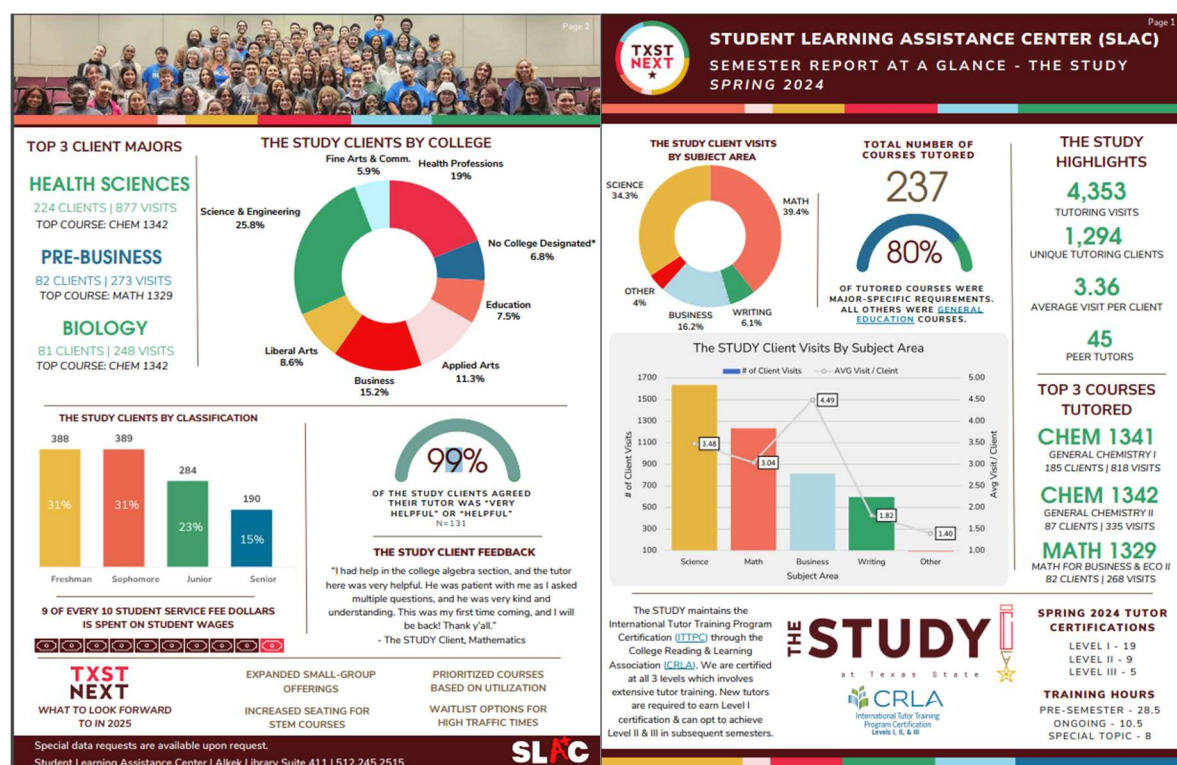


## Ethan West – Database Design User Views/Schema – Project 6

### Project 5:

Upon receiving further information on the extent of the project I will be removing the student feedback and small group handling to decrease the number of normalized tables to the ideal number of 5-6.

### Business Reports:



	FALL 2020 **		SPRING 2021 **		SUMMER 2021	
	LAB CLIENTS	LAB VISITS	LAB CLIENTS	LAB VISITS	LAB CLIENTS	LAB VISITS
TOTAL	582	1635	601	1762	91	198
MALE	267 45.9%	819 50.1%	307 51.1%	1057 60.0%	46 50.5%	120 60.6%
FEMALE	314 54.0%	815 49.8%	294 48.9%	705 40.0%	45 49.5%	78 39.4%
ETHNICITY:						
ASIAN	21 3.6%	43 2.6%	20 3.3%	82 4.7%	2 2.2%	3 1.5%
AFRICAN-AMERICAN	92 15.8%	216 13.2%	103 17.1%	265 15.0%	17 18.7%	29 14.6%
HISPANIC	235 40.4%	704 43.1%	239 39.8%	693 39.3%	35 38.5%	67 33.8%
INTERNATIONAL	9 1.5%	53 3.2%	8 1.3%	23 1.3%	5 5.5%	12 6.1%
MULTI-RACE	9 1.5%	16 1.0%	10 1.7%	20 1.1%	3 3.3%	4 2.0%
WHITE	206 35.4%	558 34.1%	213 35.4%	627 35.6%	29 31.9%	83 41.9%
OTHER	1 0.2%	1 0.1%	1 0.2%	2 0.1%	0 0.0%	0 0.0%
UNKNOWN	9 1.5%	44 2.7%	7 1.2%	50 2.8%	0 0.0%	0 0.0%
CLASSIFICATION:						
FRESHMAN	111 19.1%	278 17.0%	131 21.8%	340 19.3%	1 1.1%	1 0.5%
SOPHOMORE	148 25.4%	363 22.2%	161 26.8%	494 28.0%	5 5.5%	11 5.6%
JUNIOR	154 26.5%	526 32.2%	164 27.3%	560 31.8%	25 27.5%	46 23.2%
SENIOR	147 25.3%	393 24.0%	122 20.3%	327 18.6%	51 56.0%	129 65.2%
GRADUATE	18 3.1%	71 4.3%	18 3.0%	36 2.0%	8 8.8%	10 5.1%
OTHER	4 0.7%	4 0.2%	5 0.8%	5 0.3%	1 1.1%	1 0.5%
AGE:						
17-19	262 45.0%	646 39.5%	224 37.3%	635 36.0%	8 8.8%	12 6.1%
20-22	206 35.4%	569 34.8%	240 40.3%	770 43.7%	45 49.5%	118 59.6%
23-25	61 10.5%	245 15.0%	62 10.3%	212 12.0%	18 19.8%	31 15.7%
26-28	18 3.1%	39 2.4%	17 2.8%	44 2.5%	7 7.7%	18 9.1%
29+	35 6.0%	136 8.3%	38 6.3%	101 5.7%	13 14.3%	19 9.6%
SUBJECT CATEGORY*						
BUSINESS	92 13.6%	282 17.2%	114 16.1%	367 20.8%	40 38.5%	95 48.0%
FOREIGN LANG.	5 0.7%	19 1.2%	3 0.4%	3 0.2%	1 1.0%	1 0.5%
MATH	240 35.6%	607 37.1%	178 25.1%	420 23.8%	9 8.7%	18 9.1%
OTHER	60 8.9%	99 6.1%	53 7.5%	71 4.0%	20 19.2%	31 15.7%
SCIENCE	191 28.3%	436 26.7%	216 30.4%	609 34.6%	20 19.2%	34 17.2%
STATISTICS	27 4.0%	59 3.6%	46 6.5%	84 4.8%	5 4.8%	8 4.0%
TEST PREP - Graduate Exams	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 1.0%	1 0.5%
TEST PREP - Other Exams	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%
WRITING	59 8.8%	133 8.1%	100 14.1%	208 11.8%	8 7.7%	10 5.1%

Forms:

The STUDY Check-in

\* Required

1. NetID \*

Enter your answer

2. Subject ID \*

Enter your answer

Submit

The STUDY Check-out

\* Required

1. NetID \*

Enter your answer

Submit

Name: Content Area:

Number of hours you prefer to work each week:

Instructions for how to complete:

Complete the availability form below with *all times* you are able to work in the STUDY. The STUDY hours of operation are subject to change. You must list at least 5 more hours of availability than the actual number of hours you wish to work each week (EX: If you want to work 10 hours/week, you must list 15 hours of availability). Your schedule will be developed based on the hours of availability you provide. You will receive you spring schedule before the start of the semester.

Availabilities are due by 11/21, and the deadline for schedule changes is January 31<sup>st</sup>, 2024.

	Monday	Tuesday	Wednesday	Thursday	Friday	Sunday
10-10:30am	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	
10:30-11am	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	
11-11:30am	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	
11:30-12pm	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	
12-12:30pm	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	
12:30-1pm	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	
1-1:30pm	<div></div>	<div></div>	<div></div>	<div></div>		
1:30-2pm	<div></div>	<div></div>	<div></div>	<div></div>		
2-2:30pm	<div></div>	<div></div>	<div></div>	<div></div>		
2:30-3pm	<div></div>	<div></div>	<div></div>	<div></div>		
3-3:30pm	<div></div>	<div></div>	<div></div>	<div></div>		
3:30-4pm	<div></div>	<div></div>	<div></div>	<div></div>		
4-4:30pm	<div></div>	<div></div>	<div></div>	<div></div>		<div></div>
4:30-5pm	<div></div>	<div></div>	<div></div>	<div></div>		<div></div>
5-5:30pm	<div></div>	<div></div>	<div></div>	<div></div>		<div></div>
5:30-6pm	<div></div>	<div></div>	<div></div>	<div></div>		<div></div>
6-6:30pm	<div></div>	<div></div>	<div></div>	<div></div>		<div></div>

### Summary of Requirements:

- A. Specify attributes of the entities Student, Tutor, Subject, Schedule, Tutor Subject, and Student Walk-in:
  - a. Students must have a NetID, FirstName, and LastName
  - b. Tutors must have a NetID, FirstName, and LastName
  - c. Schedules must have a unique ScheduleID, the NetID of which tutor is scheduled, the day, and start and end times of the shift.
  - d. Tutor Subject must have a tutor NetID and a Subject ID
  - e. Student Walkin must have a Session ID, student NetID, subject ID, the day, and the start and end time
- B. Construct relationships among these entities.
  - a. Each Student is associated with one or more Student Walkins they attend for specific subjects.
  - b. Tutors are linked to Subjects through proficiencies and to Schedules to allow for tracking multiple shifts.
  - c. Student Walkins connect students, tutors, and subjects to facilitate real-time tracking of tutoring sessions.
- C. Reporting and Scheduling
  - a. Analysis of Tutor utilization, identify key times of high demand
  - b. Analysis of Subject utilization, identify key subject demand
  - c. Student Engagement, Measure frequency and duration of visits

### User View Schema:

	Student	Tutor	Subject	StudentWalkIn	TutorSubject
System Admins	Grant rights, modify structure	Grant rights, modify structure	Grant rights, modify structure	Grant rights, modify structure	Grant rights, modify structure
SLAC Admins	Insert, change, query	Insert, change, query	Insert, change, query	Insert, change, query	Insert, change, query
University Staff	query			query	
Tutors	insert			insert	

Preliminary Database:

Student

NetID	FirstName	LastName
het51	James	Scott
llp232	Trey	Adams

*NetID* → (*FirstName*, *LastName*)

Tutor

NetID	FirstName	LastName
jel23	Paul	Rudd
lep433	Jane	Doe

*NetID* → (*FirstName*, *LastName*)

Subject

ClassID	ClassName
MATH 2328	Elementary Statistics
CHEM 1341	General Chemistry I

*SubjectID* → *SubjectName*

Schedule

ScheduleID	NetID	DayofWeek	StartTime	EndTime
0001	jel23	Monday	10:00	1:00
0002	jel23	Thursday	5:00	8:00

*ScheduleID* → (*NetID*, *DayofWeek*, *StartTime*, *EndTime*)

TutorSubject

NetID	SubjectID
lep433	MATH 2328
lep433	CHEM 1341

*NetID* → *SubjectID*

StudentWalkIn

SessionID	NetID	NetID	Date	StartTime	EndTime
0001	llp232	MATH 2328	10/28/2024	1:38	3:12
0002	llp232	MATH 2328	10/29/2024	10:02	4:51

*SessionID* → (*NetID*, *SubjectID*, *StartTime*, *EndTime*)