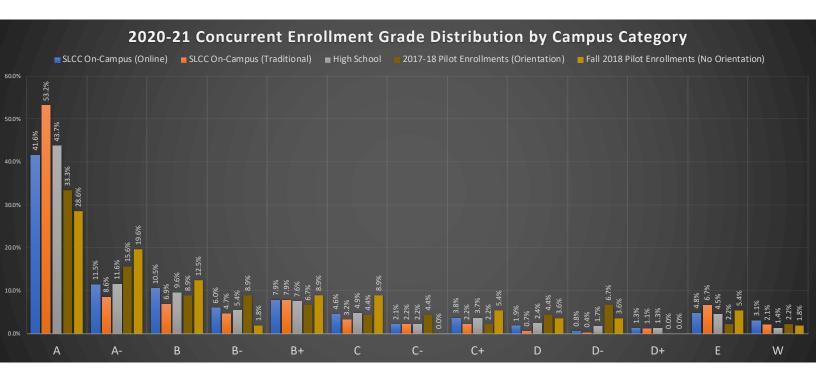
During Spring of 2020, the COVID pandemic, forced the majority of concurrent on-campus classes to transition to an online or hybrid format that continued throughout the 2020-21 academic year. During this time there were no additional safety measures, such as orientations or designated class periods in the high school, put in place to ensure student success.

At the end of 2021 we ran the enrollment data for online courses using the Class Sections with Students MyCE export to compare success of students in the pilot classes to students in the COVID adapted online classes. In looking at the overall data it is clear that concurrent enrollment students perform exceptionally well in both online and in-person concurrent

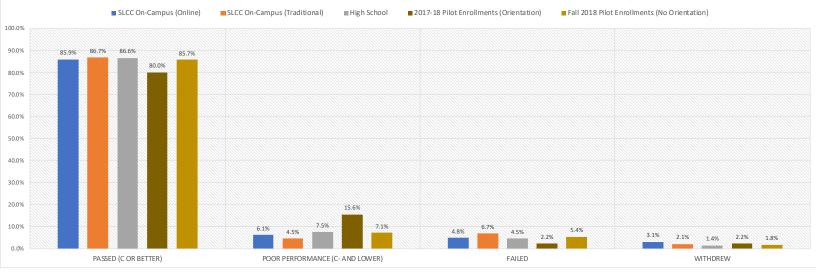
enrollment classes on a SLCC campus, and that the grade distribution is similar regardless of whether the class occurs on a SLCC campus, online, or in a high school classroom.

## Data

The following data was extracted from our MyCE concurrent enrollment program management system using the "Class Section with Students" data export that pulls a list of student registrations for all concurrent enrollment classes for a given term including final grades.



#### 2020-21 Concurrent Enrollment Generalized Grade Distribution by Campus Category



## Observations

Interestingly, students who participated in the initial pilot and attended an orientation about how to be successful in an online class performed slightly worse than students who had no orientation; however the failure rates for these students were a couple of percentage points lower. Additionally, requiring students to attend a designated high school period to ensure they stayed engaged in their online courses seemed to have no impact on student success when compared to students who engaged in online CE courses over the last year with no interventions. Overall, it appears that students in online concurrent enrollment classes taught by SLCC faculty members perform just as well as students taking classes in the high schools or students taking in-person classes on a SLCC campus from SLCC faculty members.

## Considerations & Action Steps Moving Forward

While concurrent enrollment students perform just as well in online CE classes as they do in the high schools or in in-person on-campus classes, there is one major factor that we need to consider before expanding online offerings to concurrent enrollment students.

Some SLCC academic departments are limited in the number of faculty they have available to teach online classes. If we set aside seats in these classes for concurrent enrollment students, we are limiting the number of seats available for traditional students. Many traditional SLCC students rely heavily on online classes when they are working full-time and balancing other life responsibilities. Setting aside seats for CE students could negatively impact traditional students who truly need those classes.

As we pursue additional online options moving forward we will do so in consultation with SLCC academic administrators to ensure we are only expanding offerings in areas that can support the growth without impacting opportunities for SLCC's primary traditional student population.



## Key Words

**CONCURRENT ENROLLMENT (CE):** A program where high school students take college classes in their high school from qualified high school instructors and earn both high school and college credit.

WAIT TIME: The time when a task idles between being worked on.

TOUCH TIME: The time actually spent working on a given task, excluding wait time.

**CONVERSION:** The process of becoming a college student.

## Business Case

Two of the most time-intensive and critical processes in the concurrent enrollment program are admission and registration. More problems are created by breakdowns in these process than any other processes in the CE program. Inefficiencies in these processes waste an enormous amount of personnel time.

## Root Cause Analysis

After interviewing and surveying stakeholders and performing process walks, we discovered the following suspect root causes to wasted time and breakdowns in the processes.

- There is a significant lack of consistency in the information and instructions delivered to students in the high schools, resulting in both outdated, incomplete, and incorrect information being delivered.
- There is a significant lack of consistency in the processes and systems high schools use to track admission and registration. Many use paper-based and electronic systems that require an enormous amount of time to maintain and result in a number of possible errors.
- SLCC IT systems are one of the biggest barriers to students completing admission and registration. The complex password requirement, various holds, and poor user interface design, creates a large portion of the problems that cause students and high school CE coordinators frustration and waste their time.

## Solutions Implemented

Solutions implemented include:

- Working in collaboration with the district offices to build an easy-to-use report in the high school student information system (SIS), that can be inserted into a tracking sheet template that merges high school and SLCC data for simple, fast, and easy admission and registration tracking.
- Developing presentations, handouts, Canvas shells, and instruction sheets/templates that are maintained by SLCC and customizable so that high schools always have the most up-to-date, accurate information, and can include additional, relevant high school information as they see fit.
- Translation of the student portions of the CE website into Spanish, to reduce problems and errors that are a result of language barriers.
- Adjusting the student start term for students who complete the admission application and declare the incorrect start term, resulting in a hold Spring semester that impacts hundreds of students.

## Project Results

We will be tracking results during the 2021-22 academic year, as the solutions above are implemented.

# **PROJECT CHARTER**

## Problem Statement

One of the biggest barriers to student conversion, especially among first-generation under represented populations, is the complexity of navigating college processes. High schools often complain about the complexity of SLCC processes over other USHE institutions they partner with when it comes to admissions, registration, and the various hold, errors, and restrictions associated with those processes. While the SLCC Concurrent Enrollment Department has little control over broader SLCC systems, state processes, and holds, we do have control over how those are managed in the high schools. Inconsistencies in how high school manage those processes vary across districts and even across high schools within districts, creating more issues for some than for others, and a greater likelihood of error. Inconsistencies result in (1) incorrect information and instructions being delivered to students, (2) students getting missed in the admission or registration process, and (3) students encountering barriers with little support or direction on how to navigate those.

## Goal Statement

This project will focus on finding ways to assist high schools in managing the admissions and registration tracking process, delivering consistent and up-to-date information and instructions on navigating admissions and registration, and removing barriers that prevent students from completing admission and registration processes.

Our goals include:

- A significant decrease in the amount of time spent updating admission and registration tracking sheets,
- A significant decrease in the amount of time high schools spend assisting students with admissions and registration holds during the registration period,
- A significant increase in the number of high schools using SLCC information sheets and instructions over self-generated information sheets and instructions.

## Scope In/Out

**PROCESS START:** Students are informed about concurrent enrollment opportunities at a given high school.

**PROCESS END:** Students are successfully registered in their concurrent enrollment classes.

IN: Any part of the admissions/registration process from the process start to the process end

as defined above and as defined in the Admission/Registration Process Map.

**OUT:** Any processes that may be dependent on or connected to the Admission/Registration process but are not necessary for admission or registration to occur.

## Timeline

PHASE	PLANNED	ACTUAL
Define:	1/1/20	12/31/20
Measure:	6/1/20	12/31/20
Analyze:	1/1/21	3/1/21
Improve:	3/1/21	12/31/21
Control:	10/1/21	5/1/22

## Team Members

POSITION	PERSON	TIME COMMITMENT
Project Sponsor/Manager	Brandon Kowallis	20%
Team Member	CE Staff	10%
Team Member	CE Advising and Recruitment	5%
Team Member	CE Coordinators/Secretaries	5%
Team Member	High School Counselors	1%
Team Member	District IT Specialists	1%
Team Member	SLCC IT	5%

# **PROCESS WALKS**

## Key Take Away

This process improvement project began with a series of process walks to better understand, clarify, and define the admission and registration process as they functioned and operated in the high school, and to better understand where the problems exist that many of the high schools were complaining about. We performed one process walk per major district, since generally speaking, most high school operate similarly within each district. Data was gathered using the process walk interview sheet below.

#### Interviewer Interviewee Date \_\_\_\_\_ Step #\_\_\_\_\_ Step Name DATA NOTES QUESTION How many people work on this step? What percent of the time does this person have to work on this step? How long does it take for this person to complete this step between the time the work is available until the step is complete, per unit? (Lead Time) How long would it take you to complete this step if you could work on it without being interrupted or having to wait for others? (Touch Time) What percent of units that you receive to complete this task are complete and accurate? How many units are waiting to be worked on right now? Is that normal? How long as the oldest unit been waiting? (Work in Progress) Do you have to set up anything before beginning this step? If so, how long does it take? (Set Up Time) What system do you use to complete this step? Do you batch process units for this step or do you complete them as they come in? If so how many units do you process at a time? What issues or barriers do you encounter when completing this step that are painful or time consuming?

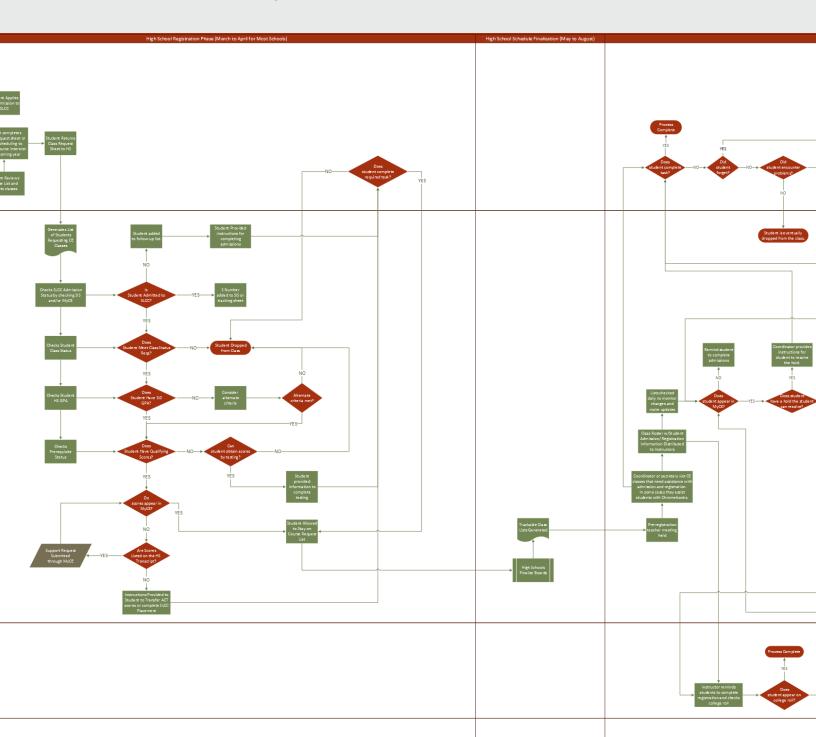
## **PROCESS WALK INTERVIEW SHEET**

PROCESS OBSERVATIONS	IMPROVEMENT OPPORTUNITIES	POTENTIAL SOLUTIONS

# HIGH LEVEL PROCESS MAP

## Key Take Away

Every district is on a slightly different timeline and engaged in slightly or vastly different processes. We worked with one high school from each of the major districts, physically walked their processes and then drafted the process map. After the process map was completed we pulled the districts together and reviewed and refined the map until everyone agreed that the map was an accurate global representation of the admission/registration process and when each step generally occurs.



# **VOICE OF THE CUSTOMER**

## Key Take Away

In order to better understand how admission and registration processes work at the individual high school level and better understand some of the biggest concerns, we asked the following questions to CE coordinators and secretaries and gathered responses from 28 high schools representing every major district and charter school. Responses to the final question confirmed that the biggest issues are cumbersome processes that create confusion for students, the time and energy required to track admission and registration, and the time and energy required to resolve holds and errors.

- When you distribute information to new prospective CE students; What format does that take (large presentation, class presentations, individual meetings, email, mail, etc.)? When does that occur? What information is included in the presentation/packet? How do you ensure it is up-to-date? Who updates that?
- Who controls/monitors/manages the CE class request process at your school (this is when they register for the high school class not the college class)?
- How do you monitor admissions to ensure all students are admitted? What data is included on your tracking sheet? How is that updated? What are some of the most common problems students have when completing admissions, both system and user problems?
- How do you organize the student vetting process? What tools do you use (excel, access, pencil and paper, SIS, MyCE, etc.)? What data is included on your tracking sheet?
- How do you monitor and manage student registration? Who does that? What tools do you use? What data is included in the tracking sheet? How is that updated?
- In what ways do you work with instructors at your school to monitor student registration? What are their responsibilities? How do they work with you to resolve problems? What tools or systems do your instructors use when it comes to monitoring registration?
- How do you track registration problems? What are some of the most common registration problems students encounter, both system and user problems?
- How do you monitor class rolls during the one week clean-up period? What tools or systems do you use and how do you use those to double check rolls?
- What other parts of the overall process feel clunky: time-consuming, confusing, or create problems for you or for the students and why?

# DATA COLLECTION PLAN

## Key Take Away

Since our project deals with decreasing the amount of time spent on managing admission and registration processes, our data plan focuses primarily on measuring and decreasing the total touch time spent on various admissions and registration tasks.

MEASURE TITLE	DATA TYPE (Continuous or Discrete)	OPERATIONAL DEFINITION	STRATIFICA- TION FACTORS (by who, what, when, where)	SAMPLING NOTES (time frame, etc.)	WHO & HOW (person responsi- ble and method)
Admission/Regis- tration Tracker Initial Generation - Touch Time	Hours - Continuous	Total time spent building the initial admission/registration tracker prior to using the SLCC tracker and after	by district by coordinator by date	1x per day during the initial setup of the tracker sheet until the sheet is solid	Brandon will work with CE coordinators to track this time on a spreadsheet during the summer and compare that to the time using the SLCC template.
Admission/Registra- tion Tracker - Touch Time	Minutes - Con- tinuous	Total daily time spent updating and monitoring admission and registration prior to using the SLCC tracker and after	by district by coordinator by date	1x per day for three weeks during the reg- istration period	Brandon work with CE coordinators to track this time each on a spreadsheet during the registration period.
Admissions Update Hold Removal - Touch Time	Hours - Continuous	Total time spent removing the admissions term update hold compared to the total number of students with the hold	by hold type by date	5 per high school	Brandon with work with CE coordinators to track in a spread- sheet.
Total counselors and coordinators actively using SLCC designed instructions & infor- mation resources	Discrete	Total number of counselors and coordinators using each document Distributed to all, some, no students. Use frequently, sometimes, never, I use my own.	by counselor by document	Sampling Not Necessary	Brandon will create a survey that list each document and distribute that to CE coordinators who may consult with counselors
Total Student Regis- tration Problems	Discrete	Total number of students not completing registration prior to the deadline, due to instructional or hold related issues prior to changes being implemented and after	by date	Sampling Not Necessary	Brandon will run re- port from MyCE and look at registration date stamps

# **SOLUTION MATRIX**

## Key Take Away

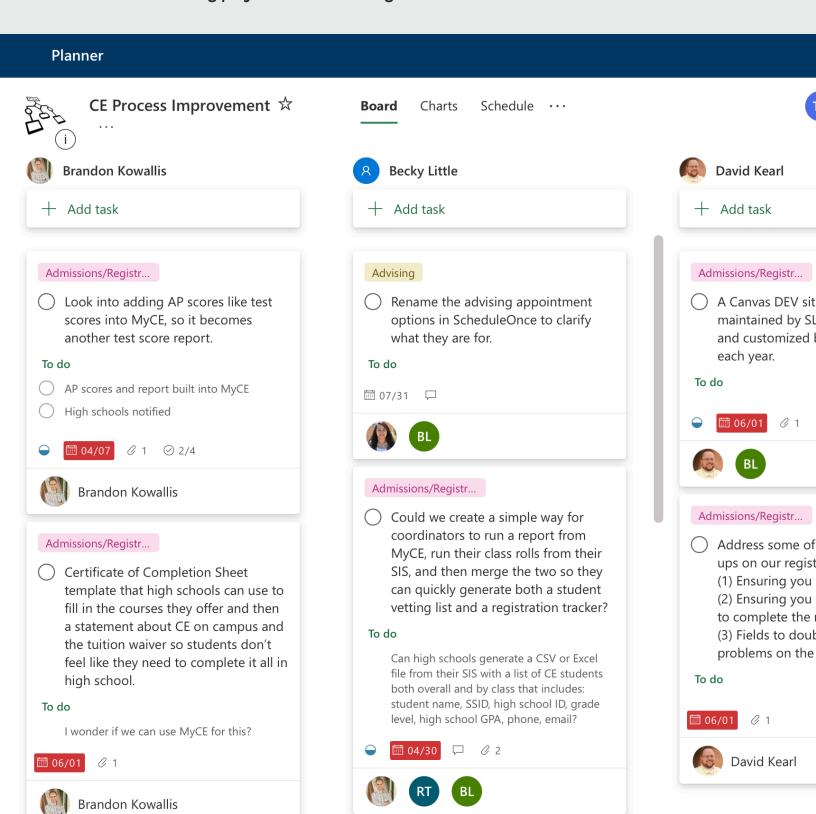
We presented possible solutions to all CE stakeholders and asked stakeholders to vote on the solutions they would be most likely to implement. Once that list was refined we prioritized tasks using the solution matrix below and then assigned tasks to various CE and Admissions staff members.

	Very Low (less good)		Moderate		Very High (best)		
	1	2	3	4	5		
Potential Solution (Provide Brief Description)	Potential to Meet Goal	Positive Customer Impact	Cost to Implement (1 = \$\$\$ & 5 = \$)	Stakeholde r Buy-in	Time to Implement (1 = Long 5 = Quick)	Total Score	Implement? Yes/No
Weighted Criteria	10	9	8	7	5		
A PowerPoint Slide/Image to insert in counselor classroom presentations when they introduce concurrent enrollment and a OneSheet for counselors to distribute to students interested in CE.	3	3	5	2	5	136	Yes
An information sheet that lists required test scores for classes that have test score pre-requisites.	2	4	5	3	5	142	Yes
Long and short version of a CE Information Session PowerPoint that includes: The value of CE and what it is The difference between CE, AP, and IB Cost and cost savings Basic steps to participate Admission vs. Registration Table where high schools can enter specific CE classes offered at their school Q&A	3	3	5	3	3	133	Yes
Perhaps we could create a vetting guide for counselors to help them quickly know if a student should be put in a CE class or not. This would depend on whether the counselors quickly vet students beforehand or if they simply enter what the student requests. Maybe work with counselors to figure out their systems for doing this and see if we could create something to help them so that perhaps the lists the coordinators are looking at are a little more refined. Maybe we could find out from counselors what they might need from us to help them make this part of their job easier when it comes to putting kids in CE classes.	1	3	5	2	3	106	Yes
Look into adding AP scores like test scores into MyCE,	2	5	5	5	2	150	Yes
so it becomes another test score report. A deadline information sheet with editable date fields so high schools can enter earlier deadlines that they require at their schools.	3	3	5	3	5	143	Yes
Mailmerge template, with accompanying report in MyCE, that will generate a list of CE classes available at any given high school with Course, Title, Semester/Yearlong, Total Credits, Class Status Limits, Pre-Requisites	3	3	5	3	3	133	Yes
It might be good to address some of the following hang-ups on our registration instructions: Ensuring you have the right CRN Ensuring you click hidden buttons to complete the registration process Fields to double check that cause problems on the admission app A Canvas DEV site that can be maintained by SLCC, and	4	3	5	3	3	143	Yes

# **IMPLEMENTATION PLAN**

## Key Take Away

Each solution was broken down into tasks which were assigned to Concurrent Enrollment and Admissions staff members to complete. Tasks were organized in Microsoft Planner and were reviewed during project status meetings.





## Overview/Methodology

During the Fall 2019 semester SLCC collaborated with Kearns High School and Taylorsville High School to test out the electronic version of the USHE parent permission form developed by Utah State University in collaboration with USHE. This parent permission form was also intended to function as a common admission application, and all USHE institutions have been asked to use it. After seeing the permission form, SLCC and several other USHE institutions voiced their concerns, which included:

- With the parent permission form being tied to admissions and requiring authentication of the student's data before the student could progress through the form, there was concern that students whose information did not authenticate would be delayed in their ability to complete admissions. Many students wait until a week or two before the registration deadline. Resolving authentication issues extends the time required to complete admissions by several days, potentially. This could then result in more students missing the registration deadline and either being unable to participate in the class or resulting in large and unsustainable numbers of manual registrations for the SLCC Concurrent Enrollment Office.
- Once the student data has been authenticated and the student and parent are able to progress to part 2 of the form, they must verify their email addresses during a single browser session. This requires having multiple windows or tabs open simultaneously. Our concern with this process was that many parents of low income, ethnic minority, first-generation students (who make up a fairly significant portion of the SLCC service region), do not have an email address, and are not as digitally literate, as their more educated counterparts. This then creates an additional potential barrier.
- Payment at the end of the form requires a credit card, which is also not an option for many of our low income, ethnic minority, first generation families. There are work-arounds, but they require an additional layer of complexity.
- All of the above require an additional layer of complexity for students who are already confused by processes like admission and registration at the college vs. registration at the high school. Additional layers of complexity like these have the potential to frustrate and turn away first time students who are already insecure about navigating college processes. We were concerned that it would be a significant barrier to those low income, ethnic minority, first generation students that we are trying to attract to SLCC or that it would result in a massive manual registration workload that would be unsustainable for the Concurrent Enrollment Office.

Despite these concerns the SLCC Concurrent Enrollment Office decided to test out the parent permission form to examine whether or not these concerns were legitimate or unsubstantiated.

In order to set up conditions that mirrored the challenges we anticipated facing with limited time frames during the admissions/registration window and get an accurate number as to how many attempted and how many completed the app, we required the following:

- We asked the participating high schools to require all students currently registered in a concurrent enrollment class at their high school to complete the form. To ensure that there was motivation to do so, we asked them to tell the students that this was required and must be completed by the deadline we had established. This allowed us to know how many students were attempting to complete the form, because we knew how many students were registered.
- The window for completing the parent permission form was opened between November 4 to November 17. This two week window mirrored the approximate time students have to complete admissions and registration each semester. Failure to complete it during that time results in students not being able to participate in concurrent enrollment.
- We developed a visual instruction sheet that walked students through the process of accessing the parent permission form and set up a promo code to waive the \$40 admission fee. We instructed high schools to distribute that to the students.

## College Completing Your CONCURRENT ENROLLMENT PARENT PERMISSION FORM

The parent permission form is required for students to participate in concurrent enrollment. Both the student and the parent must sign the form each year.

To complete the form you will need A PARENT OR GUARDIAN PRESENT and

Social Security, Student Visa, or Alien Registration Number if you have one
Student Email Address
Parent Email Address

Mobile View

THE 3 STEPS

#### INSTRUCTIONS

STEP 1: Go to www.slcc.edu/concurrentenrollment and click on "Admissions, Only Once".



#### STEP 2: In the left hand navigation click on "Forms"

<ul> <li>Student Guide</li> </ul>	The approval of your parent or guardian. WHAT TO KNOW ABOUT UTAH RESIDENCY QUESTIONS ON THE APP
Forms	easily incover your succ childrenant in you need to down the road. • An email address.
<ul> <li>Concurrent On-Campus</li> </ul>	<ul> <li>Your social security number. This is optional, but strongly recommended as it gives you the ability to easily recover your SLCC codentials if you need to down the road.</li> </ul>
New stadent Unertation     Schedule with An Advisor	know your SSID number, ask your high school counselor or administrator for it.
New Student Orientation	<ul> <li>Your state SSID number. It begins with either the number 1 or 2 and is a seven digit number. If you do not</li> </ul>
<ul> <li>Welcome</li> <li>Exc Depends &amp; Constitution</li> </ul>	SLCC cashiers office within three days of filling out the application.)
RESOURCES	<ul> <li>A credit card in order to pay the one-time S40, non-refundable admission fee (If you are unable to pay with a credit card you may pay with cash or check by filling out the applications online and then visiting a</li> </ul>
3 Pay Tuition (Each Semester)	What You Will Need to Complete the Admission App:
2 Registration (Each Semester)	requisites.
Admission (Once)	<ul> <li>Some CE courses may require qualifying placement test access such as the SAT, ACT, or Accuptacer test OR other generousite set by the college or high achool. See <u>Course Offerings</u> for course specific pre-</li> </ul>
THE 3 STEPS	<ul> <li>High school juniors and services and some functions &amp; conformance for ecception are eligible.</li> <li>A minimum GPA may be required by your school.</li> </ul>



STEP 3: In the Student Forms list click on the "Click Here to Sign" button.



**STEP 4:** Follow the instructions to complete the participation form. When you get to the final page where you are asked to pay, type in the promo code **"FREE"** to waive the admissions fee.

<text><text><text><text><text><text><list-item><list-item><list-item><list-item><list-item>

- Because the claim has been that the permission form is intuitive and relatively easy for students to get through, we did not include any instructions on how to complete the form (USU has actually included those on the form site), just on how to access it and use the code. We additionally instructed high schools not to overly coddle the students in completing the form, but to simply give them the instructions, and remind them repeatedly to go home and complete the form with their parent present. There were two reasons for this: (1) this is a parent permission form and so the parent must sign the form, and (2) we did not want to set up a situation where we end up getting a high completion rate at the cost of the high school staff having to spend an exorbitant amount of time hand-holding students through the process. Such a scenario would be unsustainable long term and would cause significant frustration for our high school partners. They were invited to help a little, but not to help in any way that would potentially be unsustainable if we adopted the form long term.
- After the window for completing the parent permission form was over, we sent out a survey to students asking for their feedback on their experience using the form, whether they completed it or not.

## Instrument/Data

After completing the study we ran student registration numbers for both high schools to determine how many students participated and then compared that to the total number of students who completed the form based on data SLCC IT extracted from USU application for delivering the form. We found that of the 282 students who were registered in concurrent enrollment classes at Taylorsville and Kearns high schools, and who were repeatedly reminded to complete the form, only 59 completed the form. In other words, only 20% of students were able to complete the form.

After the pilot window closed, 74 students completed the survey with the following responses:

### Overall how would you rate your experience using the Concurrent Enrollment Participation Form?

RESPONSE	PERCENT
Excellent	12%
Good	28%
Neutral	43%
Poor	10%
Very Poor	7%

## Were you able to complete the form?

RESPONSE	PERCENT
Yes	45%
No	55%

# Did you run into any problems or frustrations?

RESPONSE	PERCENT	
Yes	41%	
No	59%	

### What problems or frustrations did you encounter?

- It was just long plus I had to go to the campus and get help to finish it.
- I have already filled out the form before and I was told I had to do it again.
- The problems I encountered while filling out the form is my student number. It had told me to put in my number though it said my number wasn't available.
- Wouldn't let me summit
- I don't have my social security number just lying around my house
- I did it at a party because I forgot about it
- I felt like it was unnecessary
- I ran into some problems like it was sending me back to the home page. It took forever to load and the screen was scrolling up by it self and I had to keep scrolling down.
- They didn't have any other options for race and only had two options for ethnicity
- it's just annoying that we have to fill out so many of them
- it was pointless took forever. There should only be one form
- it's so pointless we have to sign these papers and pay these fees just for us to get more paper and fees. It's dumb and pointless but in the end helps us with our education.
- Problems and frustration I encounter are filling out many parent permission forms I feel we should only have just one parent permission form. The others are honestly not necessary.
- Having to do the form all over again.

### Where did you run into problems?

OPTION	RESPONSES	
Never got around to it	25	
Didn't have computer or internet access	2	
It wouldn't let me past the first page of the form	2	
When it asked me or my parent to verify our email we got stuck	1	
I couldn't figure out how to get past the payment page	1	
It was taking too long	5	
Other	2	

### Any final comments about your experience using the form or suggestions?

- I didn't see the significance.
- None
- My parents and I would have appreciated if we could do all paperwork one time.
- The form was a little hard to do.
- This is my first time being in concurrent enrollment and I like it so far a lot of signing stuff but its fine
- Why did we have to do multiply parent permission slip when we did one already ???
- Why did we have multiple permission slip?
- why would we have to fill out a parent permission form multiple times?
- Why do it again when my parent already signed it. they have already given permission
- Why is it even needed if we already completed an enrollment paper prior to this?
- I don't see why there needs to be more than one signature on the form.
- It felt pointless to do another form after we had already completed one.
- I think this form is dumb because we have already done two other permission forms why do we have to do another form for taking a class.
- I personally think there's too many forms to fill out they could all be put into one but sectioned off into their own category.
- It is not necessary. We already fill out two parent forms. There is no valid reason for us to have three. One parent form is enough.
- I think that we shouldn't have to do more than one parent permission form
- Nope.
- It was just a little bit annoying to fill out two or three times for two classes each.

After completing the pilot the CE Coordinators who ran the pilot at their school were asked to write up a brief description outlining their efforts to ensure student completed the parent permission form. Below are their responses:

We printed off step by step instructions for all our concurrent enrollment students to be able to go online and complete the parent permission form. We asked all concurrent enrollment teachers each week to remember to speak with their students during the time frame that the pilot window was open to get online with a parent and complete the parent permission form.

#### Jessica Lokeni - Kearns High School

To start the pilot, we copied the paper given to us by Brandon and Jill. We also put the information on our website with an active link.

When the "application" opened we emailed the information to each CE teacher and hand delivered the instructions to the teacher. We stated that we were here to help in whatever way was needed.

I did have one teacher send his students to us for help. We sat down and went step by step with them. Several of the students couldn't get in touch with their parents, and used their own email, or made another one up for the their parent. That way, they could receive the code, and just put the code in themselves.

I had another teacher tell me (after deadline) that his students had been trying to get in, but couldn't navigate.

I felt as though my hands were tied as I didn't know what student had or had not completed the form. In the past I have "demanded" the paper version or threatened to remove the student from that class, which seems to have been good incentive. I wasn't able to do that.

To sum it up. I believe that a paper version is acceptable as long as it is written to contain the same information as what the e-version has. It is a HUGE hassle for the students to wait for their parents to receive a code that can be entered. In addition to that, many of the students have said that their parents trust them and they should learn how to take care of "paperwork" themselves as that is part of college.

Vicky Beacham - Taylorsville High School

## Conclusion

Given the poor completion rates and the fact that a significant percentage of students ran into problems completing the form, there seem to be significant risks using the USU application for delivering the parent permission form, when it comes to creating barriers to participation for concurrent enrollment students in the SLCC service region. Also, there is a risk, if we were to adopt the form, of creating a significant burden on our high school partners and staff in attempting to both get students to successfully complete the form and in manually registering students who fail to complete the form.

A major purpose of this form seems to be data alignment between USHE institution student records and USBE student records for the annual data match. SLCC has created a tool to increase the percentage data match in collaboration with our high school partners, in a way that does not put in place barriers for student participation. This tool imports students into the MyCE system who did not match with USBE data upon completion of the SLCC admission applications. High school partners can then review the data, submit corrections, and then SLCC can re-submit that information to USBE via an API provided by the state and creates the match. Overall this process has been working well this year.

One of our findings as we ran this data-match process is that a majority of the students whose data does not match are students with hyphenated last names, which include a very

large percentage of Latino students, further indicating that a majority of students who end up encountering issues when completing the first part of the USHE participation form, will likely be ethnic minority students.

Additionally, SLCC has created an electronic version of the parent permission form that: (1) Removes barriers to participation (admission and registration) because it is not linked to admissions in any way, and (2) can be tracked and reported by both SLCC and the high school coordinators and teachers, making it easy to identify who has completed the form and who has not. This parent permission form was used Fall 2018 with positive results and reviews. We then pulled back in using this form under pressure to use the USHE form. The USHE form depends completely on student admission in order to monitor whether or not a student has completed the form. When not using the form as a common admission application, there is no way for anyone to monitor whether or not a student has completed the form, beyond running the data and going through an unsustainable manual process.

We feel like the solution SLCC has developed to acquire parent permission and improve the data match fulfills the intent of the law and the intent of the USHE office to create a better data alignment between SLCC student data and USBE data. However until we are given the go ahead to do otherwise, SLCC continues to use the USHE participation form as a participation form only and not as an admission application in order to prevent barriers identified above.

# FINANCIAL AID IMPACT ON POOR CE PERFORMANCE DATA SCIENCE & ANALYTICS RESEARCH STUDY

## Preface

For years there have been concerns about concurrent enrollment students who perform poorly in their concurrent enrollment classes, or who withdraw from or fail too many courses, and the impact that has on their ability to qualify for federal financial aid. In order to better understand this concern, the SLCC Financial Aid Office in collaboration with the Concurrent Enrollment Department worked with SLCC Data Science & Analytics to create the following research study.

As a follow-up to this research, the SLCC Concurrent Office worked with Data Science & Analytics to discover whether or not former concurrent enrollment students are better able to recover from an initial low GPA, and persist to the completion of a degree, than students who did not participate in concurrent enrollment. Two additional DSA research studies that follow attempt to begin answering those questions.



### DATA SCIENCE & ANALYTICS

## FINANCIAL AID WARNINGS FOR FORMER CONCURRENT STUDENTS

### FULL REPORT

## Summary: Financial aid warnings for former concurrent students

**Background and methods:** Students who do poorly in concurrent or early enrollment classes may begin their careers at SLCC at a disadvantage, because poor performance can make students ineligible for financial aid. Students who apply for financial aid receive a warning if, at the end of the term, they have passed < 70% of their attempted credits or their cumulative GPA is < 2.0. If the warning is not resolved by the end of the following term, the student becomes ineligible for financial aid. We explored the scope of this problem, the circumstances in which this problem tends to arise, and outcomes for students who start their careers at SLCC with such a warning.

## Key findings:

- Financial aid warnings worsen inequities: students of color, Pell-eligible students, and firstgeneration students are particularly vulnerable to either having these warnings or experiencing negative outcomes because of them. Men are more likely to have a warning, but women are more negatively affected if they have one.
- About 17% of students who participate in concurrent enrollment would start their careers at SLCC with a financial aid warning (if they choose to enroll).
- Students in this situation are slightly more likely to enroll at SLCC than students with no warning, and substantially less likely to enroll at a 4-year institution.
- Of former concurrent students who enroll at SLCC, about 21% start with a financial aid warning (about 560 students per year).
- Many of these students need to complete three or more classes to resolve the warning.
- About 65% of students who start at SLCC with a warning fail to resolve it within one term.
- Students who start at SLCC with a warning are slightly *more* likely to retain than students who start without a warning, all else being equal. Students who *end* their first term with a warning are *less* likely to retain than students who end their first term without a warning.
- In a given academic year, of first-time students who do not return, about 25% are former concurrent students, and about 5% are former concurrent students who started with a financial aid warning. If *all* former concurrent students who start with a warning were to return, the retention rate for first-term students would rise from 44% to 46%.

**Caveats and recommendations:** A substantial, though not overwhelming, number of students start at SLCC with a financial aid warning every year. Exploring ways to alleviate this problem would be worthwhile; not only do financial aid warnings represent both an obstacle to retention and completion, they are also an equity issue, because they disproportionately affect disadvantaged students.

## Full report: Financial aid warnings for former concurrent students

## BACKGROUND

Salt Lake Community College enrolls students who are still in high school in two ways. First, SLCC offers concurrent enrollment, through which high-school students take for-credit college-level courses, either at their own high schools or at one of the SLCC campuses. Historically, between 30% and 40% of concurrent students have gone on to enroll at SLCC as regular students; these students begin their career at SLCC with one or more college classes already on their transcript.

Second, high-school juniors and seniors may participate in early enrollment, in which they take regular college courses at SLCC that go beyond what is available in their high school. As with concurrent enrollment, the courses that these students take are already on their transcript if they enroll at SLCC as regular students.

Credits from concurrent and early enrollment can benefit students by giving them a head start on their degree requirements, allowing them to complete their degrees sooner. However, students who do poorly in their concurrent or early enrollment classes may actually start their college career at a disadvantage, because poor performance can make students ineligible for financial aid. Specifically, when a student applies for financial aid, if the student falls into *either* of the following categories at the beginning of a term, that student receives a financial aid warning:

- The student has passed < 70% of his or her attempted credits.
- The student's cumulative GPA is < 2.0.

If the student does not resolve the problem(s) by the end of the term, the student becomes ineligible to receive financial aid until the problems are resolved.

If former concurrent or early enrollment students are systematically losing access to financial aid at SLCC due to their pre-college performance, that is a problem. This report explores the following questions:

- What is the scope of the problem?
  - How many students finish concurrent or early enrollment with a financial aid warning?
  - How many of these students go on to enroll at SLCC?
  - Of students who start at SLCC with a financial aid warning, how serious is their situation? (I.e., what would it take for these students to resolve the warning?)
- Under what circumstances does the problem tend to arise?
  - Are certain demographic groups particularly at-risk for starting at SLCC with a financial aid warning?
  - Are certain courses more likely to produce students who start at SLCC with a financial aid warning?
- What happens to students who start at SLCC with a financial aid warning?
  - How quickly do these students resolve the problem? How do they accomplish this?
  - What does retention look like for these students?

An important point is in order here. Although a financial aid warning signals that there is a problem, we do not argue that concurrent enrollment itself is the problem. Certainly there will always be some

students who were not prepared for concurrent enrollment and should not have participated; some of the requirements for participating are intended to avoid this, and the concurrent enrollment office is currently working on additional processes with the same goal (see the end of this report for details). However, it is likely that there are other students who, if they had not participated in concurrent enrollment, would have simply gone on to earn a financial aid warning shortly after starting at SLCC. Moreover, for some of these students, earning a warning during concurrent enrollment may actually be better than earning one as a college student, because they have more structured support in their high schools and a better opportunity to start correcting the problem. To sum up, this report explores the differences between concurrent students who did or did not receive a warning, but it does not systematically attempt to compare any of these students to those who never participated in concurrent enrollment at all.

## **DATA PRESENTED IN THIS REPORT**

This report summarizes data for all students who have ever taken a concurrent enrollment class at SLCC between the 2013-2014 and 2018-2019 academic years. Some of those students later went on to participate in early enrollment; for each student, we determined the student's last term before enrolling at SLCC as a college student, whether that term was concurrent enrollment or early enrollment. Relatively few students (3.2% of those in either concurrent or early enrollment) participate in early enrollment; in other words, the vast majority of the "concurrent + early enrollment" group consists of concurrent students. Throughout this report, all references to "concurrent students" or "students' last concurrent term", etc. should be understood to include the small number of students who participated in early enrollment as well.

Although financial aid warning flags are recorded in Banner, we have re-computed them for this analysis using students' academic history. This procedure has two major benefits:

- It allows us to analyze the (potential) financial aid warning status of students who never enrolled at SLCC, or who never applied for financial aid, and therefore never received an official flag.
- It allows us to distinguish among the distinct causes of a financial aid warning: low GPA, low pass rate, or both.

For students who have applied for financial aid at SLCC, our re-created warning flags do not match the official flags in Banner perfectly, but they are close (94.1% match for students with flags, 96.5% match for students without).

Many students do not apply for financial aid at all, and therefore do not receive a warning flag even though their pass rate or GPA is low. Although these students are not in immediate danger of losing their financial aid (because they don't receive aid in the first place), their status is reason for concern because they will encounter barriers if they apply for financial aid in the future; it is also possible that some of these students choose not to apply for financial aid because they know they would receive a warning and for that reason don't think it's worth applying. Either way, to understand the full scope of the problem, we should consider students who meet the criteria for a warning and not just those who have an official warning. Throughout this report, we sometimes distinguish between students who have an official financial aid warning and those who are "eligible" for a warning; the

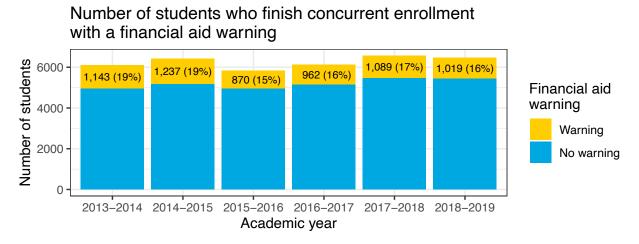
latter refers to students who have not applied for financial aid but would receive a warning if they did. Where we do not make this distinction, "financial aid warning" refers to all students with a low pass rate or GPA, whether they have an official warning in Banner or not.

Unless stated otherwise, all differences and patterns discussed in the text of this report are statistically significant. We explored whether financial aid warnings have different effects on different demographic groups and report only significant differences; therefore, if we discuss (for example) the effect of gender but not ethnicity for a particular outcome, that is because there were significant differences for gender but not for ethnicity.

## SCOPE OF THE PROBLEM

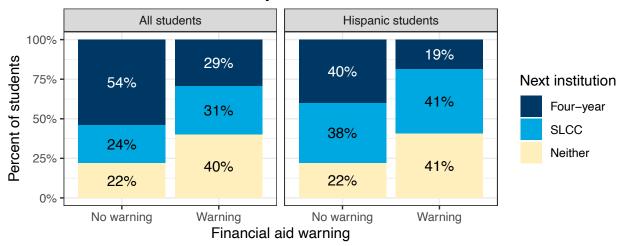
## Students who end concurrent enrollment with a financial aid warning

Figure 1 shows the number of students who end their concurrent enrollment with a GPA below 2.0 or a pass rate under 70%, and would therefore start their first term at SLCC with a financial aid warning (if they enroll). About 17% of concurrent students are in this situation.



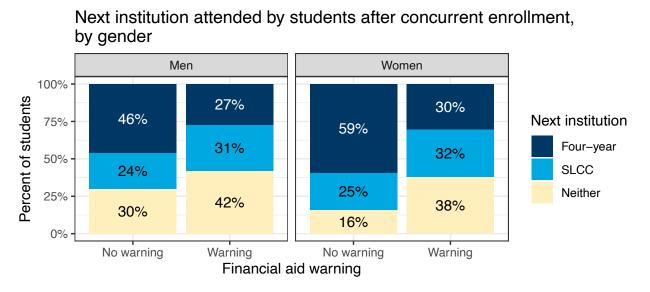
**Figure 1: Number of concurrent students by academic year and financial aid warning status.** The x-axis shows academic year; the y-axis shows the number of students who concluded concurrent enrollment during that academic year. As they are finishing high school, none of these students can have a warning on their official record; that does not occur until they enroll at SLCC and apply for financial aid. Students marked with a warning status in this graph (yellow) are those who end their concurrent enrollment with a GPA below 2.0 or a pass rate under 70%, and therefore will have a financial aid warning if they later apply.

As shown in figure 2, students who end their concurrent enrollment with a financial aid warning are more likely to later enroll at SLCC (31%) than students who do not end with a warning (24%; these are students who eventually enrolled at SLCC, not necessarily immediately after high school). This pattern appears to be due to the fact that students without a financial aid warning are far more likely to enroll in a four-year institution *instead of* SLCC. We cannot determine from this dataset whether the cause is financial (students concerned about their financial aid eligibility avoid more expensive four-year institutions), academic (warnings reveal underlying academic struggles that independently encourage students to avoid four-year institutions, particularly more selective ones), both, or something else entirely.



## Next institution attended by students after concurrent enrollment

**Figure 2:** Next institution attended by students after concurrent enrollment, by financial aid warning status. The x-axis distinguishes between students who did vs. did not end their concurrent enrollment with a financial aid warning. Students do not have a warning on their official record until they enroll at SLCC and apply for financial aid. Students marked with a warning status in this graph are those who end their concurrent enrollment with a GPA below 2.0 or a pass rate under 70%, and therefore will have a financial aid warning if they later apply. The y-axis shows the number of students in each group; color shows the number and percentage of students in each group who attended SLCC, a four-year institution, or neither of these after concluding concurrent enrollment. The left panel shows all students; the right panel shows just Hispanic students (the only ethnic group with a significantly different pattern).



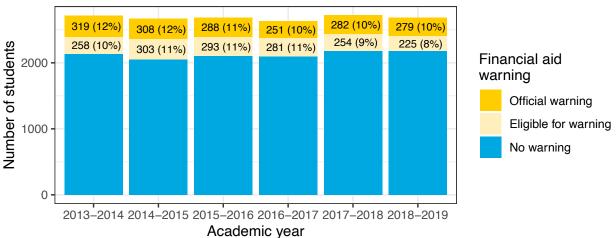
**Figure 3:** Next institution attended by students after concurrent enrollment, by financial aid warning status and gender. The x-axis distinguishes between students who did vs. did not end their concurrent enrollment with a financial aid warning. Students do not have a warning on their official record until they enroll at SLCC and apply for financial aid. Students marked with a warning status in this graph are those who end their concurrent enrollment with a GPA below 2.0 or a pass rate under 70%, and therefore will have a financial aid warning if they later apply. The y-axis shows the number of students in each group; color shows the number and percentage of students in each group who attended SLCC, a four-year institution, or neither of these after concluding concurrent enrollment.

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Figure 2 also illustrates that financial aid warnings are related to future enrollment decisions differently for different groups of students. Specifically, Hispanic students are slightly more affected by financial aid warnings than other students; a financial aid warning is associated with a bigger drop in the likelihood of attending a four-year institution for Hispanic students than for other students. (Although the difference in percentage points is smaller for Hispanic students, the actual effect is larger because Hispanic students are less likely to attend a four-year institution in the first place.) Similarly, women (figure 3) are more affected by financial aid warnings than men; a financial aid warning is associated with a much larger decrease in women's likelihood of attending a four-year institution than men's. Another way to see this difference is to note that without a warning, women are far more likely than men to attend a four-year institution; with a warning, the two groups are much more similar.

## Students who enroll at SLCC with a financial aid warning

Now we turn our attention from all concurrent students to just those students who later enrolled at SLCC. Figure 4 shows the number of former concurrent students who start their first term at SLCC with a financial aid warning. About 21% of former concurrent students are in this situation, about 560 total students per year. Roughly half of these students have an official financial aid warning; the other half do not apply for financial aid in their first term but would have received a warning if they did. Subsequent graphs do not distinguish between the two groups; unless stated otherwise, patterns are similar for students with and without an official warning.



Number of former concurrent students who start at SLCC with a financial aid warning

**Figure 4: Number of former concurrent students by academic year and financial aid warning status.** The x-axis shows academic year; the y-axis shows the number of former concurrent students who started at SLCC during that academic year. Students who started with an offical financial aid warning are shown in dark yellow; students who would have started with a warning if they had applied for financial aid are shown in light yellow.

The percent of former concurrent students who begin their first term with a financial aid warning is very similar to the percent of all students, former concurrent or not, who begin any term at SLCC with a financial aid warning (about 20%). This figure is also substantially lower than the percent

of students who did *not* participate in concurrent enrollment and who end their first term with a warning (about 27%). There is modest evidence that the percent of former concurrent students who start with a financial aid warning has decreased slightly over the last few years.

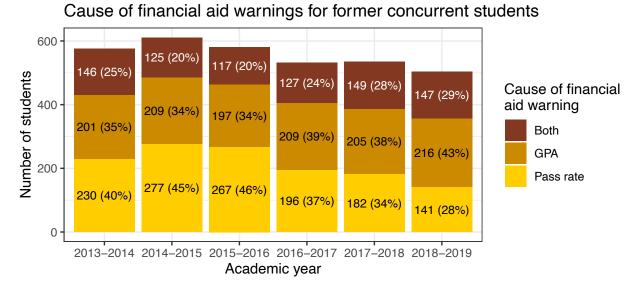
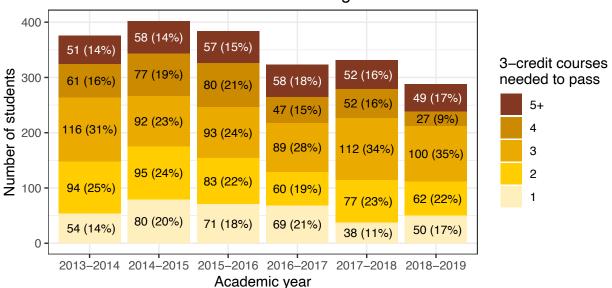


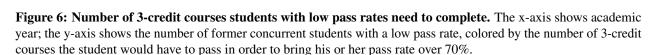
Figure 5: Number of former concurrent students who started at SLCC with a financial aid warning, by academic year and cause of financial aid warning. The x-axis shows academic year; the y-axis shows the number of former concurrent students who started at SLCC during that academic year with a financial aid warning (either an official warning, if they applied for financial aid, or met the criteria for a warning). Color distinguishes among reasons for the financial aid warning.

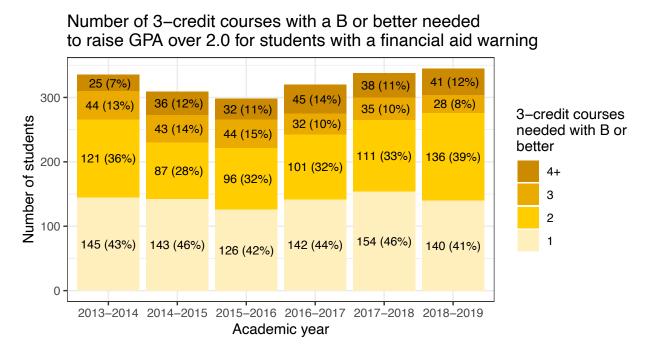
For students who started at SLCC with a financial aid warning, figure 5 breaks down those warnings by their cause. Students who already have a financial aid warning when they start at SLCC are roughly evenly divided between those whose warning is due to low GPA and those whose warning is due to a low pass rate, with a smaller group experiencing both problems.

When a student has a financial aid warning, it is naturally important for the student to improve his or her performance so as to remain eligible for financial aid. After one term with a warning, the student becomes ineligible for financial aid; therefore, the best outcome is for the student to resolve the warning before the end of the term. Depending on how poor the student's performance has been, some students have a bigger hill to climb than others in order to resolve the warning. Figure 6 shows former concurrent students with a low pass rate; colors indicate how many 3-credit courses the student would need to pass (without failing any other courses) in order to raise his or her pass rate back to the required 70%. Most students in this situation have a sizeable task ahead of them: fully 60% of students with low pass rates must pass three or more 3-credit courses in order to resolve the warning.

For students with low GPA, the situation tends to be somewhat less serious. Figure 7 shows former concurrent students with a low GPA; colors indicate how many 3-credit courses the student would need to complete with a B or better in order to raise his or her GPA back to the required 2.0. Almost half of these students (44%) need only one such course to resolve the warning, and 77% need only one or two.







**Figure 7: Number of 3-credit courses students with low GPAs need to complete with a B or better.** The x-axis shows academic year; the y-axis shows the number of former concurrent students with a low GPA, colored by the number of 3-credit courses the student would have to complete with a B or better in order to bring his or her GPA over 2.0.

Number of 3–credit courses needed to raise the pass rate over 70% for students with a financial aid warning

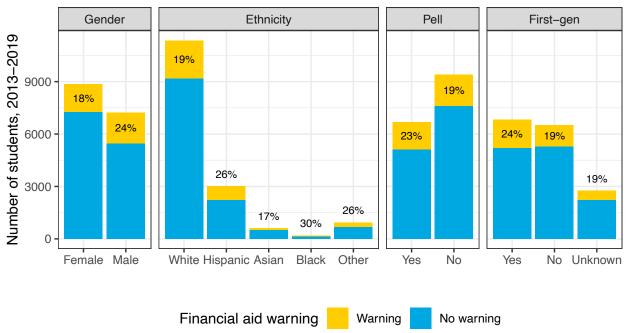
### LOCUS OF THE PROBLEM

### Demographics of former concurrent students at SLCC

Figure 8 breaks down financial aid warning status for former concurrent students starting at SLCC by demographic variables. Several groups of students are more likely to have financial aid warnings:

- Men are more likely to start with a warning than women.
- Asian students are slightly less likely to start with a warning than White students. All other ethnic groups are more likely to start with a warning than White students.
- Pell-eligible students are more likely to start with a warning than students who are not Pelleligible.
- First-generation students are more likely to start with a warning than students who are not first-generation.

As usual, within each group, about half of affected students have an official financial aid warning, while the other half would have one if they applied for financial aid. The exception is Pell eligibility; Pell-eligible students are far more likely to have an offical warning (as opposed to simply being eligible for a warning) than students who are not Pell-eligible. At least part of this difference arises from the fact that we don't know a student is Pell-eligible unless the student has applied for financial aid at some point, and that application also results in an official financial aid warning if the student meets the relevant criteria.

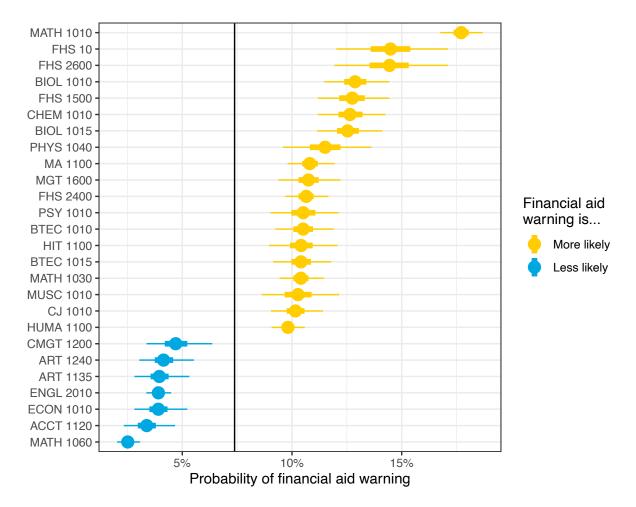


### Financial aid warning status by demographic group

Figure 8: Number of students who start at SLCC with a financial aid warning, by demographic group. Each bar shows the number of former concurrent students who started at SLCC with and without a financial aid warning (either an official warning, if they applied for financial aid, or met the criteria for a warning), grouped by gender, ethnicity, Pell eligibility, and first-generation status.

#### Courses taken by concurrent students

It is also worth exploring whether certain concurrent courses are more likely to lead to a financial aid warning (presumably because students are more likely to do poorly in them). Figure 9 (next page) shows courses whose students were significantly more or less likely to end concurrent enrollment with a financial aid warning. There is no one obvious pattern that describes which courses are more or less associated with financial aid warnings, although it does appear that first-level STEM courses (e.g., BIOL 1010 and MATH 1010) are often correlated with students being slightly more likely to receive a warning. Conversely, students who take advanced courses such as MATH 1060 are less likely to receive a warning, possibly because students who choose to take these courses are already academically strong. In addition, some of these advanced courses have prerequisite requirements, successful completion of which would lead to a higher pass rate.

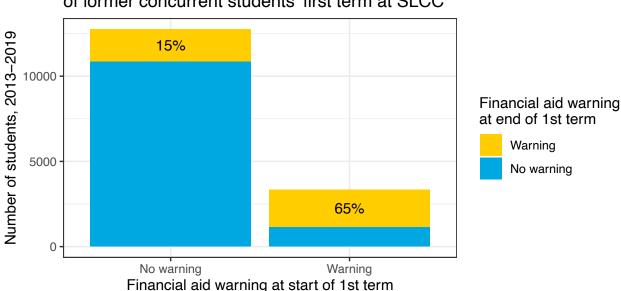


**Figure 9: Probability of students ending concurrent enrollment with a financial aid warning, by course.** Each row shows the probability that students who have taken a given concurrent course will end their concurrent enrollment with a financial aid warning (either an official warning, if they applied for financial aid, or met the criteria for a warning). Dots show the median estimate for each course; thick and thin lines show the 50% and 95% confidence intervals, respectively. The vertical line shows the overall probability of a financial aid warning across all courses. Courses that are not significantly different from the overall average and courses with fewer than 100 students are excluded.

### ACADEMIC CAREER OF STUDENTS WITH FINANCIAL AID WARNINGS

#### **Resolution of warnings and retention**

As shown in figure 10, 65% of former concurrent students who start their first term at SLCC with a financial aid warning fail to resolve that warning by the end of the term. By contrast, only 15% of former concurrent students who started *without* a warning had acquired one by the end of their first term.



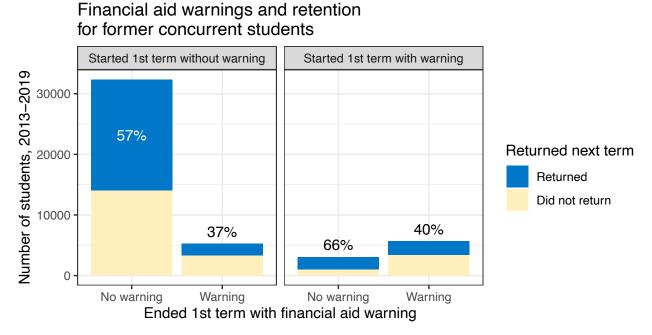
Financial aid warning status at the start and end of former concurrent students' first term at SLCC

**Figure 10: Financial aid warning status at the start and end of the student's first term at SLCC.** The x-axis distinguishes between students who began their first term at SLCC with vs. without a financial aid warning (either an official warning, if they applied for financial aid, or met the criteria for a warning). The y-axis shows the number of students in each group; colors show students who *ended* their first term at SLCC with vs. without a financial aid warning (official or not).

Figure 11 further breaks these totals down by retention. Unsurprisingly, students who ended their first term with a financial aid warning were far less likely to return than those who ended their first term without a financial aid warning. However, all else being equal, students who *started* their first term with a financial aid warning were slightly *more* likely to return than those who started *without* a financial aid warning. One possible explanation for this pattern could be that students who are willing to enroll despite their warning status do so because they are committed to improving their performance, a dedication that might also make them more likely to return the following term. Despite this somewhat hopeful observation, fewer students who start their first term with a financial aid warning also end that term with a warning.

The demographic groups that are disproportionately affected by financial aid warnings in their first term (figure 8) are the same groups that are least likely to resolve a financial aid warning by the end of that first term: men, students who are neither White nor Asian, Pell-eligible students, and first-generation students.

In a given academic year, out of about 13,200 first-time students, about 5,800 students do not return for a second term. Of these students who do not return, about 1,400 (25%) are former concurrent students, and about 270 (5%) are former concurrent students who started with a financial aid warning. If *all* former concurrent students who start with a warning were to return, the retention rate for first-term students would rise from 44% to 46%.



**Figure 11: Financial aid warning status and retention.** The x-axis distinguishes between students who began their first term at SLCC with vs. without a financial aid warning (either an official warning, if they applied for financial aid, or met the criteria for a warning). The left panel shows students who *ended* their first term at SLCC without a financial aid warning; the right panel shows students who ended their first term *with* a warning (official or not). Colors show whether or not students returned to SLCC the following term.

In addition to these short-term outcomes, it would be interesting to know whether financial aid warnings are related to outcomes such as graduation. Unfortunately, such an analysis is beyond the scope of this report because the long time gap between a student's first term and graduation makes the question exceedingly complex. A financial aid warning when starting SLCC is likely to have multiple cascading downstream effects on a student's career at SLCC; in short, we simply can't draw a straight line between warnings and completion. Moreover, it can be difficult to determine whether a financial aid warning *causes* students to have particular outcomes, or whether it *reveals* underlying problems that would have led to those outcomes anyway (something that could be said for all of the trends reported here).

### How financial aid warnings are resolved

It is worth exploring whether taking certain courses makes former concurrent students who start at SLCC with a financial aid warning more likely to resolve that warning by the end of their first term. Figure 12 (next page) shows courses whose students were significantly more or less likely to still have a financial aid warning at the end of that first term. However, we cannot conclude that (for

example) taking ENGL 2010 *causes* students to resolve their financial aid warning; it is equally possible that strong students, who are likely to resolve their warnings, are for the same reason more likely to take these classes.

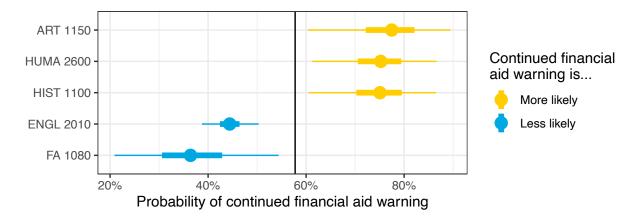


Figure 12: Probability of former concurrent students ending concurrent enrollment with a financial aid warning, by course. Each row shows the probability that former concurrent students who started their first term at SLCC with a financial aid warning will still have a warning at the end of that first term (either an official warning, if they applied for financial aid, or meeting the criteria for a warning). Dots show the median estimate for each course; thick and thin lines show the 50% and 95% confidence intervals, respectively. The vertical line shows the overall probability of a continued financial aid warning across all courses. Courses that are not significantly different from the overall average and courses with fewer than 20 students are excluded.

#### **CONCLUSIONS AND RECOMMENDATIONS**

Every year, a substantial number of new students begin their careers at SLCC with a financial aid warning: about 290 have an official warning, and an additional 270 would receive one if they applied for financial aid.

Students of color, low-income students, and first-generation students are particularly vulnerable to this problem: they are more likely to have a warning, and they are more negatively affected if they do. Men are more likely to have a warning, but women are more affected by having one.

Students who meet the criteria for a financial aid warning at the end of their concurrent enrollment – that is, students who would immediately receive a warning if they were to attend SLCC and apply for financial aid – are slightly more likely to enroll at SLCC than students with no warning, and substantially less likely to enroll at a 4-year institution.

Many students in this situation need to complete three or more classes to resolve the warning; about 65% of students fail to do this within one term. Students who start at SLCC with a warning are slightly *more* likely to retain than students who start without a warning, all else being equal. Students who *end* their first term with a warning are *less* likely to retain than students who end their first term without a warning. In a given academic year, of first-time students who do not return, about 25% are former concurrent students, and about 5% are former concurrent students who start with a warning were to return, the retention rate for first-term students would rise from 44% to 46%.

Exploring ways to alleviate the problem of financial aid warnings earned during concurrent enrollment would be worthwhile, whether within conurrent enrollment programs (to avoid students receiving a warning in the first place) or at the college level (to help students who have already received a warning). The concurrent enrollment office already has systems in place with this goal and is actively exploring ways to improve them:

- The admissions office makes presentations in high schools to help students understand what they need in order to be successful in concurrent enrollment classes.
- Most high schools have fairly high standards for allowing students to take concurrent classes (e.g., a 3.0 GPA). However, sometimes these requirements are overridden, often by parents on behalf of unprepared students.
- Concurrent instructors are becoming more intentional about teaching college skills in addition to course content; the concurrent enrollment office makes a variety of resources available to instructors to assist them with this.
- The concurrent enrollment office is in the process of getting a hold approved that would prevent students with a GPA below 2.0 from registering, unless they have a discussion with a counselor or concurrent enrollment coordinator.
- There is a report available to high schools that shows students' SLCC GPA at the end of the term; high schools that run this report have the opportunity to meet with students who have struggled and help them learn from their experience.

We recommend that the concurrent enrollment office be supported in its efforts to avoid financial aid warnings and to help students when they arise. Not only do these warnings represent both an obstacle to retention and completion, they are also an equity issue, because they disproportionately affect underrepresented students.

### ACKNOWLEDGEMENTS

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Brandon Kowallis - Concurrent Enrollment



# AFTER ACADEMIC WARNING DATA SCIENCE & ANALYTICS REPORT

# Preface

The SLCC Concurrent Enrollment Department has centered its purpose and built its structure around helping students learn the skills they need to transition to college and complete a meaningful degree or certificate. To accomplish this the CE Department has encouraged instructors not just to teach the college content for the course they are approved to teach, but also integrate into their classes key, research-defined skill sets to help students prepare to navigate the challenges of higher education that they will face after matriculation to college post-high school graduation. This culture of teaching more than just college course content has spilled over into the general high school culture supporting concurrent enrollment.

A significant percentage of students who matriculate to SLCC after high school graduation, end up on academic probation because of their performance in one or more concurrent enrollment courses. The SLCC Concurrent Enrollment Office was curious to know if the learning outcomes a student gleans from poor performance in a small number of concurrent enrollment classes help them to more easily bounce back from those experiences and subsequently outweigh the risks associated with that poor performance. In other words, is it more beneficial to allow students to try and fail and then coach them through that experience, or is it better to dissuade students from participating until they and the adults around them are certain they can be successful?

While we may never fully know the answer to these questions, this research study is an attempt to begin understanding the long-term impact of poor performance on concurrent enrollment students and identify ways to help us best help students navigate and recover from poor performing experiences.



DATA SCIENCE & ANALYTICS

STUDENT PERSISTENCE AFTER ACADEMIC WARNING

EFFECT OF CONCURRENT ENROLLMENT

# Summary

**Background and Methods:** SLCC students with sufficiently low academic performance are put on Academic Warning; if the warning is not resolved, these students become ineligible for financial aid. Former concurrent students start their SLCC careers with college credit already on their transcript; therefore, students who struggled while they were concurrent can start at SLCC already on Academic Warning. This report explores whether such students are better able to "bounce back" than students who find themselves on Academic Warning later in their SLCC careers.

**Key Findings:** We found that students on Academic Warning during their first semester at SLCC (who had therefore struggled while concurrent) were more likely to resolve the warning by the end of the term than students on Academic Warning in later semesters. This association was specific to students who struggled during their concurrent experience; it was *not* due to generally better outcomes for former concurrent students. We did not find a direct association between struggling while concurrent and retention or transfer; however, we did find an indirect association, because students who resolved the warning were more likely to return to SLCC and, if they did not return, more likely to transfer to another institution.

**Caveats and Recommendations:** One plausible interpretation of these findings is that the support struggling students receive during their concurrent experience helps them bounce back once they arrive at SLCC. However, we emphasize that we cannot be certain of the causal mechanism behind the patterns we observe, and other explanations are possible.

# Introduction

In order to remain eligible for financial aid, SLCC students must meet two conditions:

- They must have a cumulative GPA of at least 2.0.
- They must have passed at least 70% of their cumulative attempted credit hours.

If a student fails to meet these two criteria at the end of a term, the student is placed on Academic Warning for his or her next enrolled term. If the student still does not meet these criteria at the end of that term, the student becomes ineligible for financial aid.

SLCC students who took concurrent enrollment classes in high school already have a college transcript when they start at SLCC as regular (non-concurrent) students. For this reason, some former concurrent students are on Academic Warning in their first non-concurrent semester at SLCC, if they had poor outcomes in concurrent classes. However, it's possible that the extra support available to concurrent students may help them "bounce back" from these difficulties more easily than students who struggle in a non-concurrent setting. This report explores whether former concurrent students on Academic Warning in their first semester at SLCC have better outcomes than students who are placed on Academic Warning later in their SLCC career.

### Dataset

Our dataset consisted of all SLCC students who had at least one term on Academic Warning between Fall 2010 and Spring 2021.

The students of interest were former concurrent students who were on Academic Warning during their first non-concurrent term at SLCC. We compared these students to students who either (1) were never concurrent, or (2) had been concurrent, but their first term on Academic Warning was after their first non-concurrent term at SLCC. In order to make the comparison groups as similar as possible, we added the following additional restrictions on the dataset:

- The student was no more than 35 years old during his or her first term on Academic Warning.
- The student's first non-concurrent term at SLCC was Fall 2018 or earlier.
- The student had earned at most 40 credits before his or her first term on Academic Warning.

The final dataset consisted of 15,965 students who had spent at least one term on Academic Warning, of whom 3,314 were former concurrent students in their first non-concurrent term at SLCC.

# Analysis

### OUTCOMES

We explored three student-level outcomes:

- Did the student resolve the Academic Warning by the end of the term?
- Did the student return to SLCC in the next term?
- If the student did *not* return to SLCC in the next term, did the student transfer to another institution instead?

For the first outcome, we were not able to use official Banner records to determine whether the student resolved the Academic Warning by the end of the term, because those records do not exist for all the terms we are interested in. For example, if a student did not return to SLCC, that student is likely not to have a record of Academic Warning status for the next term. Instead, we used Banner data on students' academic history to determine whether the student achieved a GPA of  $\geq 2.0$  and a pass rate of  $\geq 70\%$  by the end of the term. We know from a previous project that these calculations do not match the official Academic Warning records with 100% accuracy, but that they are quite close.

For the second outcome, we counted a student as having returned if the student enrolled at SLCC in the immediately following term, *or* if the student enrolled in the fall term after a spring term (skipping summer). For the third outcome, we used data from the National Student Clearinghouse to determine whether the student enrolled at some other higher ed institution in one of those same two terms.

### PREDICTORS

We used several student-level variables to predict these three outcomes for each student on Academic Warning. The first, and most important, was whether this was the student's first non-concurrent term at SLCC – in other words, whether the academic struggles that led to the Academic Warning occurred while the student was concurrent. This predictor allows us to evaluate whether students "bounce back" more easily from difficulties during concurrent enrollment than they do from difficulties as regular SLCC students.

The second predictor was whether the student had *ever* participated in concurrent enrollment. Of course, for students in the target group, the answer is always "yes". But students who had an Academic Warning later in their SLCC careers vary: some are former concurrent, and some are not. If we find that there is indeed a benefit of a first-term Academic Warning (as opposed to a later warning), then this predictor will allow us to explore the possible causes of that benefit:

- 1. One explanation could be that students benefit from struggling *while they are concurrent*, because they have more support at that time.
- 2. An alternative explanation could be that former concurrent students are more resilient after an Academic Warning *regardless of whether they struggled in high school or at SLCC* – either because concurrent enrollment gave them long-term skills for dealing with adversity, or because the kind of student who chooses to participate in concurrent enrollment tends to be more resilient.
- 3. A third possible explanation could be that some students struggle with particular styles of instruction. If this is true of (at least some) concurrent students, we might see those students improve at SLCC, not due to student-level resilience, but simply because they are now in an environment that better suits their needs. Under this explanation, we would not see such an improvement for students on Academic Warning later in their career at SLCC, because they are in the same general setting both during the term(s) when they struggled and in subsequent terms.

If either of the two latter explanations is correct (or partially correct), then we should see an effect

of the "ever concurrent" predictor.

In addition to the two predictors of interest, our model included several other variables in order to account for differences among students:

- Gender
- Race and ethnicity
- Pell eligibility
- First-generation status
- The season of the student's first non-concurrent term at SLCC (fall, spring, summer)
- The season of the student's first term on Academic Warning (fall, spring, summer)
- Degree sought (two-year, one-year, or none)
- Prior GPA
- Prior credits
- Number of credits needed to pass to resolve the Academic Warning
- Number of 3-credit courses with a B or better needed to resolve the Academic Warning
- Whether the student resolved the warning by the end of the term (retention and transfer models only)

For gender, race, ethnicity, Pell eligibility, and first-generation status, in addition to main effects (e.g., the relationship between gender and retention), we included interactions with the first predictor of interest (e.g., does the experience of struggling while concurrent affect men and women differently?).

### MODELS

For each outcome, we fitted a logistic regression model that predicted the binary outcome (yes/no) from the predictors listed above.

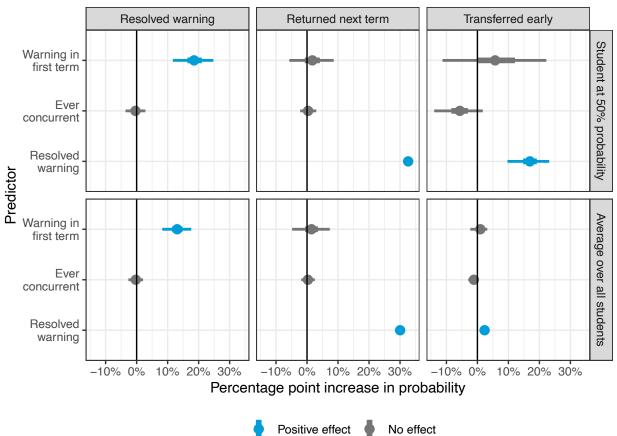
# Results

We found evidence that students who are on Academic Warning during their first term (and who therefore struggled while they were still concurrent) have modestly higher chances of resolving that warning than students who are on Academic Warning later in their career. We found no evidence for a relationship between resolving the Academic Warning and whether the student had ever been concurrent; that is, the relationship we see for first-term students is truly associated with students having struggled *while still concurrent*, not with having a concurrent experience in general. In other words, the fact that students who struggled while they were concurrent have better outcomes than students who struggled later *can't* be explained by overall better outcomes for former concurrent students.

We found no evidence for a relationship between either of those predictors and retention or transfer. However, recall that our models for retention and transfer also included a predictor for whether the student resolved the warning by the end of the term. Unsurprisingly, students who resolve the warning are far more likely to return and to transfer than students who do not; therefore, struggling while concurrent has a stronger relationship with retention and transfer *through* resolving the warning. In other words, students who struggle while concurrent are more likely to return or transfer

*because they are more likely to resolve the warning*; struggling while concurrent has no additional *direct* effect on retention and transfer.

Figure 1 quantifies the effect of the two predictors of interest on student outcomes, plus the effect of resolving the warning for the retention and transfer models. The quantitative effect is not straightforward to describe, because logistic regression models do not posit a linear relationship between predictors and outcome percentage probabilities. Specifically, a student who is already at 50% probability of, for example, returning will get a much larger percentage point "boost" from a given predictor than a student who is already at 99%; intuitively, the student at 99% has nowhere to go.



Effect of concurrent experience on student outcomes

**Figure 1: Effect of concurrent experience on student outcomes.** For each predictor of interest, the top graph shows the percentage point increase associated with that predictor for a student who would otherwise have a 50% chance of the outcome; the bottom graph shows the average percentage point increase associated with that predictor over all students who were on Academic Warning in their first non-concurrent term at SLCC.

For each predictor and outcome, the top three graphs in figure 1 show the percentage point increase for a student who would otherwise have a 50% chance of a positive outcome. The bottom three graphs show the average percentage point increase across all students who were on Academic Warning during their first term; these increases are smaller, because students who already have a very large (or small) probability are affected less by the predictor. (In particular, note that most students have a very low predicted probability of transferring, and therefore the average effect of resolving the warning on transfer is much smaller than the effect for a student at 50%.) Overall, students who are on Academic Warning in their first term have a chance of resolving that warning that is about 10 percentage points greater than students who are on Academic Warning later in their career. This predictor has no direct association with retention or transfer, but resolving the warning has a powerful association: students who resolve the warning are about 30 percentage points more likely to return.

# Conclusions and recommendations

Students who struggle during concurrent enrollment and find themselves on Academic Warning during their first non-concurrent term at SLCC are more likely to resolve that warning than students who are on Academic Warning later in their career. This association is specific to students who struggled *while concurrent*; it is not a general effect of better outcomes overall for former concurrent students.

We emphasize that we cannot be certain of the causal mechanism behind this association. It's possible that concurrent students have a better support system than regular SLCC students, and that this experience makes them better prepared to "bounce back" from academic difficulties. Alternatively, it's possible that some students benefit from a change in instructional style, and that this change between concurrent and non-concurrent experiences helps them do better at SLCC.

Stuggling while concurrent is not directly associated with a student's probability of returning to SLCC or of transferring to another institution. However, struggling while concurrent is *indirectly* associated with these outcomes, through resolving the Academic Warning: students who resolve the warning by the end of the term are more likely to return to SLCC and, if they do not return, more likely to enroll elsewhere.



Preface

The SLCC Concurrent Enrollment Department has centered its purpose and built its structure around helping students learn the skills they need to transition to college and complete a meaningful degree or certificate. To accomplish this the CE Department has encouraged instructors not just to teach the college content for the course they are approved to teach, but also integrate into their classes key, research-defined skill sets to help students prepare to navigate the challenges of higher education that they will face after matriculation to college post-high school graduation. This culture of teaching more than just college course content has spilled over into the general high school culture supporting concurrent enrollment.

In 2017 Data Science and Analytics worked on a research project for the Concurrent Enrollment Department to see whether students who participate in concurrent enrollment are more likely to persist and complete than students who did not participate in concurrent enrollment. The study found that former CE students at the time were about 10% more likely to complete a degree within 6 years and 13% more like to persist from Fall to Fall semester than non-former CE students.

At the time we ran this research project the Concurrent Enrollment Department was in the initial stages of implementing changes to strengthen what was occurring in the concurrent enrollment classroom, with regards to teaching not just college content, but also intentionally teaching students the soft skills required to navigate the challenges of higher education. We hypothesized that if we could strengthen that portion of the concurrent enrollment experience we could potentially increase persistence and completion rates for students who participated in the CE experience.

This research project replicates what was done in the initial research study in order to see if the changes we have made in the concurrent enrollment classroom have made an impact on student persistence and completion rates.

Based on this new research study it appears that concurrent enrollment does not, as we originally anticipated, have an impact on persistance, but it does have an impact on completion as well as on college GPA. This could be due to the fact that CE students are often the

top academic performers and have a head start on completion due to the fact that they have several college credits under their belt prior to matriculating to SLCC. Another thing to keep in mind is that the study was run during a COVID year which could have had an impact on persistence and completion rates. It may be worth running this same resarch five years from now in 2026 to see if we get different results with a new cohort of students that has not been impacted by COVID. The fact that concurrent enrollment students complete at higher rates than non-concurrent enrollment students, even during COVID, however is promising and something worth exploring further to understand how to increase those rates.



### Background and Introduction

In 2018, the Data Science and Analytics team conducted an analysis on Salt Lake Community College's concurrent enrollment program answering the three following research questions:

- 1. Is there a difference in grade distribution between concurrent enrollment students and nonconcurrent enrollment students at Salt Lake Community College?
- 2. Are former concurrent enrollment students more likely to retain Fall to Fall at Salt Lake Community College than non-former concurrent enrollment students?
- 3. Are former concurrent enrollment students more likely to complete and get an associate's degree at the Salt Lake Community College within a six-year period than non-former concurrent enrollment students?

The following report is an updated analysis and investigates the same three questions but for more recent years. Although this is updated report, an important caveat is that there were changes in the analysis techniques and predictor variables for modeling when deemed appropriate.

# Key Findings

- Concurrent enrollment status had a positive impact on receiving passing letter grades.
- Being a former concurrent enrollment student had no impact on Fall to Fall retention in the years examined.
- Former concurrent enrollment students were more likely to receive an associate's degree at Salt Lake Community College in a six-year time period than non-concurrent enrollment students.

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### Question 1: Is there a Difference in Grade Distribution Between Concurrent Enrollment Students and Non-Concurrent Enrollment Students?

The most popular concurrent enrollment courses from Fall 2016 - Spring 2017 were selected for the 2018 analysis. These courses were ENGL 1010, FHS 2400, MATH 1010, MATH 1050, and HUMA 1100. For this updated report we again looked at the top five enrolled concurrent enrollment courses but for the Fall 2018 - Spring 2019 and Fall 2019 - Spring 2020. These courses were ENGL 1010, MATH 1030, ENGL 2010, FIN 1050, and MATH 1050.

### THE DATA

Coarsened exact matching was conducted on this data set to mitigate bias and model dependence. Concurrent enrollment students are a unique student population, and in order to evaluate whether concurrent enrollment has an impact on grades it is required that concurrent enrollment students are compared to a similar student population. For example, if we compare a high performing 17 year old concurrent enrollment student to a high performing 40 year old undergraduate student with a full time job and children, there are considerable differences between these two students. The 17 year old student's high performance could be explained by their lack of obligations. On the other hand, a 40 year old student's high performance could be caused by their familiarity with academic institutions. Hence, to properly analyze the effect that concurrent enrollment has on grades, the only distinction between the two student populations should be that one is concurrent and the other is not. Matching is the technique used to maximize the similarity between two study groups. In other words, matching is used to simulate a control group. For the purposes of this question, students were matched with other students with respect to gender, ethnicity, high school GPA, school year enrolled (Fall 2018 - Spring 2019 or Fall 2019 - Spring 2020), and course.

Furthermore, this data set was trimmed (i.e. reduced) so that the oldest students included in this portion of the analysis were 23 years old. Being young (approximately 18 years old and younger) is an inherent property of being a concurrent enrollment student, while being older (approximately 18 years and older) is an inherent property of being a matriculated, non-concurrent college student. Ideally we would have 13-18 year old matriculated, non concurrent students to match the concurrent students to, but the sample size of these kinds of students at SLCC is too small to do a proper analysis. To overcome this problem we put an age cap on the non-concurrent students to be used in this analysis. With an age cap we are essentially comparing young students (i.e. matriculated, non-concurrent students) to younger students (i.e. high school, concurrent students). Tying this back to the point of this research question, if we are trying to see how concurrent status alone affects grades, then we need the two groups we are comparing to be as similar as possible. Age 23 was specifically chosen as the age cap because it was the youngest age we could trim to before we believed we were losing too many students for a proper analysis.

### THE MODEL

The data is nested with students within different courses, and the letter grades (the outcome of interest) are ordinal. The outcome is ordinal because there is an order to grades: A (best) to E

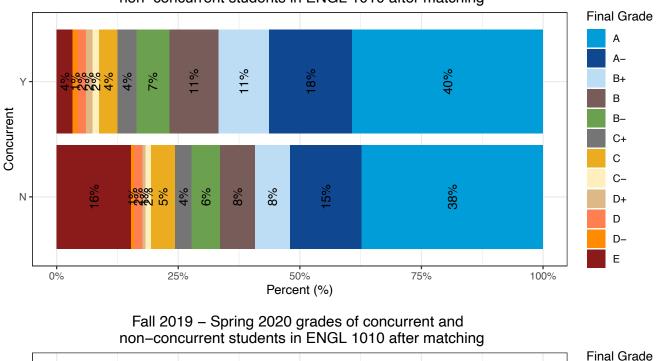
(worst). To account for the ordinal outcome and nested structure, a multilevel ordinal logistic regression model was built to evaluate whether there was a difference in grade distribution between the concurrent and non-concurrent enrollment students.

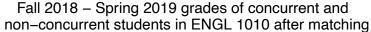
### THE RESULTS

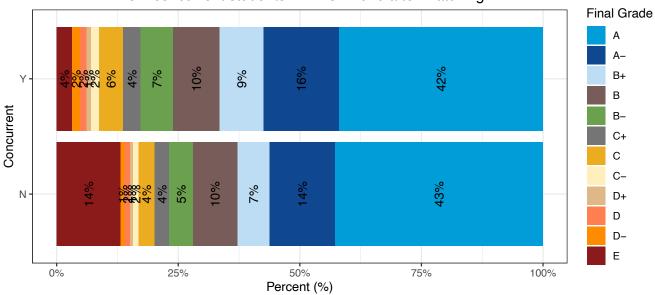
The multilevel ordinal logistic regression model showed that concurrent enrollment status had a positive effect on receiving passing letter grades in all five of the course subjects analyzed. The model's findings were supported by the matched data, and figures 1 through 5 show the concurrent and non-concurrent grade distribution of the matched data associated with each of the five courses. The letter grades vary for each of the courses and school years. However, for all five of the courses, the percent of concurrent enrollment students getting the letter grade E is always lower, and the passing grades are always higher than the non-concurrent students in both time periods examined (Fall 2018 - Spring 2019 and Fall 2019 - Spring 2020).

It is important to understand that these percentages shown in the figures below reflect the results of the matched data; the percentages shown in the figures do not reflect the magnitude of effect that *concurrent enrollment status* has on getting a specific letter grade in the five courses. However, we still include these graphs because they support the model's findings, and give insight into what the grade distributions look like with a control group.

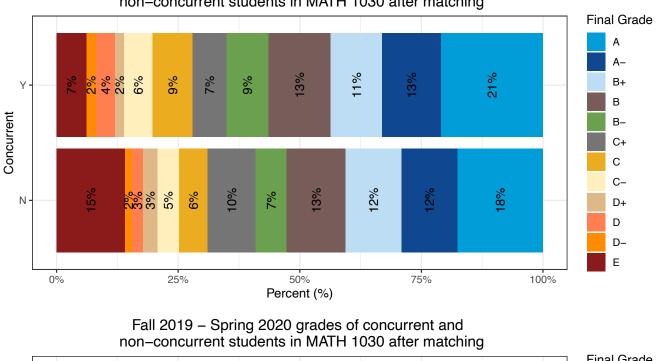
Although the results of logistic regression models can simply tell us whether there is no effect, or if an effect is positive or negative, the magnitude of effect is not so straightforward. This is because a logistic regression is non-linear. Non-linearity causes the probabilities that are generated from a logistic regression model to not be constant. Therefore, we cannot give a single number/probability for the magnitude of effect concurrent enrollment status has on the grade distributions, because it will vary and the variability is contingent on the predictor variables used in the logistic regression model.

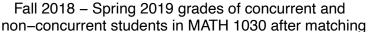


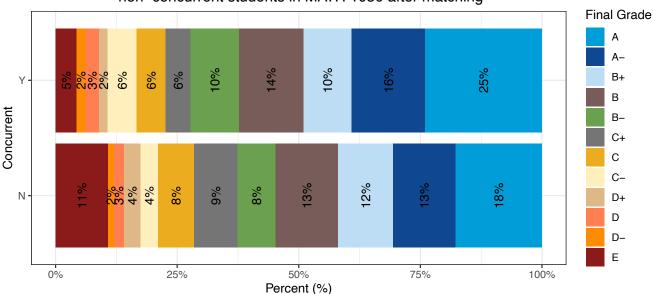




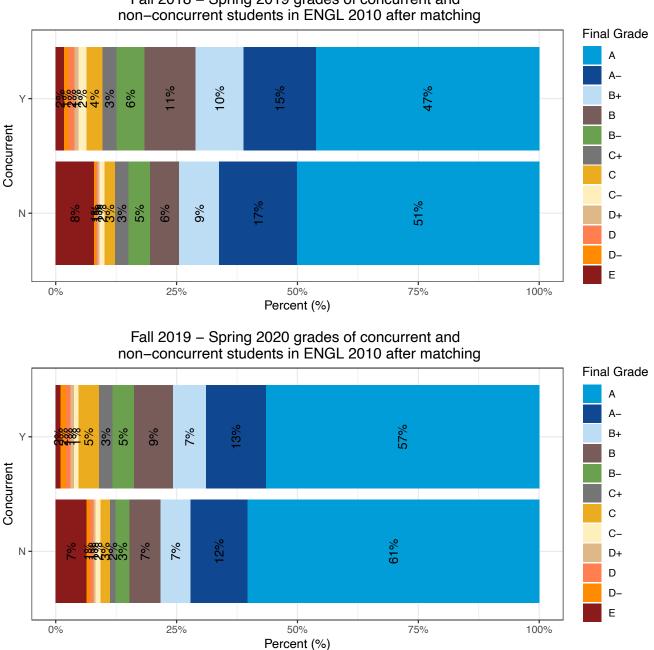
**Figure 1: Grades of concurrent and non-concurrent students in ENGL 1010 after matching.** These graphs show the grade distribution between concurrent and non-conccurrent enrollment students in ENGL 1010 from students enrolled in the Fall 2018 - Spring 2019 semesters (top) and Fall 2019 - Spring 2020 semesters (bottom). The grades were taken from the data after coarsened exact matching was conducted.





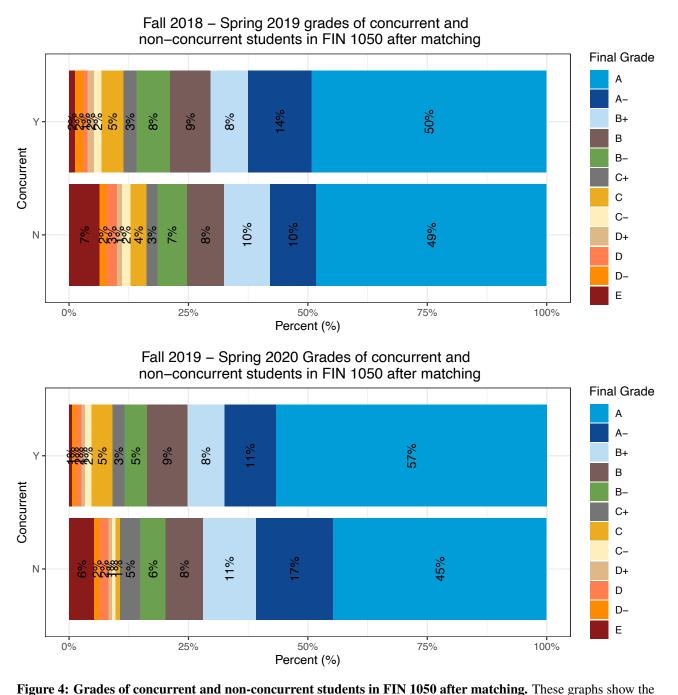


**Figure 2: Grades of concurrent and non-concurrent students in MATH 1030 after matching.** These graphs show the grade distribution between concurrent and non-conccurrent enrollment students in MATH 1030 from students enrolled in the Fall 2018 - Spring 2019 semesters (top) and Fall 2019 - Spring 2020 semesters (bottom). The grades were taken from the data after coarsened exact matching was conducted.

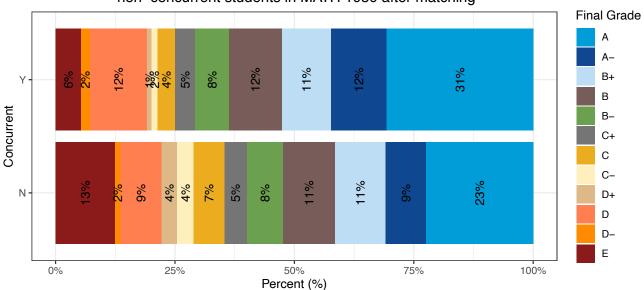


Fall 2018 - Spring 2019 grades of concurrent and

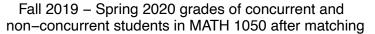
Figure 3: Grades of concurrent and non-concurrent students in ENGL 2010 after matching. Grade distribution between concurrent and non conccurent enrollment students in ENGL 2010 from students enrolled in the Fall 2018 -Spring 2019 semesters (top) and Fall 2019 - Spring 2020 semesters (bottom). The grades were taken from the data after coarsened exact matching was conducted.

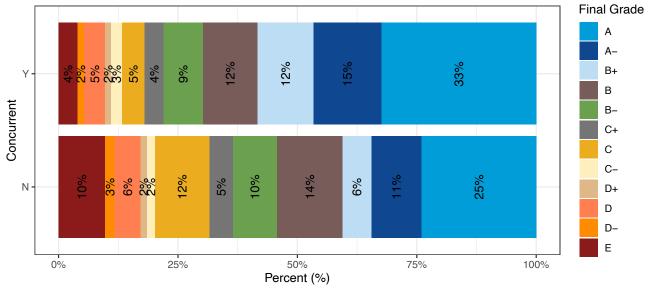


grade distribution between concurrent and non-concurrent students in FIN 1050 after influenting. These graphs show the grade distribution between concurrent and non-conccurrent enrollment students in FIN 1050 from students enrolled in the Fall 2018 - Spring 2019 semesters (top) and Fall 2019 - Spring 2020 semesters. The grades were taken from the data after coarsened exact matching was conducted.



Fall 2018 – Spring 2019 grades of concurrent and non-concurrent students in MATH 1050 after matching

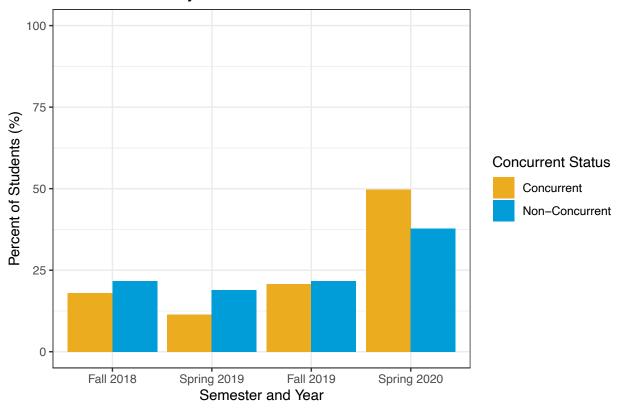




**Figure 5: Grades of concurrent and non-concurrent students in MATH 1050 after matching.** These graphs show the grade distribution between concurrent and non-conccurent enrollment students in MATH 1050 from students enrolled in the Fall 2018 - Spring 2019 semesters (top) and Fall 2019 - Spring 2020 semesters (bottom). The grades were taken from the data after coarsened exact matching was conducted.

#### **COVID-19 AND GRADE DISTRIBUTIONS**

It is important to note that Spring 2020 was the first academic term upon which COVID-19 had an impact. Salt Lake Community College changed their withdrawal policy to accommodate for the changes caused by the pandemic. An analysis by the Data Science and Analytics team found that there were many more withdrawals and incomplete grades than E letter grades in all courses for the Spring of 2020. Figure 6 below shows combines all of the withdrawals in ENGL 1010, MATH 1030, FIN 1050, ENGL 2010, and MATH 1050 and takes the percentage by academic term and year for both concurrent and non-concurrent enrollment student. When interpreting these graphs, there is a subtle distinction to be aware of. These percentages were generated by using the total withdrawals in Fall 2018, Spring 2019, Fall 2019, and Spring 2020. For example, the graph does not tell us that "approximately 18% of the concurrent students in Fall 2018 withdrew". The correct interpretation is, "out of all the concurrent enrollment withdrawals in Fall 2018, Spring 2019, Fall 2019, and Spring 2020, approximately 18% of these withdrawals were in the Fall of 2018". This figure clearly shows a clear spike in the percentage of withdrawals in the Spring of 2020 for both concurrent and non-concurrent students. Due to this spike, many of the students that would have otherwise received an E may have withdrawn instead causing the grade distributions to be skewed upwards for Fall 2019 - Spring 2020.



#### Withdrawals by concurrent status and semester

**Figure 6: Withdrawals by concurrent status and semester.** This graph combines all the withdrawals in ENGL 1010, MATH 1030, FIN 1050, ENGL 2010, and MATH 1050 and takes the percetages of these withdrawals by academic term and year for both concurrent and non-concurrent enrollment students.

# Question 2: Are Former Concurrent Enrollment Students More Likely to Retain from Fall to Fall?

The initial analysis conducted in 2018 analyzed Fall to Fall retention from Fall 2016 to Fall 2017 for former concurrent students and non-former concurrent students. For this updated analysis we looked at retention from Fall 2018 to Fall 2019 and retention from Fall 2019 to Fall 2020.

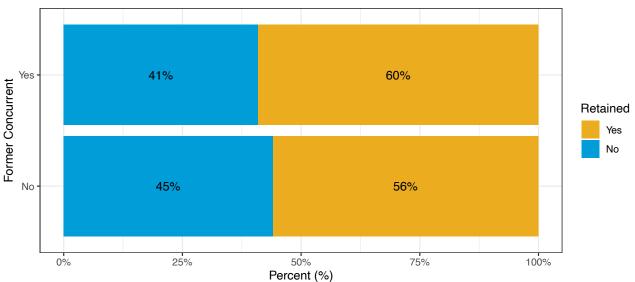
### THE DATA

Again, coarsened exact matching was performed in order to make the two groups-former concurrent and non-former concurrent-as similar as possible to investigate how being a former concurrent enrollment student or not contributed to a student returning the subsequent Fall. The fields used in matching were gender, ethnicity, Pell grant eligibility, age, credits taken in the term, and term GPA. Only degree seeking students, and students in their first year of enrollment as matriculated students were included in this report. Students that received an associate's degree during the study period were excluded from the data set.

#### THE RESULTS

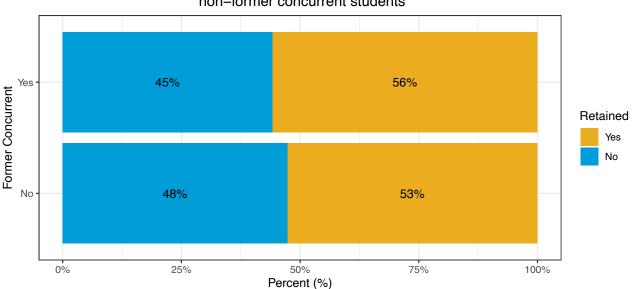
A binary logistic regression model was built to answer this question. The model found no significant relationship between former concurrent enrollment status and Fall to Fall retention. The model's findings are supported by the matched data shown in figures 7 and 8. The matched data shows that 60% of the former concurrent students and 56% of the non-former concurrent students retained from Fall 2018 to Fall 2019, and 56% of the former concurrent students and 53% of the non-former concurrent students retained from Fall 2019 to Fall 2020. The model found that the student's GPA at the end of the term, and the number of credits taken during the term were the major factors that impacted retention. Although the model results show that being a former concurrent student had no effect on Fall to Fall retention, we can see from the matched data that former concurrent students and non-former concurrent students that are similar to them all have a retention rate above 50%.

We emphasize again, like the first model in this report, these percentages were generated from the matched data on the previously mentioned variables, and do not account for all students. These percentages are also not the magnitude of effect that concurrent enrollment has on Fall to Fall retention. These percentages only show the percent of students returned for the Fall of 2019 if they attended in the Fall of 2018, and percent of students returned in the Fall of 2020 if they attended in the Fall of 2019 for former concurrent and non-former concurrent students. We emphasize again, that this is because logistic regression models can clearly tell us if there is no effect or if an effect is positive or negative, however, the magnitude of effect is not so straightforward due to its non-linear nature.



Fall 2018 – Fall 2019 Retention of Former Concurrent and Non–former Concurrent Students

**Figure 7: Fall 2018 - Fall 2019 Retention of Former Concurrent and Non-former Concurrent Students.** This graph shows Fall 2018 - Fall 2019 retention as a percentage by concurrent enrollment status for students in their first year as matriculated students. The data used to generate the percentages displayed in the figure were from the matched data set.



Fall 2019 – Fall 2020 retention of former concurrent and non-former concurrent students

**Figure 8: Fall 2019 - Fall 2020 retention of former concurrent and non-former concurrent students.** This graph shows Fall 2019 - Fall 2020 retention as a percentage by concurrent enrollment status for students in their first year as matriculated students. The data used to generate the percentages displayed in the figure were from the matched data set.

### **Question 3: Are Former Concurrent Enrollment Students More** Likely to Complete?

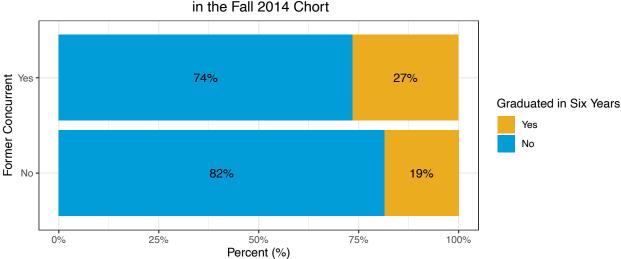
In the 2018 analysis, the Fall 2012 cohort of first-term, former concurrent students at SLCC was examined to see if they had a difference in six-year completion rates when compared to non-former concurrent enrollment students. Here, completion and award are defined as getting an associate's degree. For this analysis the Fall 2014 cohort of first year students was analyzed to determine if former concurrent enrollment students are more likely to complete at SLCC.

### THE DATA

Again, coarsened exact matching was used to make the two groups-former concurrent and nonformer concurrent- as similar as possible. For this portion of the analysis, the fields matched on were their ages, gender, Pell grant eligibility, ethnicity, high school GPA, and first generation student indicator. Non-degree seeking students were excluded from this cohort of students.

### THE RESULTS

A binary logistic regression model was built to answer this question of whether former concurrent enrollment students were more likely to get an award in six years. There was a positive relationship between concurrent enrollment students and graduating within six years with an associates degree for this Fall 2014 cohort. The model's findings are supported by the matched data shown in figure 9 below. Of the former concurrent students from the 2014 cohort, 27% finished with an associate's degree within six years, while only 19% of non-former concurrent students finished with an associate's degree within the same time frame. Like the previous two questions, these percentages that were generated come from the matched data.



Completion of former concurrent and non-former concurrent students in the Fall 2014 Chort

Figure 9: Completion of former concurrent and non-former concurrent students in the Fall 2014 cohort. This graphs shows the percentage of former concurrent and non-former concurrent students that did and did not complete with an associate's degree within a six year time period.

### Conclusion

This updated report found that concurrent enrollment had a positive effect on the outcome of student grades, and similarly being a former concurrent enrollment student also had a positive effect on completing in a six-year time period. However, former concurrent enrollment status had no effect on retention from Fall to Fall in the years examined. The outcomes are very similar to the analysis conducted in 2018 with the exception of Fall to Fall retention. These current findings using new cohorts indicate that former concurrent enrollment status does not influence Fall to Fall retention. While this report analyzed the impact of concurrent enrollment on grades, Fall to Fall retention, and completion, the underlying causes, or the mechanisms that lead to these results requires further investigation and was not within the scope of this analysis.

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