

Westat survey model:

- **63 Chapters, selected at random**
- **667 Coaches**
- **5,299 Students**

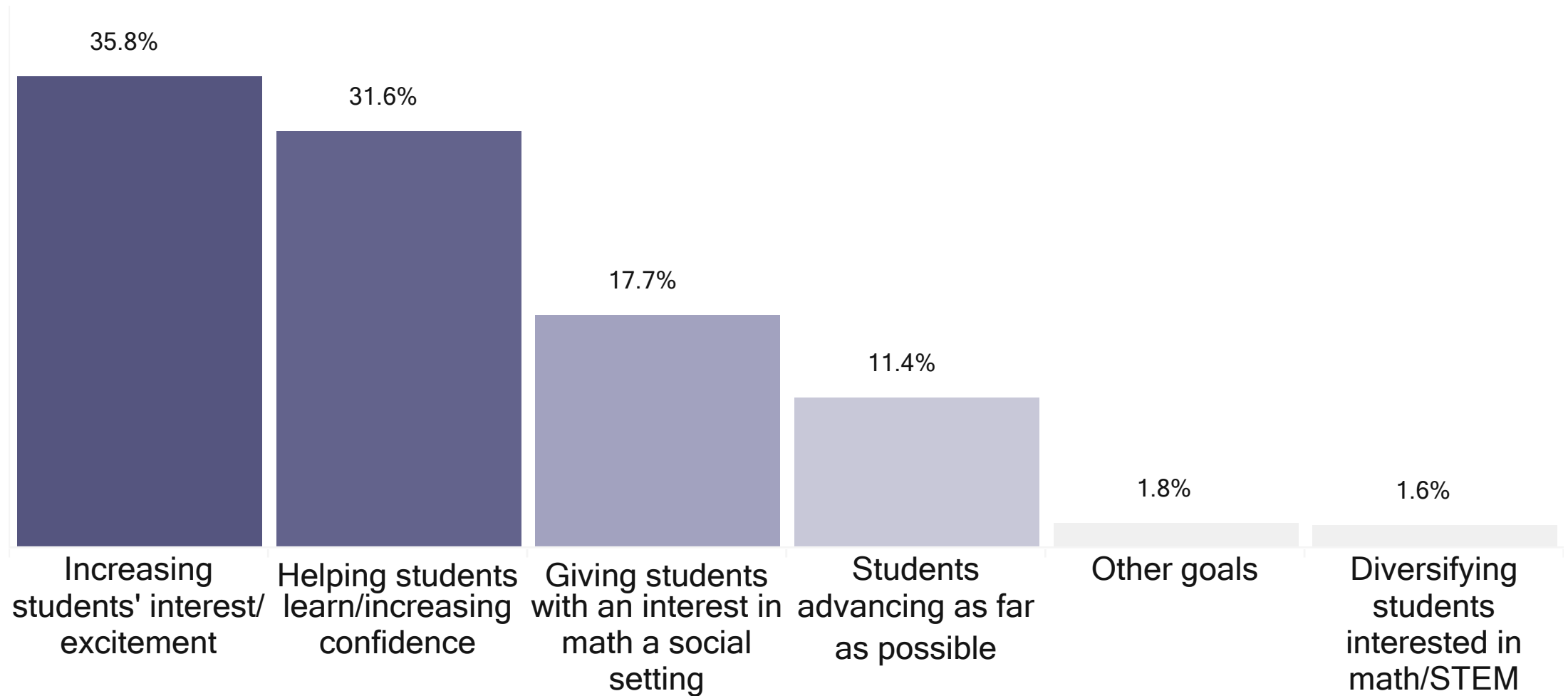
WHAT
WE
LEARNED!



**Top 10 Craziest, Wildest Things
We Learned from the Westat
Survey....(You won't believe #2)!!**

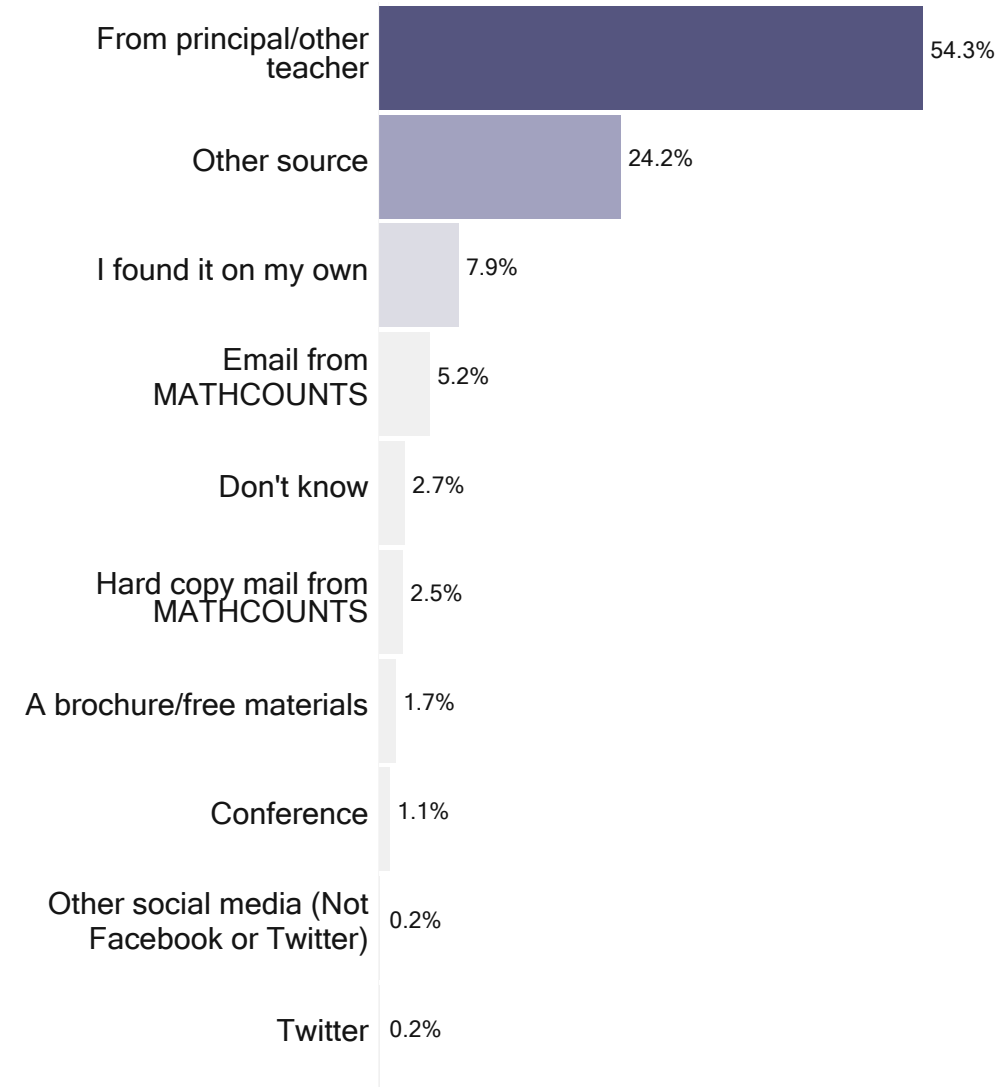
10. The main reason for coaches participate is not to increase test scores but to increase their students' interest in and excitement for STEM.

Main Goal for Coaching



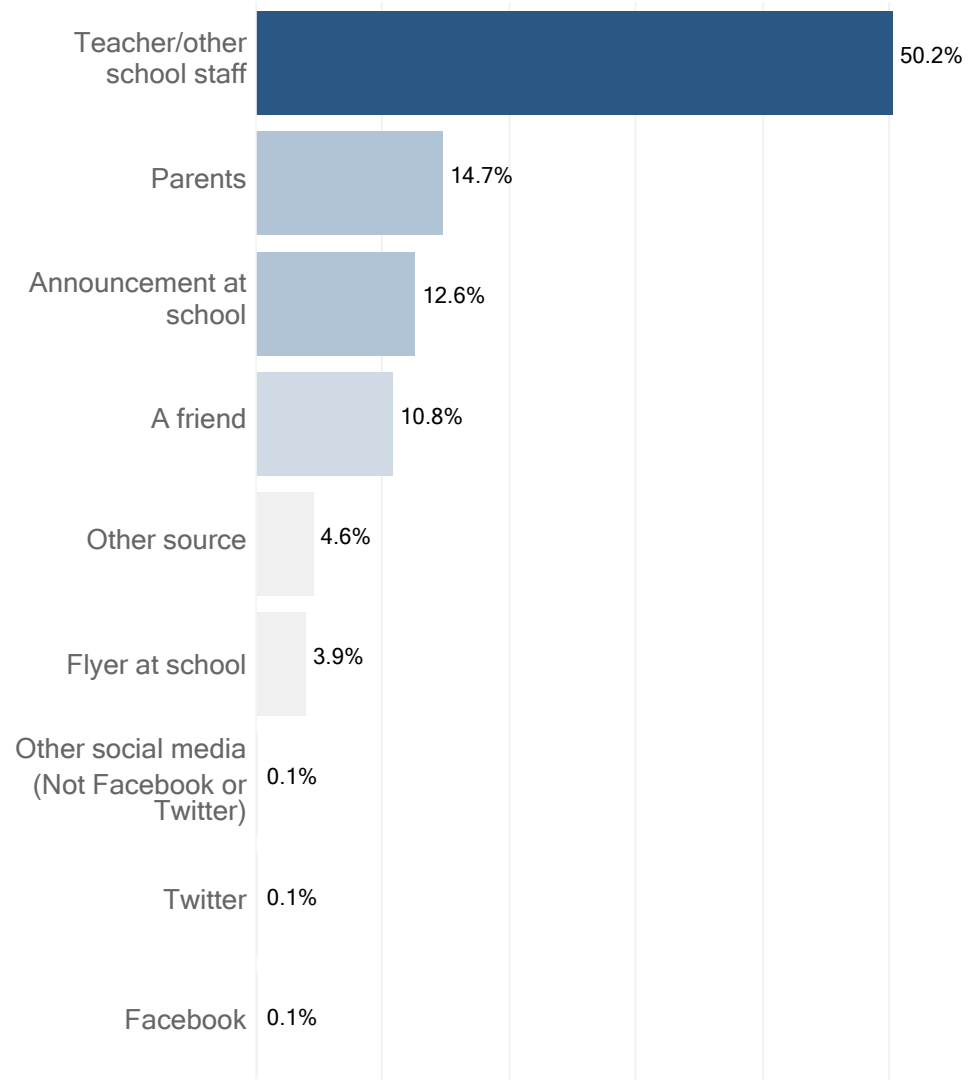
9. Most teachers hear about MATHCOUNTS from other teachers or administrators – not from MATHCOUNTS direct mailings, social media, or other methods.

How Coaches First Heard About the MATHCOUNTS Competition Series



8. Most kids hear about MATHCOUNTS from a direct conversation with a teacher or other school staff – not from general announcements or flyers at school, or from other sources (parents, friends, social media).

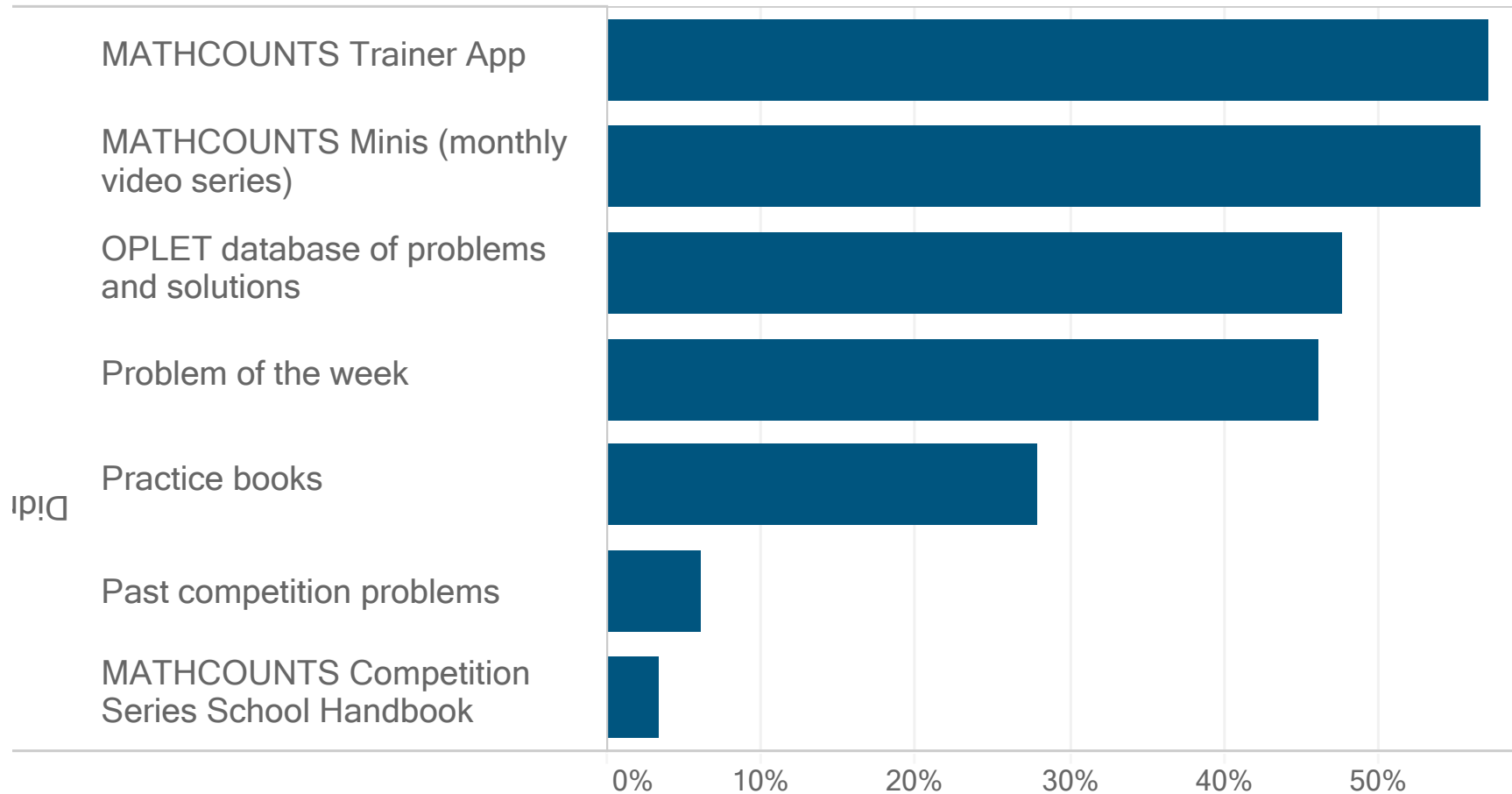
How student first heard about the MATHCOUNTS Competition Series



7. Certain training resources were not being utilized due to lack of awareness by coaches.

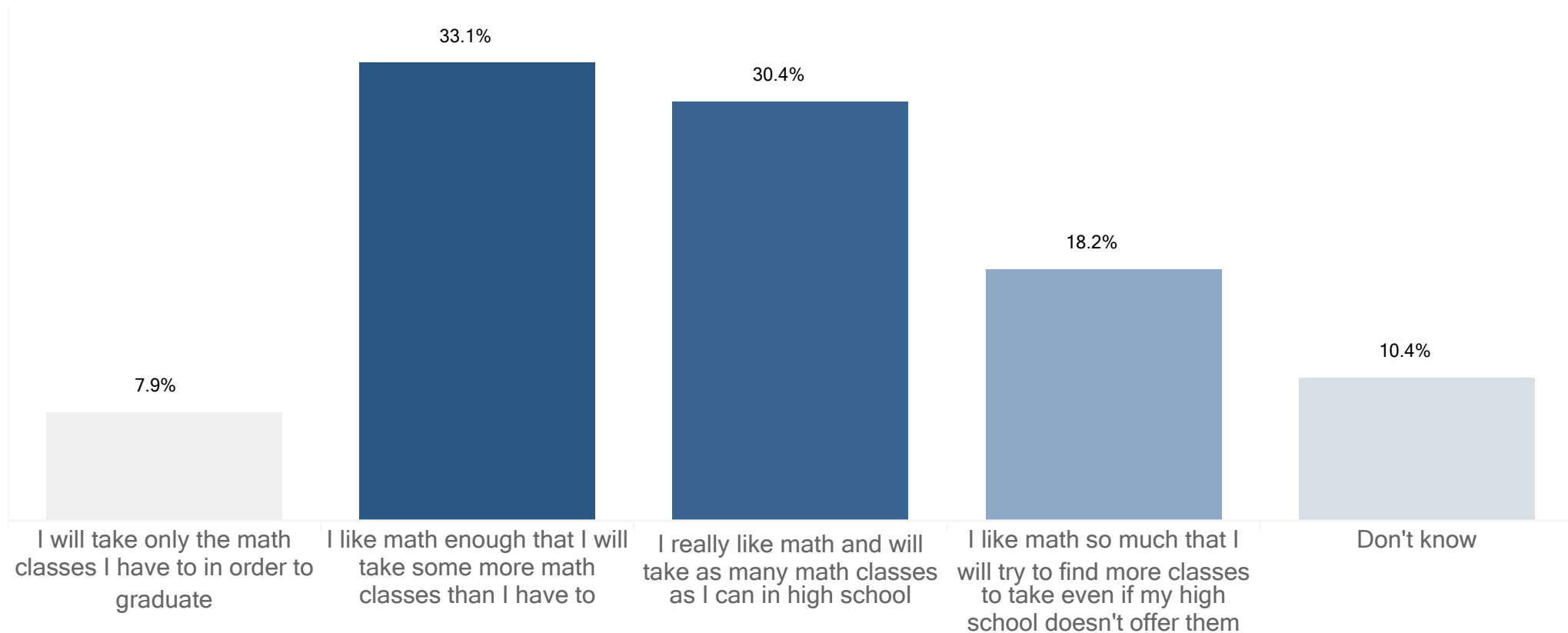
Coach usage of MATHCOUNTS Competitions Series elements/resources

number of responses and weighted %



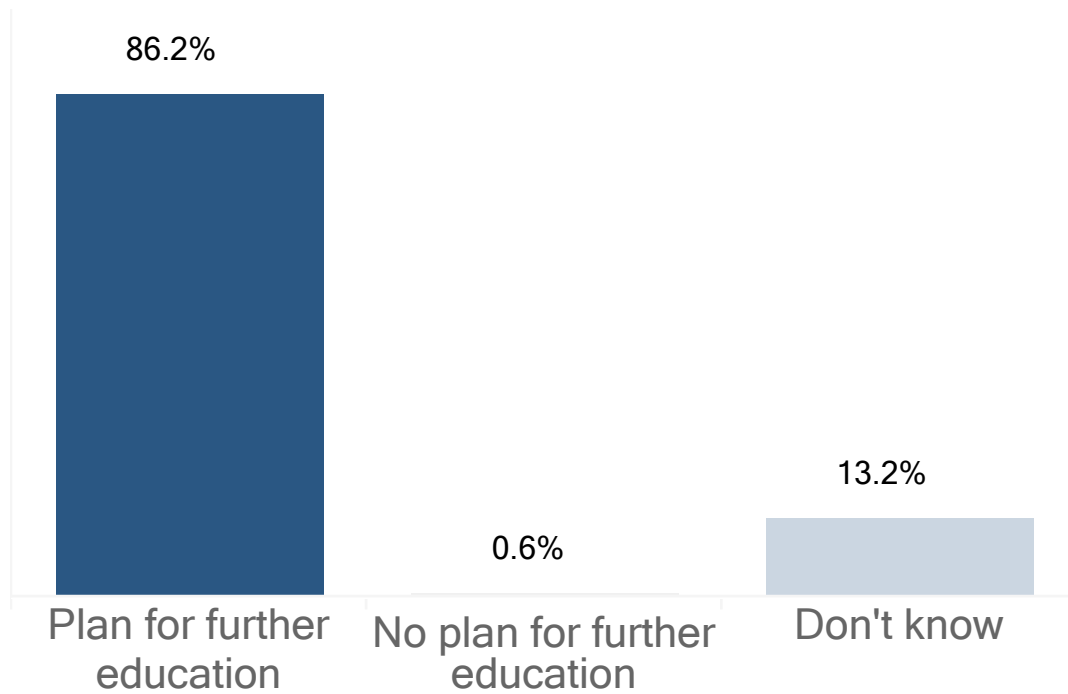
6. Over 80% of students said they wanted to take more math than was necessary in high school, with students in MATHCOUNTS for multiple years reporting a higher propensity to want to take more math.

Student propensity to take math classes in high school

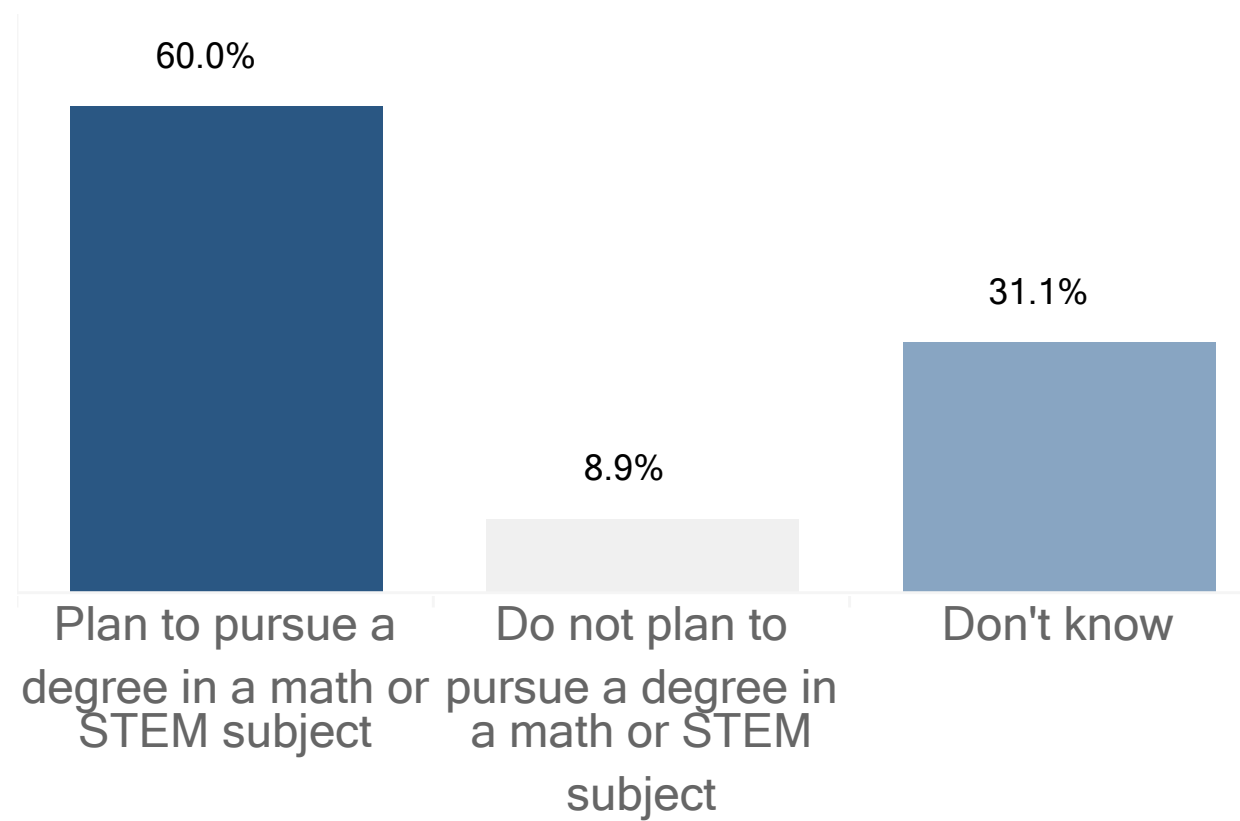


5. Of those students indicating that they wanted to pursue post-secondary education, 60% indicated that they want to pursue a degree in a STEM field.

Students' Plans to Pursue Post-secondary Education



Students' Future Degree Plans

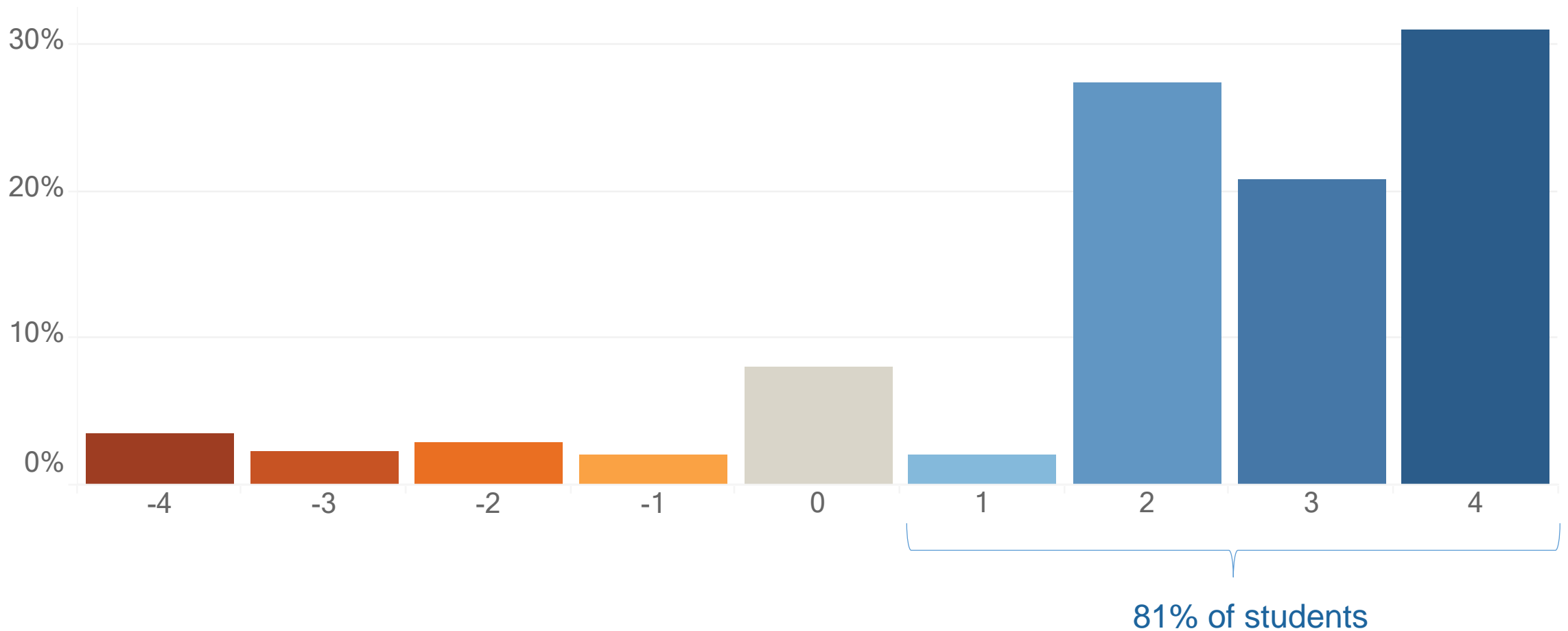


4. Over 80% of students indicated that participation in the Competition Series increased their confidence in and excitement for math/STEM.

Distribution of student math/STEM perception scores

Student perception of influence of MATHCOUNTS participation

number of responses and weighted %

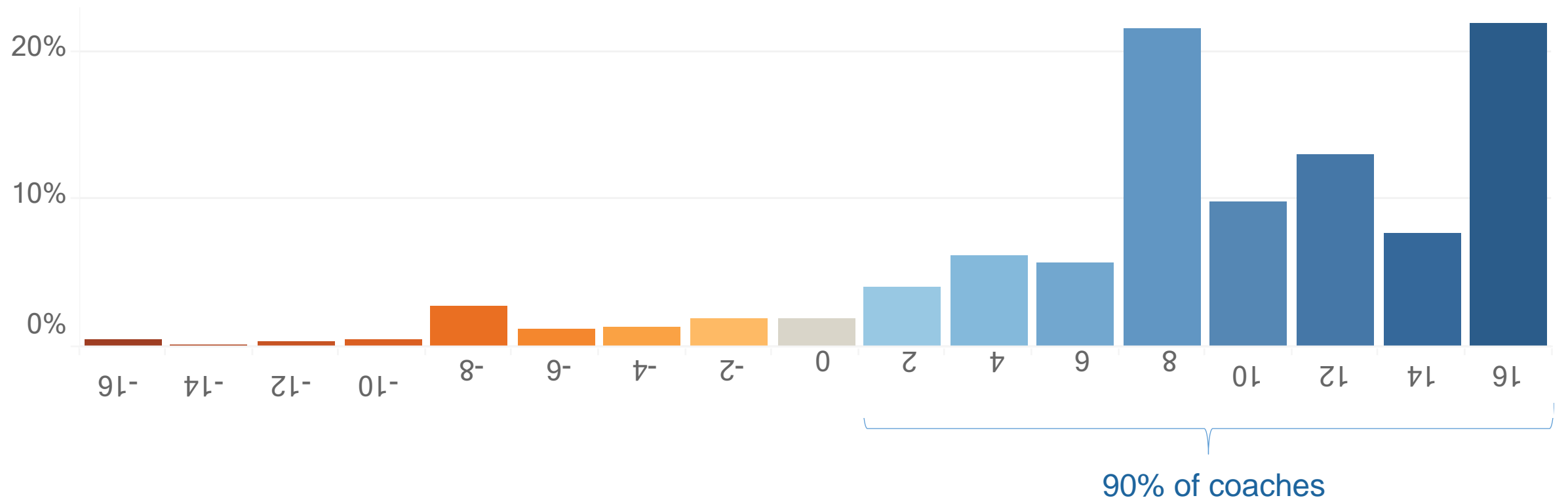


3. 90% of coaches reported that the Competition Series helped to introduce or explore in more depth specific math/STEM topics.

Coach perceived helpfulness of MATHCOUNTS aggregate score distribution

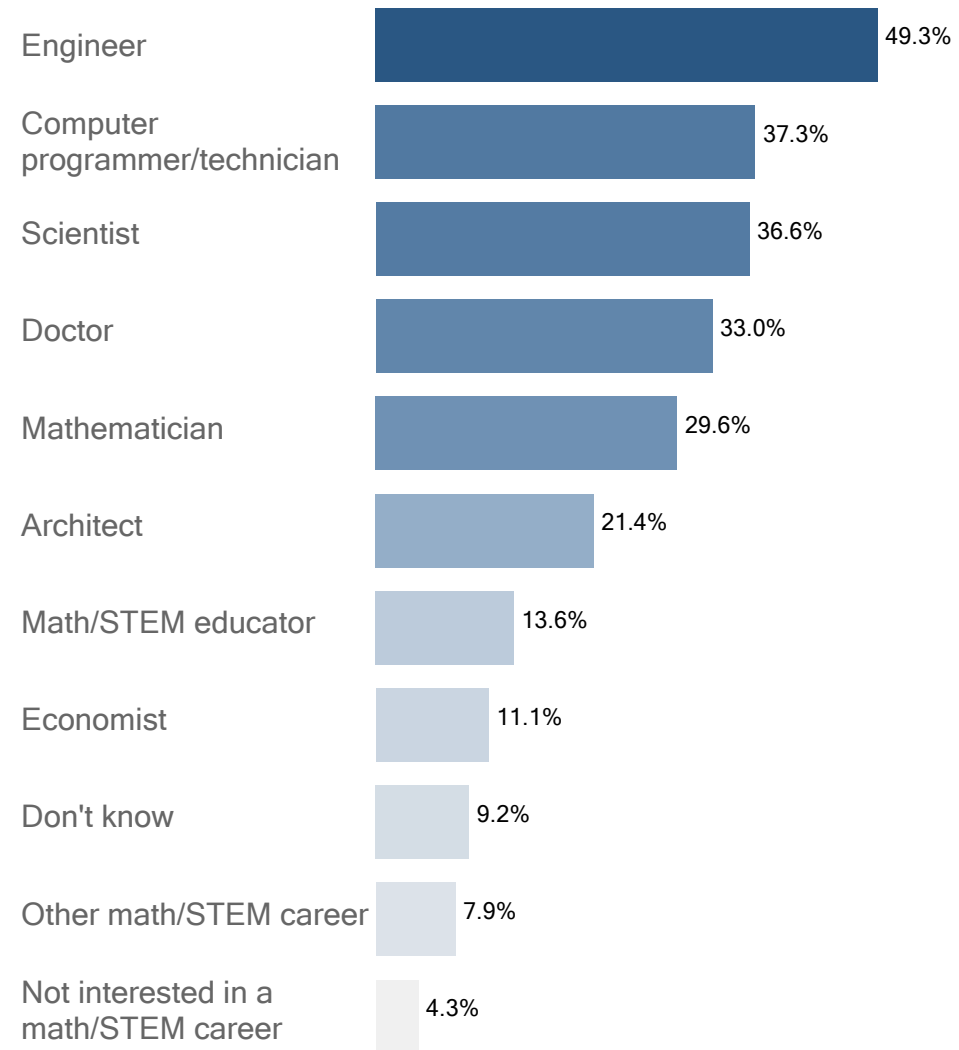
number of responses and weighted %

Math/STEM concepts



**2. Over 85% of students indicated an interest in a STEM career...
and students were most likely to indicate an interest in becoming an engineer.**

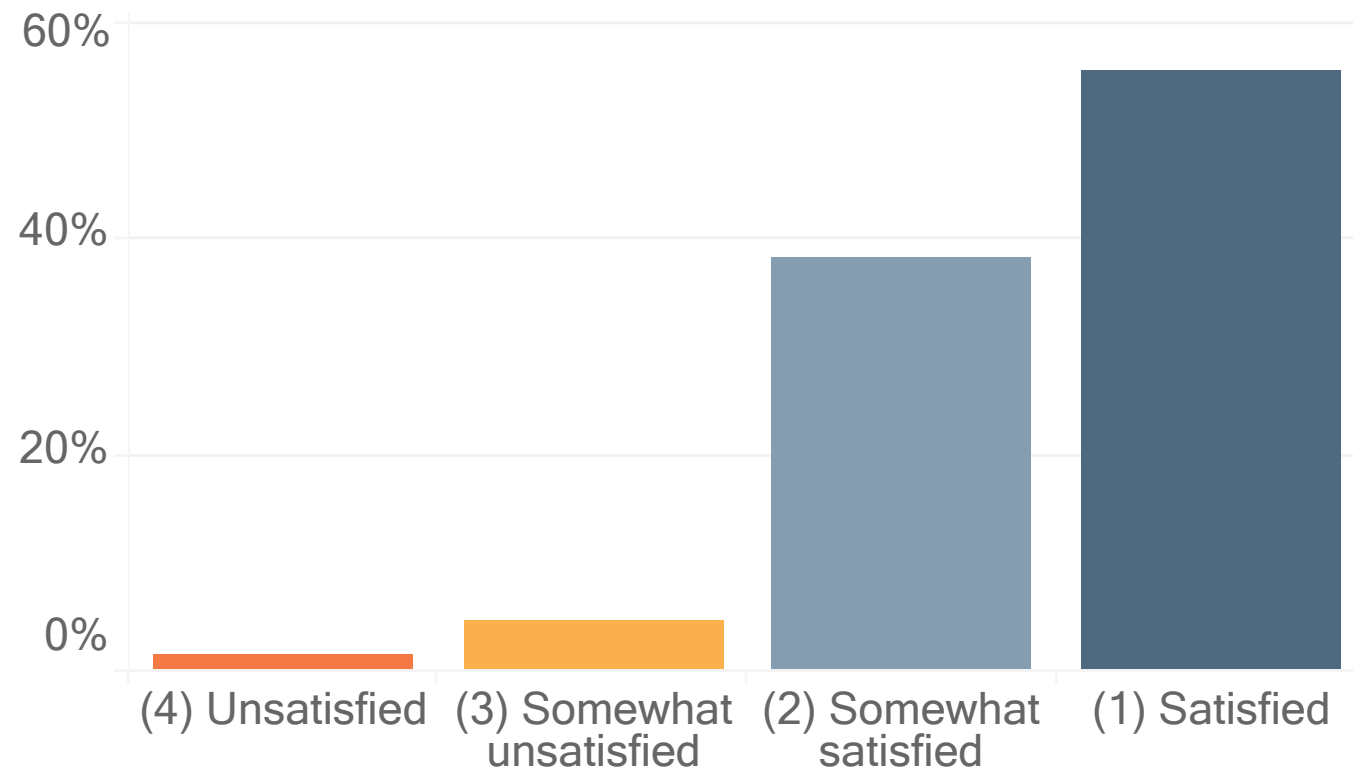
Students' Career Interests



**1. Student satisfaction with the Competition Series was high with over 90% of students satisfied with their participation in the program....
Thanks to the awesomeness of our volunteers!**

Student satisfaction with the MATHCOUNTS Competition Series overall

number of responses and weighted %



DISCUSSION BREAK:

What is your reaction to this information?

How can you use this information to help your efforts at the Chapter or State level?



But Wait...
**THERE'S
MORE!**

APT study goals:

- **None!**

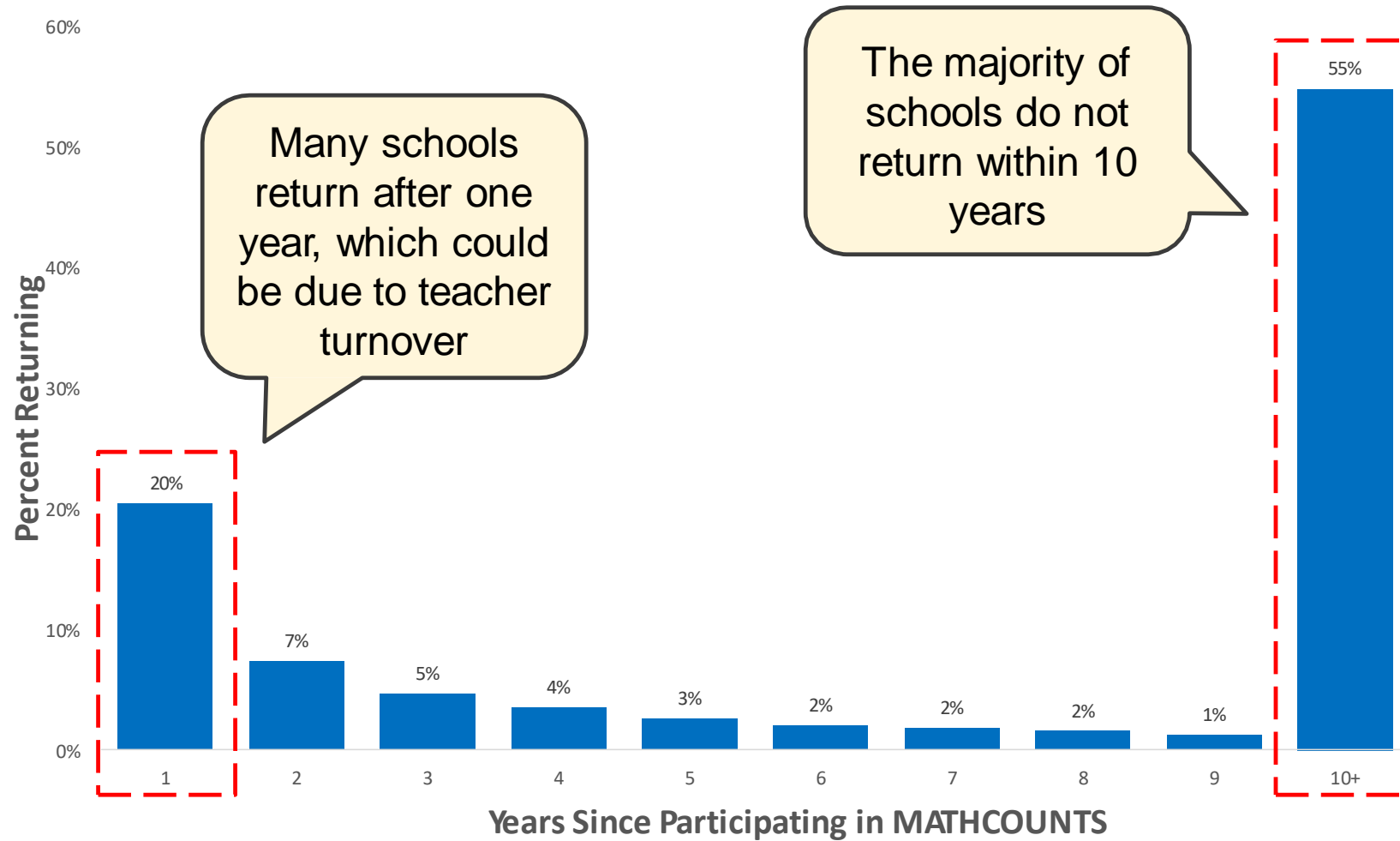
APT data sources:

- **APT looked at Competition Series registration data from 1993-2016 (approx. 22,000 records)**
- **Approximately 22,000 schools**
- **Factored in demographic information for school**
- **Looked at Chapter Competition test results for past 7 years (2010-2016)**

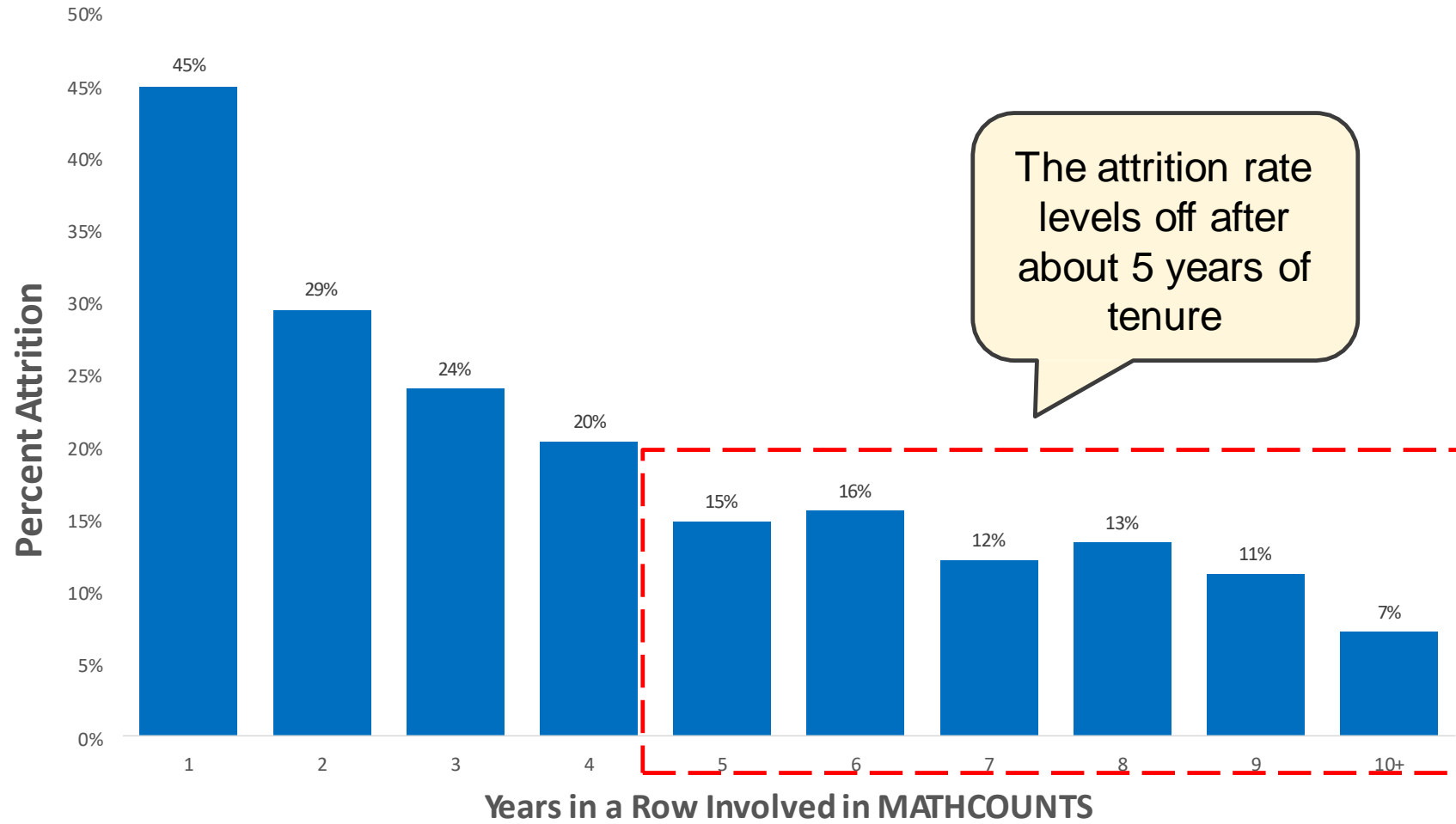
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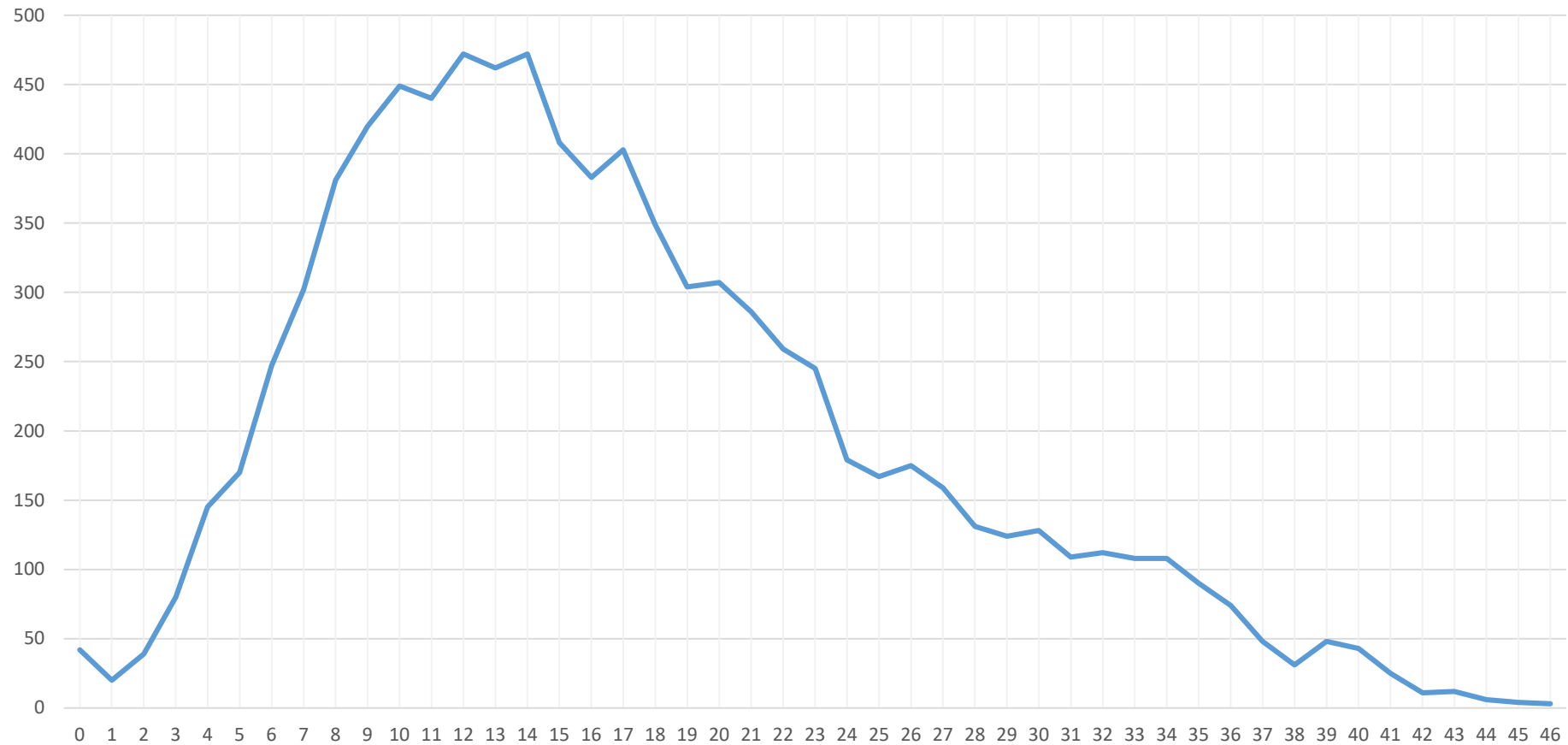
3. While many schools who drop out return after one year, the majority of schools do not return after ten years.



2. The longer a school is involved in the Competition Series, the less likely they are to drop out, stabilizing by the fifth year of participation.

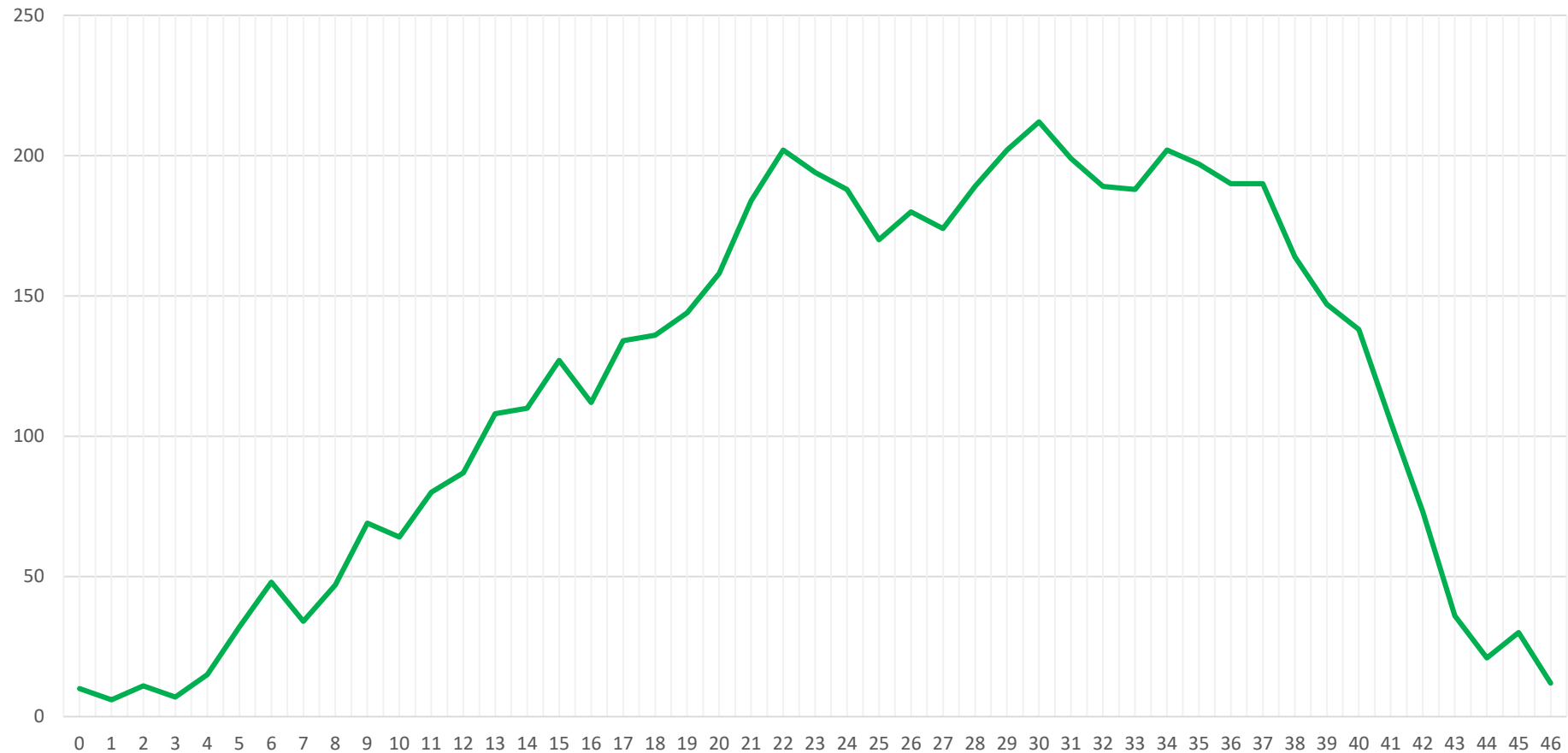


Distribution of 2016 Chapter Competition results



Average score: 16.9 ; Median score: 15; Most frequent score: 14

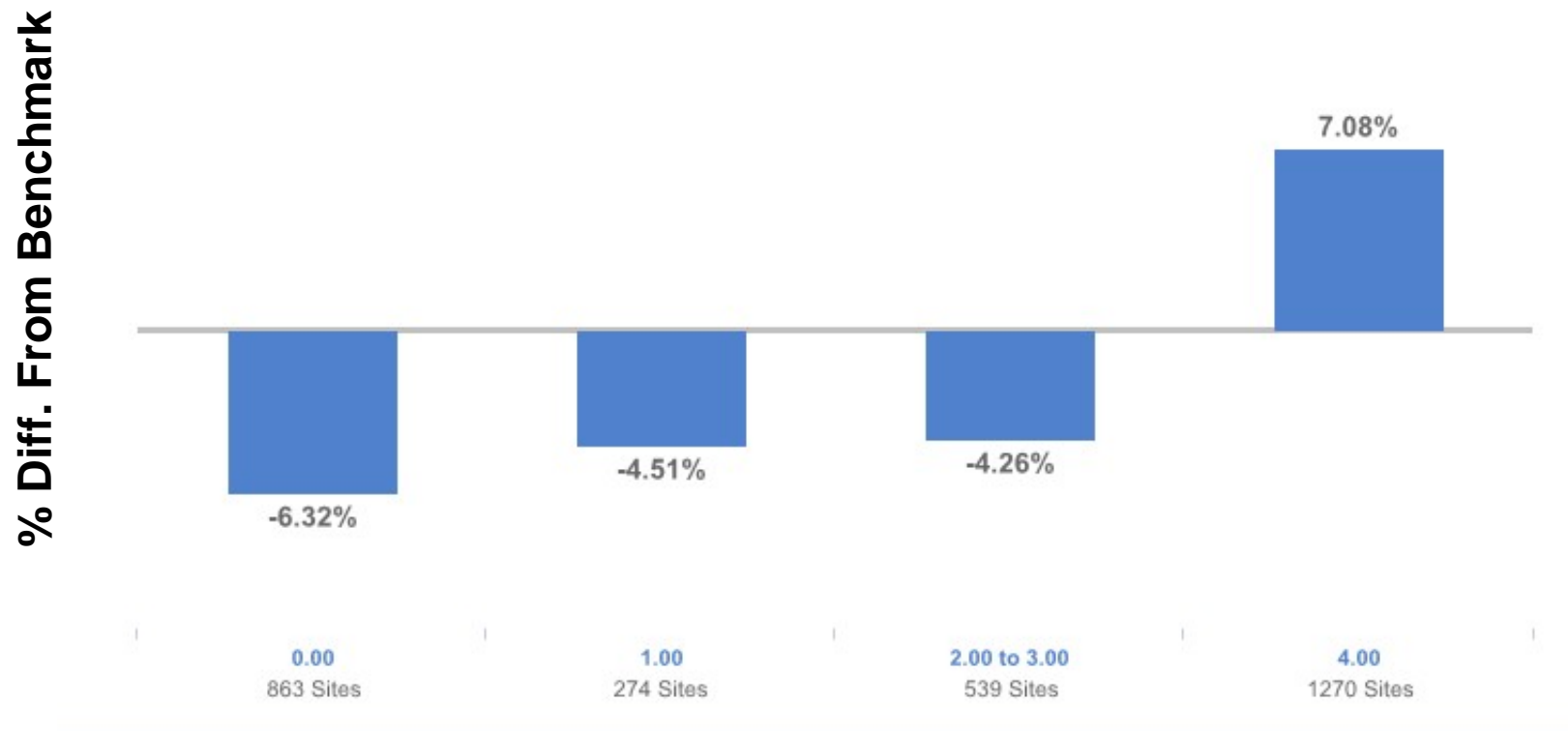
Distribution of 2017 Chapter Competition results



Average score: 26.3 ; Median score: 27; Most frequent score: 30

1. Years of participation has a significant impact on Chapter Competition results.

Sum of Years Registered Prior to 2011



DISCUSSION BREAK:

What is your reaction to this information?

How can you use this information to help your efforts at the Chapter or State level?



ANY
QUESTIONS
?

