

Student Attitude in Mathematics Classrooms

Brookstein, A., Hegedus, S., Dalton, S., Moniz, R., & Tapper, J. (2011). Measuring student attitude in mathematics classrooms. *Dartmouth: Kaput Center for Research and Innovation in STEM Education, University of Massachusetts.*

23 Items

4 Dimensions

Deep affect: Positivity towards learning mathematics and school

I do not like school.

In middle school, my math teachers listened carefully to what I had to say.

I think mathematics is important in life.

In middle school, I learned more from talking to my friends than from listening to my teacher.

I like math.

I enjoy hearing the thoughts and ideas of my peers in math class.

Mathematics interests me.

Working collaboratively and related effect

I sometimes feel nervous talking out-loud in front of my classmates.

I do not like to speak in public.

When I see a math problem, I am nervous.

I do not participate in many group activities outside school.

I like to go to the board or share my answers with peers in math class.

I am not eager to participate in discussions that involve mathematics.

I feel confident in my abilities to solve mathematics problems.

In the past, I have not enjoyed math class.

I receive good grades on math tests and quizzes.

Working Privately

I enjoy working in groups better than alone in math class.

I prefer working alone rather than in groups when doing mathematics.

I learn more about mathematics working on my own.

Use of technology

I enjoy using a computer when learning mathematics.

When using technology for learning mathematics, I feel like I am in my own private world.

Technology can make mathematics easier to understand.

I am not comfortable using technology in math class.

5-point Likert Scale (0 ("Strongly Disagree") to 4 ("Strongly Agree"))

Cronbachs α :

Deep affect: positivity towards learning mathematics and school ($\alpha = .744$), Working collaboratively and related effect ($\alpha = .716$), Working privately ($\alpha = .702$), and Use of technology ($\alpha = .637$)