



Student and Support Services

2022 - 2023 Self-Study

Three-Year Program Review Template

Hornets Tutoring



Library/Learning Resources, Instructional Support Programs and Services

Statement of Collaboration

The program staff listed below collaborated in an open and forthright dialogue to prepare this Self Study. Statements included herein accurately reflect the conclusions and opinions by consensus of the program staff involved in the self-study.

Participants in the self-study

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Aaron Mezzano, Oscar Navarro, Sarah Kaump

Authorization

After the document is complete, it must be signed by the Principal Author, the Department Manager, and (when appropriate) the Dean or appropriate Immediate Management Supervisor (IMS) prior to submission to the Program Review Committee.

Jessica Johnson Brandon Floerke	Jessica Johnson & Brandon Floerke	Manager of Tutoring Programs & Co- Coordinator of HT	1/23/2023
Printed name of Principal Author	Signature	Title	Date
Kristine Nikkhoo	<i>Kristine Nikkhoo</i>	Director, Academic Support Programs	1.23.23
Printed name of Department Manager	Signature	Title	Date
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Printed name of Dean or Immediate Management Supervisor (IMS)	Signature	Title	Date

1.0 Mission and Goals

Mission, Vision, Core Values and College Goals drive all college activities. The Program Review committee would like to understand the connection of your program to the Mission, Vision, Core Values and College Goals. Summarize how your program supports each area.

Hornets Tutoring (HT) is an embedded tutoring program in the SI model designed to help students navigate their chosen pathway through Fullerton College. We hire successful students and embed them in challenging gateway courses, where they offer support both in the classroom and during organized group study sessions, that are generally right before and after class. HT provides a valuable, holistic service to students that closely aligns with the college's mission and goals.

HT has four core values that guide our service to students, the personal and professional growth of our tutors, the communication among staff, and our collaboration with the broader FC community:

Communicating Care: Hornets Tutoring creates **supportive and inclusive environment** for **diverse communities** where all students and staff are treated with respect and empathy, guided by the concept of unconditional positive regard.

Collaboration: Participants in HT receive collaborative academic assistance in course content, directly impacting **student learning and achievement**. Collaboration is not simply our primary pedagogical modality; it is also a value that drives our decision-making and culture. Our organizational structure invites collaboration within the program, and we seek out opportunities to collaborate with a wide range of instructional and student services organizations and programs across FC.

College Connections: Embedded Tutors play an invaluable role as liaisons between students and the college as a whole. Embedded Tutors are well-informed about the various student support services on campus and help students get plugged into the resources they need to be successful. Our staff also connects our tutors with campus resources to address a variety of needs including, basic needs, mental health challenges, academic counseling, career development, etc. On a programmatic level, HT nurtures strong relationships with other programs and organizations at Fullerton College.

Mindsets: In addition to helping students with course content, Embedded Tutors are trained to help students adopt the study skills, habits, and academic mindsets necessary for achieving long-term goals in **educational and career growth, certificates, associate degrees, and transfer**. Embedded Tutors and HT staff model and nurture academic mindsets, such as help-seeking behavior, growth mindset, purpose and belonging, goal-setting and organizational skills, engagement, and mindfulness.

Student Equity: HT is committed to improving outcomes for marginalized students at FC. We bring an equity focus to our hiring practices, training, and culture. HT cultivates a sense of belonging and creates a safe space for employees and students from underserved populations.

2.0 Program Description/Data & Trends Analysis

2.1 Describe the purpose, components, and staffing of this program.

The Purpose of Hornets Tutoring

The primary purpose of embedded tutoring is to increase academic success of students in challenging courses. Collaborative group study sessions are the primary means of academic support. These are one-hour long and generally take place immediately before and after class. Tutors plan these sessions in advance and get feedback during their mentor meetings. Some examples of group study sessions include the following:

- Working at the white board to solve math problems in pairs
- Using a model or graphic organizer to understand how the organs related to human digestion fit together
- Reviewing key terms by playing a Jeopardy game
- Using a rubric to practice paraphrasing from a source

Embedded Tutors also provide academic support during class time by assisting groups during collaborative learning activities, participating in class discussions, answering question in zoom chat, contributing to discussion boards, modeling successful student behavior, etc. They can also answer questions via email and other asynchronous communication platforms.

Beyond academic success, HT takes an ambitious view of what is possible through embedded tutoring.

1. *Redress equity gaps for underserved populations.* Because our tutors are embedded in the classroom, they have a special opportunity to overcome the common apprehension that marginalized students can have about help-seeking behaviors. As opposed to a “come to us” model of support, we take the tutor to the students, where they can build relationships and trust. HT also has the opportunity and responsibility to hire tutors that reflect the diverse and complex identities of FC students.
2. *Improve student engagement.* Tutors are trained to connect students with organizations, programs, clubs, and affinity groups that can improve their engagement with the campus as a whole.
3. *Increase sense of belonging.* The group collaboration model encourages students to develop a web of social support, leading to a stronger sense of belonging.
4. *Support students with mental health and basic needs.* HT has cultivated a close collaboration with the Office of Behavioral Health Services, and we make frequent referrals. We also work closely with the Food Bank, EOPS, DSS, Career Closet, etc.
5. *Demystifying the “hidden curriculum” of higher education.* Tutors often function as informal mentors for students, helping them to navigate the “hidden curriculum” that often creates disadvantages for underserved populations, particularly first-generation college students.
6. *Develop academic mindsets.* While students are in group study sessions to learn about the subjects, they are also learning about how to learn. Our tutors are trained in various study skills and mindsets that have been linked with long-term college success.

With all of these goals, it is important to note that most of our tutors (90% at last calculation) are current or recent FC students. The engagement, belonging, and support our tutors experience are relevant outcomes.

Organizational Structure

The leader and IMS for HT is the Manager of Tutoring Programs. They work closely with the Faculty Coordinator to plan and administrate all aspects of the program.

The office has two permanent classified staff members: one Administrative Assistant II and one Instructional Assistant (IA). They handle clerical tasks associated with hiring, timecards, scheduling, reporting participation data, ordering and organizing supplies, updating the website, administering surveys, answering tutor questions, etc.

HT also employs a part-time Professional Expert (PE). The PE and IA work together as Mentor Co-Coordinators writing mentoring agendas, meeting with mentors weekly, reporting areas of concern, keeping detailed records, and planning Leadership Meetings. The PE is a former Mentor Tutor in HT, and the position lasts for

one academic year. This provides experienced Mentor Tutors an opportunity for professional growth, while the program benefits from having the perspective of a recent tutor in a leadership position.

These five staff members meet at least once per week in a staff meeting for planning, reporting, and professional growth. An unusual characteristic of HT is that nearly all of the staff have worked as Embedded Tutors at FC in the past.

HT employs 20-30 Mentor Tutors every semester. Embedded Tutors with two semesters of experience can become mentors through a competitive application process. In addition to normal tutoring duties, Mentor Tutors have several additional responsibilities. They meet with a small group of tutors once per week to give feedback and advice, to disseminate program announcements and policies, and to support tutors in their week-by-week efforts to help students. They also play a vital role in the HT training program by leading workshops and otherwise assisting. Finally, they attend monthly Leadership Meetings with the staff. Leadership Meetings generally cover effective mentoring strategies, planning for upcoming tutor trainings, and professional and personal growth. They are also an important opportunity for the staff to include mentors in planning.

HT employs 120-150 Embedded Tutors each semester, who are placed in classes across academic disciplines. Prior to COVID-19, tutors were generally allocated 8 hours per week for assisting students during class times, leading group study sessions, meetings, prep time, and clerical tasks. When HT went fully remote in Spring 2020, tutors' hours were increased to 10 hours per week in order to accommodate a massive increase in asynchronous communication with students via email, Canvas, Discord, etc.

Professional Growth

We treat Embedded Tutors as academic professionals and offer a robust professional growth program. Our training events are designed to help our tutors grow in their craft but also as academics and professionals. All tutors participate in three training events, and new tutors also complete an asynchronous orientation and attend a three-hour meeting at the end of the first week.

One of the required training events held mid-semester is the Hornets Tutoring Peer Support Symposium. This three-hour training event is organized like an academic conference. When tutors check in, they receive a program that lists the various workshop options, and they decide which workshops they would like to attend. Some of the workshops are led by HT staff, but most of them are led by Mentor Tutors and guest presenters from other organizations on campus. The workshops cover a wide range of topics and are vetted by HT staff. Some examples of the workshops offered in fall 2022 include:

- Successfully Transitioning into College: Tools for First-Year Students and Beyond Peer-support experts from the Promise Program will be presenting on challenges that face first-time college students at Fullerton College and tools that we can use to support them. Come learn how to help your students find those College Connections!
- Panel: Transferring to University and Applying to Graduate School In this panel, tutors will share their experiences navigating academia beyond Fullerton College. They will discuss the experience of applying and the challenges of navigating new campuses and new expectations.
- Gamification for Equity: Level Up Your Tutoring Game to Increase Student Engagement and Success What is gamification pedagogy and how can it help increase student engagement? The Co-coordinators of the Fullerton College First Year Experience invite you to attend this workshop to learn about cutting-edge gamification research and develop practical strategies to "level up" your group study sessions.

- Calming a Buzzing Mind: Mindfulness and Learning Leaders from the Mindful Growth Initiative will share academic applications for mindfulness strategies. Enrich your own personal wellbeing and learn how to better support students by turning down the volume on stress and anxiety through mindfulness.
- Purpose and Belonging What makes academic work meaningful for students? Dr. Miguel Powers will share game-changing research about how to improve outcomes for students through the concepts of Purpose and Belonging, and how Hornets Tutors can use these ideas to move the needle on student success.
- Embracing Failure: How to Apply “Growth Mindset” to Peer Support Contrary to popular opinion, people are not born to be bad at math or to hate writing. The science of neuroplasticity has shown that the human brain is always growing and adapting. By embracing the power of “growth mindset,” tutors can help students to embrace setbacks as a natural part of learning.
- Building Critical Thinking by Redirecting Questions Redirecting questions is one of the core skills of facilitating collaboration. This workshop will give some guided practice in different kinds of redirecting strategies.

In addition to the training events, Embedded Tutors have regular opportunities for growth during the weekly meetings with Mentor Tutors and faculty members. In addition to these formal meetings, the HT staff take an intrusive interest in our Embedded Tutors’ personal and professional growth. For example, the Faculty Coordinator meets one-on-one with tutors who are applying to transfer, for graduate school, or for scholarships. The Manager of Tutoring Programs frequently applies her academic background with a BA in business and an MA in counseling to help tutors in a wide range of areas, from resumes to time management to mental health referrals.

Selection of Classes

Theoretically, HT places tutors in “high impact” classes, which can be defined by looking at factors such as success rates, class size, prerequisites, and so on. However, staffing decisions often come down to availability: what tutors do we have, when they are available, and when are the classes offered? The end result is generally close to matching our priorities. However, there is a growing demand for Embedded Tutoring at FC. As a result, HT needs to be more strategic about how they decide where to place tutors. The process could be improved to be more strategic, more collaborative, and more transparent.

- 2.2 Staffing – complete the table below. Please list the total number of personnel in each type of position in the department/program. Within each classification in the first column, please list the position titles. For confidentiality, **do not** include the names of any people in the position.

CURRENT STAFF					
Classification (Include position titles)	# of staff in each position title	Percent of employment	Months per year of employment	Source of funding (General / Categorical)	FTE
Managers	1 – Manager of Tutoring Programs	100%	12	SEAC	1
Classified	2				2
	Admin II	100%	12	General Funds	
	Instructional Assistant	100%	12	General Funds	
Faculty (full-time)	1 - Reassigned Time	80%			0.8
Hourly - Adult	110 -140			SEAC / Equity	
				Title V	
				CARES	
Hourly - Student	8 - 10			Work Study	
Work Study					
Professional Experts	1 - Mentor Co- Coordinator				0.5
Total FTE					4.3

2.3 Other Resources – While there are no other resources that we monetarily use, HT has many strong collaborations on campus that benefit the tutor, students, and campus as a whole.

OTHER RESOURCES	
Please list each position by classification in the department/program	Services Provided
Mindful Growth	Tutors hired for MIND 101 courses are then trained to be mindfulness ambassadors and contribute their mindful expertise to the training of other Hornets Tutors during the HT symposium and other training events.
Academic Support Center	HT are trained to refer students to the ASC as additional support services. Under the direction of the Director of Academic Support, HT and tutoring center hire tutors to tutor in both areas, allowing extensive coverage for students in subjects that are challenging to recruit.
Promise	Promise staff attend the HT symposium and bring their expertise to present workshops for all tutors. HT also collaborates to utilize tutors for some of their large events such as START.
FYE / Guided Pathways	Hornets Tutors were utilized in the pilot of Student Ambassadors in work group three of guided pathways. HT has staffed FYE pilot cohort courses with tutors and is working closely with their staff to plan events utilizing tutors.

Transfer Center	HT has worked with Transfer to send out time specific messaging delivered by the tutors to all sections of HT. This was a scripted message given by each tutor to promote transfer week and the college fair.
Office of Psychological Health	HT is one of the top referral sources of Maxient reports to the Student Support Resource Team. Averaging about 1-2 a week during the semester. These are mostly for tutors, but they are also for students enrolled in a class with an HT tutor who are experiencing hardship. We plan to collaborate further by incorporating the new Mental Health Ambassadors into our training program and HT symposium.
Student Development & Engagement	HT is collaborating with Student Development and Engagement to find the best way the program can support SD&E students. We are working on specific messaging going out to all students enrolled with an Embedded Tutor as well as hiring tutors who are students in SD&E programs.
Puente	HT hires former Puente students to be Embedded Tutors for Puente cohort English courses.
Educational Partnerships - DE and Cohorts (STEM)	HT has offered tutors for dual enrollment courses and continues to support the DE efforts. We also place tutors in cohort classes such as STEM.
Starfish Pilot	HT was an early adopter of Starfish, utilizing it for tutoring session attendance and exploring more features we can integrate.
Financial Aid - Work Study	We have utilized federal work study every semester to grow offerings. We encourage all eligible tutors to complete FASFA working with the Financial Aid office to determine who is eligible.
Student Equity and Achievement Committee (SEAC)	HT receives funding from SEAC and continues to collaborate with the committee as new funding formulas and directives are established.

2.4 Utilize the data provided in the tables above in a discussion of the appropriateness of the staffing levels of this program.

HT works hard to maintain payroll discipline while maximizing course offerings. The base line cost for one tutor embedded in one class is approximately \$3,000 a semester including training and benefits. However, HT increases efficiency by offering one tutor, two of the same courses, with the same professor. Tutors with two of the same course and professors are offered an additional three hours per week to the tutor's overall hours. Not only does it increase efficiency with budget, but tutors can also hold more sessions offered to the two sections providing students more opportunity to attend. Tutors are tutoring in 1.4 classes on average.

2.5 How many students are served? How has this number changed since the last review? Scale/reach

Since HT was formed in summer 2019, we have placed tutors in 1,204 total sections across all academic divisions. 41,198 unique students had access to an Embedded Tutor in one or more classes. Of those students who had an Embedded Tutor, 18,113 unique students (44%) participated in at least one tutoring session.

Definitions of terms that will be used to describe students served by HT:

- Student Served: Any student enrolled in a class with an Embedded Tutor
- Participant: Any student who attend one or more tutoring sessions with their Embedded Tutor
- Low Participant: Any student attended one to three tutoring sessions
- High Participant: Any student who attended four or more tutoring sessions

The following table provides more detail, followed by analysis:

Term Code		Number of Sections Offered	# of Different Courses Offered	# of Students Served	% of Students who Participated in HT session	Low Participant	High Participant
201830	Summer 2019	16	6	493	70.99%	156	194
201910	Fall 2019	169	42	5,911	56.81%	1,504	1,854
201920	Spring 2020	175	61	unavailable	unavailable	unavailable	unavailable
201930	Summer 2020	28	16	1,229	38.73%	282	194
202010	Fall 2020	256	80	8,828	42.52%	2,469	1,285
202020	Spring 2021	286	83	9,179	59.30%	3,598	1,845
202030	Summer 2021	24	14	658	46.05%	194	109
202110	Fall 2021	289	85	9,055	30.81%	1,660	1,130
202120	Spring 2022	208	78	5,845	28.06%	1,026	614
202130	Summer 2022	29	18	unavailable	unavailable	unavailable	unavailable

Getting reliable data reports has been a challenge since the onset of HT. The scale of and complexity of our program and our data have led to frequent revisions to our data collection system and how that data is processed by the Office of Institutional Effectiveness (OIE). As a result, we have a few gaps in our data in Spring 2020 and Summer 2022. The raw data exists for these semesters, and we are continuing to work with OIE to process that data into a usable format.

The COVID-19 pandemic has also affected our data collection. When the program went fully remote in Spring 2020, it became clear that we needed to train tutors in flexible methods of support beyond the Group Study Sessions. While they continued to hold study sessions in Zoom, tutors also engaged in frequent (and sometimes lengthy) asynchronous communication with students looking for help with course content, technological help, personal challenges, and so forth. They also began to hold “student hours” in Zoom, which are like office hours for students to “drop-in” to ask questions or hang out. As a result, our data became muddled. This flexible approach to student support was fruitful, but it led to ambiguities about participation data. In the remote context, we had to define what sorts of tutor-student interactions counted as “participation” in Hornets Tutoring. For example, if a student emailed their tutor to ask where they can find something on Canvas, and the tutor spent five minutes taking a screenshot to email the student back, should that count? In the end, we decided that an interaction needed to be equivalent to a 30-minute meeting to count as “participation.” While this guidance helped to normalize how tutors reported their participation data, tutors still had to make judgment calls, which could lead to some inconsistencies in the above table. However, it is worth noting that tutors had many important interactions with students during COVID-19 that are not captured in our data because they were not the equivalent of a 30-minute meeting.

One additional note about data collection is that in Spring 2022, we began collecting data through Starfish. Prior to that, tutors entered data through a Qualtrics survey. There are some potential advantages to Starfish,

the primary one being that faculty members can pull participation data for their class (this feature has not yet been unlocked). However, in the short term, there have been challenges. We believe that this might help to explain why Spring 2022 has the lowest rate of student participation on record (28%), and we suspect actual participation rates were significantly higher.

Despite the caveats explained above, we are confident that our participation data is meaningful, and we are proud of our tutors for their professionalism during challenging times.

		# of Tutors	# of Faculty
201830	Summer 2019	17	17
201910	Fall 2019	133	127
201920	Spring 2020	134	112
201930	Summer 2020	28	25
202010	Fall 2020	162	130
202020	Spring 2021	182	153
202030	Summer2021	32	23
202110	Fall 2021	176	140
202120	Spring 2022	147	124
202130	Summer 2022	20	20

Finally, an important part of our service to students has been to employ FC students in our program, giving them access to the opportunities for growth that our program affords. Data from the 2020-21 academic year showed that 90% of Embedded Tutors are current or recent FC students.

2.6 Since the previous Program Review Self-Study what significant changes have occurred that impact the services of this program?

This is the first Program Review for Hornets Tutoring. HT was formed when several similar programs merged after Spring 2019. The predecessor programs were the Transfer Achievement Program, Supplemental Instruction, the Entering Scholars Program, and Foreign Language Embedded Tutoring. The merger of these programs facilitated a consolidation of resources, enabling a major expansion of embedded tutoring at FC.

2.7 Describe any laws, regulations, trends, policies and procedures or other influences that have an impact on the effectiveness of your program.

HT began in Summer 2019, and by Spring 2020, we were adapting to a fully remote environment. There have been several factors that have an ongoing impact on HT, but the COVID-19 pandemic is the most significant. The concept of an “embedded” tutor in a fully online class did not exist on this campus (or perhaps anywhere) prior to March 2020. All the data in this report is affected by the pandemic, and it may be years before we are able to fully understand the impact of COVID-19 on this program.

The passage of AB705 has eliminated developmental classes. This has had a significant impact on how HT staffs tutors, especially in math and English classes. Our primary goal for placing tutors into general education classes has shifted as a result. In the past, we would aim to place tutors into large GE classes with low success rates. However, with AB705 and GP, wide coverage in entry level math and English has become our primary GE focus.

Guided Pathways (GP) has impacted HT. Campus-wide conversations about student pathways have created a context where we can work more closely with instructional programs to identify appropriate classes for embedded tutoring. Just as AB705 brought clarity to our GE mission, GP has helped us refine our thinking about how to support students along their major pathways. Faculty have been using data to better understand the experiences of students in their disciplines. This gives us an opportunity to improve collaborations with discipline faculty to identify critical gateway courses where a tutor can have the most impact.

Furthermore, GP has led to the creation of several new programs on campus, such as Instructional Support Teams, First Year Experience, and others. These programs share many of our goals and values and afford opportunities for critical collaboration.

Dual Enrollment (DE) is a growing aspect of Fullerton College's service to the community. HT has placed tutors in DE classes since Spring 2019.

Emerging from the initial stages of the pandemic, there have been various sources of soft funding - including CARES and Enrollment and Re-Engagement funding - with the goal of supporting student success. This money has been instrumental in continuing the efforts of embedded tutoring. Combined with SEAC funding we have received for several years; the HT budget is comprised almost entirely of soft money.

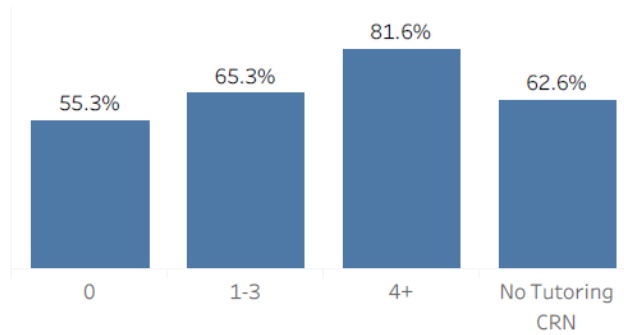
- 2.8 Provide any other data that is relevant to your self-study, for example, if you collected data to assess an outcome.

Success and Retention

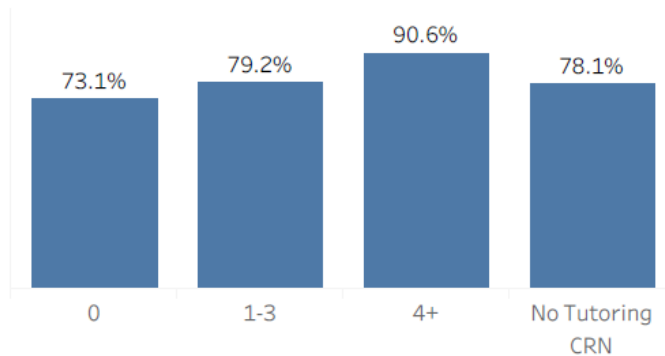
Definitions of terms used in retention and success data displays:

0	Students who had access to tutors and elected not to go to any tutoring sessions also called "non-participant"
1-3	"Low participant" as described in the prior section
4+	"High Participant" as described in the prior section
No-Tutoring CRN	The control group. Students enrolled in a section of a course without an embedded tutor where at least one section of that same course has an embedded tutor (i.e., a section of ENGL 100 without a tutor is included because other sections of ENGL 100 have tutors; however, no sections of ENGL 105 are included because no sections of ENGL 105 have tutors)

Success Rate



Retention Rate



The data show that success rates increase as much as 19% compared with the control group when students participate in tutoring at higher rates. The table below further shows that students' grades are also likely to be higher when they participate in tutoring. Participants are much more likely to get A's and B's, compared with non-participants and the control group:

Final Grade Distribution

	0	1-3	4+	No Tutori..
A	21.4%	28.3%	41.5%	26.8%
B	18.8%	21.2%	22.6%	20.5%
C	14.4%	14.3%	15.1%	14.8%
D	4.9%	4.5%	3.6%	4.8%
EW	18.3%	16.5%	6.8%	14.2%
F	12.9%	9.5%	5.4%	10.8%
I*	0.0%	0.1%	0.0%	0.1%
NP	0.2%	0.2%	0.2%	0.2%
P	0.5%	1.1%	2.0%	0.3%
W	8.4%	4.2%	2.7%	7.6%

In Spring 2021, HT conducted surveys of HT students, faculty, and tutors. These surveys will be referred to as the “HT Surveys” throughout this document. 1019 students responded to the student survey, helping to describe the academic benefits of HT:

- 84% of tutoring participants agreed that attending tutoring improved their grade in the class.
- 75.12% of students stated they strongly agree that “It was beneficial to have a tutor in this class.”
- 88% of students stated that the tutor helped them somewhat frequently or very frequently during class meeting time.

When given a chance to comment on their answers, students often pointed to the benefits related to grades and mastery of course content:

- “I really enjoyed the tutoring. Made the math very easy to understand.”
- “Hornets Tutoring offered services that enhanced my academic learning and allows for dedicated study hours to meet weekly requirements.”
- “Our tutor was able to show us more detailed examples of how to apply the concepts we learned in class. The tutor also offered us personalized feedback in a one-on-one setting. Super helpful!”
- “Helped me learn the wizard art of physics.”
- “I never would have guessed it would have been this helpful but it really was.”

Faculty who participated in HT also completed a survey in 2021. Of the 43 respondents, 40 agreed that is beneficial to have an embedded tutor in their class, 39 agreed that they noticed the tutor creating a sense of community in the class, and 43 indicated that they had the sense that students attending tutoring had higher grades than those who did not attend tutoring.

In addition to the HT Surveys, we can also find evidence of the academic benefit of HT in the “Report of Findings and Recommendations of the Fullerton College Survey Inquiry Group.” In the summer of 2021, the SIG was formed to analyze the data from several large campus wide surveys, including the SENSE, NACCC, CCSSE, and others. This report will hereafter be referred to as the SIG. The SIG reported that “Several programs/services came up across multiple surveys as... highly impactful... Among the highly impactful services, peer-to-peer embedded tutoring stood out as both a very accessible and effective service as perceived by the students.”

The student voices that emerged in these different survey tools point to embedded tutoring as an important academic intervention. This survey data is commensurate with success and grade distribution data.

Non-Participants

In the success data shared above, students in the “non-participant” group have lower success rates than students in the control group. This is consistent with findings from the predecessor programs (SI, ESP, etc.) and with the peer reviewed literature describing programs using an SI-type intervention. This gap between non-participants and the control group could be explained in a few ways. One explanation is that the characteristics of the non-participant students that leads them to not go to tutoring may be linked to other factors that have an adverse effect on their success, such as extremely busy work schedules, aversion to help-seeking behaviors, and so forth. It is also important to point out that these same students, if placed in the control group would not be likely to be successful in that context either.

HT has tried to learn more about the non-participant students through disaggregated data analysis and the HT Survey as described below.

It might be tempting to suppose that marginalized students are more likely to be non-participants, but the data do not show that this is the case. Consider two important populations that we serve: disabled students and black students. On average 44% of students that have access to an embedded tutor elect to participate in

tutoring. White students and Latinx students participate at rates close to the average (44% and 43% respectively), but Black students are slightly more likely to use tutoring than the average (46%). Disabled students registered with Disabled Student Services are far more likely to participate than the average (55%). The data related to these populations suggests that non-participants are not more likely to come from historically underserved populations.

In the HT survey, 218 respondents identified that they elected not to participate in any group study sessions. Here are some of the things that we learned about non-participants.

When asked “What was your reason for not attending tutoring?” they answered as follows (count/percentage):

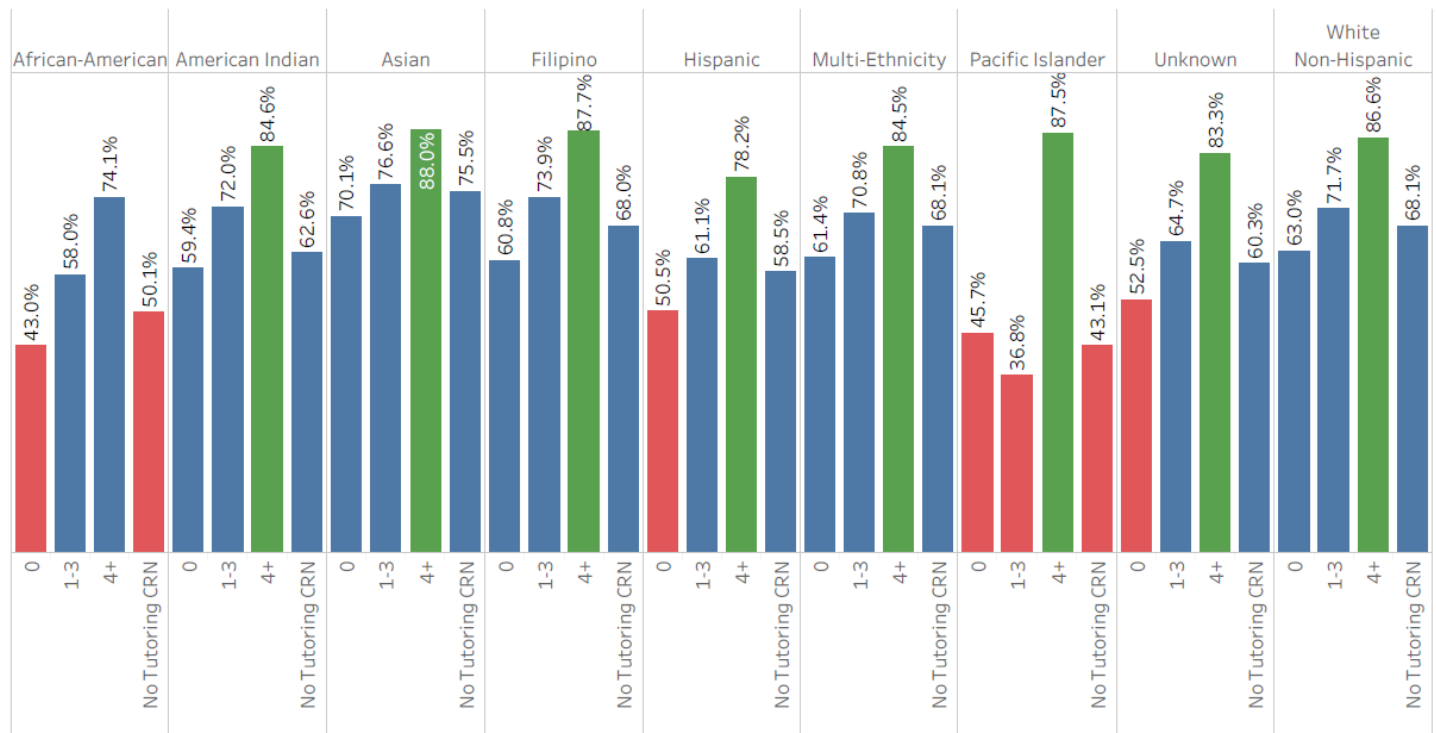
1. The tutoring times did not work with my schedule (103/32%)
2. I did not feel like I needed tutoring (62/19.5%)
3. Tired/lack of motivation (57/18%)
4. Personal problems (35/11%)
5. I did not want to attend any more Zoom meetings (32/10%)

Some students also wrote in answers such as “I am shy” and “social anxiety.” In the same survey, this population of students indicated they would use tutoring in future semesters (83%); and they would go to tutoring if they could start the semester over again (74%).

Interestingly, students also indicated that they benefitted from the tutor being in the class, even if they were not able to go to the tutoring sessions. 133 of the respondents stated it was beneficial to have a tutor in class, even though they did not attend tutoring. 90% of non-participants indicated that the Embedded Tutor made them feel welcome and included, and 78% indicated that the tutor made them aware of campus resources.

Disaggregated by Race

When success data is disaggregated by race some important themes emerge:



When compared to the aggregated data, we can see some of the same patterns in the disaggregated data: non-participants tend to have lower success rates than the control group (no tutoring CRN), low participants are slightly higher than the control, and high participants are much higher than the control. White students have higher success rates than the average across all groups, but the ratios are similar to the disaggregated numbers. White high participants success rates are approximately 18.5% higher than the control compared to 19% for the disaggregated numbers.

The most notable outlier is the Pacific Islander group. The ratios within that population are strikingly unlike the general pattern, and a deeper study of this group is worthwhile. However, only 70 individuals are represented in the test group. These small numbers make it difficult to know what conclusions to draw without more information.

For the purposes of this program review, we will focus on the Black student population. The good news is that Black students who are high participants are succeeding at 74%, well above the aggregated control group (62%). Also, as mentioned in the previous section, Black students are slightly more likely to participate than White and Latinx students. There is even an 8% increase in success for low participants compared to the control. These are strengths to build on.

The two subgroups within the Black student population that we need to serve better are non-participants and the control group. Here are the raw numbers for each subgroup:

	0	1-3	4+	No Tutoring
Black Students	582	293	197	1,583

Even though the high participants (4+) are doing well, that group is too small. HT needs to find ways to get more non-participants to attend tutoring, and we need to encourage more Black students enrolled in classes with an embedded tutor. The HT Survey was not disaggregated by race, but most students who responded to the survey stated they did not enroll in a course with the intent of having an embedded tutor (89.39%). While we do publish a list of classes with a tutor on our website, that list is usually posted well after students begin to register for classes. We should find better ways to promote classes with Embedded Tutors, especially to Black students.

Tutoring Online vs. In-Person

Prior to the pandemic, HT did not offer fully online tutoring. Then all of our services were moved online when the campus was fully remote. During Spring 2021 and Fall 2021, we have been transitioning more of our services back to in-person. Some aspects of what we do will likely be hybridized indefinitely, but we need to collect more data to understand the efficacy of online vs. in-person tutoring. In the survey data we have collected, the responses are mixed. In the HT Faculty survey, 31 agreed and 12 disagreed that tutoring online was “as effective” as in-person. The written comments were also varied:

- “I hope every class online has an embedded tutor, it is extremely helpful and I appreciate the tutors I worked with them over the years.”
- “For my face-to-face class, the tutor's presence was obvious and very effective. In my online asynchronous class, my tutor reached out to students and had a few regulars who came to the weekly sessions, but the majority of students did not respond to my tutor's email and did not show up at any of his group practice sessions. This really surprised me because I thought students in an online class

would be really eager for extra help and for speaking practice! And my tutor is well known and popular with students! It was disappointing to me.”

- “My tutors were wonderful, but tutoring online is not as effective as it is in person. Online tutoring offers students and tutors a lot of flexibility, but It's hard to get to know students, build community, support their academic needs, etc.”

In the coming semesters, we will get a clearer picture of how we can support online and hybrid students.

Students’ Sense of Belonging

In addition to the academic benefits of tutoring, we can point to strong survey evidence that embedded tutoring helps to build a stronger sense of belonging. 92% of students agreed that “having an embedded tutor made them feel more connected to the class in a remote environment,” and 87% agreed that the tutor made them feel connected to Fullerton college as a whole.

Students’ written comments were often more focused on the affective domain and sense of belonging than on academic success. Answers frequently included words like “caring,” “accepting,” and “fun.” For example:

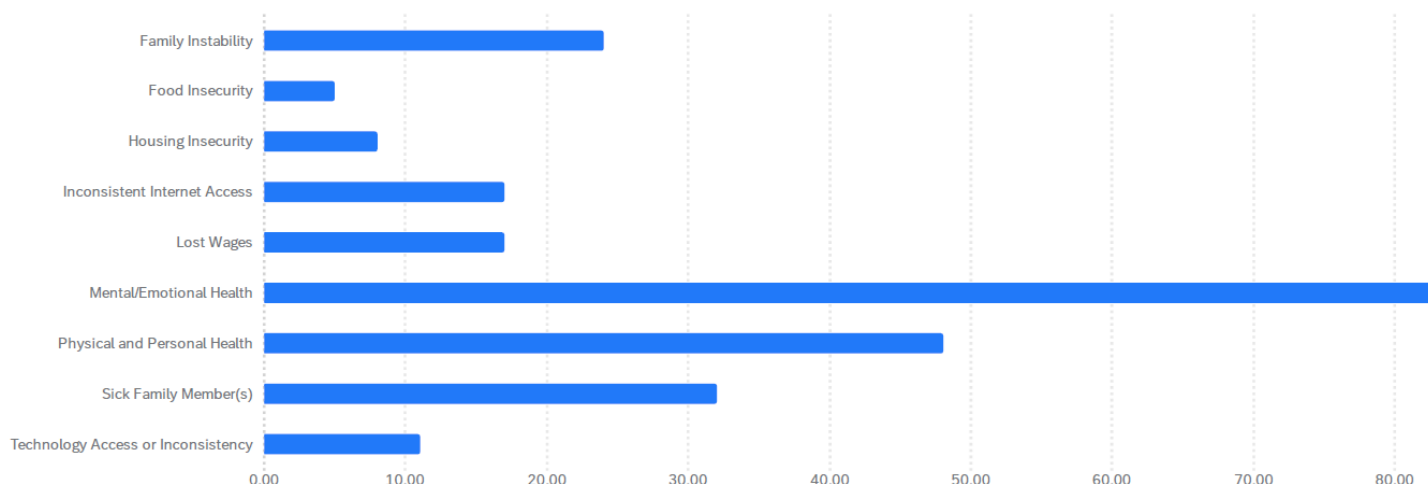
- “Made me feel like my questions were not dumb”
- “The tutor is a very supportive and caring dude who goes the extra mile to make sure the students get the best help possible”
- “She is completely awesome in, like: empathy, encouragement, patience, etc.”
- “It made me feel involved in the class”
- “I very much enjoyed how they made an effort to include everyone [...] so that everyone felt comfortable”
- “The tutor created community where we were able to become close friends with other students in the class”
- “Tutoring really felt like we were all in this together”

In community colleges, we use the word “success” to mean achieving a passing grade in a class. While tutors offer significant help with academic success, it is important that we recognize how successful tutors can be at creating a sense of belonging. Even when students are not “successful” in a class, they recognize the value of their tutor because they feel cared for and connected. In fact, 85% of students surveyed indicated that they considered their Embedded Tutor to be a mentor.

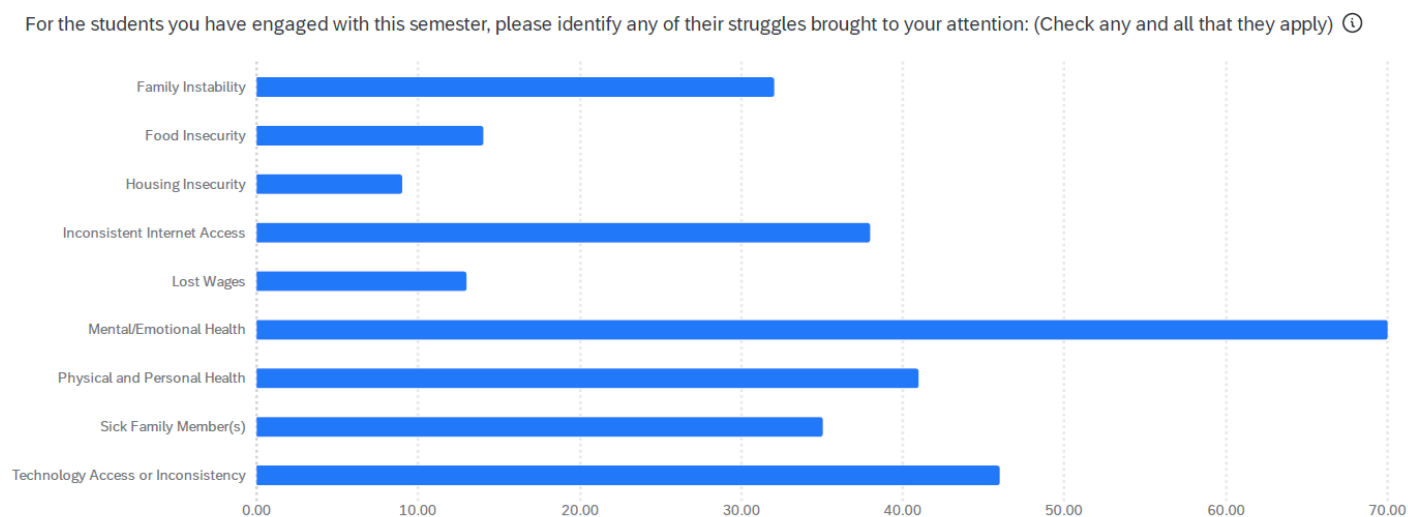
Students with Basic Needs and Mental Health Challenges

Building on the theme in the prior section, HT plays another important role that is not directly captured in success data: namely, helping students with basic needs and mental health challenges. Students in the HT survey indicated that they had such needs:

In what ways have you struggled personally this semester? (Check any and all that apply.) ⓘ



The community that students found in tutoring sessions allowed for tutors to learn about the struggles of students, so it is not a surprise that tutors were aware of concrete challenges students were facing, as seen in the following chart from the HT Tutor Survey:



Theme 2 from the SIG was “Student Needs and Services.” They identified that students are not only not aware of the services for basic needs, but even when they are aware, only a small percentage are utilizing the services. Two recommendations from the SIG are “Weave services into existing student experiences to help foster a sense of interdependence and belonging, and “Empower students to be a resource for other students, such as mentorship, embedded tutoring, office liaisons, and student governance.” One of the HT values is to connect students to resources, just as the SIG suggests, and there is evidence that we are doing just that.

In the HT survey, students were asked to identify the services that their tutor helped them learn about and/or connect with. The list included things such as the food bank, mental health support, academic counseling, DSS, etc. only 11% of students responded, “none of these apply.” 64% of tutors said that they “frequently or very frequently” referred students to campus resources. The manager and the coordinator of the program also spend a significant amount of time helping tutors connect their students to basic need and mental health support through the Maxient system.

Service to Tutors

The biggest winners in HT are the tutors. HT provides a lot of personal and professional growth and layers of mentoring—from staff, faculty, and Mentor Tutors. Our most recent data indicates that 90% of our tutors are current or recent FC students. The survey data point to the variety of benefits noted by the tutors themselves:

- 90% indicated that their mentor meetings helped them with their “personal academic endeavors”
- 85% indicated that their mentor meetings helped them “pursue career-related endeavors”
- 86% indicated that they had a strong relationship with the faculty they work with

3.0 Strengths, Weaknesses, Opportunities, Challenges (SWOC)

3.1 Based on your analysis in 2.1 through 2.8, what are the strengths of your program?

Effective Intervention for Student Success. Students who attend tutoring, especially those who attend multiple times show an increase in success. Compared with the control group and non-participants, students who participants are much more likely to get A’s and B’s.

Community. Embedded Tutors create caring, inclusive communities and connect students to other campus resources. The survey data showed how much going to tutoring and having a tutor in the course made students feel connected to the campus and to each other. Furthermore, the tutors also indicated having an increased level of community through the program.

Efficiency and Reach. HT runs smoothly on a very large scale, reaching a large number of FC students across disciplines and in critical general education classes. 18,113 unique students have interacted with an HT tutor in a tutoring session over the last three years. HT staff are efficient at maximizing tutors, budget discipline, and managing student challenges that might arise and connecting them with resources.

Supporting the Whole Person. Embedded Tutors receive holistic support not just to grow as a tutor but also to grow professionally and personally. Tutors who are successful can also help other students be successful. The survey data indicates that tutors supported students in a plethora of areas other than academics.

Collaboration. One of HT core tenants is collaboration. It is how HT operates from staff to study sessions. This mindset has led to many successful collaborations with other departments and groups on campus. Our goal is to continue to grow these collaborations and support others on campus.

3.2. Based on your analysis in 2.1 through 2.8, what are the weaknesses of your program?

Course Offerings. HT currently covers a large number of classes and disciplines. However, the program needs to be more strategic about how tutors are allocated. Too often, classes get staffed based on who is willing and able to participate. There is a growing demand for Embedded Tutors at FC which provides an opportunity to develop a strategic, transparent, data-driven process for academic disciplines to request tutors. Along with this, we want to continue our collaboration with GP to work with disciplines to identify key classes on their pathway.

Data on Tutors. There are two areas of growth with tutor data. One is collecting and analyzing data on the diversity of the tutors in the program. The number one recommendation of the SIG is to have diversity of faculty, we want the tutors to reflect the student body's diversity. We suspect that the tutor pool is similar to that of the college, however we have not collected and analyzed this data in a systematic way. Secondly, we do not have information on the impact of the program on the tutor's long-term success. The tutors are the biggest winners in the program. We can see this in the survey data. However, we do not have data collected about tutors after they leave the program.

Program Data. One of the biggest challenges with the size and scope of HT is data collection. We have put exponential effort into combining all the different forms of data we have collected over the last three years along with the change in tracking data over the pandemic to usable and reliable data. We know it is not perfect. Starfish has allowed tutors an easier way to track and record attendance of sessions. Yet, there are still many features that have still to be explored and unlocked that will improve our data and collaborations with other departments.

Data Sharing. Our goal is to be transparent about the effectiveness of HT with different departments on campus. We want to share our data frequently with all our constituent groups. Due to the challenges in recording data prior to the implementation of starfish, we have been unable to share data in a timely manner

or in a form that is useful for decision making. As more features of Starfish are rolled out, it is our goal that some data is automatically shared, such as faculty checking who attends weekly sessions through the Starfish platforms. Then other aggregated data is shared by HT, every semester with the help of the OIE dashboards and starfish Argos reports.

3.3 Based on your analysis in 2.1 through 2.8, what opportunities exist for your program?

Hiring Tutors. Collecting and analyzing data about the diversity of the tutor pool will give us the opportunity to identify gaps in our hiring. We want to continue to collaborate with the office of Student Development and Engagement to further increase the diversity of our tutor pool.

First Year experience and GP endeavors. The goals of GP align with the mission of HT. We want to continue to build these collaborations to make HT more effective at targeting the best course for embedded tutors as well as utilize the tutor effectively within FYE.

3.4 Based on your analysis in 2.1 through 2.8, what challenges exist for your program?

Budget Challenges. There has been tremendous support for HT from faculty, staff, and administrators at FC. The support has also been monetarily, funding for both the staff and tutor positions. This funding comes solely from soft money. This money has allowed us to grow to reach an incredible number of students. Yet, being entirely on soft money makes planning from year to year a challenge.

Tutor Hourly Rate. Three years ago, tutors in the program were paid several dollars above minimum wage. In this short time, the minimum wage has increased, and inflation is high. Other entry level jobs are paying higher starting hourly rates and offering bonuses to attract employees. We see the tutor position as not just a job for an FC student but as an opportunity to grow personally and professionally. Students from marginalized communities will not be able to take the HT opportunity due to the lower wage lower than that of other entry level positions.

Increasing Demand for Tutors. Every semester HT receives new requests for tutors for a department or course we have not previously offered tutoring. The number of DE courses offered at FC is increasing as well as the demand for tutors in these courses.

Hybridization Services Offered. We see the value of having flexibility with both online and in person services through HT. Yet, managing both modalities effectively is a challenge. Tutors who have completely online tutoring for online courses feel more disconnected from the program. However, the data shows sessions online are attended by students. Tutors also currently navigate canvas, zoom, pronto, email, and other communications in addition to offering in person and online tutoring. Studying the effectiveness of hybridization as well as updating our policies, procedures, and training is an ongoing challenge.

4.0 Outcome Assessment

Note: Sections 4.9 and 4.10 are new. Please review before filling out your outcome tables below.

This section is not applicable, since this is our first Program Review.

4.1 List your outcomes and complete the expandable table below.

This section is not applicable, since this is our first Program Review.

4.2 Assessment: Complete the expandable table below.

	Intended Outcomes	How will you determine if the outcome is met?	How will you collect the data?	Can this data be disaggregated at the student level?	What will the results show?
1.	Increase Black students attending tutoring and increase the number of Black students enrolled with an embedded tutor	Using data from the OIE	Student attendance data will be collected through starfish.	Yes, starfish can be linked with banner information that can be disaggregated by race.	Results should show that there is an increased in the number of black students enrolled in a course with HT.
2.	Diversity of tutors recruited and hired should match that of the student population.	Using data from the OIE	Applicant diversity information will be collected during interviews.	The OIE can determine who in our applicant pool is students and link with banner information that can be disaggregated by race.	The diversity of the tutor's mirrors that of the student population.

4.3 How has assessment of program outcomes led to improvements in services provided to students by this program?

This section is not applicable since this is our first Program Review.

4.4 How has assessment of outcomes led to improvements in student learning and achievement?

This section is not applicable, since this is our first Program Review.

4.5 What challenges remain to make your program outcomes more effective?

Please see the list of challenges in the "challenges" section above.

4.6 Describe how the program's outcomes are linked to the [college's goals](#).

Hornets Tutoring (HT) is committed to **promoting success for every student** through the academic and affective support it provides; HT **creates a culture of equity** in its trainings and in the very core and philosophy of the work it conducts; HT **strengthens connections with the community** through its many partnerships and areas for collaboration; and HT is **committed to accountability and continuous quality improvement** through its detailed assessment measures and constant review of best practices, data and outcomes.

- 4.7 Describe how the program's outcomes support the achievement of the [institution level SLOs](#).

Communication, Critical Thinking and Information Competency, Personal Responsibility and Professional Development are all goals of the Hornets Tutoring program. This is demonstrated in all of our trainings as well as in the tutoring sessions themselves.

- 4.8 A. What methods are used to assess the program's success in serving the student population that interacts with your program?

Evaluations, surveys, and analysis of data.

- B. What do the results of the above methods of assessment indicate about the effectiveness of the program?

Students and faculty are very satisfied with the Hornets Tutoring program and continue to be our best recruiters.

- C. How were the assessment results used to make improvements to services provided by this program? Please provide examples.

We regularly seek feedback from students and faculty to make improvements to our services. We have regular meetings with Mentor Tutors who serve as a liaison between the tutors in the classes and the HT program coordinators.

- 4.9 At least one outcomes listed in 4.1 should address the following:

- A. List the outcomes that focuses on individual student learning or actions.

Course success and course retention.

- B. Identify methods to assess outcomes in such a way that the data can be disaggregated.

Tableau data

- C. Identify a process for using outcome assessment data to improve student services programs

Regular analysis of the data.

- D. Identify a process for assessing outcomes and collecting data that can be used to build dashboards (where applicable).

Course retention and success

- 4.10 Outcomes Equity Analysis

- A. Looking at the one outcome from 4.9, do you find significant differences by race, ethnicity, gender, and other categories? Describe here what the data shows. What strategies will you use to close the attainment gaps among groups of students? What kinds of professional learning would help?

As demonstrated in the sections above, students who regularly take advantage of our tutoring have higher success and retention rates. We are aiming to increase the number of black/African American students who take advantage of this service.

5.0 Evaluation of Progress Toward Previous Strategic Action Plans

This section is not applicable, since this is our first Program Review.

6.0 Strategic Action Plans (SAP)

Using the tables below, list the strategic action plans (SAPs) for your program. These plans should follow logically from the information provided in the self-study. Use a separate table for each SAP.

SAPs for this three-year cycle:

STRATEGIC ACTION PLAN # 1		
Strategic Action Plan Name:	Creating a strategic plan for the courses offered through HT	
List College goal/objective the plan meets:	College Goal #1: Promote Success for Every Student Objective #4: Objective 4: Increase completion of courses, certificate and degree programs, and transfer-readiness	
Briefly describe the SAP, including title of person(s) responsible and timeframe, in 150 words or less.	With increasing demand and finite funding and human resources it is imperative that the manager of HT create a strategic plan for the courses offered through HT and how programs can request tutors.	
What <i>Measurable Outcome</i> is anticipated for this SAP?	Creating a plan for courses we want to target as well as creating a plan for how programs can request tutors and then matching our course offerings to this plan.	
What specific aspects of this SAP can be accomplished without additional financial resources?	This SAP can be accomplished without additional financial resources.	
If additional financial resources would be required to accomplish this SAP, please complete the section below. Keep in mind that requests for resources must follow logically from the information provided in this self-study.		
Type of Resource	Requested Dollar Amount	Potential Funding Source
Personnel		
Facilities		
Equipment		
Supplies		
Computer Hardware		
Computer Software		
Training		
Other		
Total Requested Amount	\$0	

STRATEGIC ACTION PLAN # 2		
Strategic Action Plan Name:	Publicizing courses that faculty and tutors commit to prior to registration. Advertising these courses to black students through Umoja and Student and Engagement Infinity Groups	
List College goal/objective the plan meets:	College Goal #: College Goal #1: Promote Success for Every Student Objective #4: Objective 4: Increase completion of courses, certificate and degree programs, and transfer-readiness	
Briefly describe the SAP, including title of person(s) responsible and timeframe, in 150 words or less.	The manager will create a system in which returning faculty and staff can commit to offering a class in HT prior to the schedule being publish. This will allow the HT staff to publicize on the website courses students can enroll in with a tutor.	
What <i>Measurable Outcome</i> is anticipated for this SAP?	We will be able to post a schedule prior to registration. We will see an increase in the number of Black students enrolling with a course with a Tutor.	
What specific aspects of this SAP can be accomplished without additional financial resources?	This SAP can be accomplished without additional financial resources.	
If additional financial resources would be required to accomplish this SAP, please complete the section below. Keep in mind that requests for resources must follow logically from the information provided in this self-study.		
Type of Resource	Requested Dollar Amount	Potential Funding Source
Personnel		
Facilities		
Equipment		
Supplies		
Computer Hardware		
Computer Software		
Training		
Other		
Total Requested Amount	\$0	

STRATEGIC ACTION PLAN # 3	
Strategic Action Plan Name:	Data Collection
List College goal/objective the plan meets:	College Goal #: College Goal #1: Promote Success for Every Student Objective #4: Objective 4: Increase completion of courses, certificate and degree programs, and transfer-readiness
Briefly describe the SAP, including title of person(s) responsible and timeframe, in 150 words or less.	As described in this review, there have been many obstacles to getting reliable data in a timely manner. The manager will work with the OIE to make the HT dashboard updated every semester, as well as working with the starfish team to create monthly or weekly reports of attendance.

What <i>Measurable Outcome</i> is anticipated for this SAP?	A data dashboard that is updated every semester. Ongoing reports from starfish.	
What specific aspects of this SAP can be accomplished without additional financial resources?	This SAP can be accomplished without additional financial resources	
If additional financial resources would be required to accomplish this SAP, please complete the section below. Keep in mind that requests for resources must follow logically from the information provided in this self-study.		
Type of Resource	Requested Dollar Amount	Potential Funding Source
Personnel		
Facilities		
Equipment		
Supplies		
Computer Hardware		
Computer Software		
Training		
Other		
Total Requested Amount	\$0	

7.0 Long Term Plans

Describe the long-term plans (four-six years) for your program. Please consider future trends in your narrative. Identifying financial resources needed for these plans is optional.

7.1 Describe in detail your need for additional resources as listed above (if applicable)

Hornets Tutoring is a relatively new program that has been formalized in the last three years. Within those three years we have weathered a 100-year pandemic and moved from in person, to completely remote services, and now a hybridized version of both. It has been a time of incredible change while still formalizing policies and procedures for a new program. Our long-term goal is that HT will continue to be funded at its current level and as outlined in our SAP #1 we will create a plan for the courses offered through HT that meets the needs of the students and is in line with the college goals. Along with this, we want to continue to explore the hybridization of services, its effectiveness, and how we can continue to maximize our funding to offer both modalities of support.

8.0 Self-Study Summary

This section provides the reader with an overview of the highlights, themes, and key segments of the self-study. It should not include new information that is not mentioned in other sections of this document.

Hornets tutoring is a high-touch program that is effective at improving student success and creating community. The program reaches a large percentage of the student body every semester and offers support in almost every division on campus. The students receive support not only in mastering course content but also learning academic mindsets, connecting with campus resources, and finding a sense of community and

belonging. A second and just as important part of the program is the tutor's success, the skills and knowledge they learn from being part of the program as well being part of the HT community. We hope to continue to build and improve on the incredible success that HT has seen over the last three years.

9.0 Publication Review

Fullerton College is committed to assuring integrity in all representations of its mission, programs, and services. As such, during the program review self-study process programs are required to document their publications (websites, brochures, magazines, pamphlets, etc.) that are used to promote programs and services to the campus community and community at-large. This review should specify when the publication was last reviewed, if the information in the publication is accurate, and if the information correctly represents the college's mission, programs, and services.

Information on the college's graphic standards is available here: <http://news.fullcoll.edu/campus-communications/web-help/graphics/>.

In the far-right column, please provide the URL where the publication can be accessed. If it cannot be accessed via the Internet, please provide a sample of the publication with your program review self-study. If you have any questions about what type of publication should be included, please contact Lisa McPheron, Director of Campus Communications at lmcpheron@fullcoll.edu.

For publications that you have identified as inaccurate, please provide the action plan for implementing corrections below.

Publication	Date last reviewed	Is the information accurate?	URL of publication
HT Website	1/16/2023	Yes	https://academicsupport.fullcoll.edu/hornets-tutoring/

Routing & Response Page

Originator → IMS → Program Review Chair → Appropriate President's Staff Member

Originator: *Electronically submit completed Program Review to Division Dean/IMS for review.*

Appropriate Immediate Management Supervisor (IMS): *Select one and provide response if necessary. Forward electronically to appropriate Vice President's Office.*

RESPONSE

Dani Wilson

Printed name of IMS

Dean, LLRISPS

Title



I concur with the findings contained in this Program Review.



I concur with the findings contained in this Program Review with the following exceptions (include a narrative explaining the basis for each exception):

Area of exception:



I do not concur with the findings contained in this Program Review (include a narrative explanation):

Appropriate President's Staff Member: *Print Program Review, sign, and route both hard copy and electronic version to Program Review Chair.*

ACKNOWLEDGING RECEIPT

Printed Name

Signature

Title

Date



Fullerton College Mission Statement

MISSION

Fullerton College advances student learning and achievement by developing flexible pathways for students from our diverse communities who seek educational and career growth, certificates, associate degrees, and transfer. We foster a supportive and inclusive environment for students to be successful learners, responsible leaders, and engaged community members.

VISION

Fullerton College will transform lives and inspire positive change in the world.

*Approved by Fullerton College
President's Advisory Council and
accepted by President Schulz
May 2017.*

VALUES

Community

We promote a sense of community that enhances the well-being of our campus and surrounding areas.

Diversity

We embrace and value the diversity of our entire community.

Equity

We commit to equity for all we serve.

Excellence

We honor and build upon our tradition of excellence.

Growth

We expect everyone to continue growing and learning.

Inclusivity

We support the involvement of all in the decision-making process.

Innovation

We support innovation in teaching and learning.

Integrity

We act in accordance with personal integrity and high ethical standards.

Partnership

We work together with our educational and community partners.

Respect

We support an environment of mutual respect and trust that embraces the individuality of all.

Responsibility

We accept our responsibility for the betterment of the world around us.