

Effectiveness of Various Technologies in Wyoming Mathematics Classrooms

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RELEVANCE

AND

METHODS

Relevance

- It's being used!
- Research supports that technology increases student achievement
 - Conceptual or Procedural?
- Previous research relates to college-level participants and courses
 - Wyoming High School Students
- Use on assessments and homework
- Factors related to use

Methods

- IRB Approval
- Created Survey
- Emailed to Wyoming HS/JHS Principals (133)
- Collected data

Responses

- 69 responses
- 46 High School Mathematics Teachers
- 63 Wyoming High Schools
 - (Wyoming DOE)

Survey Questions

- Type and Frequency
- Student Interest and Comprehension
- Use on Assessments and Homework
- Rationale for Using Technology
- Demographics
- Additional Comments

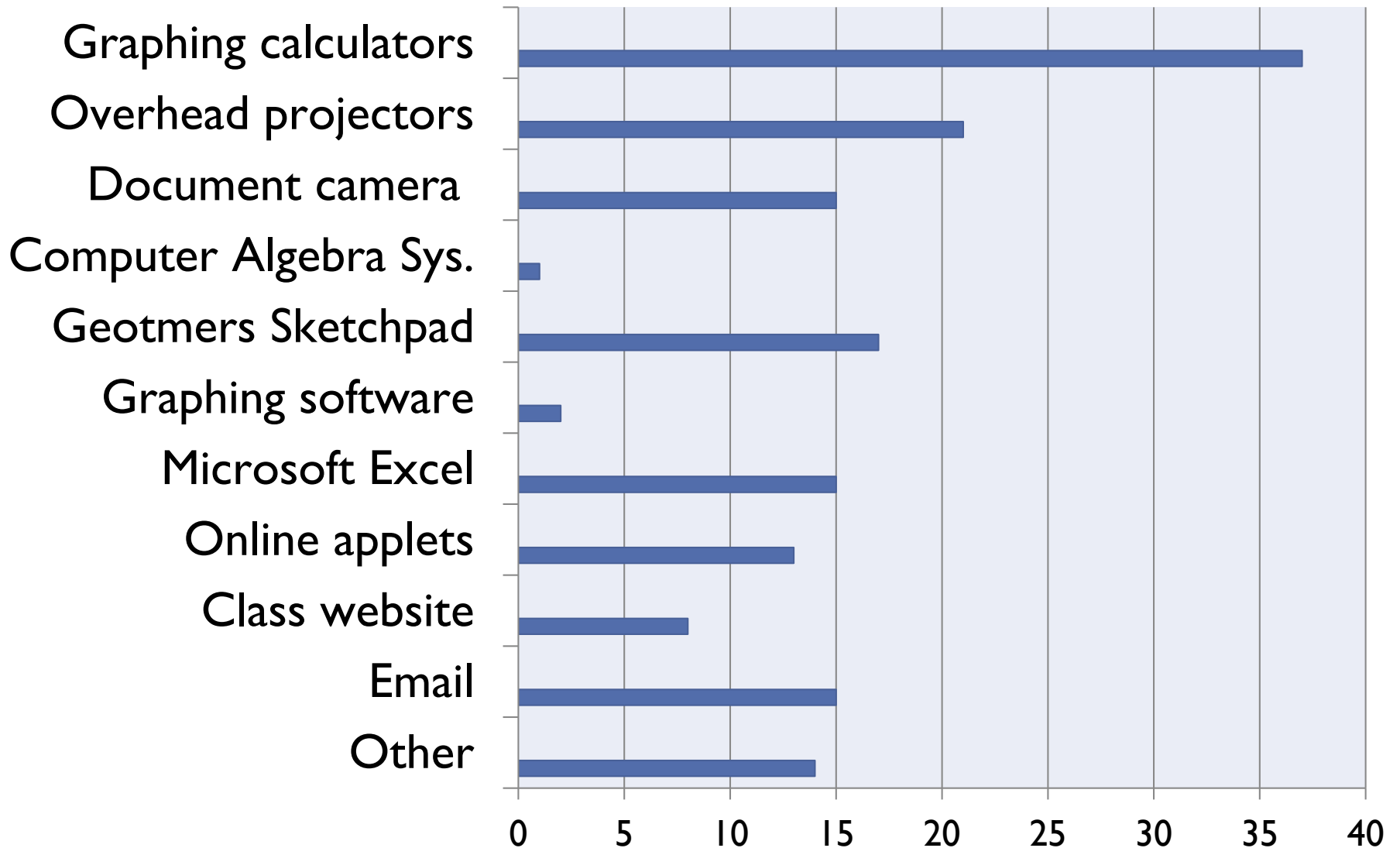


TYPE OF TECHNOLOGIES

AND

FREQUENCY

What technologies do you use in your classroom?



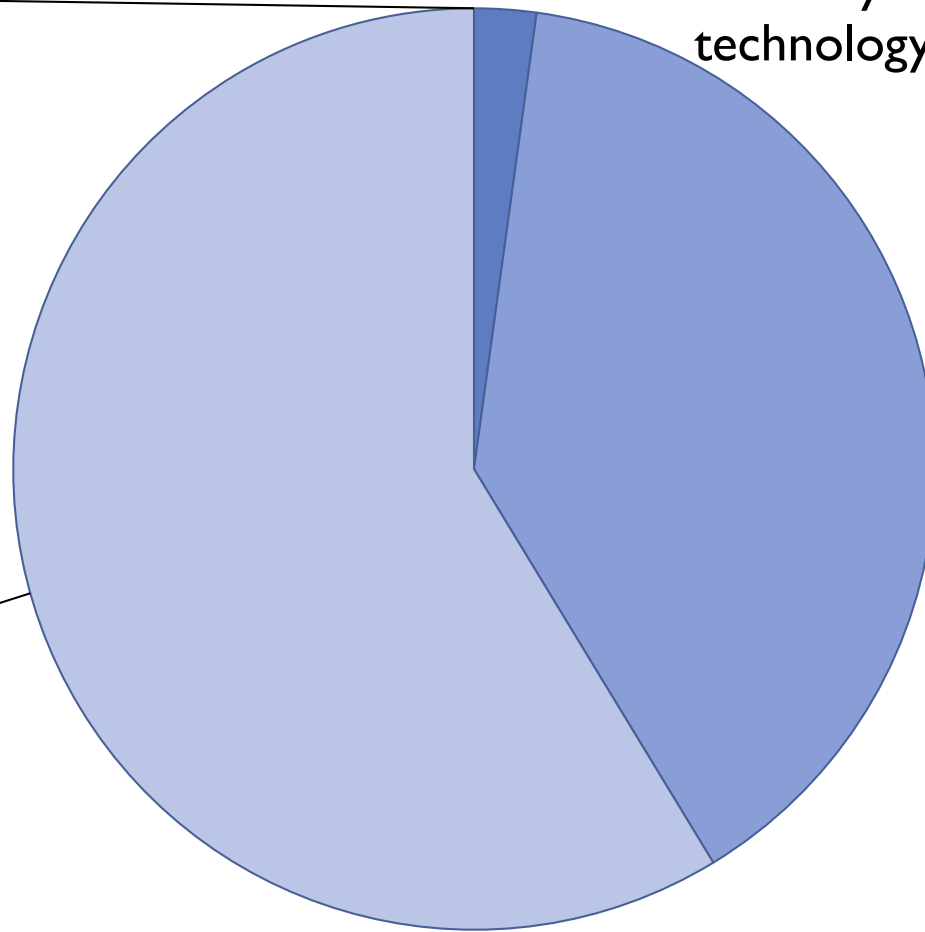
How often do you use technology in your classroom?

I don't use
technology (0)

I rarely use
technology (1)

I use
technology
some of the
time (18)

I use
technology
almost all the
time (27)



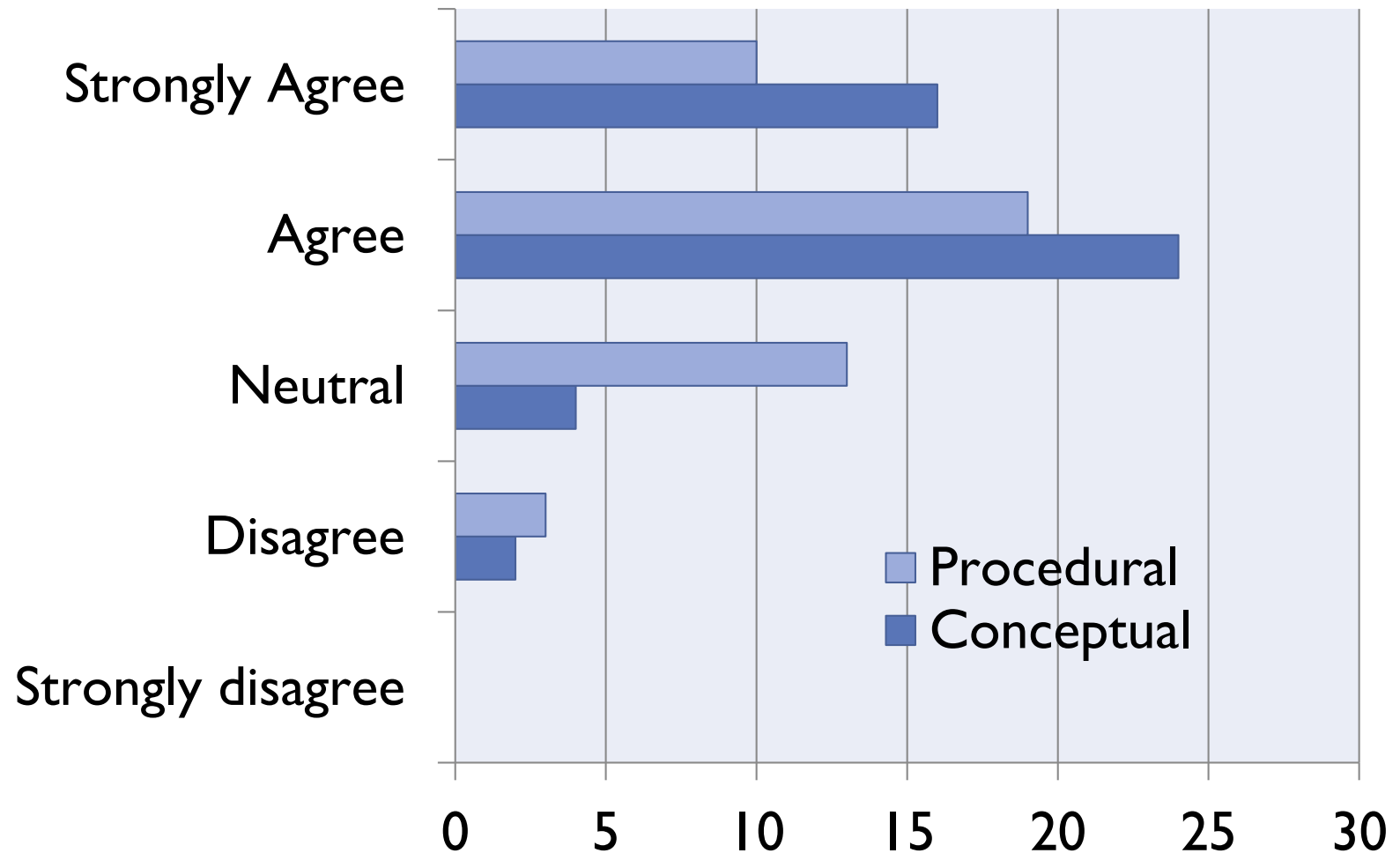


STUDENT INTEREST

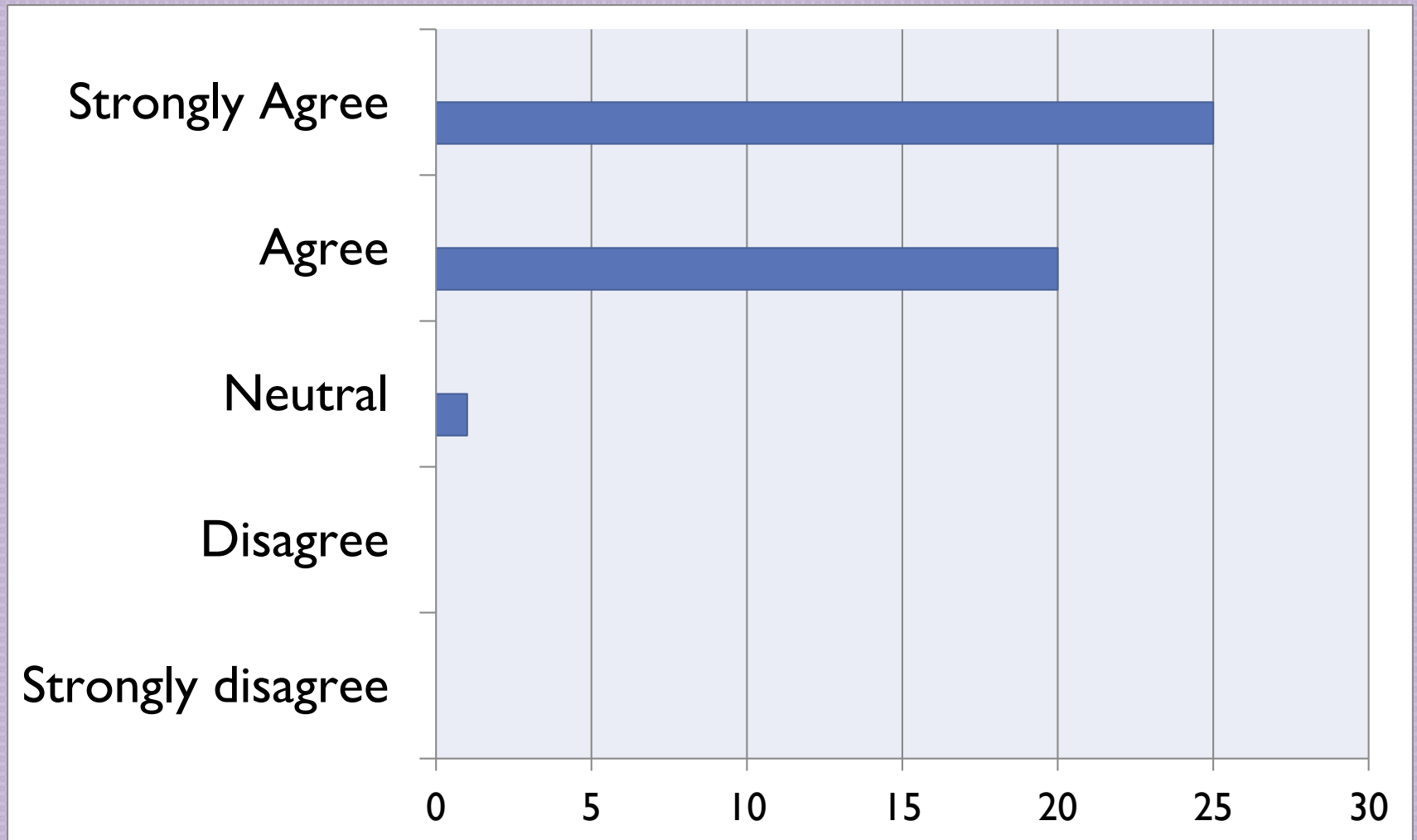
AND

COMPREHENSION

Using technology aids in **procedural** understanding.
Using technology aids in **conceptual** understanding.



Using technology helps with visual representations.



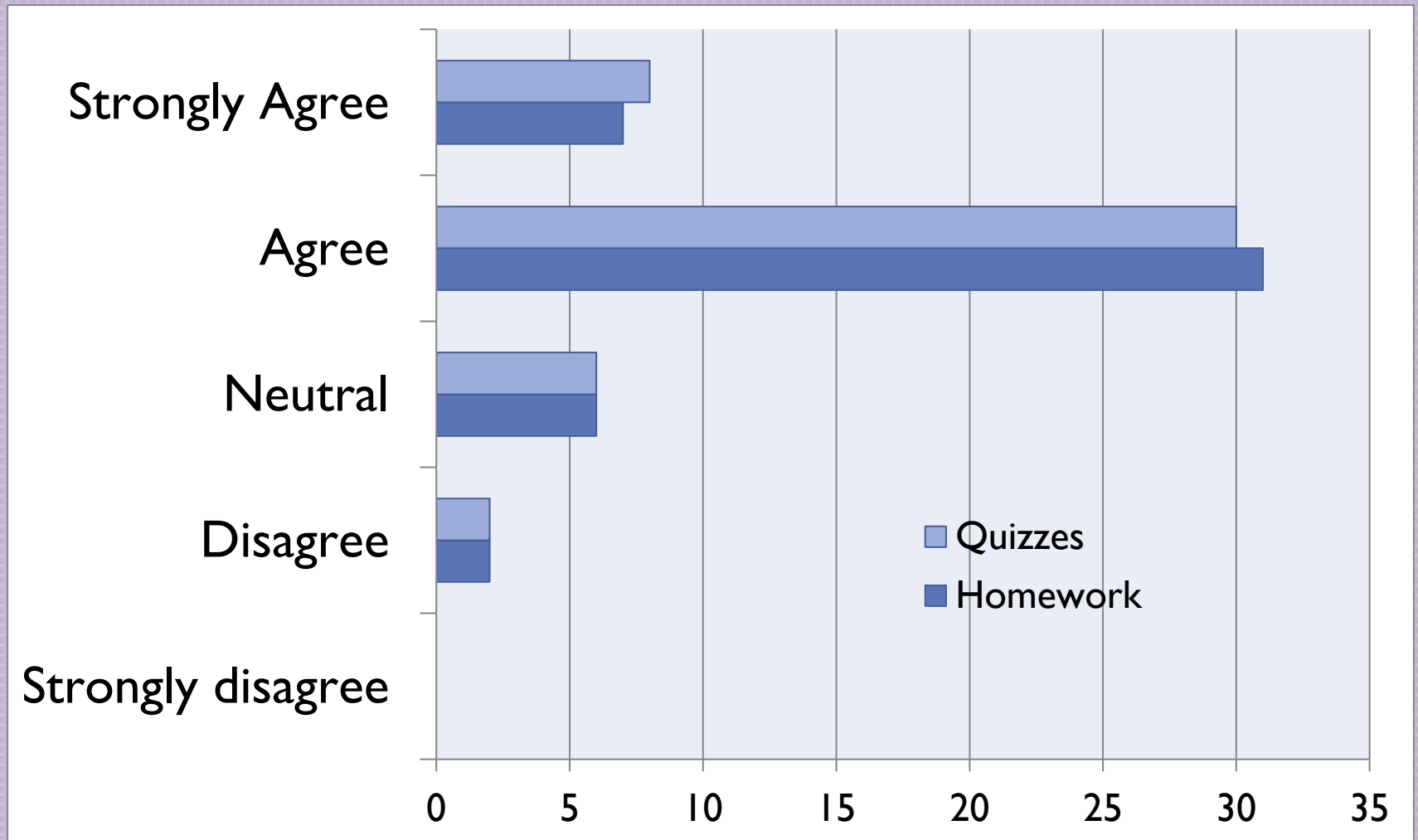


USE ON ASSESSMENTS

AND

HOMEWORK

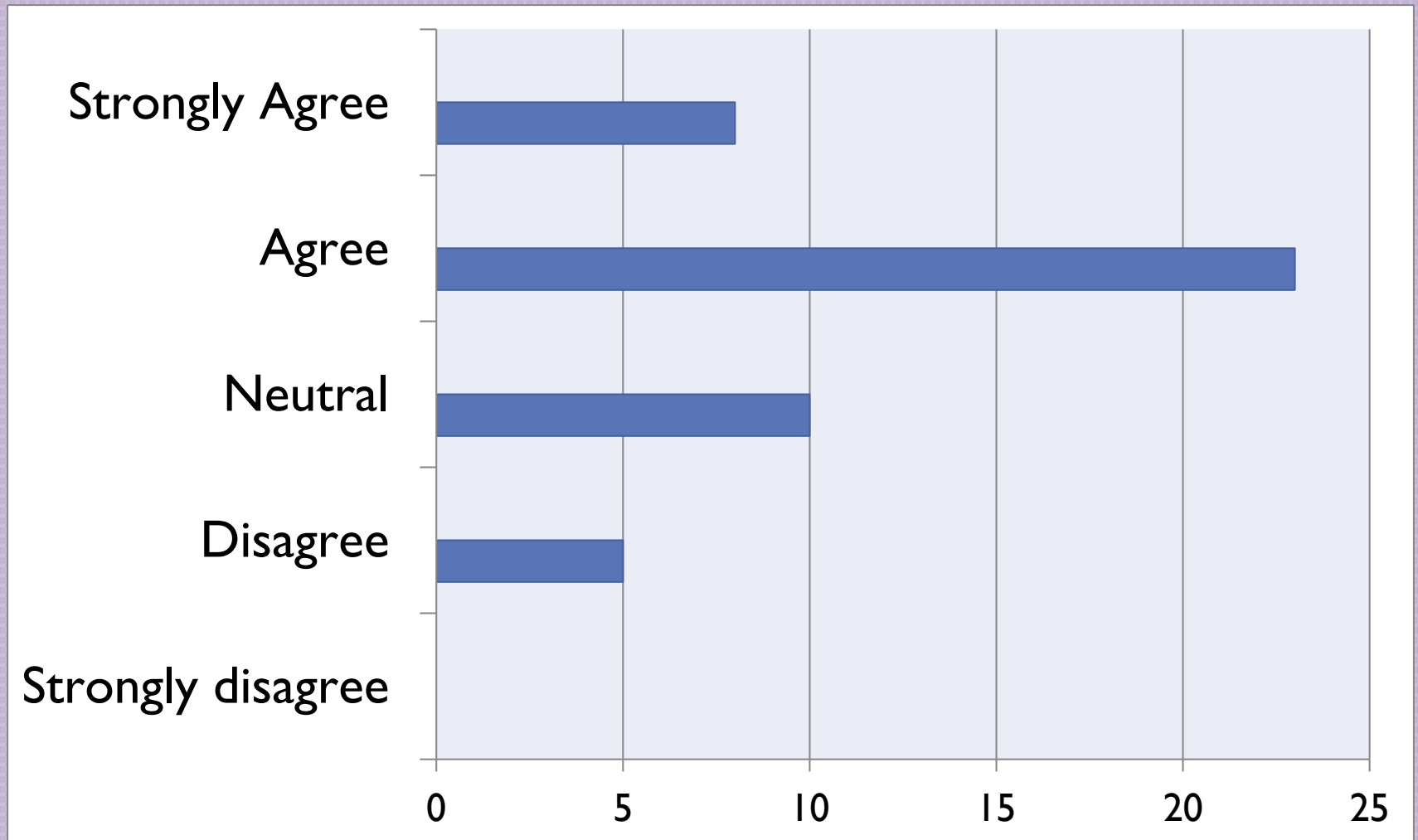
Students should be able to use technology on **quizzes**.
Students should be able to use technology on **hw**.



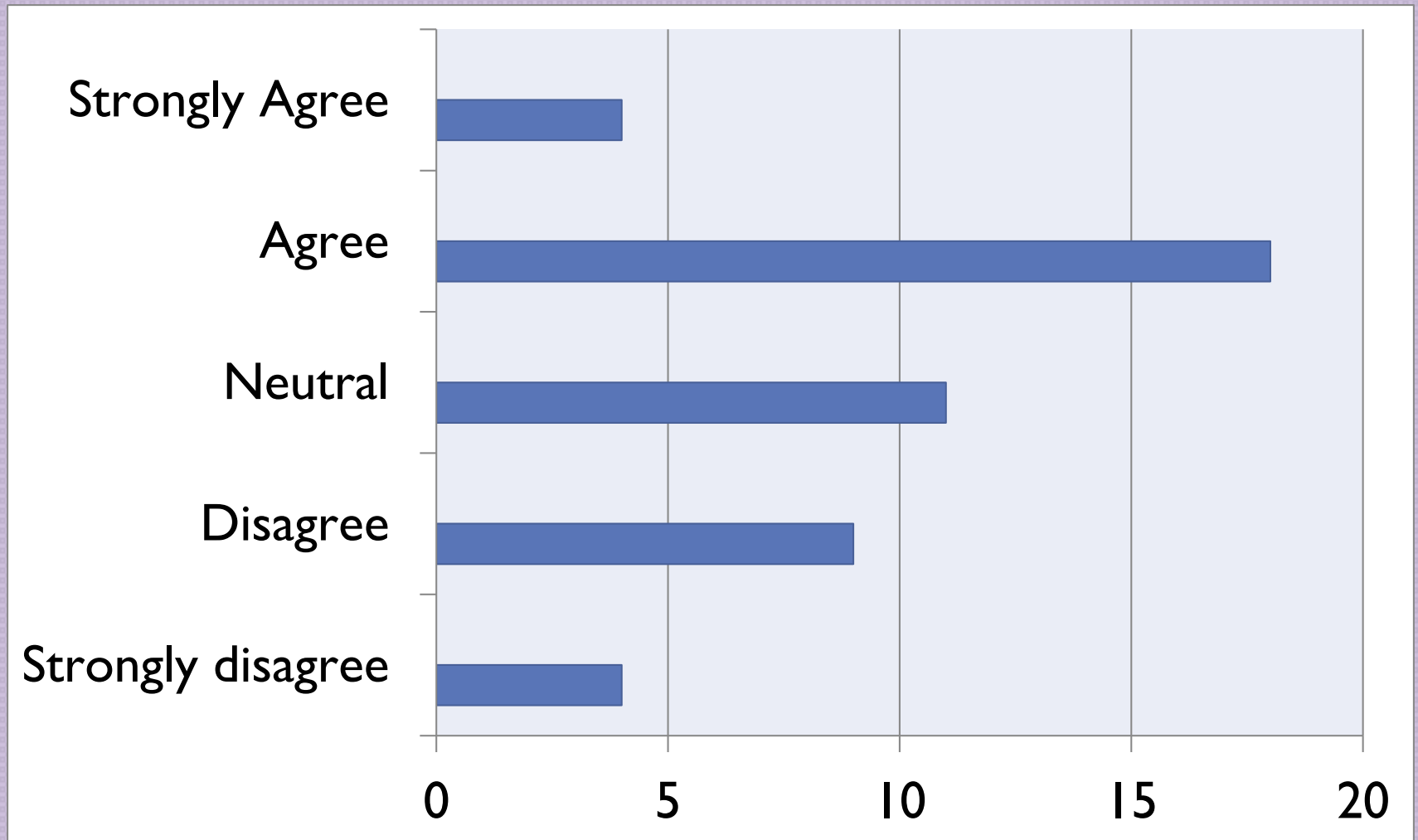


RATIONALE FOR USING TECHNOLOGY

I feel confident in my expertise with technology.



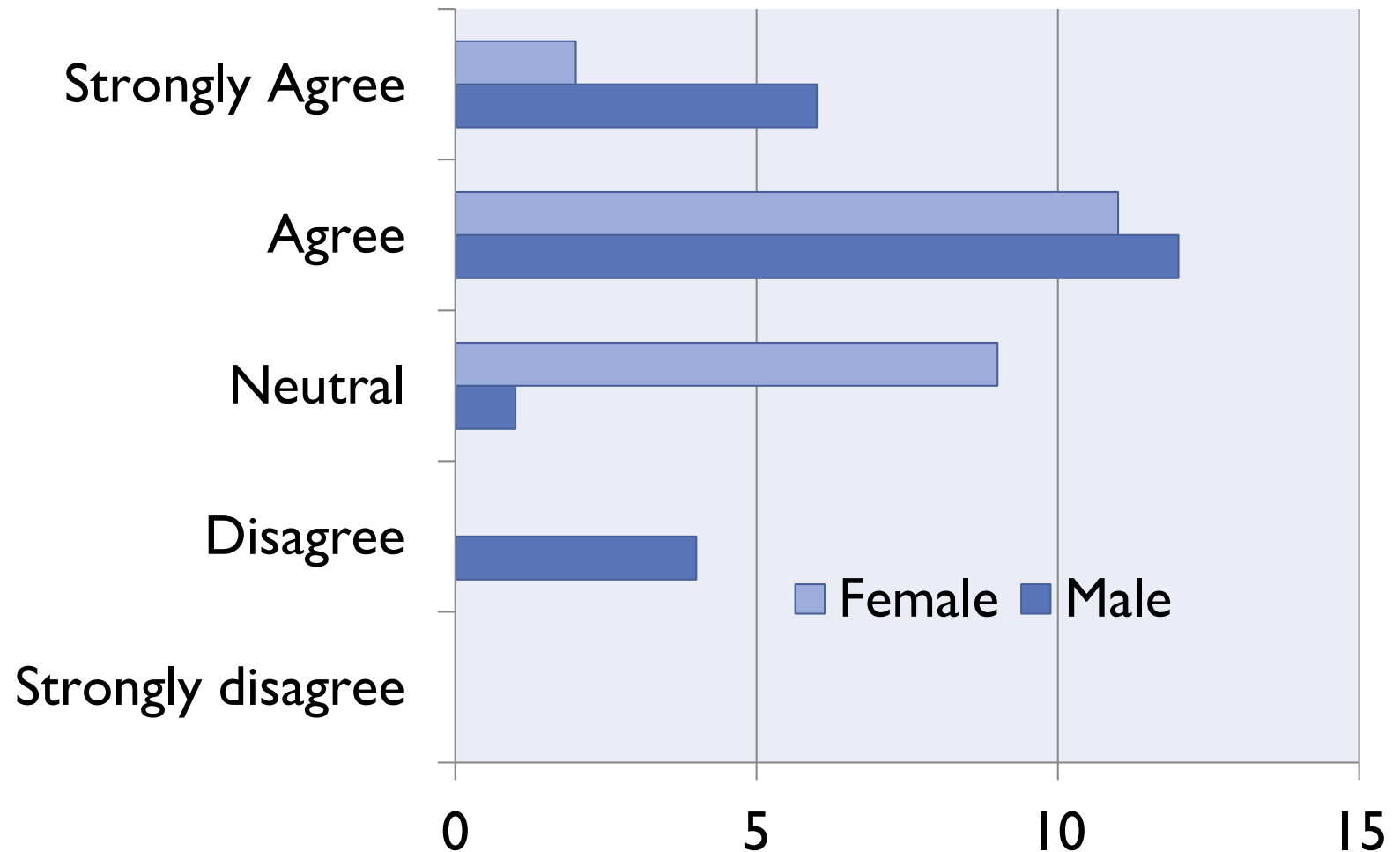
Professional development has helped me to integrate technology in my teaching.



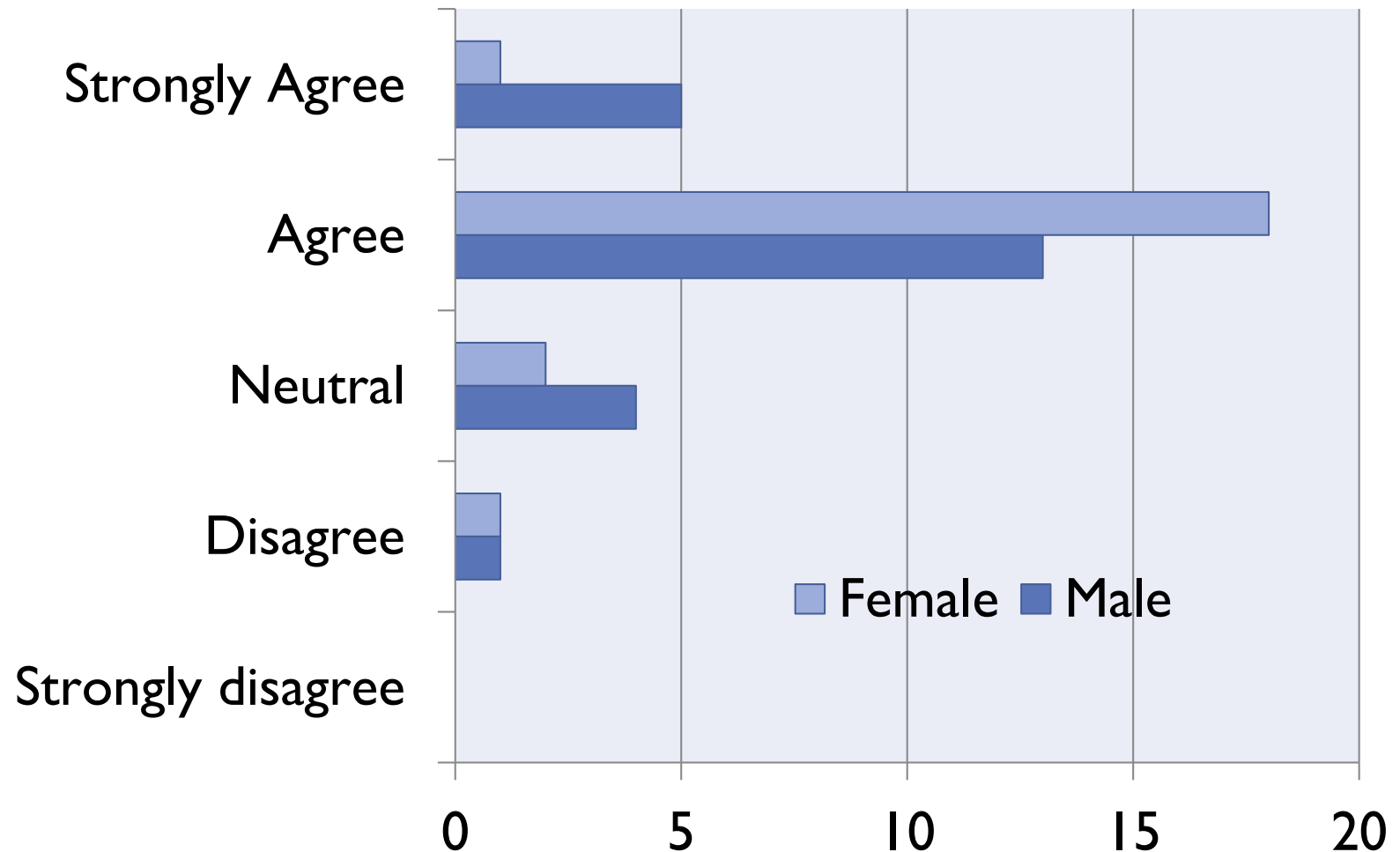


DEMOGRAPHICS

Using technology benefits all students.



Students should be able to use technology on hw.





CONCLUSIONS

AND

COMMENTS

Technology is a Means to an End

“Technology should aid in learning mathematics, if the whole focus is technology then we are missing the aim. Students should still be able to perform many calculations by themselves, to really understand what the technology is doing.”

“Technology is a wonderful teaching tool. However, it does not replace what can be learned using pencil and paper. ..Technology is a tool not a guarantee to learning.”

Expertise


“Professional development has not taught me to use technology, I am self-taught and have taken classes on my own dime to learn more.”

“My student teaching experience really helped me utilize technology. I was placed with a teacher that was comfortable experimenting with technology and integrated it into almost every single class.”

Integration

“I have found it hard to find good, meaningful ways to incorporate technology. I don't want to just use it as a filler, but it takes longer to create your own lessons sometimes.”

“It allows us to go where we otherwise would not be able to go. It allows for some nifty, efficient, colorful, fun, student-interactive experiences. It offers teachers more tools for individualization. It saves a great deal of time, and can lead to more student-directed experiences...”



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