

Academic Success Center
University Tutoring

2016-2017 Impact Report

Michael A. Donzella, M.S.
Academic Program Coordinator

Executive Summary

Each section in this report provides insights regarding University Tutoring (UT) operations and demonstrates six key facts about UT services.

I. **Usage Data** (pp. 3-5)

Tutoring usage increased for the academic year in terms of visits and students, 13% and 34%, respectively.

II. **Student Demographics** (pp. 6)

Compared to the overall Kent State University population of 15% Underrepresented Students (URS), 19% of the University Tutoring population consists of URS students.

III. **Efficiency Metrics** (pp. 7)

University Tutoring allocates its funds appropriately. For every tutoring hour supplied, there is at least one or more students that utilize it.

IV. **Grade Impact of Scheduled Tutoring** (pp. 8-14)

Using scheduled tutoring regularly has a positive impact on grades. Students who utilize tutoring seven times or more are more likely to pass than their peers.

V. **Qualitative Advancements and Improvements** (pp. 15)

UT has made improvements based on feedback and continues to do so.

VI. **Survey Results** (p. 16)

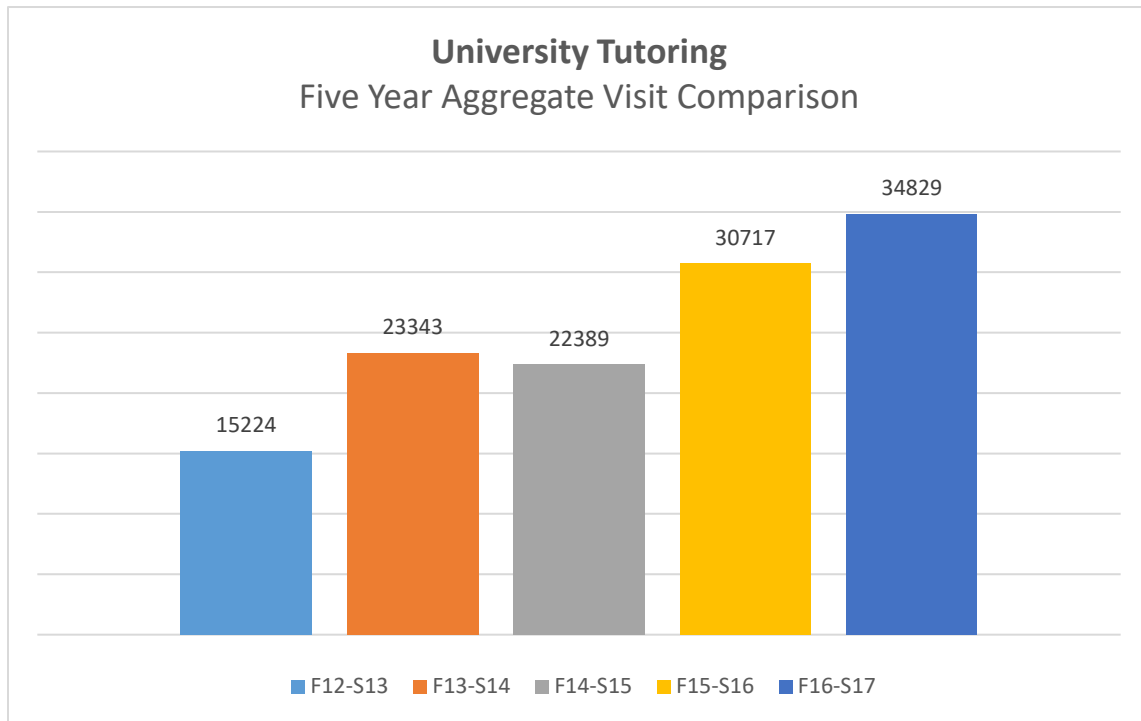
When surveyed, students who use UT services reported their experience as beneficial.

The beginning of each section illustrates the overall data of each reporting category for easy reference. The aggregate results are then followed by more detailed analysis and supporting data.

Section I: Usage Data

Visits

During this academic year, University Tutoring experienced its largest overall gain in visits compared to previous years.

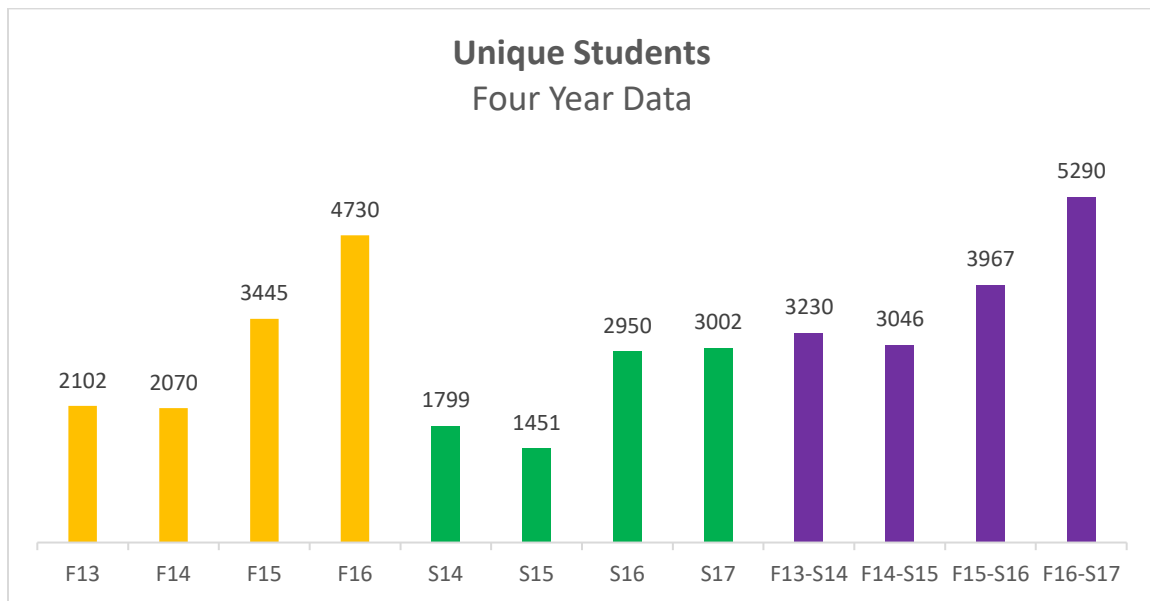


Four year data indicates that student utilization increased by 13% compared to last year and 129% over a 4-year timeframe.

F12-S13	F13-S14	F14-S15	F15-S16	F16-S17
15224	23343	22389	30717	34829
1 Year Difference				4112
2 Year Difference				12440
3 Year Difference				11486
4 Year Difference				19605
1 Year % Change				13%
2 Year % Change				56%
3 Year % Change				49%
4 Year % Change				129%

Unique Students

This academic year resulted in an increase in unique students. The number of unique students utilizing tutoring increased by 34% relative to last year and 75% over a two-year timeframe.



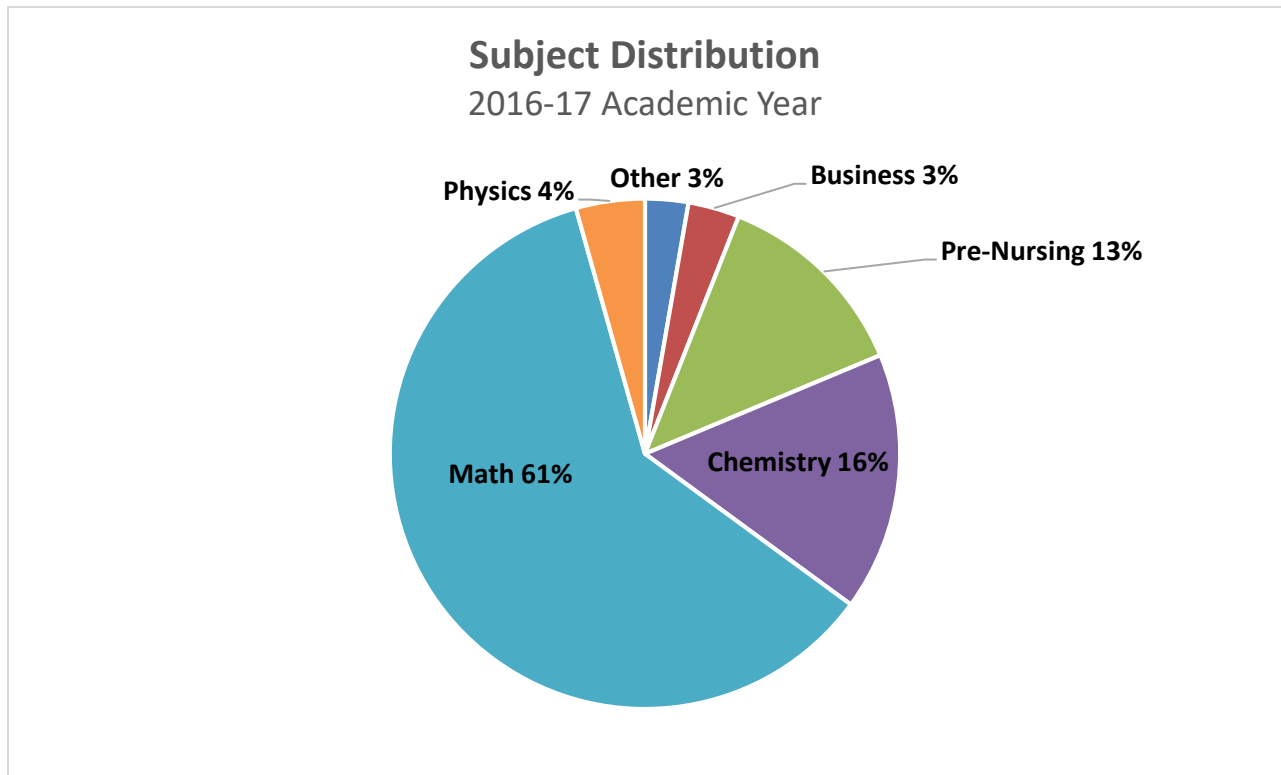
eTutoring

eTutoring Visits										
	Fall 13	Spring 14	Fall 14	Spring 15	Fall 15	Spring 16	Fall 16	Spring 17		
eQuestions	13	8	11	14	11	19	21	5		
eChat	29	41	39	40	33	25	26	6		
Writing Queue	51	59	96	217	134	92	48	112		
Total:	90	108	146	271	178	136	95	123	Difference	% Decrease
Annual Total:	198		417		314		218		-96	-31%

For the academic year, eTutoring usage slipped slightly for the 2016-17 academic year

Subject Distribution

Consistent with previous years, mathematics continues to prevail as the most popular tutoring subject.



Program Size



87
Subject
Tutors

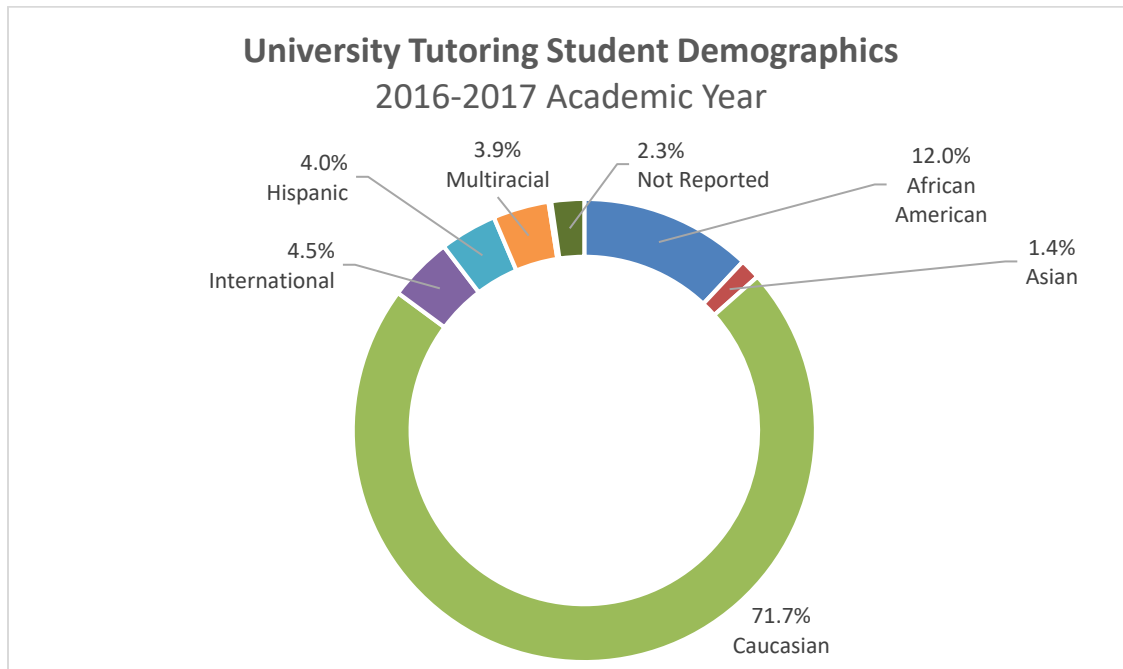


1
Graduate
Assistant



1
Program
Coordinator

Section II: Student Demographics



Compared to the overall Kent State University population, 15% consist of underrepresented students. In comparison, 19% of the University Tutoring population consists of underrepresented students.

University Tutoring Student Demographics			Kent State University Student Demographics		
Ethnicity	Count	Percent	Ethnicity	Count	Percent
African American	635	12.0%	African American	2024	8.9%
Asian	76	1.4%	Asian	359	1.6%
Caucasian	3792	71.7%	Caucasian	16746	74.0%
International	238	4.5%	International	1321	5.8%
Hispanic	211	4.0%	Hispanic	751	3.3%
Multiple	207	3.9%	Multiple	790	3.5%
Native American/Alaskan Native	8	0.2%	Native American/Alaskan Native	34	0.2%
Native Hawaiian or Other Pacific Islander	5	0.1%	Native Hawaiian or Other Pacific Islander	14	0.1%
Not Reported	121	2.3%	Not Reported	588	2.6%

Special Populations



Under-Represented Students
19%



First Generation Students
36%



Pell Grant Eligible
33%

Section III: Efficiency Metrics

Quantifying overall efficiency stems from the notion that one tutoring hour supplied should coincide with one contact hour of tutoring. Hence, the ratio contact hours to tutor ours obtains the *Efficiency Percentage*. If this percentage is greater than 100%, then tutor hours are being utilized effectively. If the ratio is less than 100%, then more tutor hours are being provided than are being used by students.

$$\text{Efficiency Percentage} = \frac{\text{Contact Hours}}{\text{Tutor Hours}}$$

Efficiency Metrics 2016-17 Academic Year			
Location	Tutor Hours	Contact Hours	Efficiency Percentage
Lake Hall	53.36	138.55	260%
Library Drop-In	7902.00	13674.12	173%
Manchester	1284.14	2171.17	169%
Prentice	207.69	143.21	69%
Tri-Towers	2269.88	2798.82	123%
Scheduled Tutoring	9514.73	14928.09	157%
Total:	21231.80	33853.96	159%

In each prominent UT outreach location but one, we see that every tutor hour supplied corresponds to one or more students utilizing it. In particular, the overall efficiency percentage of 159% implies that approximately 1.5 students utilize every tutoring hour supplied.

Section IV: Grade Impact of Scheduled Tutoring

Methodology

To demonstrate the effectiveness of scheduled tutoring, students who utilized this service regularly, at least seven scheduled visits, in the highest volume subject areas were sampled. The final grades from these students in Mathematics, Pre-Nursing, and Chemistry were compared to their peers in the same courses who attended infrequently or not at all. The courses included in this survey are as follows:

- **Mathematics**

- MATH 10041 Introductory Statistics
- MATH 10772 Modeling Algebra Plus
- MATH 10773 Algebra for Calculus Stretch I
- MATH 10774 Algebra for Calculus Stretch II
- MATH 10775 Algebra for Calculus Plus
- MATH 11009 Modeling Algebra
- MATH 11010 Algebra for Calculus
- MATH 11012 Intuitive Calculus
- MATH 11022 Trigonometry
- MATH 12001 Algebra & Trigonometry
- MATH 12002 Analytic Geometry & Calculus I
- MATH 12003 Analytic Geometry & Calculus II
- MATH 14001 Basic Math Concepts I
- MATH 14002 Basic Math Concepts II

- **Pre-Nursing**

- BSCI 20021 Basic Microbiology
- BSCI 21010 Anatomy & Physiology I
- BSCI 21020 Anatomy & Physiology II
- CHEM 10055 Molecules Of Life

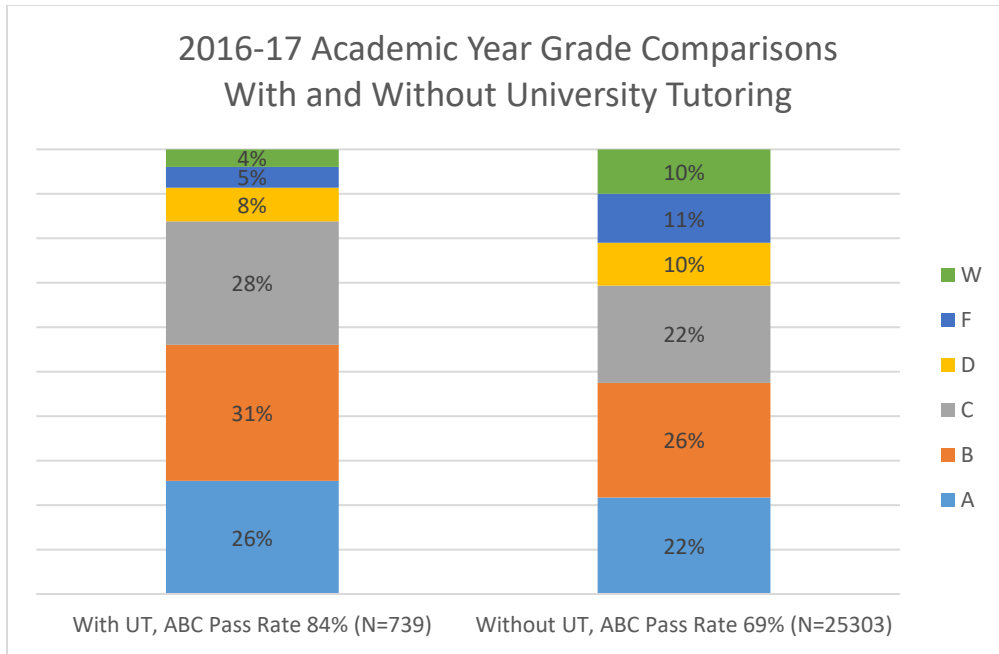
- **Chemistry**

- CHEM 10060 General Chemistry I
- CHEM 10061 General Chemistry II
- CHEM 20481 Basic Organic Chemistry I
- CHEM 30481 Organic Chemistry I

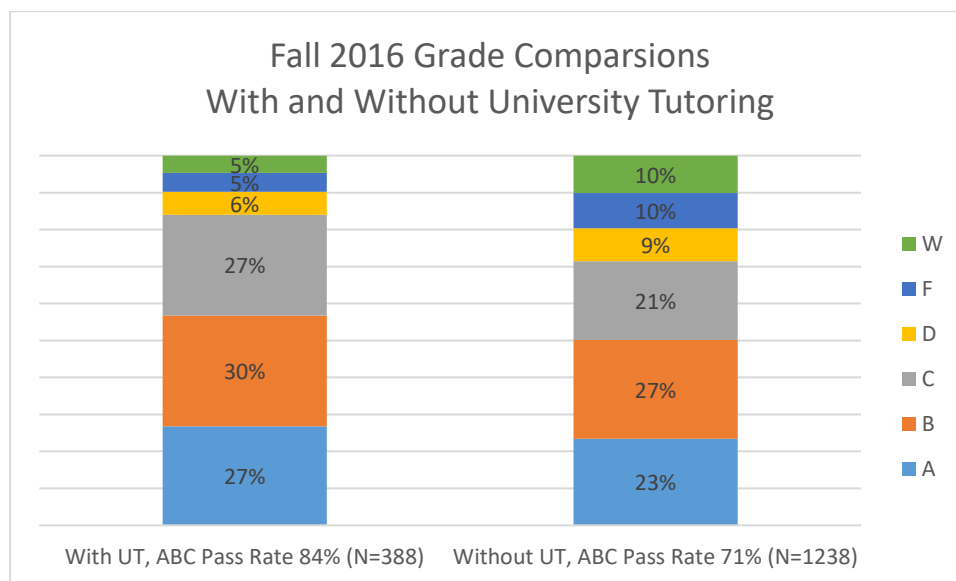
In particular, the DFW rates, as well as ABC rates, were examined to illustrate scheduled tutoring's effect on student grades. It should be noted that the overall Spring sample size is smaller as tutoring participation is traditionally less than in Fall semester.

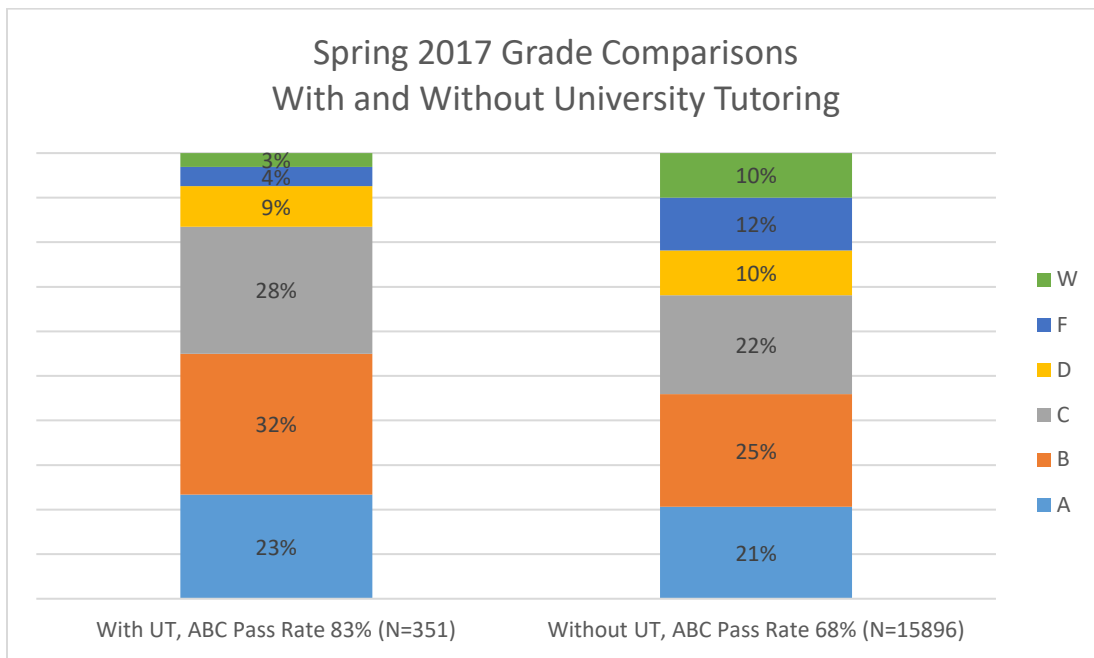
Overall Grade Impact

Combining all the data together, the results below detail the aggregate effect of utilizing scheduled tutoring regularly for the 2016-17 academic year. Note that each student counted is not unique.



Students who attended regularly have a higher pass rate by 15% than that of their peers who did not utilize scheduled tutoring regularly.





Overall Conclusions

Within each major facet of scheduled tutoring, students who attend regularly have a higher AB rate compared to irregular or non-attendees. By demonstrating the impact of tutoring on grades in current marketing literature, students are provided with an incentive to register for scheduled tutoring and maintain their participation.

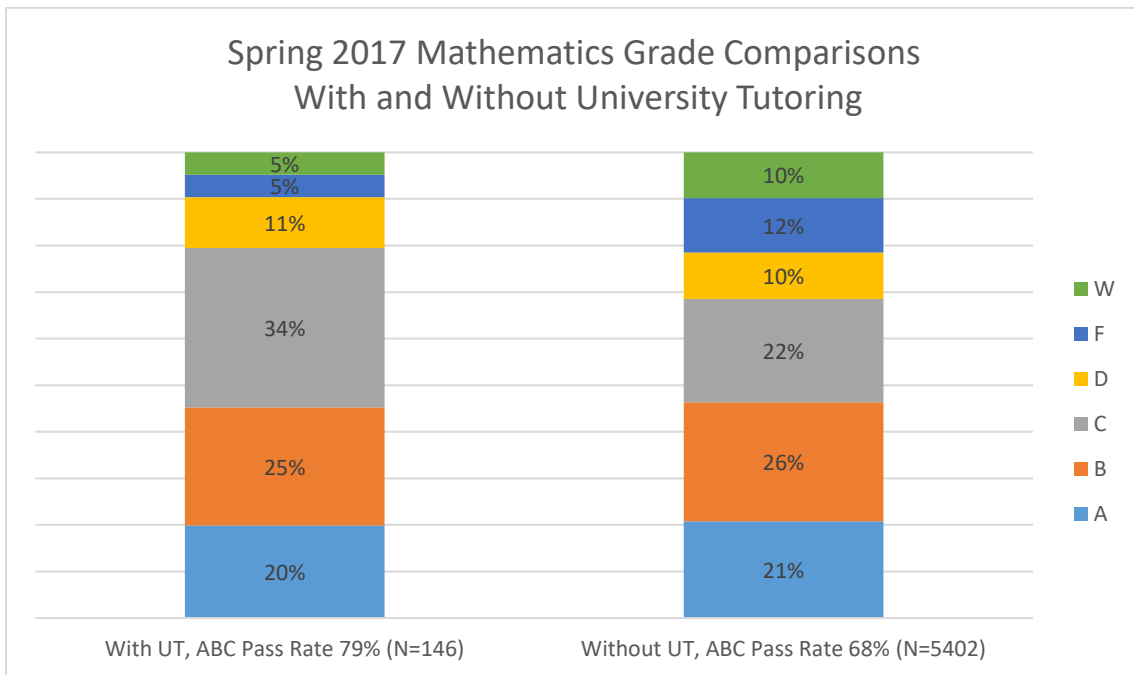
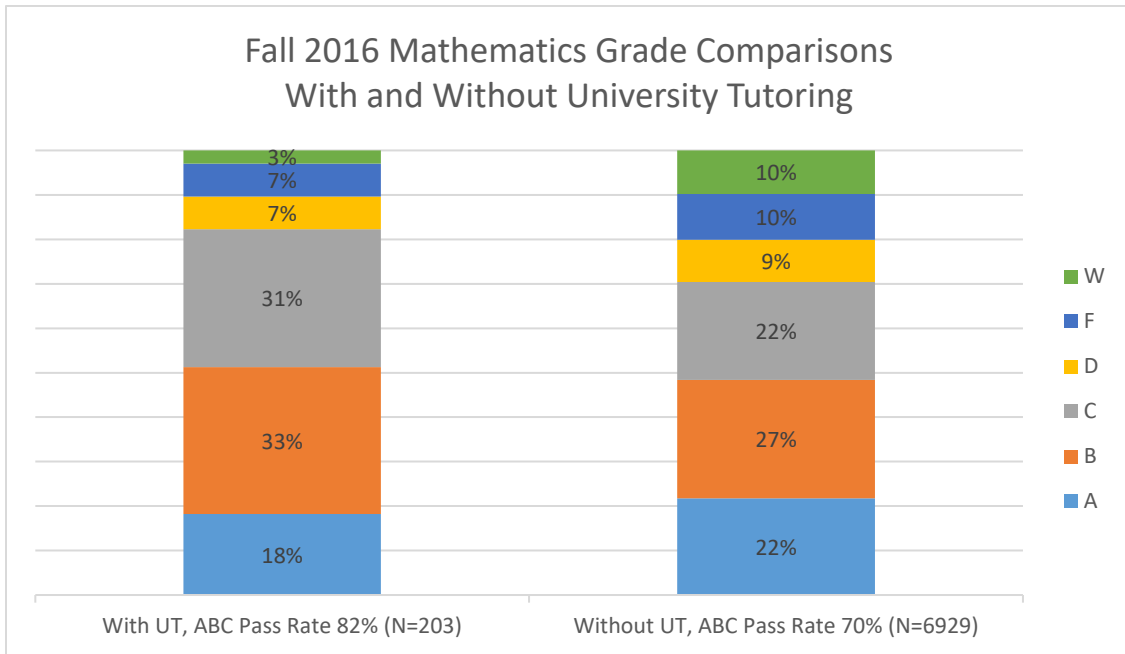
Individual Subject Breakdown

Mathematics

Mathematics serves as UT's most popular subject area, and thereby constituted the largest sample size. This is especially true since in many Mathematics courses, students must receive a grade of at least a "C" to progress on to the next course. The courses compared in this study are as follows:

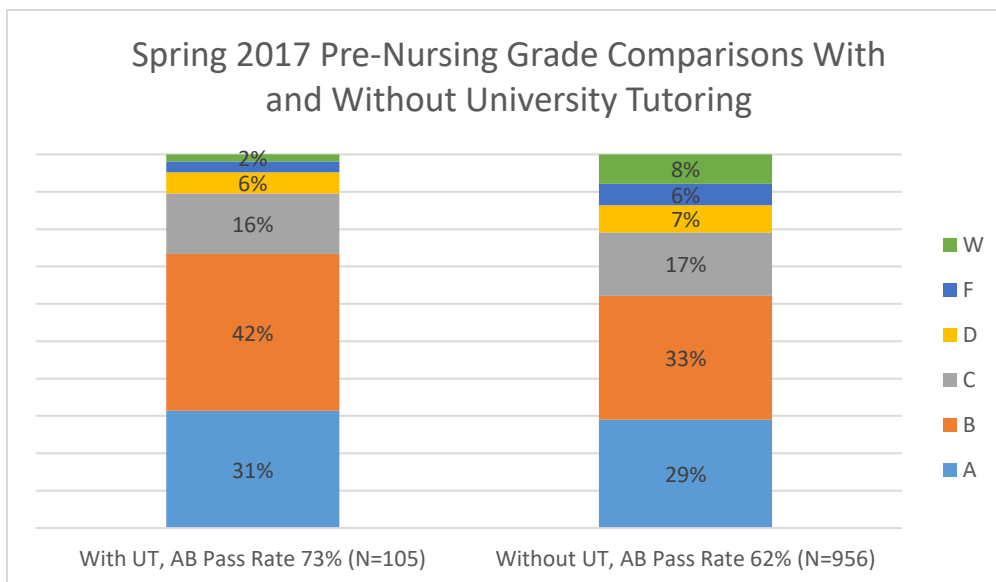
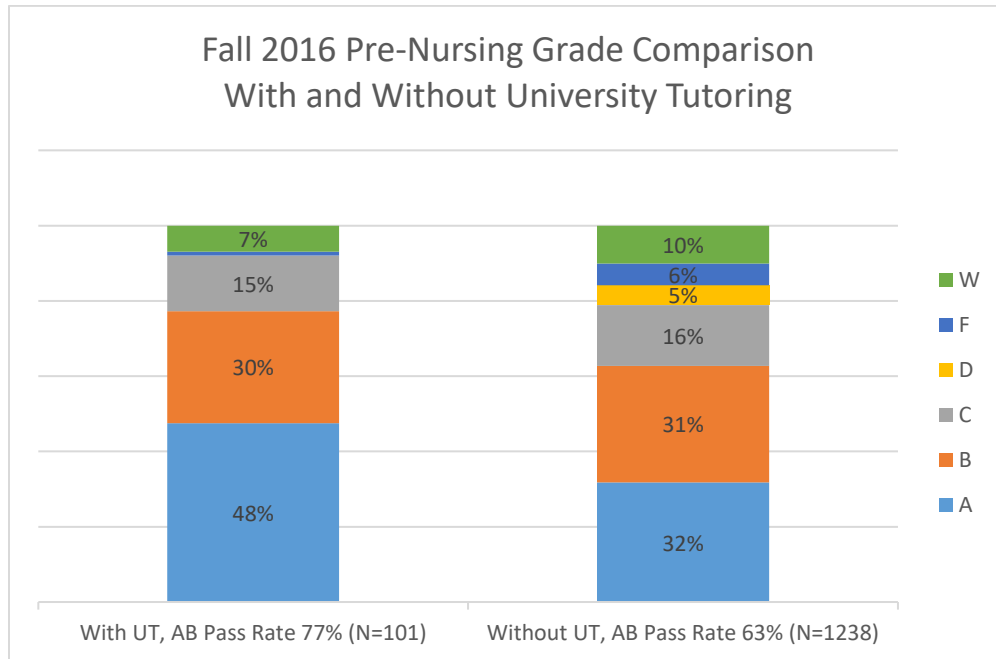
- MATH 10041 Introductory Statistics
- MATH 10772 Modeling Algebra Plus
- MATH 10773 Algebra for Calculus Stretch I
- MATH 10774 Algebra for Calculus Stretch II
- MATH 10775 Algebra for Calculus Plus
- MATH 11009 Modeling Algebra
- MATH 11010 Algebra for Calculus
- MATH 11012 Intuitive Calculus
- MATH 11022 Trigonometry
- MATH 12002 Analytic Geometry & Calculus I
- MATH 12003 Analytic Geometry & Calculus II
- MATH 14001 Basic Math Concepts I
- MATH 14002 Basic Math Concepts II

The results revealed that students who utilized scheduled tutoring regularly achieved higher grades in comparison to their peers.



Pre-Nursing

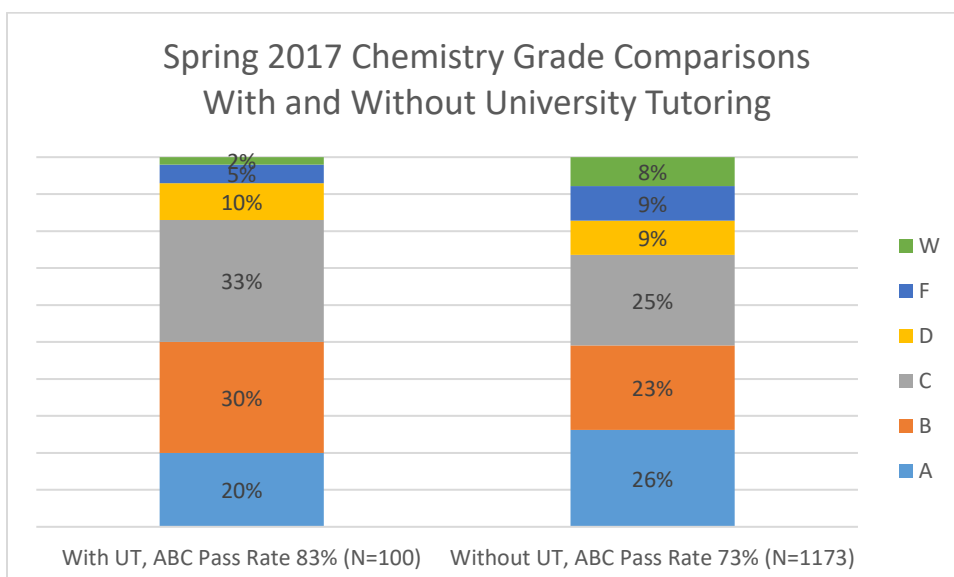
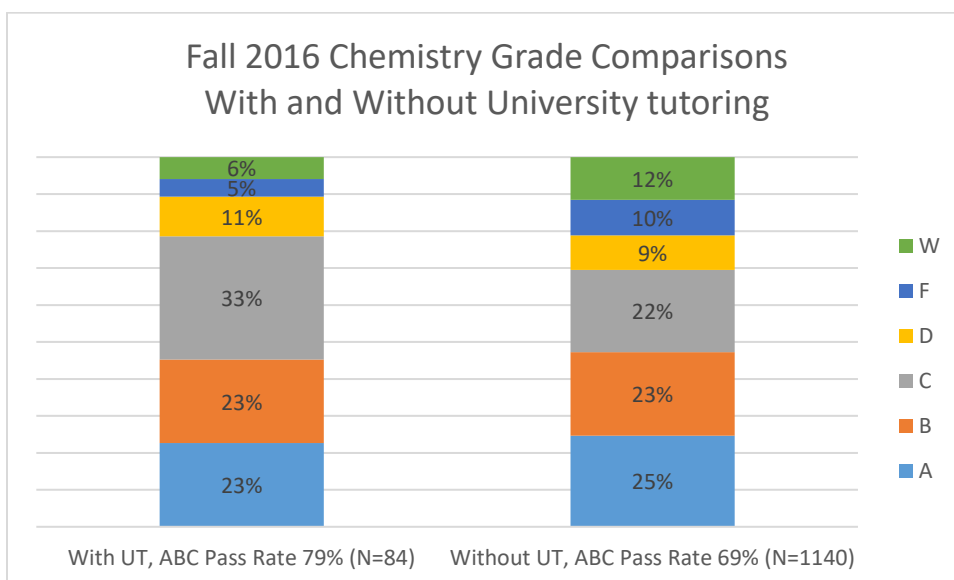
The next category includes prerequisite courses for Pre-Nursing majors. To enter the Nursing program students must perform well in four particular science classes, BSCI 20020 Biological Structure and Function, BSCI 20021 Basic Microbiology, BSCI 21010 Anatomy and Physiology I, BSCI 21020 Anatomy and Physiology II as well as CHEM 10055 Molecules of Life. In order to be considered for the Nursing major, Pre-Nursing students need a cumulative GPA of 2.75 in these courses. As a result, the AB pass rates and CDFW rates were reported. Note that students who utilized scheduled tutoring had an AB pass rate that was greater than those who did not.



Chemistry

With Chemistry tutoring, students who utilized scheduled tutoring throughout the semester performed better than their peers. In particular, the ABC pass rate for scheduled tutoring students far surpasses that of the general population who did not utilize tutoring throughout the whole of the semester. The chemistry courses compared are as follows:

- CHEM 10060 General Chemistry I
- CHEM 10061 General Chemistry II
- CHEM 20481 Basic Organic Chemistry I
- CHEM 20481 Basic Organic Chemistry II
- CHEM 30481 Organic Chemistry I
- CHEM 30482 Organic Chemistry II



Summary of Results

For each semester, the DFW rates and ABC rates are summarized for scheduled tutoring below.

F16 Scheduled Tutoring ABC Rates					
Subject	ABC with UT	N with UT	ABC without UT	N without UT	Difference
Math	82%	203	70%	6929	12%
Pre-Nursing	77%	101	63%	1238	14%
Chemistry	79%	84	69%	1140	10%
S17 Scheduled Tutoring ABC Rates					
Subject	ABC with UT	N with UT	ABC without UT	N without UT	Difference
Math	79%	146	68%	5402	11%
Pre-Nursing*	73%	105	62%	956	11%
Chemistry	83%	100	73%	1173	10%

*Denotes AB Pass Rate

Section V: Qualitative Advancements and Improvements

During the 2016 - 17 academic year, students, tutors, and faculty were surveyed to provide feedback on UT programs. Based on their feedback, UT has made the following improvements over the past academic year.

- Introduced finals week review sessions for mathematics block final exams
- Staffed tutors for the Academic STARS summer program within the Student Multicultural Center
- Launched online tracking for mathematics classroom assistants
- Added a mentoring component to the UT program
- Created protocol for staffing the information desk for University Library drop-in
- Expanded Prentice Hall tutoring for the College of Business Administration Learning Community
- Shared tutor training resources with the College of Education, Health, and Human Services
- Implemented a professional development component into tutor training and performance reviews to link tutor job competencies with highly valued professional skills
- Increased course offerings to include online and scheduled Public Health tutoring
- Relocated daytime drop-in tutoring to the second floor of the University Library
- Relocated evening drop-in tutoring to the second floor of Tri-Towers Rotunda

Section VI: Survey Results

Methodology

During the 2016-2017 academic year, 275 students were surveyed at five outreach locations over the course of two weeks on a four point scale. The survey results are listed below.

<u>Question</u>	<u>Agree</u>	<u>Disagree</u>
I was aware of tutoring at the Academic Success Center (ASC) at the beginning of the semester.	98.5%	1.5%
I received a tutor in a timely manner.	99.3%	0.7%
The location of the tutoring services is convenient.	98.9%	1.1%
I was able to schedule an appointment with ease.	99.2%	1.8%
The ASC staff creates a friendly learning environment.	99.6%	0.4%
Staff at the ASC helped me to develop/maintain a connection with the university.	99.3%	0.7%
I felt comfortable about asking my tutor questions.	99.3%	0.7%
My tutor explained the subject matter so I could understand it.	96.7%	1.8%
My tutor listened carefully.	97.8%	0.7%
My tutor answered questions well and provided examples to clarify problems.	98.9%	1.1%
My tutor spoke clearly and distinctly.	99.6%	0.4%
My tutor was on time and familiar with the material.	99.6%	0.4%
My tutor has adequate knowledge to assist me with academic problems.	99.2%	0.8%
My tutor encouraged my participation in each session.	100.0%	0%
My tutor acted in a professional manner.	100.0%	0%
My tutor was patient and did not rush through the session.	99.3%	0.7%
If my tutor were qualified to tutor another course I was taking, I'd request him/her again.	98.6%	1.1%
If I take another course for which tutoring is offered, I would consider signing up for assistance at the ASC.	97.8%	2.2%
I would recommend the tutoring service at the ASC to my friends.	99.7%	0.4%
Tutoring has helped raise my grade	98.1%	1.8%
Tutoring has helped to improve my belief that I can graduate from college.	98.2%	1.8%
Tutoring assistance plays an important role in my decision to remain at KSU.	90.8%	9.2%
Overall, my tutoring experience was beneficial.	99.2%	0.7%