

THINK TANK

2019-2020

DEPARTMENT DESCRIPTION

THINK TANK Mission: THINK TANK is dedicated to empowering UA students by providing a positive environment where they can master the skills needed to become successful lifelong learners. Every University of Arizona student provides us with the opportunity to discover new ways of learning. By offering a wide range of programs and services, we encourage students to apply and refine transferable skills that will sustain them throughout their academic and professional lives. Strengthened by our partnerships, application of research, and use of technology, we create diverse learning environments that promote academic and personal exploration, collaboration, and critical thinking.

The goals of THINK TANK are:

- As a result of using one or more services at the THINK TANK, students will self-report an increase in their academic self-efficacy.
- As a result of using one or more services at the THINK TANK, students will have a self-reported or observable increase in their metacognitive skills by identifying their learning strengths and applying them to their study habits to become more successful learners.
- As a result of using one or more services at the THINK TANK, students will self-report use of transferable cognitive strategies.

Description of Services or Programs:

Tutoring: THINK TANK offers content area peer tutoring services for math, science, and business courses. Language tutoring is offered by Spanish and French instructors at THINK TANK. The majority of tutoring (92%) is free of charge and drop-in. THINK TANK also offers fee-based individual and group tutoring sessions. THINK TANK peer tutors are certified through the College Reading and Learning Association's training program.

<https://thinktank.arizona.edu/drop-in-schedule>

Supplemental Instruction: Supplemental Instruction (SI) is a free service that provides regularly scheduled, out-of-class study sessions. SI sessions are led by students who have previously taken the course. During the sessions, students use collaborative learning techniques to review important course concepts, predict and practice test items, develop test prep strategies, and discuss readings.

<https://thinktank.arizona.edu/supplemental-instruction>

Writing Center: THINK TANK's Writing Center offers students free drop-in tutoring sessions for writing support, as well as free 30-minute appointments. Writing tutors offer feedback on structure, formatting, style, and expression, and serve as a sounding board for students' ideas. Though many of the students come for support in foundational English courses, the Writing Center offers support for students in all subjects.

<https://thinktank.arizona.edu/writing-center>

Schedule for Success: Schedule for Success (S4S) is a comprehensive program designed to help students build a strong foundation and support system at the University of Arizona. Students are placed into S4S based on their chosen major and the score they receive on their math placement exam. The program is designed to help students progress through their required math at the university level. Specific coursework, professional academic coaching, and individualized tutoring contribute to students' success this year and beyond.

<http://scheduleforsuccess.arizona.edu>

Academic Skills Tutoring: Academic Skills Tutoring is part of the THINK TANK’s academic coaching suite of services. Students work one-on-one with a peer who is trained as an Academic Skills Tutor (AST) to develop and refine academic skills, study strategies, and key behaviors to succeed in college. ASTs also conduct free regular workshops on academic skills.

<https://thinktank.arizona.edu/academic-skills>

Test Prep: THINK TANK offers preparatory courses for college entrance exams (ACT and SAT) as well as Graduate School entrance exams (GRE, GMAT, LSAT, and MCAT). The courses are comprehensive and cost-effective. Professional staff members with training in the respective areas teach the Test Prep courses.

<https://thinktank.arizona.edu/test-prep-courses>

Exam Prep: THINK TANK offers two-hour, course-specific, math exam reviews in various courses during the fall and spring semesters. This is a fee-based service.

<https://thinktank.arizona.edu/exam-prep>

Academic Coaching: Academic Coaching includes a series of individual meetings with a professional Learning Specialist to help students develop and refine skills necessary for the rigors of the University of Arizona. Topics include balancing and prioritizing time, success in courses, and test preparation. This is a fee-based service.

<https://thinktank.arizona.edu/academic-skills/academic-coaching>

EXECUTIVE SUMMARY

THINK TANK would use the word “transformation” to describe Academic Year 2019-2020. The department navigated many events such as: growth via Strategic Plan initiatives, new leadership in multiple positions, COVID-19 responses, and budget cuts/layoffs. These are many changes combined into one year, but the department displays resilience and growth as a response to these events.

Some notable achievements include:

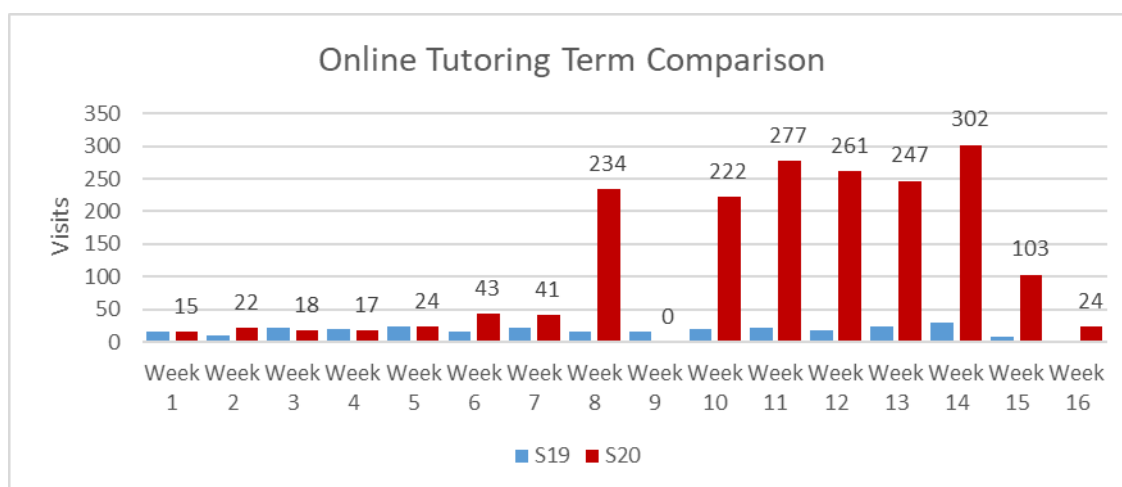
- Writing Center tutors were able to conduct a total of 6,409 sessions, compared to 5,743 sessions last year. The length of the sessions grew as well, by design. If we compare Spring 2019 to Spring 2020, for example, service hours grew from about 918 hours (2019) to about 1,871 hours (2020).
- Tutoring in Science courses had a 40% increase in visits prior to COVID-19. Despite COVID-19, Science visits ended the year with 336 more visits compared to the previous year
- All services were transitioned to online modalities. THINK TANK can adapt freely to in-person, online, or hybrid approaches for the upcoming year.
- The team continues to offer services for our large population of students. This year alone we supported 9,305 unique students, totaling 55,039 visits across all of our services.

THINK TANK has transformed some services, such as the SAS100AX course, which will be delivered fully online in Fall 2020. We continue to improve and innovate our services and the way we interact with students. Our website was updated, new programs were utilized, and staff was trained in new technologies; all with the intention to improve the student experience.

COVID-19 RESPONSE

THINK TANK was challenged to respond to COVID-19 in a timely manner. Within a matter of days, all of our services needed to be adjusted to account for students not being on campus. The goal was to have all services available online to students for the remainder of Spring 2020. The department already offered many services online but we utilized this as an opportunity to grow the scale of our online support. This transition went magnificent; all services, including the SAS100AX course, moved to a fully-online format. Overall, THINK TANK supported 1,487 unique students post-transition for a total of 5,316 visits. 589 of those students had not previously utilized in-person services during the year, signaling the importance of different modes of access.

Online content tutoring increased approximately 10x after shifting resources to an online environment.



The **Writing Center** was well prepared to transition to online-only services in response to the COVID-19 campus closures. The WC was already engaged in online services including asynchronous Feedback Loop sessions, and synchronous Zoom sessions. Peer and professional staff had already conducted Zoom workshops prior to the campus closures, which made it possible to continue this in the online-only environment.

- A total of 1,377 sessions were conducted subsequent to 3/18
- 229 students used multiple remote Writing Center visits during this timeframe

Supplemental Instruction also shifted resources to online services. Once faculty were given the instruction to teach in an online setting, multiple faculty members requested that we either support them online or further expand out online presence to continue to support their students. This service took longer to implement as we had to await faculty plans and we lost the collaborative in-person nature of the sessions. However, the SI program still supported over 200 sessions each week online for the remainder of Spring 2020.

Lessons Learned:

- THINK TANK can continue to offer online support through summer and AY20-21 if needed.
- Some staff can work remotely and continue their job duties in a work from home environment.
- Technology needs of the department needed to be assessed.
- The transition to fully online operations served as proof of concept for maintaining an online-only writing center indefinitely, should the need arise.
- Learned a number of pragmatic lessons regarding conducting workshops and events using Zoom.
- Realized the importance of all tutor staff meetings in cultivating community ethos.
- Learned how important face to face interaction is for staff as we collaborate to provide support. This can be recreated in an online setting but it takes intention and work.

SUMMARY OF PROGRAM PARTICIPATION

Despite the challenges of the spring semester, THINK TANK supported 9,305 unique students over the year, totaling 55,039 visits across all of our services in THINK TANK centers.

FREE SERVICES	STUDENTS	VISITS
Math Drop-In Tutoring	2,329	14,511
Writing Center Visits	2848	6696
Language Drop-In Tutoring	357	697
Science Drop-In Tutoring	730	2371
Business Drop-In Tutoring	372	1003
Supplemental Instruction	3,943	22,829
Academic Skills Tutoring	764	906
Schedule for Success - Learning Specialists/workshops/office hours	984	2,783
Academic Recovery	103	318
College of Engineering Study Group	211	440
Total Free Services	9,064	52,554

FEE-BASED SERVICES	STUDENTS	VISITS
Academic Coaching	21	156
Exam Prep	653	1,232
Group Tutoring	17	94
Individual Tutoring	295	966
Writing Individual Tutoring	9	37
Total	908	2,485

GRAND TOTAL	9,305	55,039
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Additional Participation highlights:

- Supplemental Instruction and Tutoring programs each saw a return rate of 5.7, meaning that students who used those programs attended on average over 5 times.
- Writing Center held seven events throughout the year, with 177 total student participants. Some of these events, such as a WriteNite program, were new to the Writing Center.
- Writing Center also introduced a new service called Feedback Loop, an asynchronous writing support initiative, and held 2,932 sessions.
- The Schedule for Success instructional team taught 105 sections of SAS100AX: Math Success Strategies in fall 2019, totaling 1,660 students. In spring 2020, they taught 18 additional sections, with 286 students.

PARTICIPANT DEMOGRAPHICS

The demographic tables below include undergraduate students as of fall census.

Demographic/Academic Group	% of THINK TANK Undergrad Users Fall Census (n=8,836)	Comparison to UA Main Campus Undergraduates (Fall 2019 Census)
Gender		
<i>Female</i>	63.3%	53.5%
<i>Male</i>	36.7%	46.5%
<i>Unknown/Other</i>	0.0%	0.1%
Race/Ethnicity		
<i>African American</i>	4.2%	3.7%
<i>American Indian</i>	1.4%	1.1%
<i>Asian</i>	6.2%	5.4%
<i>Hispanic</i>	29.3%	26.9%
<i>International</i>	6.6%	6.8%
<i>Pacific islander</i>	0.2%	0.2%
<i>Two or More Races</i>	4.8%	5.0%
<i>Unknown/Other</i>	1.4%	1.2%
<i>White</i>	45.9%	49.6%
Pell Recipient	28.7%	25.0%
First Generation	33.1%	30.7%
Honors	14.4%	15.3%
Residency		
<i>In-State</i>	62.8%	65.1%
<i>Out-of-State</i>	37.2%	34.9%
College		
Arch Plan & Landscape	1.0%	1.6%
Agric and Life Sci	11.9%	8.7%
Applied Sci & Tech	1.0%	0.0%
Education	1.9%	2.5%
Eller (Management)	14.7%	17.1%
Engineering	8.2%	8.3%
Fine Arts	1.4%	4.2%
Humanities	1.6%	1.6%
James C Wyant College of Optical Sci	0.2%	0.4%
Medicine - Tucson	7.4%	4.8%
Nursing	4.0%	2.3%
Pharmacy	1.8%	0.9%
Public Health	3.2%	2.4%
Science	24.3%	21.3%
Social & Behavioral Sci	10.1%	17.3%
Letters Arts & Sci	6.9%	5.9%

Participant Demographics (continued)

<i>Class Standing (fall Census)</i>	
<i>Freshman</i>	47.6%
<i>Sophomore</i>	25.4%
<i>Junior</i>	14.5%
<i>Senior</i>	10.2%
<i>Graduate/Professional</i>	2.3%

RETENTION OUTCOMES

Freshmen retention rates for AY18-19 THINK TANK participants are below. For the purpose of analysis, we define participation as three or more visits for a specific program (Writing Center, SI, or Tutoring), and five or more visits for THINK TANK overall. A comparison group for each analysis was created using propensity score matching analysis. Students who used THINK TANK services consistently persist at higher rates than their comparison group of non-participants.

Full-time Freshmen (FTFT)

Program	Participants (Fall 2018 FTFT Cohort)	One-Year FTPT Retention Rate (Fall18 Cohort)	Retention Rate of Comparison Group¹
<i>Tutoring (3+ visits)</i>	N=708	89.4%	85.3%
<i>Writing Center (3+ visits)</i>	N=265	93.2%	84.5%
<i>Supplemental Instruction (3+ visits)</i>	N=730	95.5%	87.1%
<i>THINK TANK Participant (5+ visits)</i>	N=1,232	93.0%	83.1%

Part-Time Freshmen (FTPT)

Program	Participants (Fall 2018 FTPT Cohort)	One-Year FTPT Retention Rate (Fall18 Cohort)	Retention Rate of Comparison Group¹
<i>Tutoring (3+ visits)</i>	N=242	86.0%	60.7%
<i>Writing Center (3+ visits)</i>	N=91	84.6%	69.2%
<i>Supplemental Instruction (3+ visits)</i>	N=141	85.0%	65.7%
<i>THINK TANK Participant (5+ visits)</i>	N=613	82.6%	59.7%

1. Student comparison group is generated using propensity score matching to account for factors which influence retention and program participation

PROGRAMMATIC OUTCOMES

Supplemental Instruction, Tutoring, and Exam Prep

Certifications and Training

- 59 new content tutors became certified through the College Reading and Learning Association's training program. 15 of those completed level 2 certification, and 7 completed level 3.
- Supplemental Instruction certified 64 new SI leaders

Growth in Usage

- Private Tutoring had a 3% increase in usage by the time COVID-19 social isolation occurred
- Business tutoring had a 32% increase in visits by the time COVID-19 social isolation occurred. Despite COVID-19 Business visits ended the year with 19 more visits compared to the previous year
- Science tutoring had a 40% increase in visits by the time COVID-19 social isolation occurred. Despite COVID-19 Science visits ended the year with 336 more visits compared to the previous year
- Online tutoring/SI sessions experienced growth before and During COVID-19

Community Voices Content Tutoring

"It makes me feel reassurance with my assignments. I feel that I am able to ask as many and any questions that I like without feeling like I am asking dumb questions. I am always responded to and helped in a patient and helpful manner."

"THINK TANK has awesome tutors that are always there to help me understand problems that I can tackle on my own! I will always come to THINK TANK and recommend them to a friend."

"Math is my worst subject and I always knew going into college I would need help with math. I use Think Tank every day and sign up for all of the exam preparation. I have taken Math 120R and Math 122A and passed both. Now I am in Math 122B with an A. My experience has been very positive and I definitely feel that I have been able to understand the concepts more after using Think Tank services."

Community Voices Supplemental Instruction

"SI Leaders have been exceptional in my classroom in the past, and I love the SI program. I am sure you will enjoy your new position as the program helps the students and students appreciate it too." – Dr. Perera

"I am so happy with SI, and the leaders I have this semester. So, thank you for your wonderful program!" – Dr. Hidalgo

"I'm so glad Emily and CJ will be SI leaders again. They have been preceptors for me before and are terrific." – Dr. Jackson

"Supplemental Instruction was a major innovation that helped enhance my understanding of the material through the COVID 19 outbreak this year. The supplemental instruction was very successful in its ability to assist students both academically and emotionally during these difficult times."

"I found the extra practice problems and explanations to be very helpful. I also liked that it gave me more examples to look back on when I was studying for the exam. SI gave me a chance to try the problems on my own and helped me determine if I grasped the material. I couldn't have done it without the extra help."

Writing Center

Session Outcomes and Returning Students

- In AY 2019-20, Writing Center tutors were able to conduct a total of 6,409 sessions, compared to 5,743 sessions last year.
- The length of the sessions was longer than previous years. Both Feedback Loop and Zoom sessions provide students with up to 45 minutes of writing consultation time with a tutor. In person sessions can last up to 30 minutes. Combined this yields substantially more time working with students. A Spring 2019 to Spring 2020 comparison, for example, shows that tutor time with students essentially doubled from about 918 hours (2019) to about 1,871 hours (2020).
- About 44% of students who attend one session returned for more sessions.
- The average number of visits across all of our clients is ~2.3; one student had over 100 sessions.

Selected Highlights from Post-Session Survey

"Gloria was my tutor and she left super helpful feedback both on my writing and in the follow up email. Signing up for an appointment was super easy too. I really enjoy the feedback style that the writing center has set up so that I don't have to be there in real time with the editor." (June 4, 2020)

"I love Feedback loop! I only wish I knew about it sooner! Please let more students know about this wonderful service. Seriously, I want to thank all of the people who reviewed my papers. Mele Hala'ufia Adrian Flick Alexandria Javier Bree Dean Bernadette Ryan Squires Not only did they help me improve my writing, but they also made suggestions that I was able to clearly interpret and implement. Thank you all so much. :) <3"(May 13, 2020)

"Alaina's comments were extremely helpful, organized, and comprehensive! She caught things that I totally overlooked and was super encouraging in her comments! Amazing!" (May 8, 2020)

"Sophia does an outstanding job! She goes above and beyond to make sure that students are able to successfully complete their assignments." (April 27, 2020)

Understanding Writing Support Needs across campus

The THINK TANK Writing Center is leading an initiative to assess the needs of writing support among faculty and students. A survey is being conducted and the data gathered will inform changes to the services THINK TANK offers.

Schedule for Success

For the fall 2019 cohort, the Schedule for Success team identified two key goals:

- **Math Readiness:** 80% will place into a college level math course after completing the program
- **THINK TANK usage:** 85% will utilize THINK TANK resources

Math Readiness

1390 students remained enrolled in MATH 100 for the duration of the fall 2019 semester accounting for 93% of the cohort. 104 students from the S4S cohort either dropped MATH 100 or did a complete withdrawal from the university. The chart below summarizes college level math placement for the academic year:

College Level Math Placement at end of AY19-20	N	% of Cohort
<i>Placed into college level math after fall</i>	1194	86.0%
<i>Placed into college level math after winter/spring</i>	40	2.8%
<i>Total college level math placement at the end of academic year</i>	1237	89.0%

THINK TANK Usage

- 1,028 S4S students used THINK TANK Services for a total of 6,730 visits and 6,861 hours during their first academic year on campus. Roughly 69% of the S4S cohort utilized THINK TANK services. This will be a key goal for the upcoming academic year to work towards 85% usage.

SAS 100AX Course Feedback

In the Fall 2019, 964 SAS 100AX students provided feedback on the course and their experience. Below are the key themes students felt were most helpful from SAS 100AX:

- Calculator Tips
- ALEKS Work Time (Independently, with a peer or help from the S4S Leader)
- Strategies for success on ALEKS (including strategies for tough topics)
- Time Management skills
- Math and Testing Anxiety Management
- Goal setting/Action planning for Math 100

S4S Learning Specialists

During the fall 2019 semester, a survey was created for S4S students regarding their experience working with their Learning Specialist. Survey results showed:

As a result of meeting with my Learning Specialist, I have more awareness of:	Not at all	A little	A moderate amount	A lot	A great deal	N
<i>How to achieve my goals.</i>	0.70%	6.29%	22.38%	37.76%	32.87%	286
<i>What is expected of me as a college student.</i>	1.05%	3.16%	16.14%	41.40%	38.25%	285
<i>When I need to ask for help.</i>	0.35%	3.16%	15.09%	34.04%	47.37%	285
<i>The options available to me to be successful.</i>	0.35%	2.48%	8.87%	33.33%	54.96%	282
<i>The UA policies and procedures that are relevant to me.</i>	1.40%	7.69%	16.78%	33.92%	40.21%	286

As a result of meeting with my Learning Specialist, I feel more confident with:	Not at all	A little	A moderate amount	A lot	A great deal	N
<i>Asking clarifying questions in class.</i>	2.11%	5.28%	15.14%	38.03%	39.44%	284
<i>Asking for help when I need it.</i>	1.05%	3.86%	14.04%	37.54%	43.51%	285
<i>Visiting campus resources</i>	1.05%	3.86%	20.35%	33.68%	41.05%	285
<i>Initiating conversations with professors regarding academics.</i>	1.75%	7.02%	20.70%	31.93%	38.60%	285

Academic Recovery

In the Spring semester the Academic Recovery team of Learning Specialists had a total of 252 appointments and served 83 students.

The AR team created a framework that consisted of five meetings for the spring 2020 semester. While five meetings were the goal, if a student completed three meetings, the intervention was considered complete for the spring 2020 semester. Term and cumulative GPA is shown in the table below.

Completed Intervention	Average of Spring 2020 GPA	Average of Cumulative GPA
<i>N (64 students)</i>	<i>1.91</i>	<i>1.68</i>
<i>Y (52 students)</i>	<i>2.88</i>	<i>1.93</i>
<i>All students (116)</i>	<i>2.35</i>	<i>1.79</i>

STAFF POINTS OF PRIDE

THINK TANK is proud to acknowledge the many accomplishments of our staff members.

- The Tutoring Program successfully renewed their CRLA program certification.
- THINK TANK staff successfully navigated several transitions: leadership transition, COVID-19 response transition, and budget cuts transitions.
- Adapted new student orientation materials, presentation, and availability for online delivery.
- Chemistry Tutoring increased significantly, doubling in unique students and visits. This was accomplished by changing locations and times of service offering.
- Kaylin Squyres, WC Program Coordinator, presented on our innovative hybrid online and in-person training model at the CRLA in the Fall of 2019.
- Nick Cenegy continues to serve as State Rep for the Rocky Mountain Writing Centers Association. He attended the RMWCA meeting at the International Writing Centers Association annual conference in Ohio in Fall 2019.
- Nick Cenegy presented at the inaugural Conference on Writing and Well-Being at U. Arizona in January 2020.
- Increased campus partnerships across all services including: ASEMS, Upward Bound, SSRI departments, Eller, and the Writing Program.
- New event-- Tangent: A Day of Math Storytelling – an event for MATH 100 students that amplified stories of mathematicians of color, from the LGBTQ community and folks who traditionally struggled with math and persevered. There were over 40 students in attendance at this event.
- Tana Jay von Isser participated in the Assessment Institution and conducted the capstone project in partnership with Erika Deianni. This resulted in the utilization of the Tiny Café UX model as a tool for pre-assessment of the viability of utilizing the Participatory Action Research method Photovoice with Schedule for Success students, namely exploring Sense of Belonging)
- Carly Winetrobe, the Tutoring Team, and the Supplemental Instruction team presented at SSRI conference with campus partners from SALT, Math department, and C.A.T.S. academics.

LOOKING AHEAD

THINK TANK Department Wide

- Data Management and Tracking: department will engage in more efficient ways to track data, analyze and report results in a timely manner.
- THINK TANK services will be optimized after considering reduced resources and staff. Leadership will identify areas where budgets and staff utilization can be more efficient.
- SAS100AX will be redesigned to continue to support a cohort of 1500-1800 students. Curriculum will be transformed to hybrid and online formats for fall 2020.
- Learning Specialists – the structure of the service will be explored to integrate a peer coaching model. This model will aid in supporting a large volume of students.
- THINK TANK will evaluate program objectives and learning outcomes and modify where necessary, accounting for online modalities.

Writing Center

- Results of the Writing Support Needs Assessment, a survey generated by a collaboration between THINK TANK, the Writing Program's Writing Across the Curriculum Director, the Office of Instruction and Assessment, RCTE program, will be analyzed and used to improve services.
- Publishing resources for students will be made available online (~55 documents are nearing completion on a range of writing-related topics).
- Digital resources and content will be expanded.
- Publishing scholarship vis-a-vis relationships with Rhetoric, Composition, and the Teaching of English

Tutoring and Supplemental Instruction

- Content tutoring will focus on improving online offerings for all supported classes. Improvements will have to be considered in scheduling, registration and attendance processes, and technology use such as Zoom.
- Tutoring and SI will continue to work together with the intent of improving efficiency in budgets and efficiency in the sharing of knowledge and best practices.
- Supplemental Instruction will continue to expand online offerings. The team will work closely with faculty and teaching teams to find solutions on SI support for each of the courses supported.

Fee-Based Services

- All fee-based services will set revenue goals to meet at the end of the fiscal year.
- Test Prep has introduced new courses and tutoring options such as online, self-paced courses, and private tutoring for select examinations.
- Community Tutoring will be revamped to increase capacity and reach to middle school and high school students, as well as non-local markets.