



2023|24 Year 5

Get The Facts Out

Student Strategy Engagement (SSE) Analysis



Authors

Wendy Adams, *Executive Director*

Stephanie Chasteen, *External Evaluator*

Savannah L. Logan, *Postdoctoral Researcher*

Besnik Abrashi, *Research Analyst*

Kaitlin Miller, *Research Assistant*

About Get the Facts Out

Get the Facts Out (GFO) is a five-year, NSF-funded partnership of the Colorado School of Mines and four national societies: the American Physical Society, the American Chemical Society, the American Association of Physics Teachers, and the Association of Mathematics Teacher Educators. GFO is a unique project designed to reach STEM majors in a large fraction of all U.S. mathematics, chemistry, and physics departments and has the potential to address teacher shortages in these high-need STEM disciplines significantly.

Repairing the Reputation of the Teaching Profession

To change the conversation around STEM teacher recruitment at institutions across the country, GFO produces research-based content and reports that faculty can use to help improve their teacher recruitment efforts. The resources are designed to celebrate the positives of teaching and to provide students and faculty with facts that address misinformation and common misperceptions about teaching. The GFO Project Team continually works to update and improve these resources as well as provide support to the faculty who use them.

These resources, and all other content in this report, are intended to be used broadly to change the conversation around STEM teaching careers. We encourage anyone to use and distribute these materials for their intended purpose, within the terms of the [Creative Commons license described here](#).



Any opinions, findings, conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation. NSF DUE #1821710 & 1821462.

Table of Contents

Title Page	1
SSE Questions	2
Demographics.....	3
Question 1 Data (Includes Breakdown by Major).....	4
Q1 Breakdown by Gender and Yes vs. No want to teach.....	5
Questions 2 Data (Includes Breakdown by Major)	6
Q2 Breakdown by Gender and Yes vs. No want to teach.....	7
Question 3 Data.....	8
Q3 Breakdown by Major	9
Q3 Breakdown by Gender.....	10
Q3 Breakdown by Gender and Yes vs. No want to teach	11
Question 4 Data.....	12
Q4 Breakdown by Major	13
Q4 Breakdown by Gender.....	14
Q4 Breakdown by Gender and Yes vs. No want to teach	15
Question 5 Data (Includes Breakdown by Major).....	16
Q5 Free Response Analysis.....	17
Q5 Free Response Analysis (Want to teach)	18
Q5 Free Response Analysis (Don't want to teach	19
Q5 Breakdown by Gender and Yes vs. No want to teach	20
Question 6 Data (Includes Breakdown by Major).....	21
Q6 Breakdown by Gender and Yes vs. No want to teach.....	22
Comments/Suggestions Summary.....	23

Questions include:

1. *How many faculty members do you remember hearing mention grade 7-12 teaching as a career option?*
2. *Have you had a conversation with a faculty member about **becoming** a grade 7-12 teacher?*
3. *Have you heard a faculty member mention various topics about grade 7-12?*
4. *Within your department, have you seen any media addressing any of the topics listed in Question 3?*
5. *How do you think your family feels about teaching as a career option? **Please explain.***
6. *Are you interested in sharing any media related to the topics listed in Question 3 with your family? This could be in the form of brochures, or flyers, etc.*

Demographics

Student Gender Information (n = 463)		
Gender	Respondents	Percentage
Male	202	43.6%
Female	235	50.8%
Other	26	5.6%
Total	463	100.0%

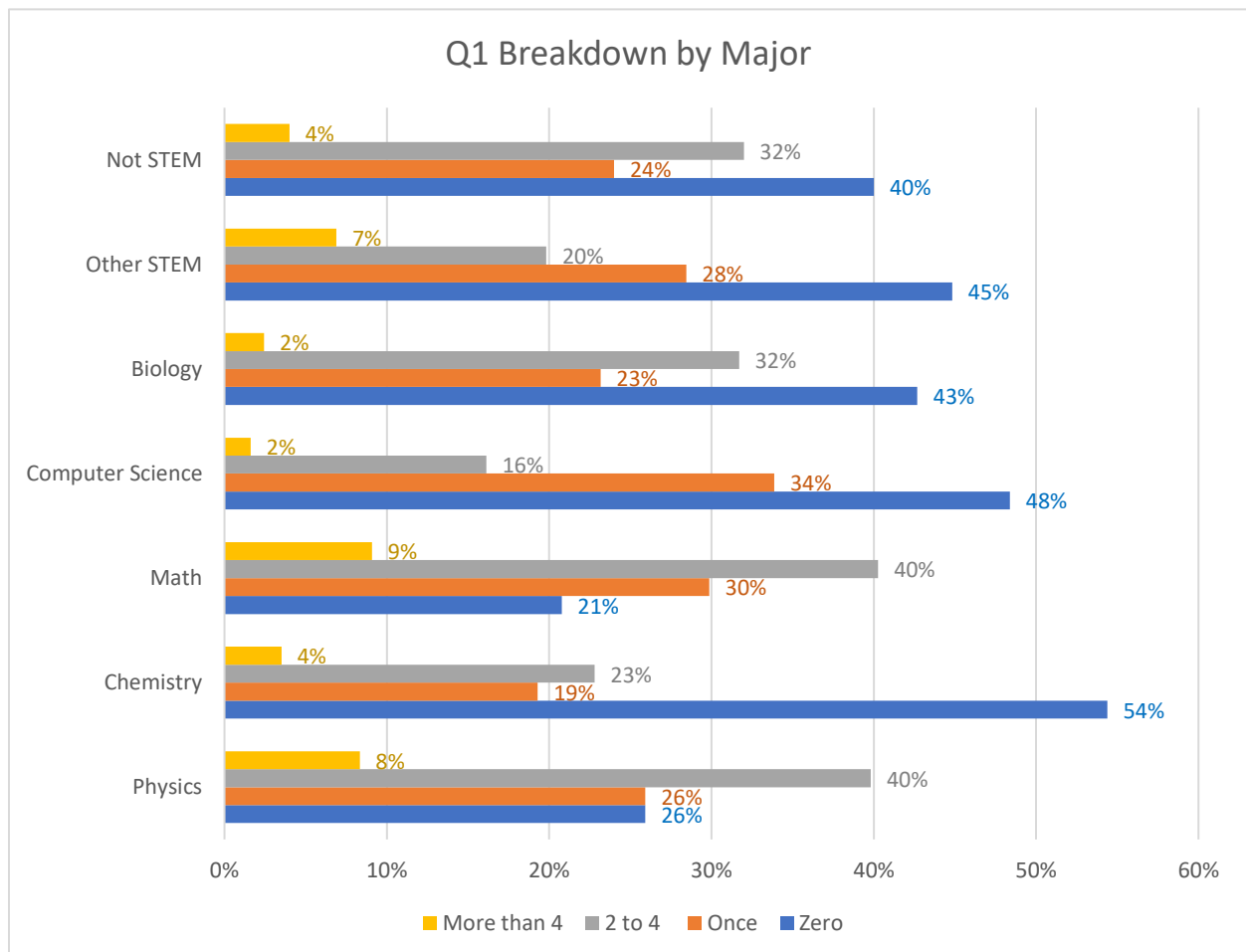
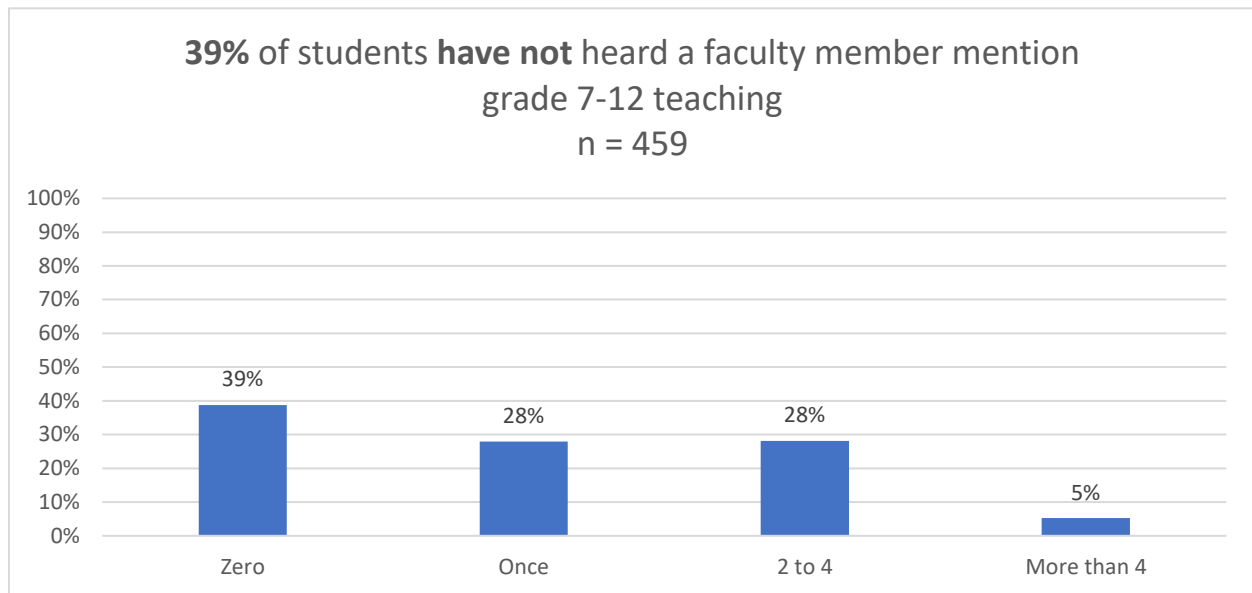
Student Department Information (n = 532)		
Department	Respondents	Percentage
Math	77	14.5%
Chemistry	57	10.7%
Physics	109	20.5%
Comp. Science	63	11.8%
Biology	83	15.6%
Other	143	26.9%
Total	532*	100.0%

*This total counts people who selected multiple options

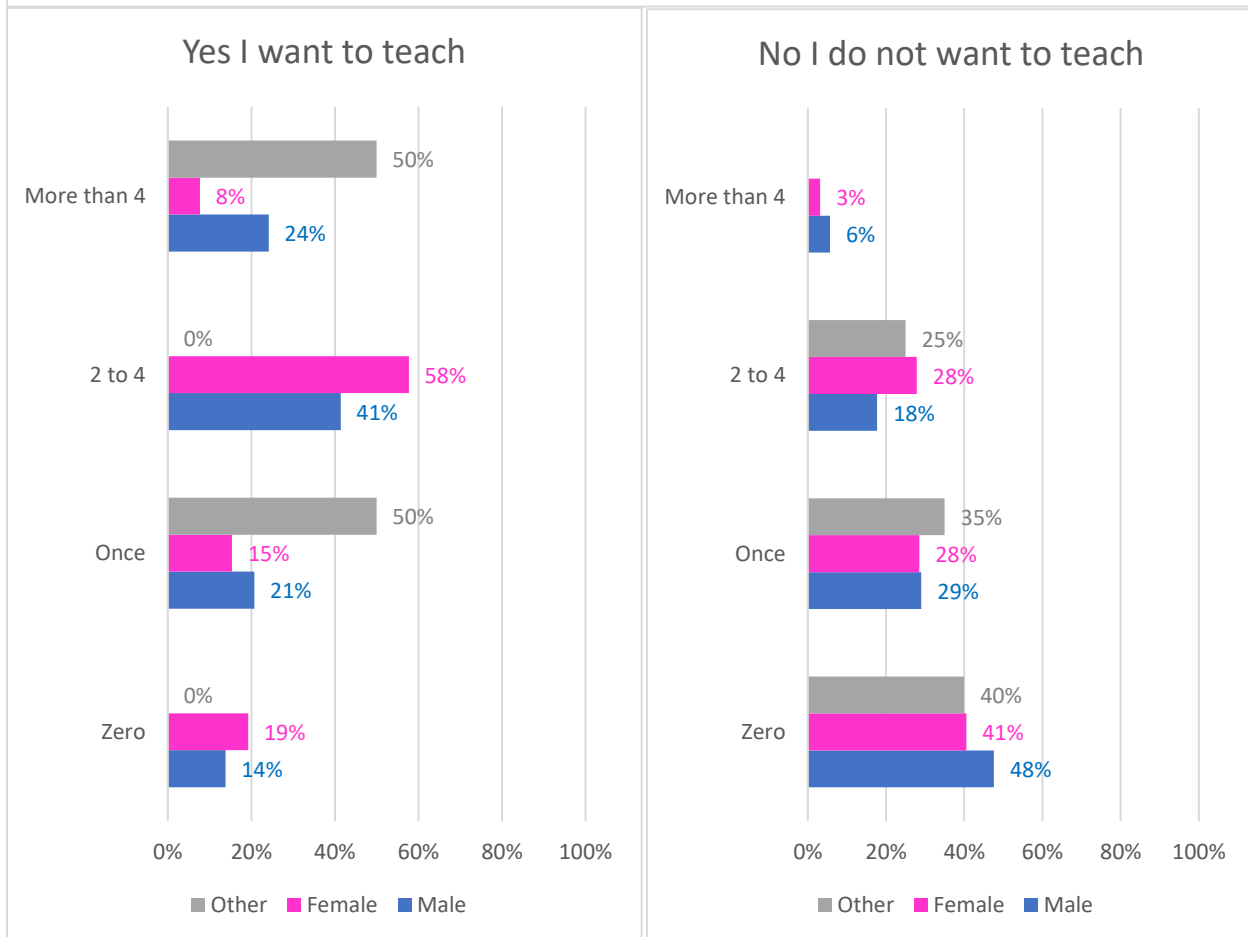
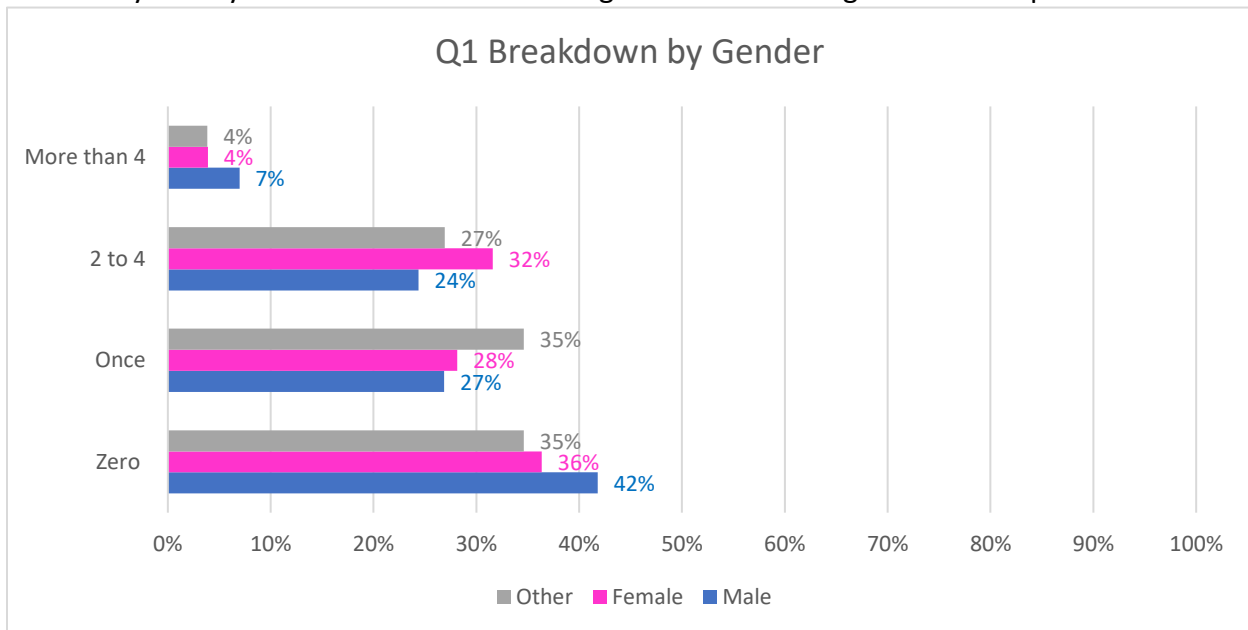
Student Race/Ethnicity Information (n =)		
Race/Ethnicity	Respondents	Percentage
White/Caucasian	331	63.2%
Black/African American	37	7.1%
Hispanic/Latino	64	12.2%
Asian/Asian American	63	12.0%
American Indian/Alaska Native	4	0.8%
Native Hawaiian/Other Pacific Islander	2	0.4%
Middle Eastern/North African	9	1.7%
Prefer not to say	9	1.7%
Other	5	0.9%
Total	524*	100.0%

*This total counts people who selected multiple options

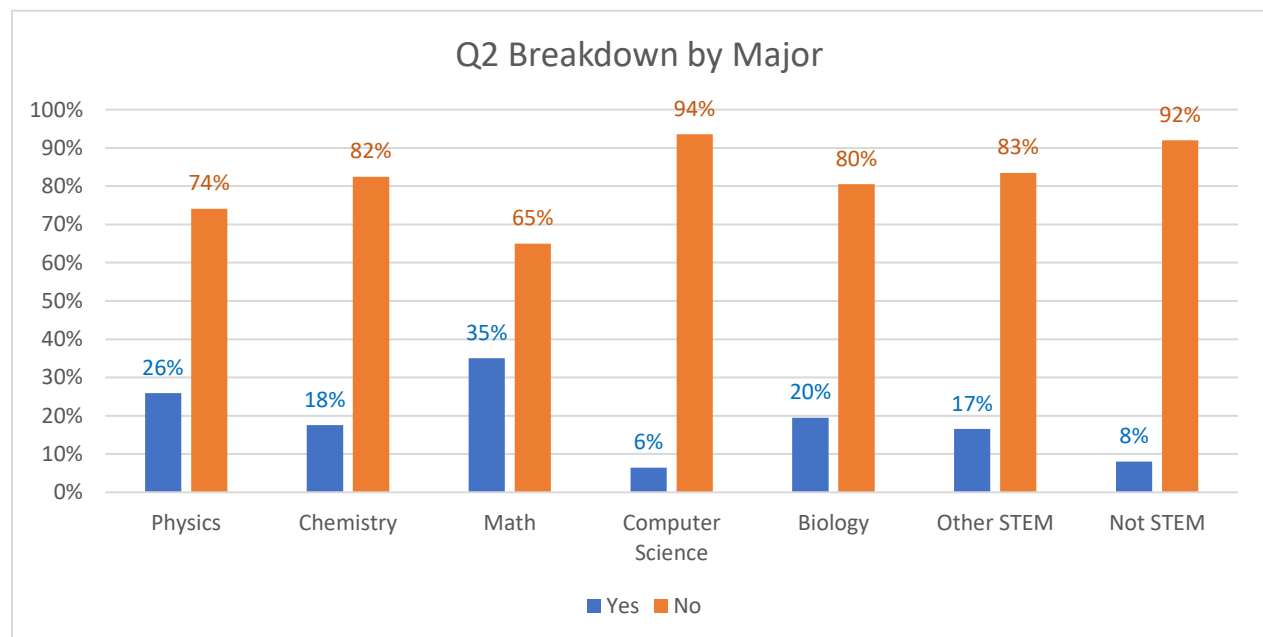
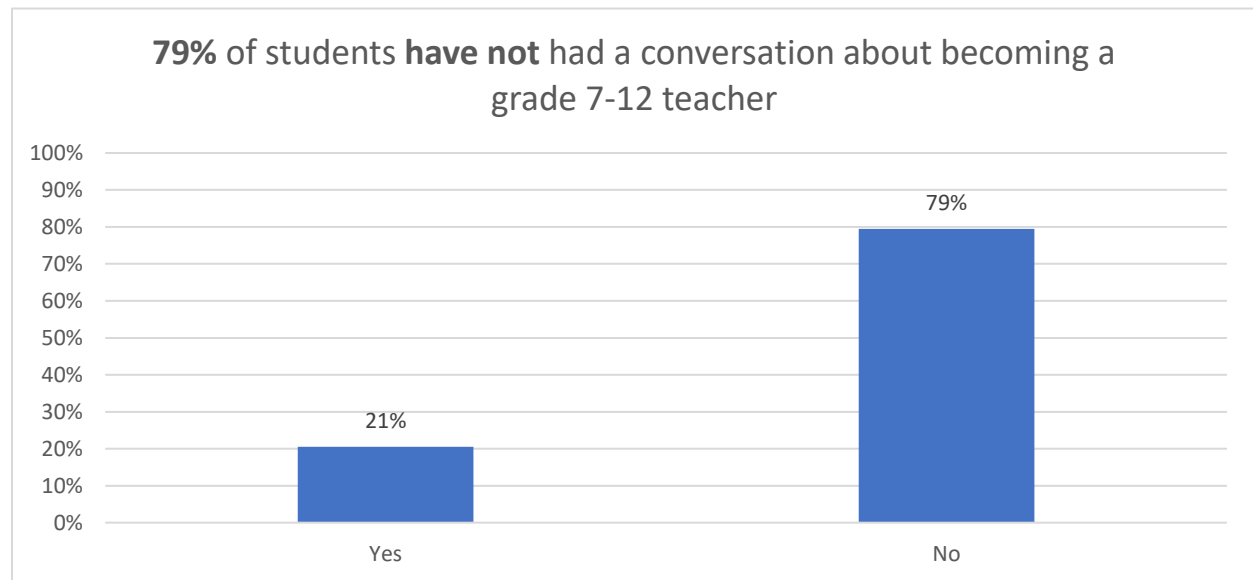
Students were asked how many faculty members they remember hearing mention grade 7-12 teaching as a career option.



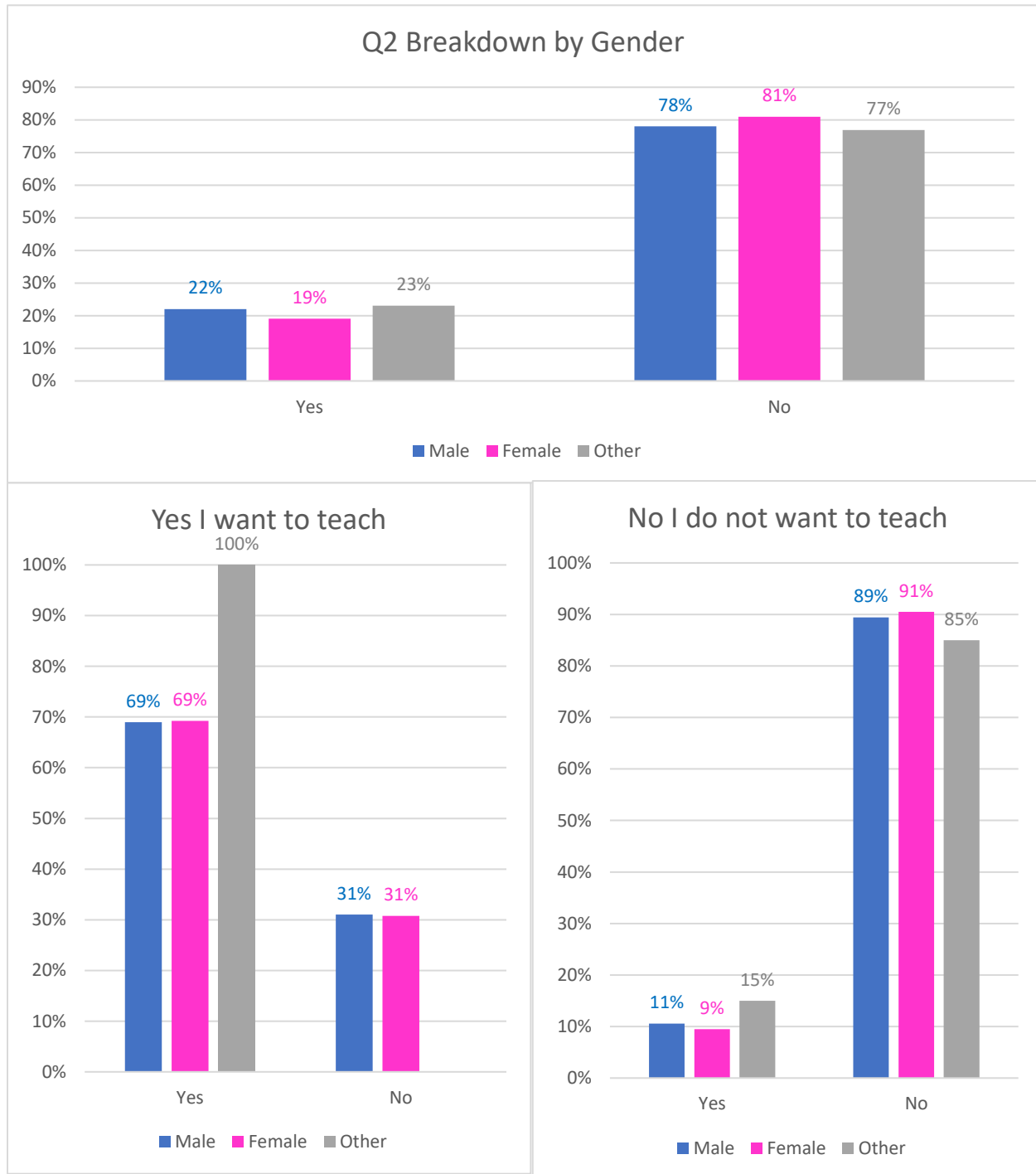
How many faculty members have mentioned grade 7-12 teaching as a career option



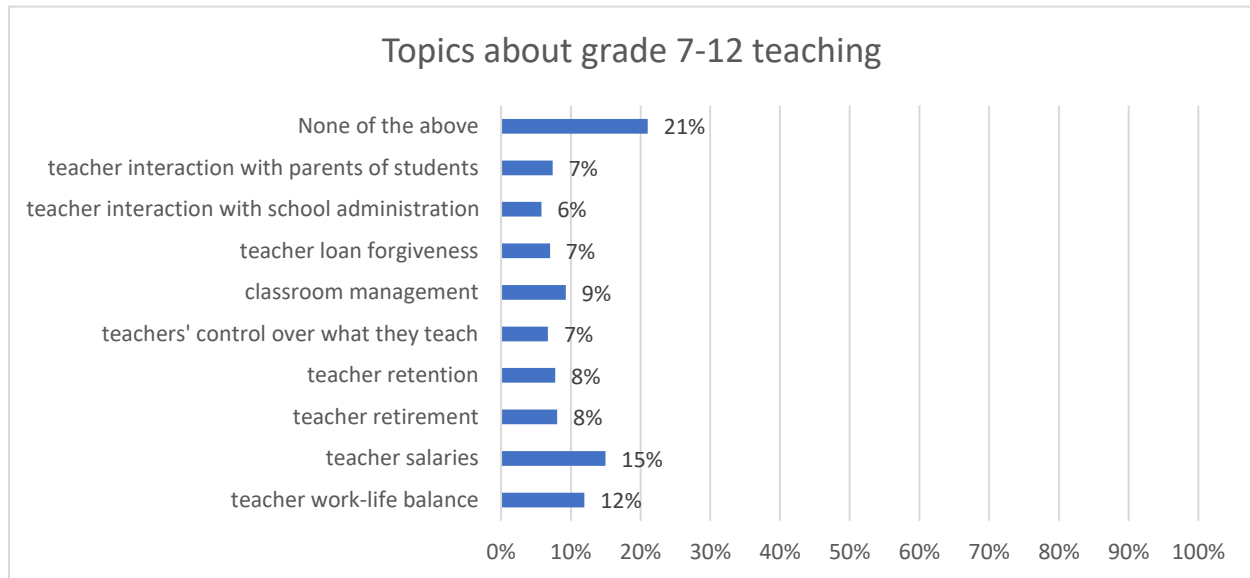
Students were then asked whether they have had a conversation about becoming a grade 7-12 teacher.



Have students had a conversation about becoming a grade 7-12 teacher.

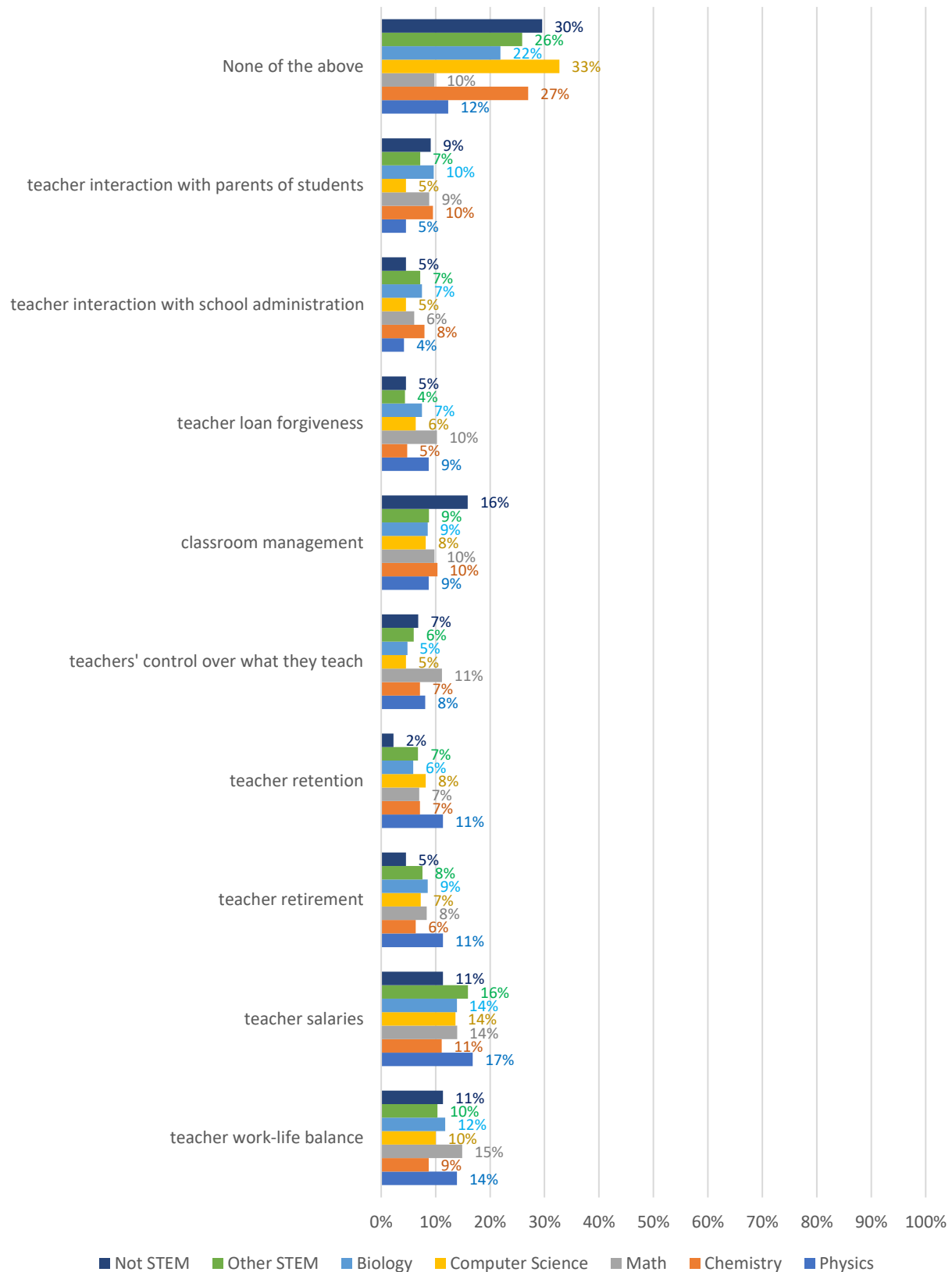


Students were asked whether they have heard a faculty member mention one of the options about grade 7-12 teacher below

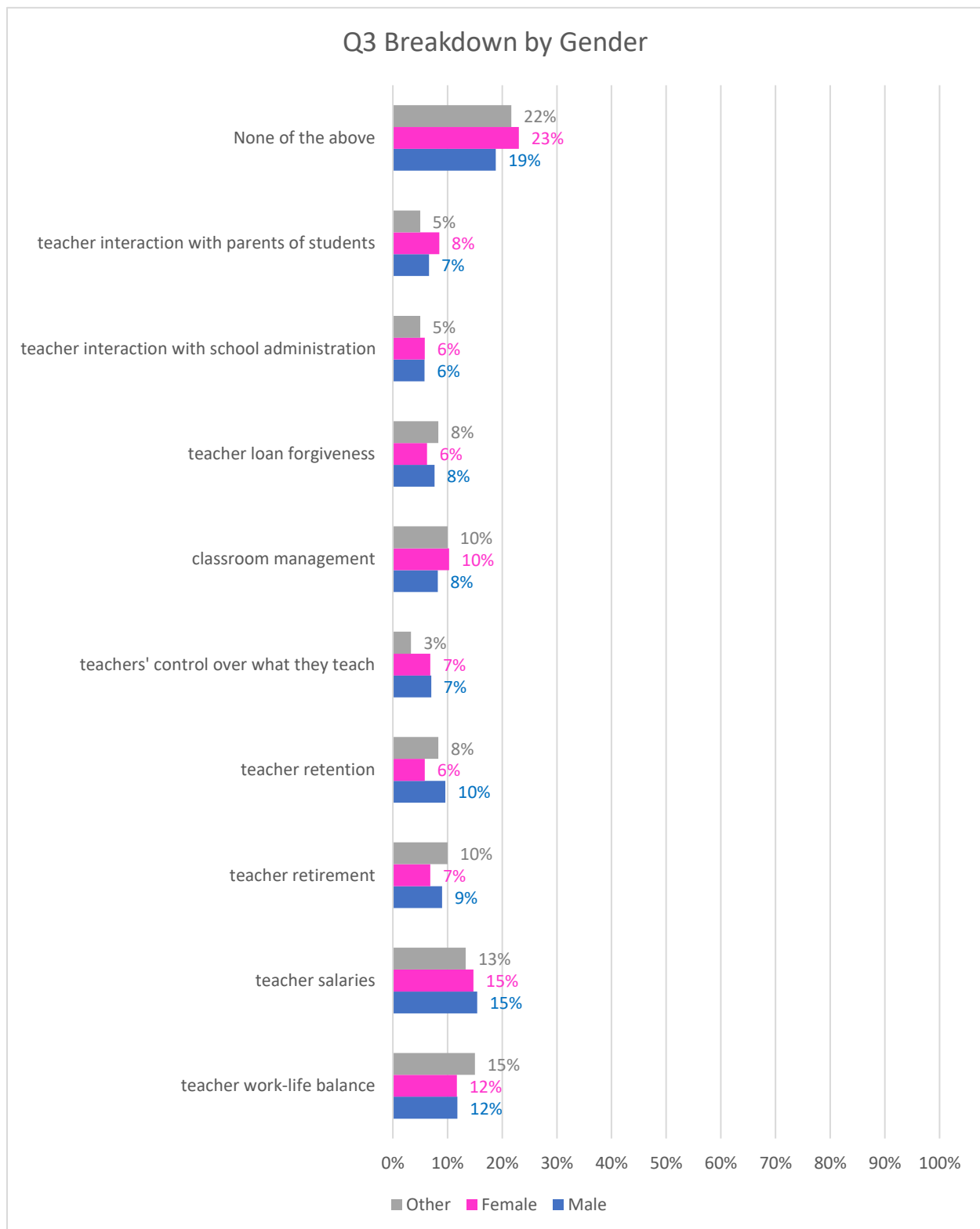


The majority of students have not heard any of the options listed above from a faculty member, but the most popular topics mentioned are teacher salaries and teacher work-life balance.

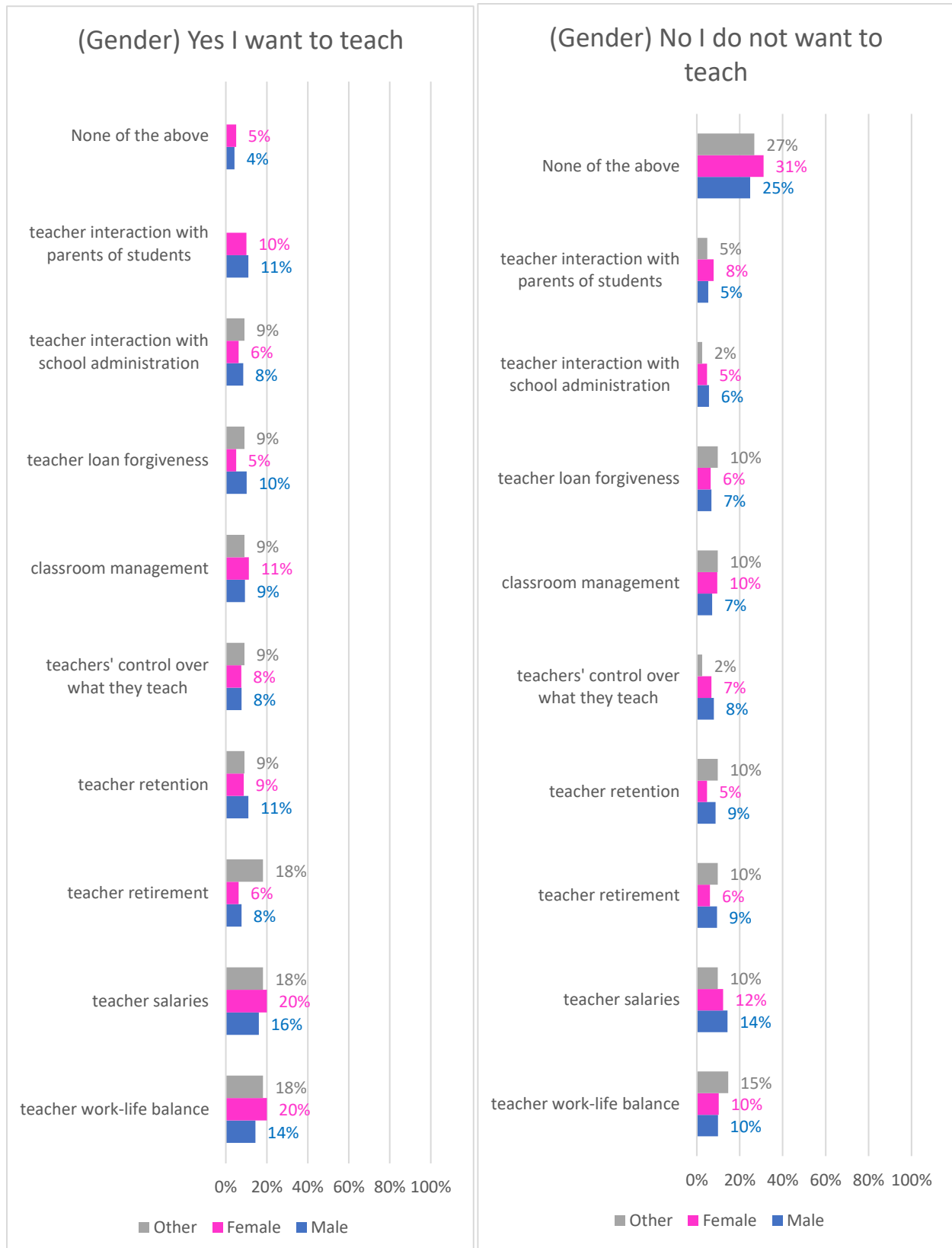
Q3 Breakdown by Major



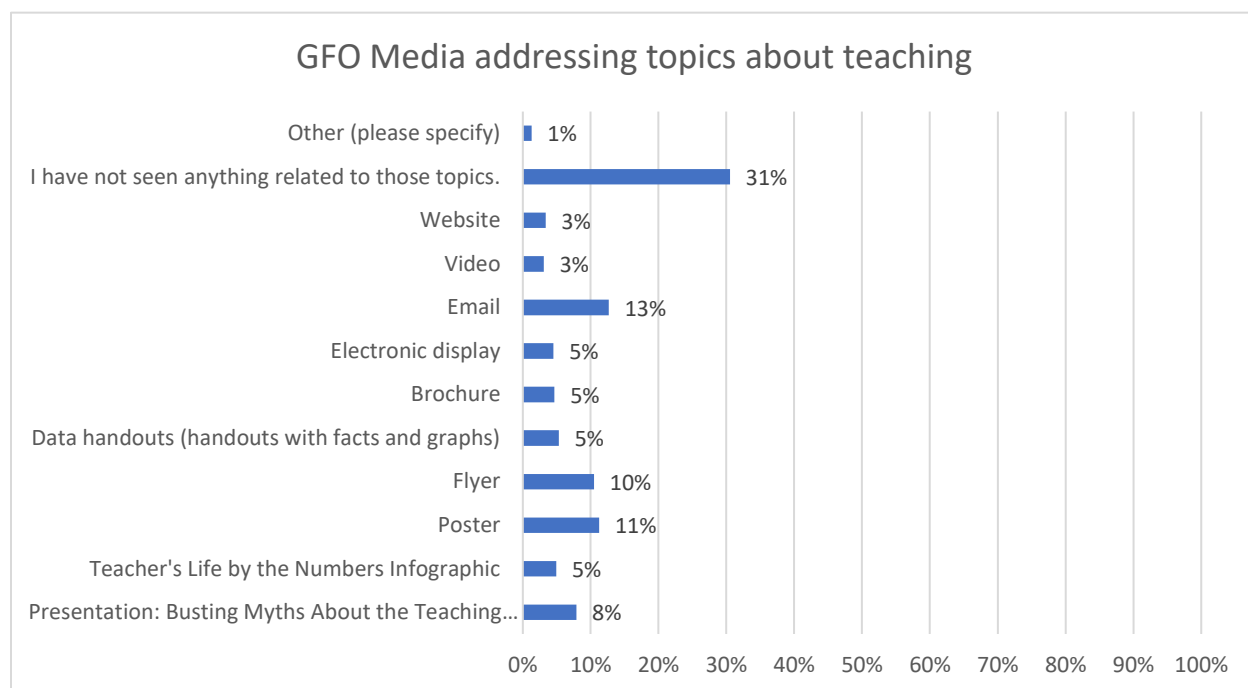
Have students heard a faculty member mention one of the topics about grade 7-12 teaching.



Have students heard a faculty member mention one of the topics about grade 7-12 teaching.



Students were then asked, within their department, have they seen any media addressing the topics in the previous question.

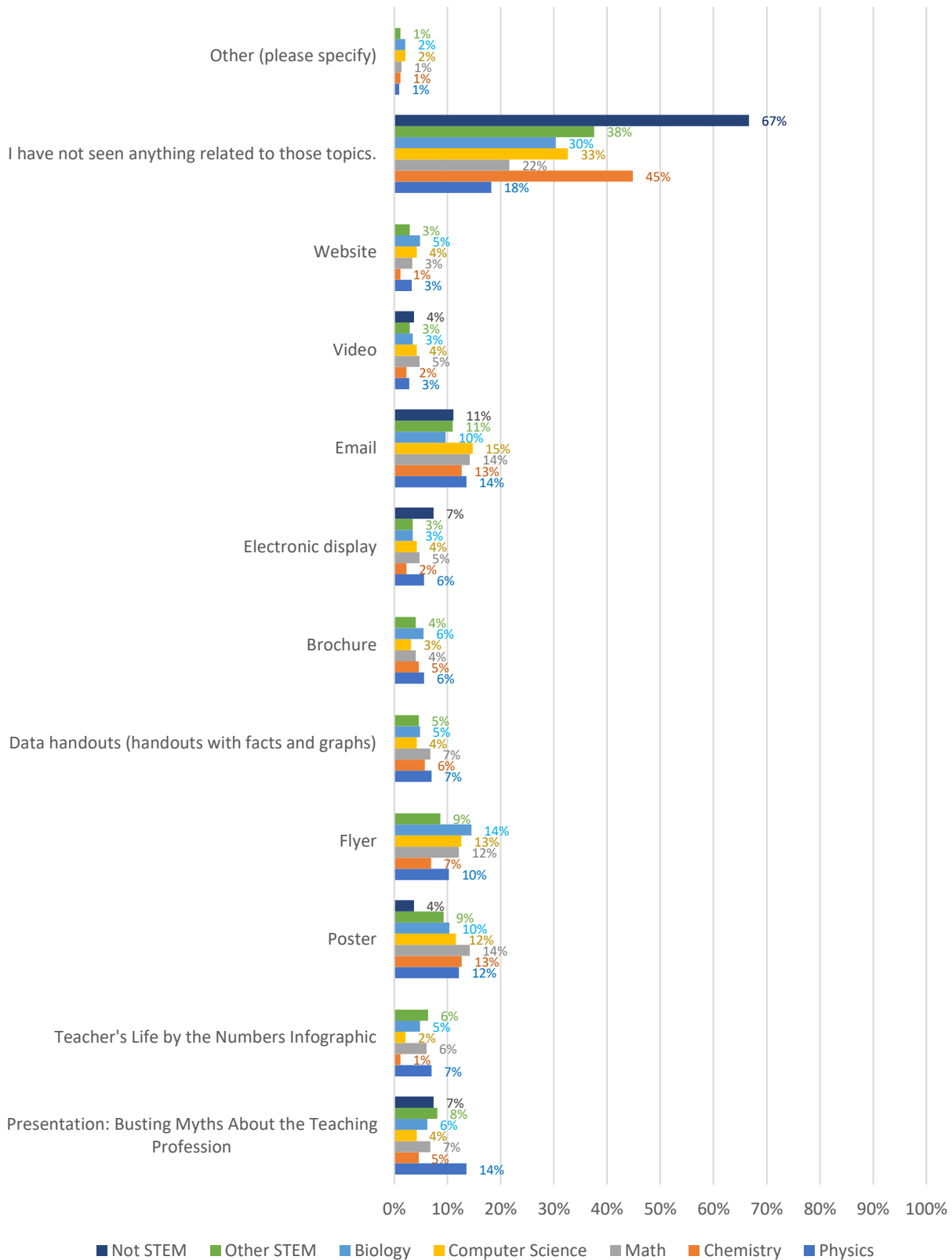


Similar to question 3, the majority of students said they have not seen anything related to the topics above. The most popular medias were Email, Posters, and Flyers.

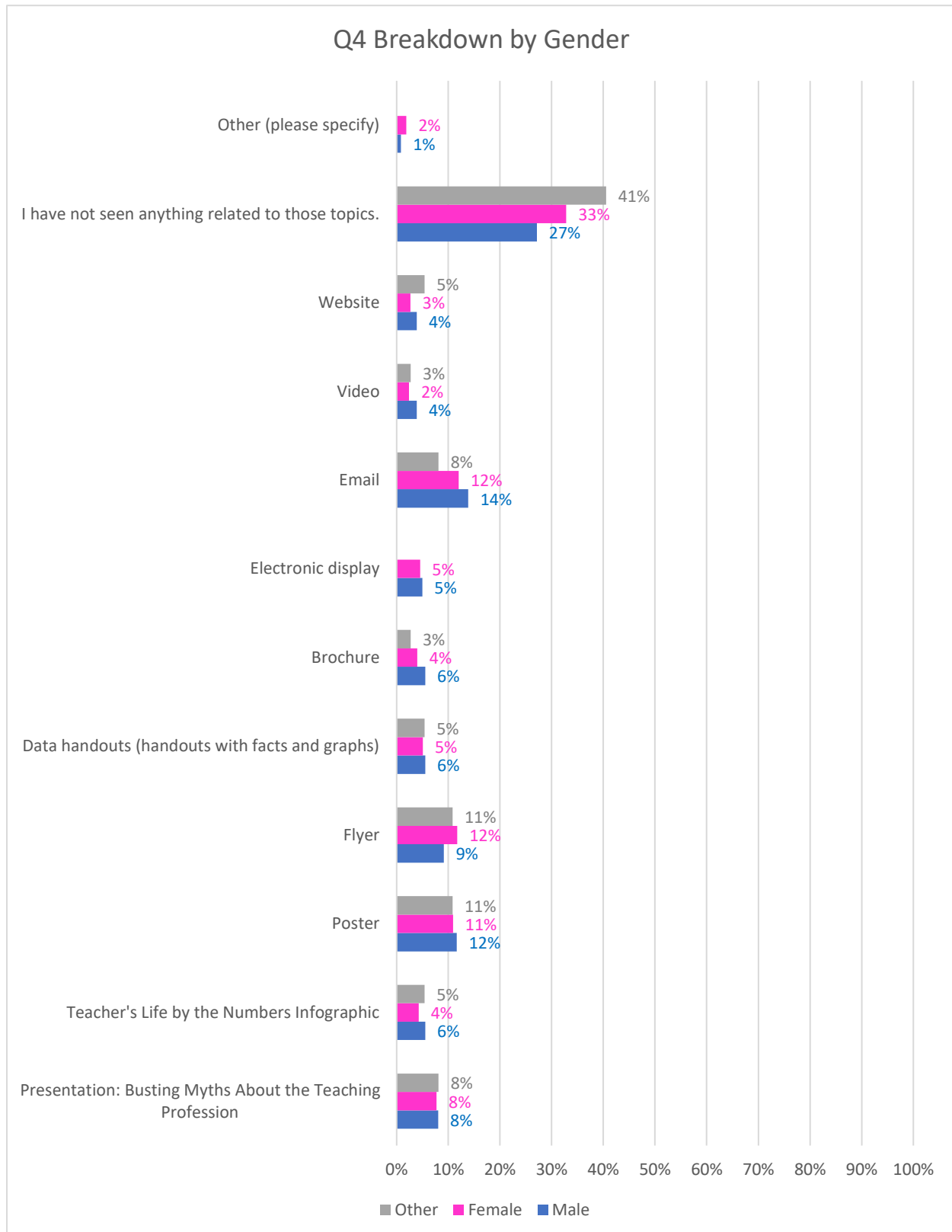
Other responses include:

- Professor came to talk to us – 2
- Social media
- scholarship to become a teacher
- In a class lecture
- I have seen it only within the physics department
- Teach Houston Program
- The college of natural sciences and mathematics doesn't really do anything, but teachHouston gets permission to advertise in that department.
- Presentations in class on a teaching program specific to the UH College of Natural Sciences and Mathematics.
- I also haven't tried to find information about 7-12 teaching. I'm sure I could get plenty if I asked about it and sought out this kind of info.

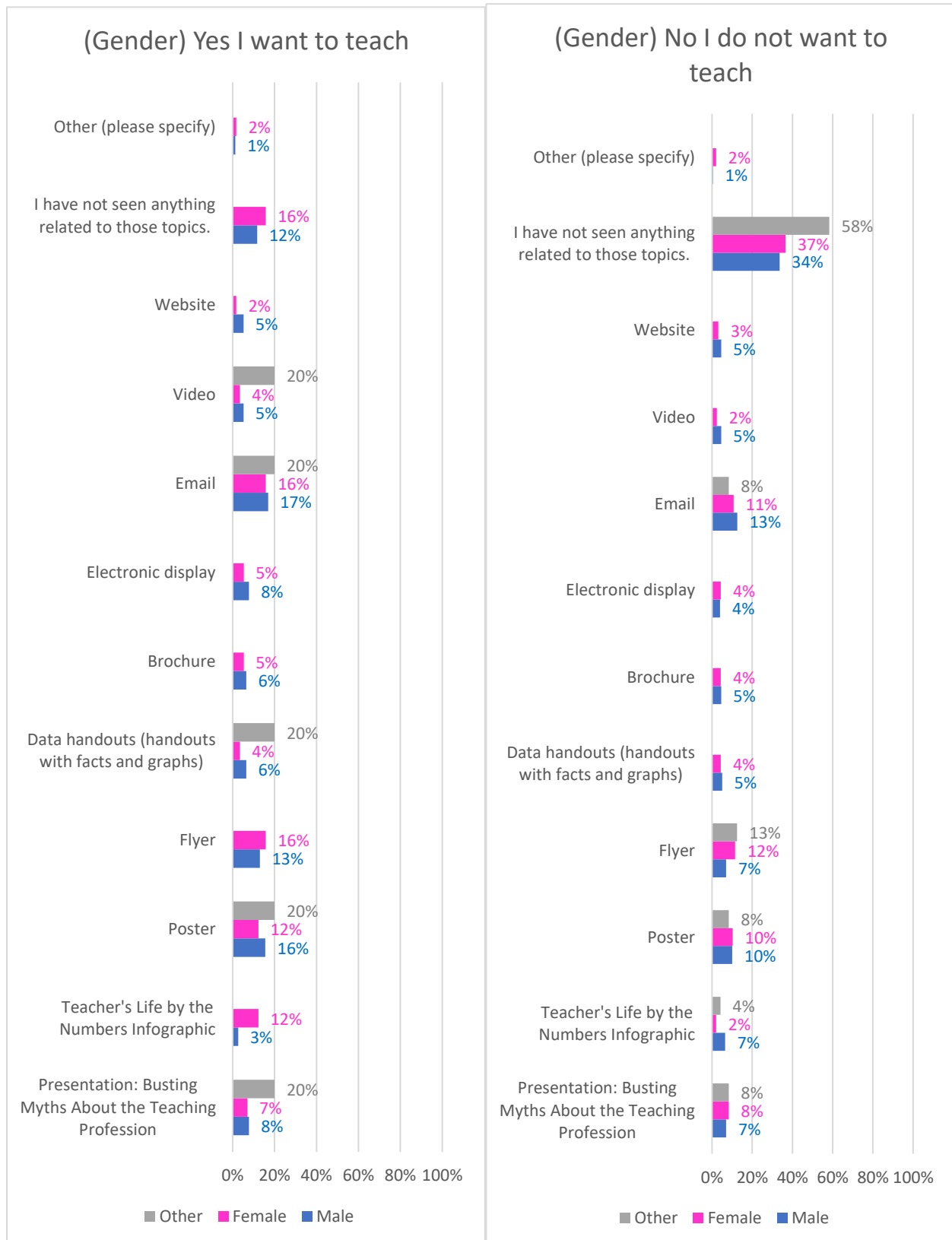
Q4 Breakdown by Major



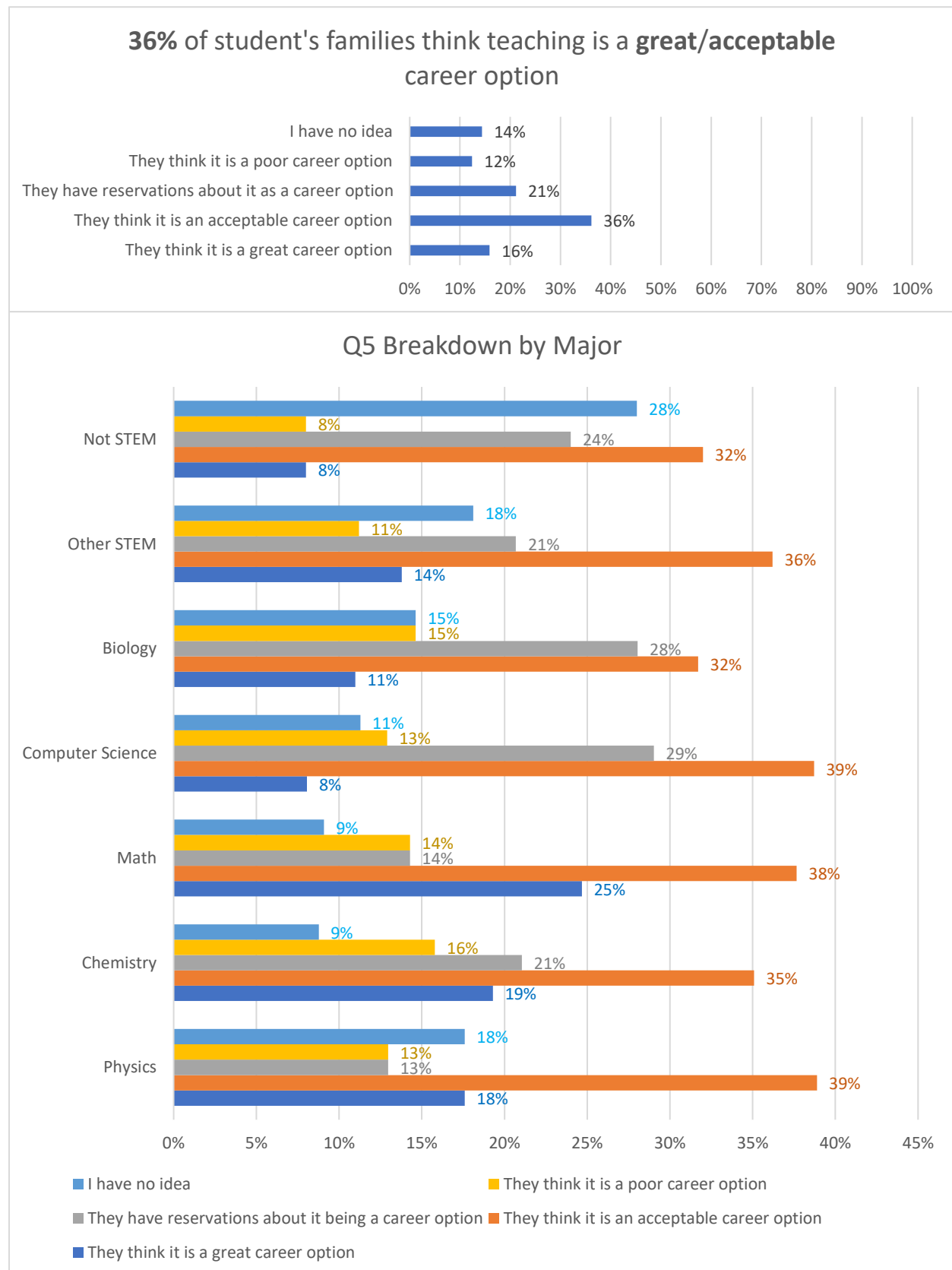
Within their department, have students seen any media addressing the topics in the previous question.



Within their department, have students seen any media addressing the topics in the previous question



Students were asked how their families feel about grade 7-12 teacher as a career option.



Explanations of what families think of grade 7-12 teaching

Male: n = 68 | Female: n = 75 | Other/Prefer not to say: n = 11

Teachers do not make enough money/are treated poorly/overworked	36 - 22	13	1
My family will support me for any career choice including teaching	24 - 5	17	2
I have family members that are/were teachers, BUT they do not support a career in teaching	21 - 6	14	1
I have family members that are/were teachers	18 - 9	7	2
Teaching is an acceptable profession, but there are better careers/more money outside of teaching	13 - 7	4	2
I or my family does not want me to teach/want to pursue another career	10 - 4	4	2
Never asked/Not sure	9 - 5	4	0
Not mine or my families first choice of career, but will still have support	8 - 1	6	1
I can do more with my degree/knowledge than teaching	6 - 2	4	0
Teaching is a backup career	5 - 3	2	0
My family does not support teaching/think it is a poor career choice.....	2 - 2	0	0
My family thinks it is a great/acceptable career	1 - 1	0	0
Teaching collegiate level is better than grade 7-12.....	1 - 1	0	0

Explanations of what families think of grade 7-12 teaching

Students that want to teach

Male: n = 9 | Female: n = 8 | Other/Prefer not to say: n = 0

Teachers do not make enough money/are treated poorly/overworked	7	-	3		4		0
I have family members that are/were teachers, BUT they do not support a career in teaching	4	-	4		0		0
Teaching is an acceptable profession, but there are better careers/more money outside of teaching	2	-	1		1		0
My family will support me for any career choice including teaching	1	-	0		1		0
I can do more with my degree/knowledge than teaching	1	-	0		1		0
I or my family does not want me to teach/want to pursue another career	1	-	0		1		0
My family thinks it is a great/acceptable career	1	-	1		0		0

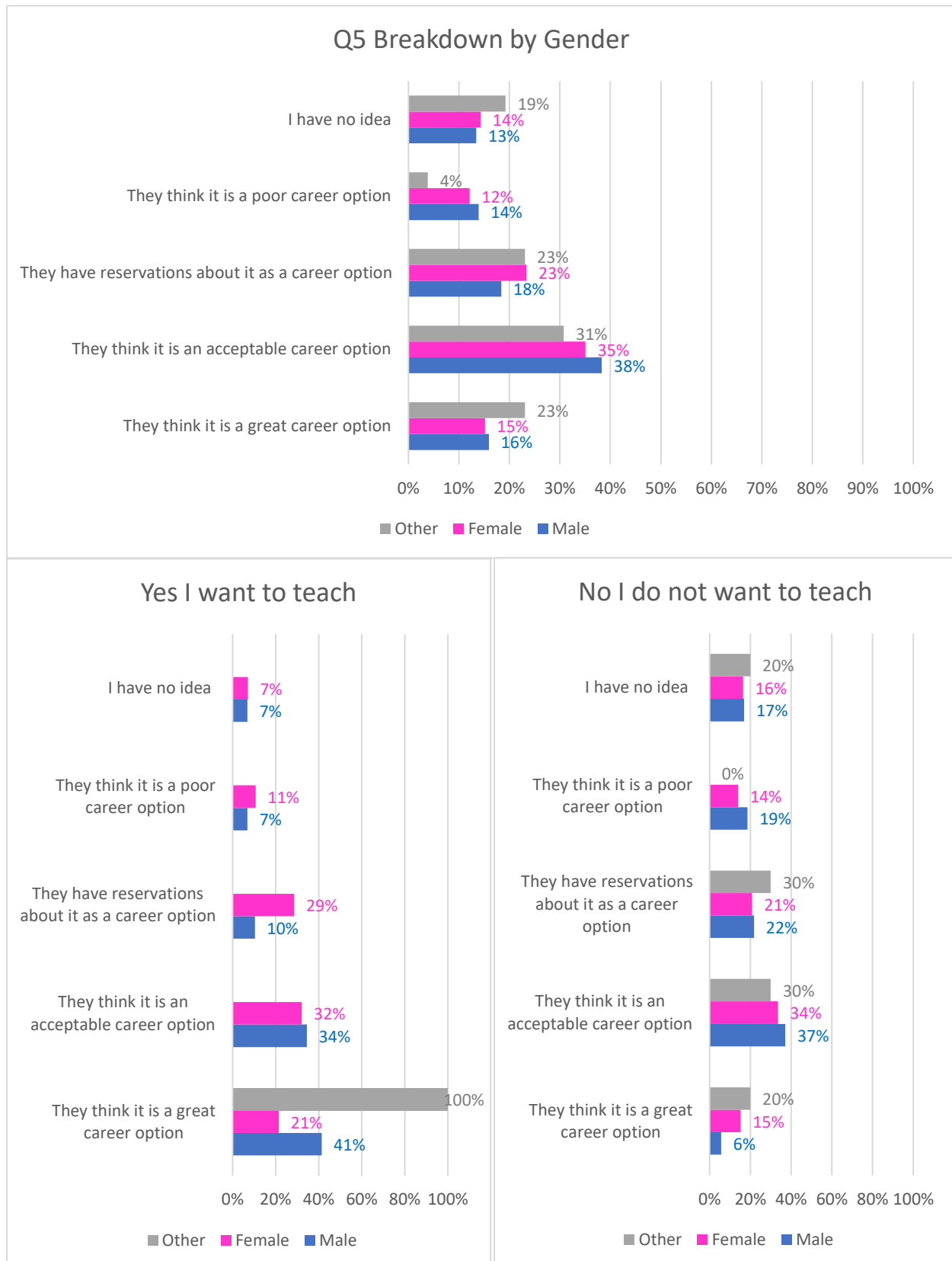
Explanations of what families think of grade 7-12 teaching

Students that DO NOT want to teach

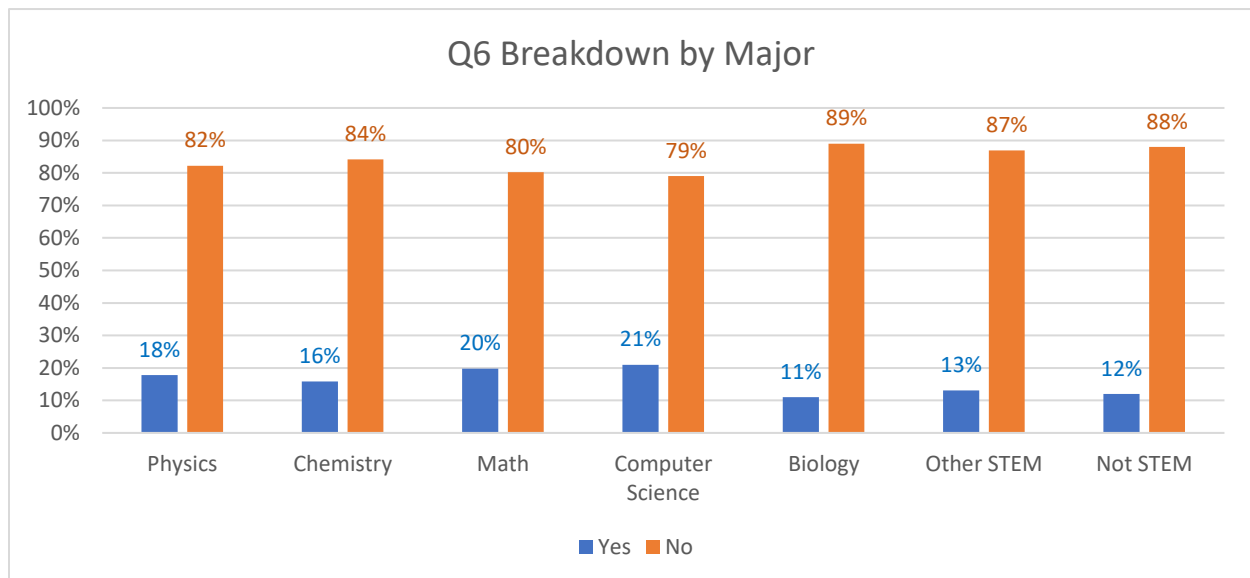
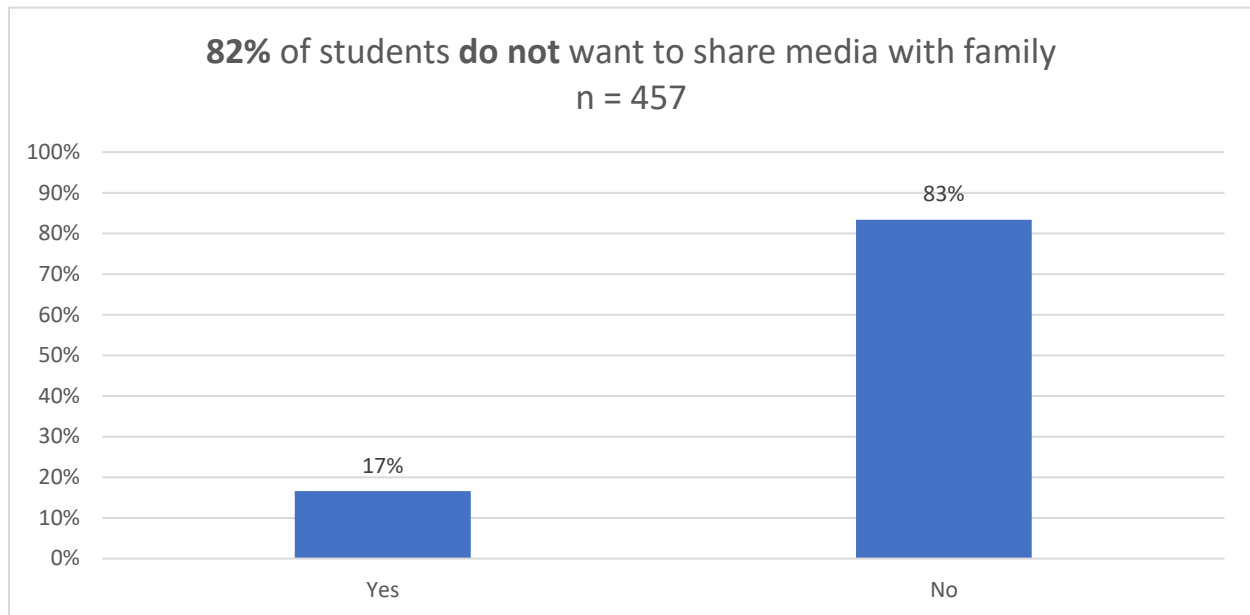
Male: n = 42 | Female: n = 55 | Other/Prefer not to say: n = 10

I have family members that are/were teachers, BUT they do not support a career in teaching	22	-	7		14		1
Teachers do not make enough money/are treated poorly/overworked	20	-	10		9		1
My family will support me for any career choice including teaching	13	-	3		8		2
Teaching is an acceptable profession, but there are better careers/more money outside of teaching	11	-	6		3		2
Not mine or my families first choice of career, but will still have support	10	-	2		8		0
I have family members that are/were teachers	9	-	2		5		2
I or my family does not want me to teach/want to pursue another career	9	-	4		3		2
Never asked/Not sure	7	-	4		3		0
I can do more with my degree/knowledge than teaching	2	-	1		1		0
My family does not support teaching/think it is a poor career choice	2	-	2		0		0
Teaching collegiate level is better than grade 7-12	1	-	1		0		0
Teaching is a backup career	1	-	0		1		0

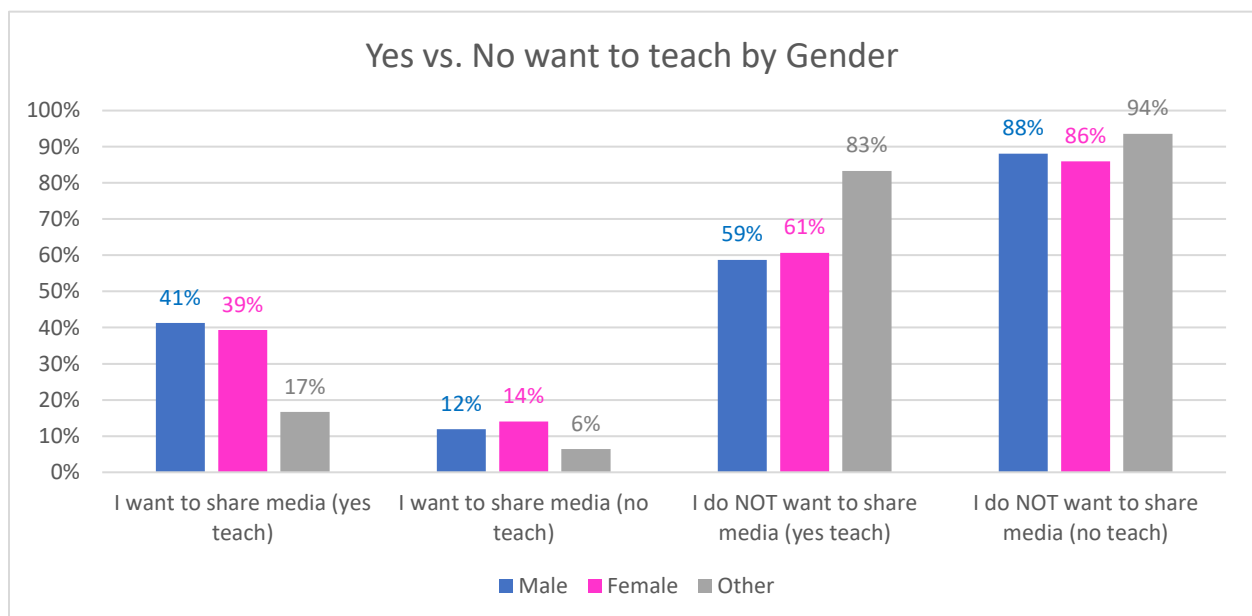
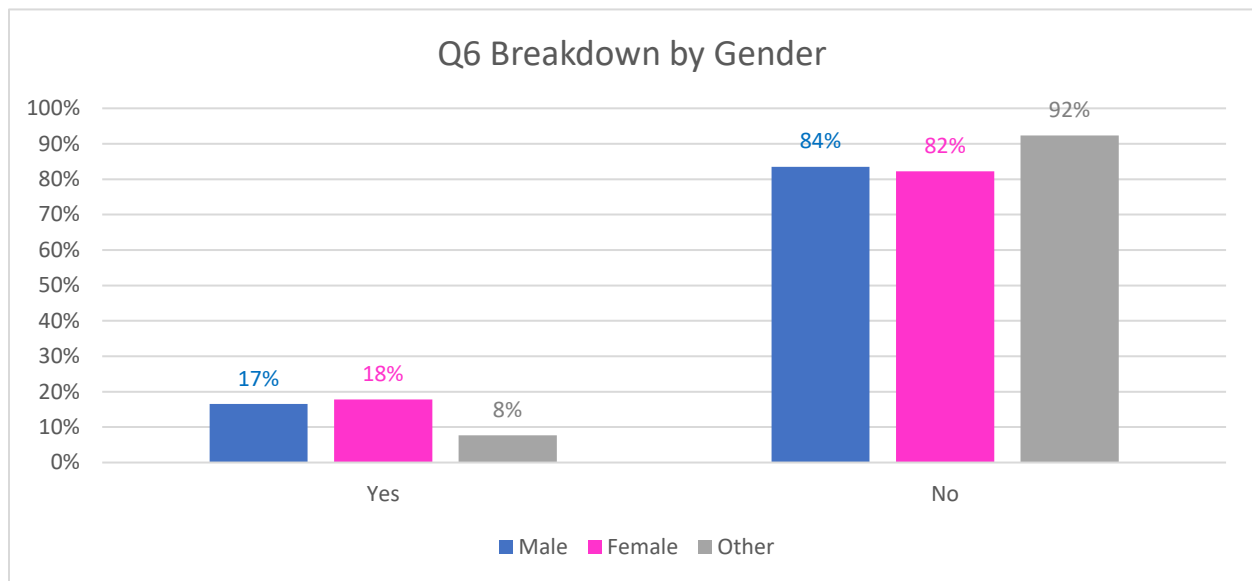
How do student's families feel about grade 7-12 teaching as a career option.



Students were finally asked if they would share any of the media relating to the topics in question 3 with their family.



Do students want to share any media relating to the topics in question 3 with their family?



Comments/Suggestions

Positive:

Teaching is an important job - 4

Want to learn more about teaching as a career

I only participate this survey because my math adviser encourage me to do it. I guess math teaching is an interesting career. I will think it about whenever I feel like I am ready.

Neutral:

Survey Feedback:

- Include they instead of he or she
- Survey too long – 2
- Liked question 52

College is better than high school for teaching - 3

Negative:

Teaching is great but:

- Teachers can't teach what they want because of standardized testing
- Teaching is great, but it is basically babysitting since kids don't value education
- High schoolers don't care about school
- I don't personally want to teach

Teachers deserve better pay/treatment – 13

- CS is one of the worst fields to teach in
- Quality of Texas public education is poor and not improving
- Specifically bad pay in North Carolina
- The statistics seem wrong and there is no way teachers feel fulfilled

I wish I could be a math teacher because my high school had no math teacher at all but everyone in my community would be so disappointed in me. Everyone is "dishonored" by me even becoming a math major instead of going to the Honors Computer Engineering track and make more money (albeit very miserably to the point I switched to applied math.)