Getting to Know Our Students Survey Summary 2023

University System of Georgia

08 May, 2024

1 Freshman Academic Mindset at Georgia Institute of Technology for 2023

This report provides summary information for Georgia Institute of Technology. Included below are summary statistics for most of the survey elements for which composites are constructed (including both the composite and the underlying elements that construct it). In most instances, Research Universities and System Total data is provided for comparison. There are also visual comparisons between the early and late Fall administrations of the survey to offer a window into how students' mindset changes over time (and how it sometimes doesn't), along with comparisons between majority and Black and Hispanic students and by gender.

It is noteworthy that the available dataset provides a more information that is included in this report, and institutions are welcome to use their deidentified data to investigate further. In the analysis below, for institutions where there are insufficient data for analysis, some of the tables or charts may be empty/blank. A codebook providing details on the survey items and composites is available here (https://completega.org/2022_Mindset_Survey/F22_GA_Codebook.xlsx).

2 About the Survey

The USG Getting to Know Our Students Survey has been administered to incoming freshmen across the University System of Georgia since 2017. Developed in collaboration

with Motivate Lab at the University of Virginia (https://motivatelab.org/), the survey asks a host of questions designed to assess students' motivations and attitudes about learning to provide a snapshot at the beginning of their post-secondary journey. The survey is administered twice in the fall semester, once in the first three weeks of classes and again in the final three weeks. Student responses are linked to academic outcomes and administrative data to allow an understanding of how Academic Mindsets and their changes over time are related to student success. The elements of the survey are available here (https://completega.org/2020-mindset-survey-items).

3 Descriptive Statistics for Georgia Institute of Technology

Total Survey Count	Early Fall Administration	Median Time Spent T1	Late Fall Administration	Median Time Spent T2	Students Taking Both Surveys
563	563		2		2

4 Summary of Academic Mindset Items

The Getting to Know Our Students Survey asks students to indicate the extent to which they agree of disagree with a series of statements about their thoughts about their academic work and faculty. These elements combine to create composite measures of different Academic Mindsets. The three primary Academic Mindsets that are the focus of this survey are Growth (or Theory of Intelligence), Purpose and Value, and Sense of Belonging. These three are highlighted because of their importance to student success and persistence and because they are understood to be malleable.

Individuals often hold different mindsets depending on the subject at hand. For the USG Getting to Know Our Students Survey, students were asked about basic Mindset constructs across the four most common subject areas in the first year: Math, Science, English and History. Students were asked to respond to items on either Math or Science and English or History. The composite results provide us with a glimpse into student mindsets across the curriculum.

4.1 Growth Mindset

Growth Mindset refers to a belief that intelligence is something that can change and be developed over time through the application of effort, strategies, and help-seeking behaviors. A fixed mindset typically refers to a belief that intelligence is a characteristic of the learner (like eye-color or dominant hand) that can't be changed. For individuals with a more growth mindset, setbacks provide opportunities to reflect and learn. Fixed mindsets may focus on grades or scores as measures of intelligence.

The Growth Mindset construct includes questions about the students' theory of intelligence or growth mindset - the concept that students feel that they can be successful through the application of effort, strategies, and assistance, and their expectancy or sense of "I can do this."). Growth Mindset is tied to the idea of learning from setbacks and using feedback to improve.

4.1.1 Growth Mindset 4.1.2 Expectancy

4.1.1.1 Math Growth Mindset 4.1.1.2 Science Growth Mindset

4.1.1.3 English Growth Mindset 4.1.1.4 History Growth Mindset

4.1.1.1.1 Georgia Institute of Technology 4.1.1.1.2 Research Universities

4.1.1.1.3 System Totals

Early Fall	count	mean	sd	median	min	max
Composite: Math Growth Mindset	289	4.87	1.14	5	1	6
You can learn new things, but you can't really change your basic math intelligence. (Reverse coded)	289	4.82	1.28	5	1	6
You have a certain amount of math intelligence and you really can't do much to change it. (Reverse coded)	289	4.97	1.18	5	1	6
Your math intelligence is something about you that you can't change very much. (Reverse coded)	289	4.83	1.25	5	1	6

Late Fall	count	mean	sd	median	min	max
Composite: Math Growth Mindset	1	3.33		3.33	3.33	3.33
You can learn new things, but you can't really change your basic math intelligence. (Reverse coded)	1	4.00		4.00	4.00	4.00
You have a certain amount of math intelligence and you really can't do much to change it. (Reverse coded)	1	3.00		3.00	3.00	3.00
Your math intelligence is something about you that you can't change very much. (Reverse coded)	1	3.00		3.00	3.00	3.00

4.2 Purpose

Purpose includes a range of constructs around student motivation that investigate how students attach value to the work that they are engaged in in school. Included in this section are responses to students assessment of the importance, utilty and costs associated with their academic work. Also included in this section are students' expectations for graduation and income and their reasons for attending college.

Purpose provides a measure of whether the learning context has *value* to the students. Specifically, whether they find their learning to be relevant, purposeful, interesting, or important. Students may value learning for different reasons - to help them get a job or advance in their careers, to make a difference oin the world or their community, because it aligns with their identity or sense of self, or because the subject matter is interesting to them. Related to purpose and value constructs is the concept of costs - that students have to give up something else in order to focus on their learning.

Also in this area we explore students' expected outcomes for graduation (in terms of time and eventual salary) and their sense of what they could earn immediately. These combine to provide a sense of the "discounting" students may be making regarding their investment in higher education. While the lifetime return on a college degree is well-established, students' perceptions of the difference, and their sense of how long they will need to wait to realize that return, provides a useful way of learning more about their willingness to commit to their program of study.

4.2.1 Purpose and Value 4.2.2 Cost 4.2.3 Expectations for Graduation

4.2.4 Salary Expectations at Graduation compared with Current Expectations

4.2.1.1 Math value 4.2.1.2 Science value 4.2.1.3 English value

4.2.1.4 History value

4.2.1.1.1 Georgia Institute of Technology 4.2.1.1.2 Research Universities

4.2.1.1.3 System Total

Early Fall	count	mean	sd	median	min	max
Composite: Math Value	289	5.03	1.05	5.25	1	6
I think math is important.	287	5.04	1.24	5.00	1	6
I think math is useful.	288	5.33	0.92	6.00	1	6
What I learn in my math classes will be useful in the future.	288	4.86	1.31	5.00	1	6
What I learn in my math classes will help me in my future career.	284	4.92	1.29	5.00	1	6

Late Fall	count	mean	sd	median	min	max
Composite: Math Value	1	4		4	4	4
I think math is important.	1	4		4	4	4
I think math is useful.	1	4		4	4	4
What I learn in my math classes will be useful in the future.	1	4		4	4	4
What I learn in my math classes will help me in my future career.	1	4		4	4	4

4.3 Belonging

Students feel they **Belong** in the learning context when they are connected to peers, feel that they are known and cared for by faculty and mentors, fit in academically and socially, and are free from doubts and worries about belonging. Belonging can serve as a support for student success, and the degree to which students find a home in the institution can be a

powerful predictor of retention and academic outcomes. Students can experience different levels of belonging in an academic context - they may feel an overall sense of belong at the institution, but may not have that sense in a particular course or in their major or their belonging my shift over time.

4.3.1 Georgia Institute of Technology | 4.3.2 Research Universities | 4.3.3 System Total

Early Fall	count	mean	sd	median	min	max
A. Composite: College Belonging	**536**	**4.82**	**1.07**	**5.0**	**1**	**6**
A1. I belong at this college/university.	536	4.64	1.22	5.0	1	6
A2. I feel like this college/university is a good fit for me.	532	5.00	1.08	5.0	1	6
B. Composite: College Identity	**536**	**4.61**	**1.15**	**5.0**	**1**	**6**
B1. Being a student at this college/university is an important part of my identity.	536	4.35	1.41	5.0	1	6
B2. I am very proud to be a student at this college/university.	535	4.88	1.15	5.0	1	6
C. Composite: College Involvement	**535**	**4.67**	**1.19**	**5.0**	**1**	**6**
C1. I feel more academically prepared than other students at this college/university.	533	3.42	1.43	3.0	1	6
C2. I am very involved in groups and/or activities at this college/university.	530	4.66	1.27	5.0	1	6
C3. I am not very involved on campus; I'm just here to take classes. (Reverse Coded)	535	4.69	1.38	5.0	1	6
D. Composite: Belonging Uncertainty	**534**	**2.98**	**1.47**	**2.5**	**1**	**6**

Early Fall	count	mean	sd	median	min	max
D1. When something bad happens, I feel that maybe I don't belong at college.	534	2.95	1.52	3.0	1	6
D2. Sometimes I feel that I belong at college, and sometimes I feel that I don't belong at college.	531	3.02	1.70	3.0	1	6
D3. I don't know if I really belong in my major.	531	2.54	1.47	2.0	1	6

Late Fall	count	mean	sd	median	min	max
A. Composite: College Belonging	**2**	**4.00**	**1.41**	**4.00**	**3.0**	**5.0**
A1. I belong at this college/university.	2	3.50	0.71	3.50	3.0	4.0
A2. I feel like this college/university is a good fit for me.	2	4.50	2.12	4.50	3.0	6.0
B. Composite: College Identity	**2**	**4.75**	**1.06**	**4.75**	**4.0**	**5.5**
B1. Being a student at this college/university is an important part of my identity.	2	5.00	1.41	5.00	4.0	6.0
B2. I am very proud to be a student at this college/university.	2	4.50	0.71	4.50	4.0	5.0
C. Composite: College Involvement	**2**	**4.25**	**1.06**	**4.25**	**3.5**	**5.0**
C1. I feel more academically prepared than other students at this college/university.	2	2.50	0.71	2.50	2.0	3.0
C2. I am very involved in groups and/or activities at this college/university.	2	4.00	1.41	4.00	3.0	5.0

Late Fall	count	mean	sd	median	min	max
C3. I am not very involved on campus; I'm just here to take classes. (Reverse Coded)	2	4.50	0.71	4.50	4.0	5.0
D. Composite: Belonging Uncertainty	**2**	**3.25**	**0.35**	**3.25**	**3.0**	**3.5**
D1. When something bad happens, I feel that maybe I don't belong at college.	2	3.50	0.71	3.50	3.0	4.0
D2. Sometimes I feel that I belong at college, and sometimes I feel that I don't belong at college.	2	3.00	0.00	3.00	3.0	3.0
D3. I don't know if I really belong in my major.	2	3.50	3.54	3.50	1.0	6.0

4.4 Persistence (Grit)

Persistence, popularized by Dr. Angela Duckworth's research around **Grit** provides a window into how students may behave in the face of challenge and setbacks. Persistence is often very contextual - students may be very committed to push through difficulties in some areas but not in others - and translateable - students can carry the lessons they know about persisting in one area into those where they are struggling.

4.4.1 Georgia Institute of Technology | 4.4.2 Research Universities | 4.4.3 System Total

Early Fall	count	mean	sd	median	min	max
Composite: Persistence (Grit)	560	4.83	0.93	5	1	6
I am a hard worker.	559	5.00	1.01	5	1	6
I finish whatever I begin.	558	4.65	1.12	5	1	6

Late Fall	count	mean	sd	median	min	max

Late Fall	count	mean	sd	median	min	max
Composite: Persistence (Grit)	2	3	0.71	3	2.5	3.5
I am a hard worker.	2	4	1.41	4	3.0	5.0
I finish whatever I begin.	2	2	0.00	2	2.0	2.0

4.5 Motivation

The Mindset Survey asks students about their reasons for attending college and for choosing a major to get a better sense of their motivation for attending college, and for selecting their academic path. Reasons for Attending College are themselves divided into three categories: Independent motives related to the individual's interests/goals Interdependent motives related to supporting others and the somewhat overlapping Helping motives, which removes some of the community values for individual ones. Additionally, the survey investigates students perceptions of family support.

4.5.1 Reasons for Attending College 4.5.2 Reasons for Selecting a Major

4.5.3 Family Support

4.5.1.1 Independent Motives 4.5.1.2 Interdependent Motives

4.5.1.3 Helping Motives

4.5.1.1.1 Georgia Institute of Technology 4.5.1.1.2 Research Universities

4.5.1.1.3 System Total

Motive	count	mean	std. dev.	median	min	max
Composite: Independent Motives	562	5.00	0.83	5	1	6
Develop my independent thinking.	562	4.96	1.12	5	1	6
Expand my understanding of the world.	560	5.10	1.10	5	1	6
Explore new interests.	561	4.80	1.10	5	1	6

Motive	count	mean	std. dev.	median	min	max
Learn more about my interests.	559	5.13	1.02	5	1	6

4.6 Perception of Faculty Mindset

4.6.1 Georgia Institute of Technology 4.6.2 Research Universities

4.6.3 System Total

Early Fall	count	mean	sd	median	min	max
Composite: Perception of Facutly	177	4.45	0.87	4.5	1.25	6
The Instructors at my school seem to believe that some students are smart, while others are not. (Reverse Coded)	176	4.82	1.26	5.0	1.00	6
The Instructors at my school seem to believe that students who are less smart will always be less smart than the other students in the class. (Reverse Coded)	175	2.81	1.49	3.0	1.00	6
The instructors at my school seem to believe that every student can learn new things and significantly grow their intelligence.	175	4.87	1.03	5.0	1.00	6
The instructors at my school seem to believe that every student can learn new things and significantly grow their intelligence. (Reverse Coded)	175	4.52	1.36	5.0	1.00	6
The instructors at my school seem to believe that students can learn new things, but they can’t really change their basic intelligence (Reverse Coded)	176	4.65	1.28	5.0	1.00	6
The instructors at my school seem to believe that students either “have it” or they don’t. (Reverse Coded)	176	4.73	1.27	5.0	1.00	6

Early Fall	count	mean	sd	median	min	max
The instructors at my school seem to believe that students have a certain amount of intelligence, and they really can't do much to change it. (Reverse Coded)	177	4.82	1.14	5.0	1.00	6

Late Fall	count	mean	sd	median	min	max
Composite: Perception of Facutly	177	4.45	0.87	4.5	1.25	6
The Instructors at my school seem to believe that some students are smart, while others are not. (Reverse Coded)	176	4.82	1.26	5.0	1.00	6
The Instructors at my school seem to believe that students who are less smart will always be less smart than the other students in the class. (Reverse Coded)	175	2.81	1.49	3.0	1.00	6
The instructors at my school seem to believe that every student can learn new things and significantly grow their intelligence.	175	4.87	1.03	5.0	1.00	6
The instructors at my school seem to believe that every student can learn new things and significantly grow their intelligence. (Reverse Coded)	175	4.52	1.36	5.0	1.00	6
The instructors at my school seem to believe that students can learn new things, but they can't really change their basic intelligence (Reverse Coded)	176	4.65	1.28	5.0	1.00	6
The instructors at my school seem to believe that students either "have it" or they don't. (Reverse Coded)	176	4.73	1.27	5.0	1.00	6

Late Fall	count	mean	sd	median	min	max
The instructors at my school seem to believe that students have a certain amount of intelligence, and they really can't do much to change it. (Reverse Coded)	177	4.82	1.14	5.0	1.00	6

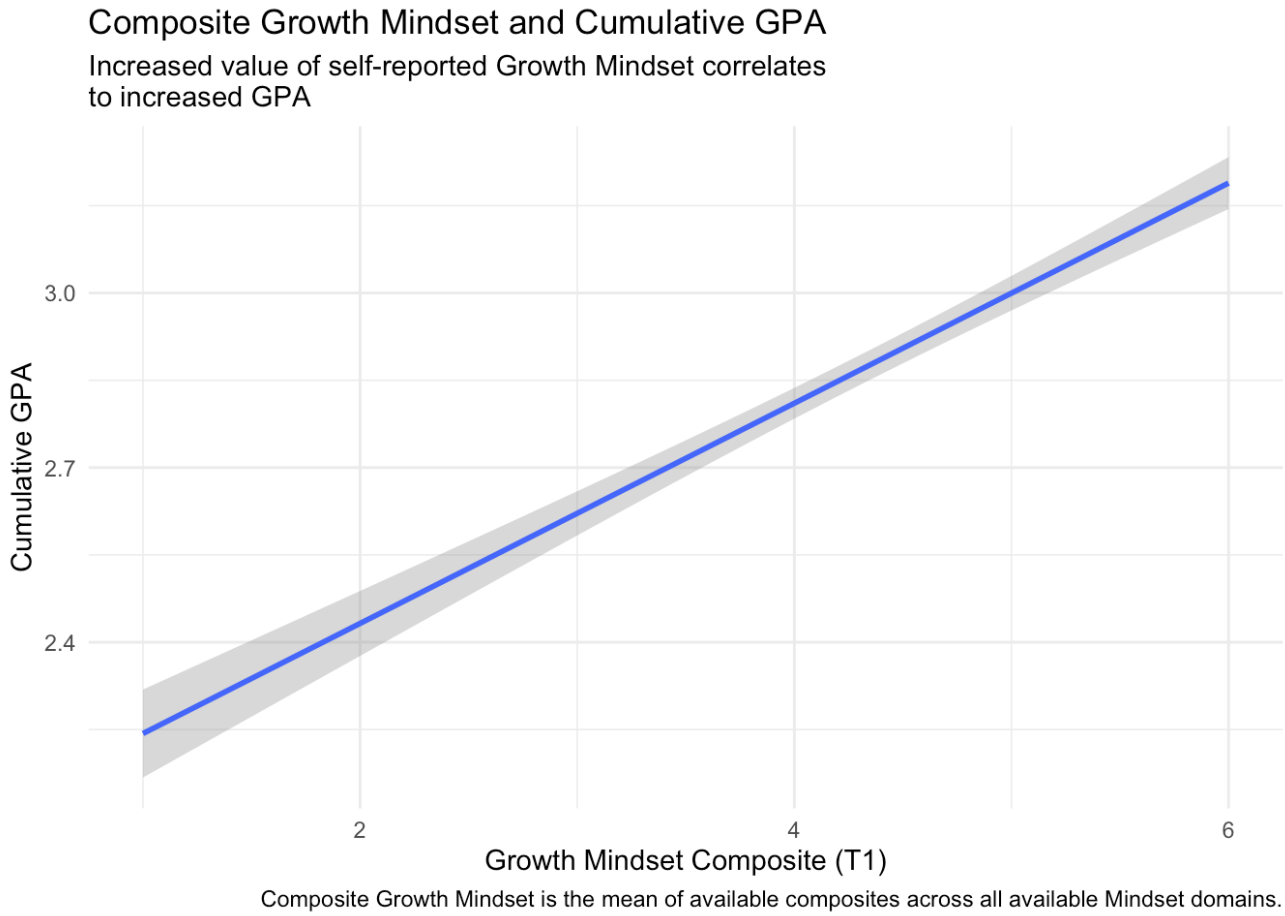
5 Visualizing Academic Mindset

The charts below provide some visual presentations of Academic Mindset composites, primarily focused on the diffferences between early Fall (t1) and late Fall (t2) administrations. These comparisons capture all student reposes in these surveys, so are not entirely overlapping populations (this analysis is possible, but for most institutions, the number of students who complete both surveys is relatively small).

In general, we expect measures of Academic Mindset to decline over the course of a semester, which is witnessed here. Within the data there are interesting areas to explore around students perceptions relative to the four covered subject areas as well as student gender and ethnicity.

5.1 Mindset and Academic Outcomes

5.1.1 Growth Mindset 5.1.2 Purpose and Value 5.1.3 Sense of Belonging



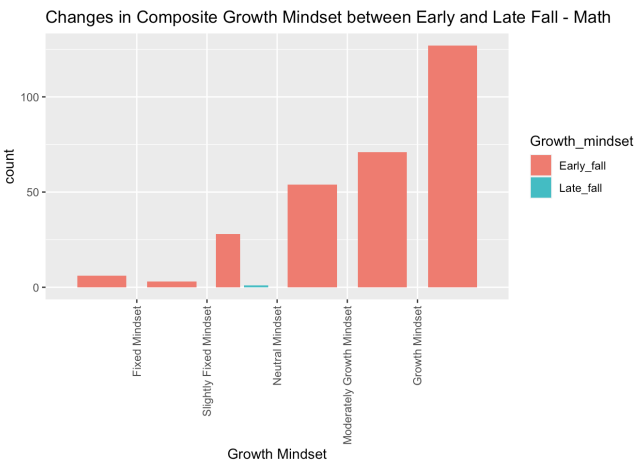
5.2 Mindset Growth Mindset Composite graphs T1 vs. T2

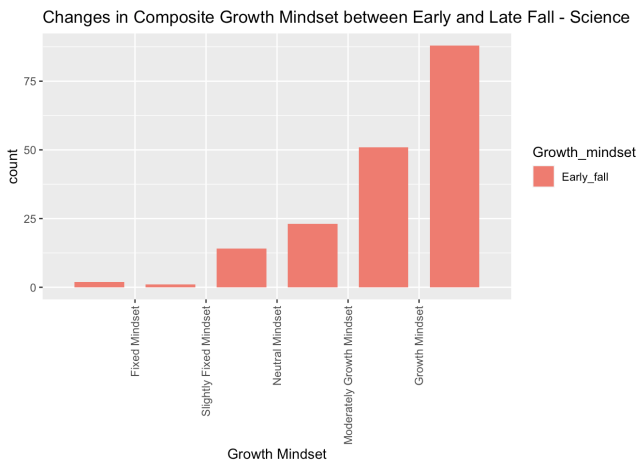
5.2.1 Georgia Institute of Technology

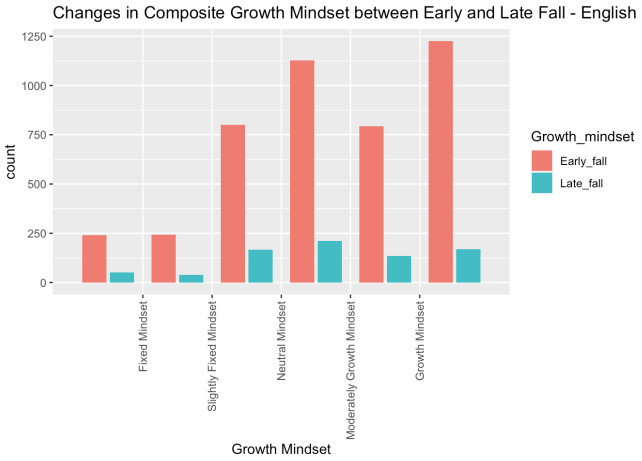
5.2.2 Research Universities

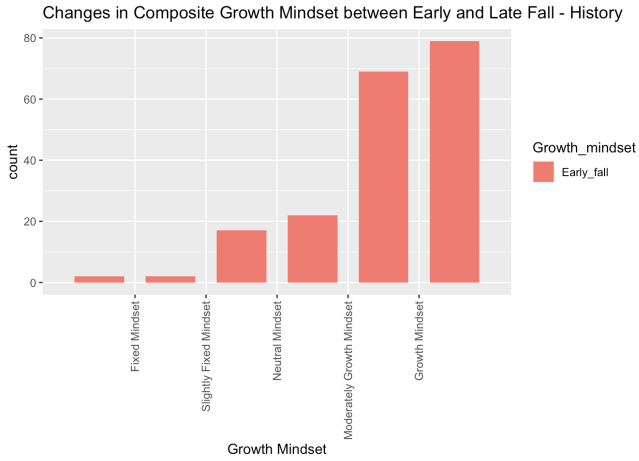
5.2.3 System Total

5.2.4 Comparisons by Minority Status and Gender (System Level)







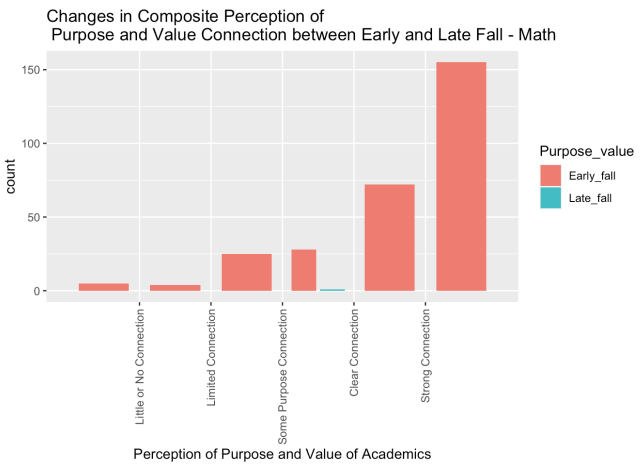


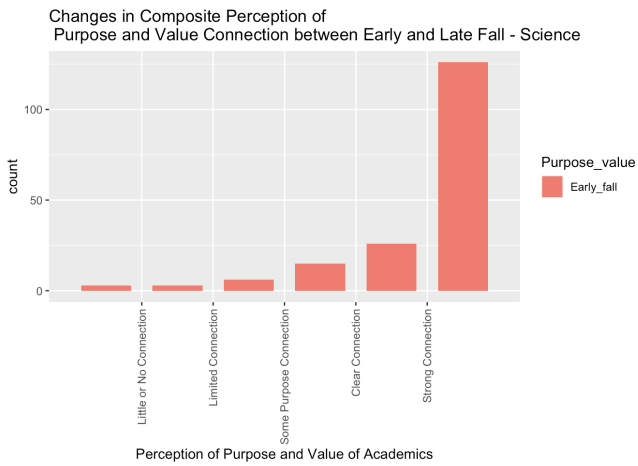
5.3 Purpose and Value Composite Graphs T1 vs. T2

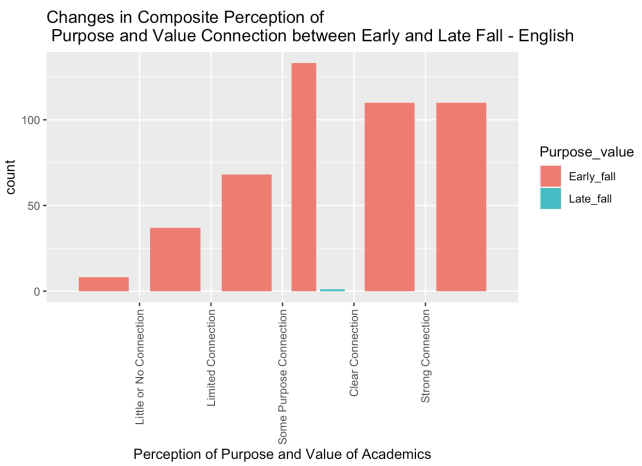
5.3.1 Georgia Institute of Technology 5.3.2 Research Universities

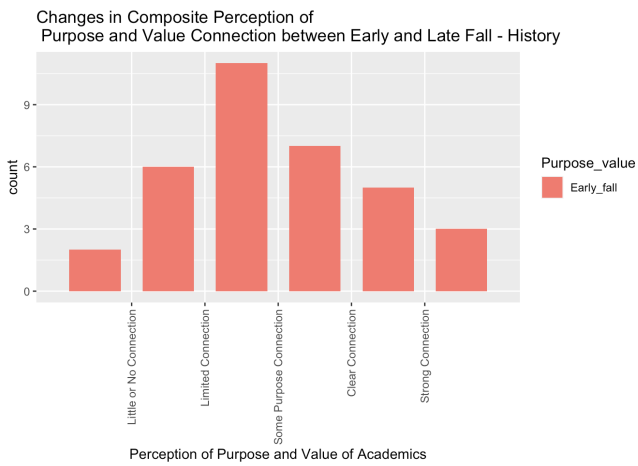
5.3.3 System Total

5.3.4 Comparisons by Minority Status and Gender (System Level)









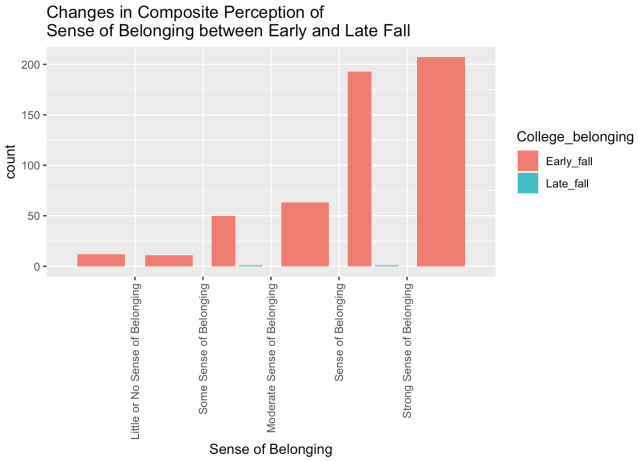
5.4 Belonging Composite graphs T1 vs. T2

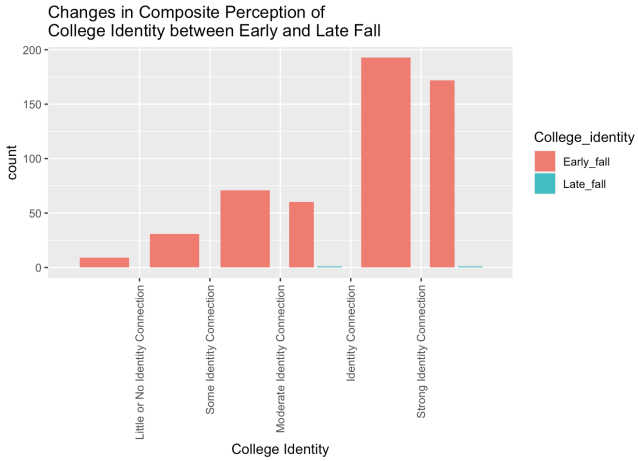
Belonging items included in the survey include two related contstructs to measure the extent to which students feel they belong at their institution (College Belonging) and the extent to which being a student at the institution is a part of their identity.

5.4.1 Georgia Institute of Technology 5.4.2 Research Universities

5.4.3 System Total

5.4.4 Comparisons by Minority Status and Gender (System Level)



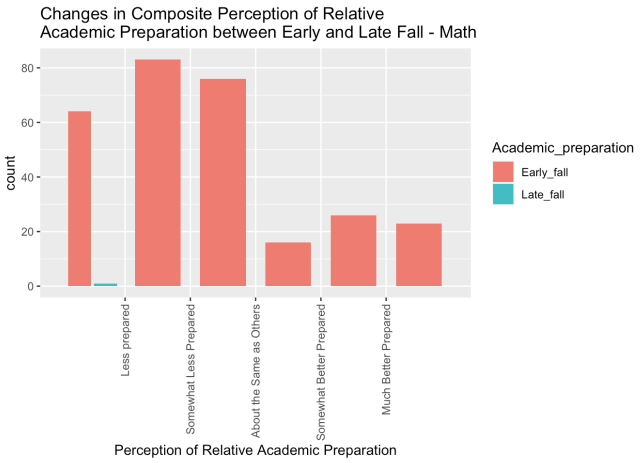


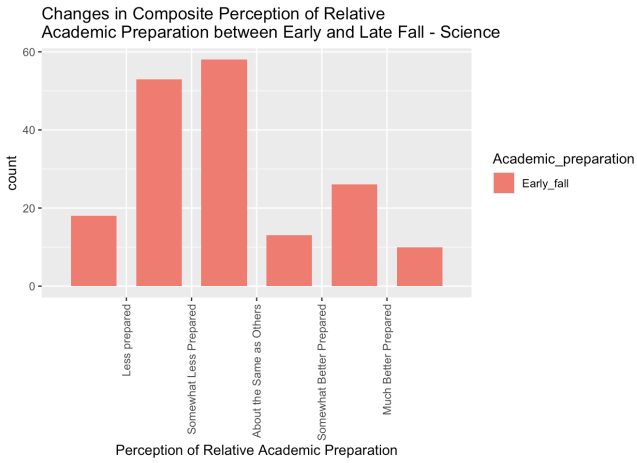
5.5 Academic Preparedness Composite graphs T1 vs. T2

5.5.1 Georgia Institute of Technology 5.5.2 Research Universities

5.5.3 System Total

5.5.4 Comparisons by Minority Status and Gender (System Level)





5.6 Perception of Faculty Composite Graphs T1 vs. T2

5.6.1 Georgia Institute of Technology 5.6.2 Research Universities

5.6.3 System Total

5.6.4 Comparisons by Minority Status and Gender (System Level)