

**Action Research Study
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Title of the Study:	What are the Attitudes of Grade 7 Students Toward Mathematics?
Location or Institution (optional)	Al-Razi Independent School for Boys
Abstract	It s a study for students' attitude toward mathematics to improve mathematics learning by observed the positive attitudes and supporting this attitude, also observed the negative attitude and try to find a solutions for this attitude to replace by positive attitude.
Grade Level:	preparatory
Data Collection Methods:	questionnaire
Subject/Topic:	Mathematics

What are the Attitudes of Grade 7 Students? Toward Mathematics?

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Any Maths teacher in an Independent School must wonder about the students' attitudes toward studying Mathematics.

As students enter the classrooms in September and we look at our students' faces, some questions must come to mind.

- Do our students have difficulty understanding Maths?
- Do our students regard Maths as an important subject for their future careers or further study? In Medicine? Or engineering? Or as a geneticist? Or as a mechanic for large trucks?
- Do our students enjoy Maths?
- What would students say if we asked them, what is the aim of learning Maths?

We should also keep in mind that some of our students may have doubts about their abilities in understanding maths. Maybe they lack self-confidence in understanding maths.

So, who bears the responsibility in making them feeling so?

Is it the subject itself or the teacher?

Research shows that students find maths difficult if we teach the subject in a traditional manner; students can't cope with maths taught in a traditional manner. Hence, we "the teachers" should look for a new, enjoyable teaching methodology which incorporates ICT to simplify the subject for the students and to engage them to learn maths.

But the question is; can we achieve this goal quickly?

This idea needs more time and it should be started at the elementary stage or at preparatory stage.

Evidence from teachers suggests that we can't convince the high school students to study maths just in order to get a high mark or even to succeed.

Consequently, this may be another disadvantage that affects their understanding negatively.

Students have many attitudes towards maths and during this research, we will discuss some of those attitudes.

We completed a survey on two classes of grade 7 in our school and two classes of grade 7 girls at a leading Independent school. One of Qatar's leading private schools also agreed to participate and so, we surveyed two classes of mixed students in grade 7.

We used the How I Feel about Mathematics Scale (HIFAMS) which is designed for grade 4 thru 7 and so, we are targeting three schools to take our sample.

Our results show that almost of students in the survey regard Mathematics as an important subject, and we can see the result from each of the following frequency tables.

Also we can see the difference between each of the schools from the following table.

question	agreement	Alrazi school (n = 44)	Private school			Girls school (n = 44)
			boys (n =23)	girls (n = 14)	total (n = 41)	
1. Math is boring	Strongly agree	11.6%	30.4%	0.0%	17.1%	31.8%
	Agree	14.0%	17.4%	7.1%	12.2%	22.7%
	Undecided	14.0%	26.1%	57.1%	41.5%	25.0%
	Disagree	18.6%	8.7%	28.6%	17.1%	9.1%
	Strongly disagree	41.8%	17.4%	7.1%	12.2%	11.4%
2. Math is too confusing	Strongly agree	14.0%	8.7%	0.0%	4.9%	36.4%
	Agree	16.3%	17.4%	28.6%	19.5%	31.8%
	Undecided	30.2%	21.7%	21.4%	24.4%	20.5%
	Disagree	16.3%	30.4%	35.7%	34.1%	6.8%
	Strongly disagree	23.2%	21.7%	14.3%	17.1%	4.5%
3. I enjoy my math's lessons	Strongly agree	53.5%	13.0%	14.3%	12.2%	15.9%
	Agree	16.3%	17.4%	28.6%	22.0%	22.7%
	Undecided	11.6%	30.4%	42.9%	39.0%	18.2%
	Disagree	4.7%	34.8%	14.3%	24.4%	15.9%
	Strongly disagree	13.9%	4.3%	0.0%	2.4%	27.3%
4. Math's is an important subject	Strongly agree	52.3%	60.9%	78.6%	68.3%	43.2%
	Agree	22.7%	26.1%	21.4%	24.4%	18.2%
	Undecided	4.5%	4.3%	0.0%	2.4%	18.2%
	Disagree	6.8%	8.7%	0.0%	4.9%	6.8%
	Strongly disagree	13.6%	0.0%	0.0%	0.0%	13.6%
5. I can't keep up with the work we do in math's	Strongly agree	9.1%	0.0%	0.0%	0.0%	18.2%
	Agree	18.2%	4.3%	28.6%	12.2%	25.0%
	Undecided	20.5%	21.7%	0.0%	14.6%	29.5%
	Disagree	22.7%	30.4%	64.3%	46.3%	13.6%
	Strongly disagree	29.5%	43.5%	7.1%	26.8%	13.6%

question		Al-Razi	Private School			Girls
	response	(n = 44)	boys (n = 23)	girls (n = 14)	total (n = 41)	(n = 44)
6. I like maths	Strongly agree	43.2%	21.7%	7.1%	14.6%	15.9%
	Agree	9.1%	26.1%	28.6%	26.8%	27.3%
	Undecided response	15.9%	30.4%	50.0%	41.5%	15.9%
	Disagree	13.6%	17.4%	14.3%	14.6%	6.8%
	Strongly disagree	18.2%	4.3%	0.0%	2.4%	34.1%
7. I like maths more than my other school subjects	Strongly agree	25.0%	8.7%	14.3%	9.8%	11.4%
	Agree	22.7%	8.7%	0.0%	7.3%	16.0%
	Undecided response	13.6%	17.4%	28.6%	24.4%	16.0%
	Disagree	11.4%	34.8%	21.4%	29.3%	13.6%
	Strongly disagree	27.3%	30.4%	35.7%	29.3%	43.0%
8. Doing maths problems is fun	Strongly agree	38.6%	8.7%	7.1%	7.3%	27.3%
	Agree	25.0%	26.1%	14.3%	22.0%	20.4%
	Undecided response	8.2%	13.0%	7.1%	17.1%	13.6%
	Disagree	13.6%	21.7%	57.1%	31.7%	11.4%
	Strongly disagree	4.6%	30.4%	14.3%	22.0%	27.3%
9. I can't see why I have to do math's	Strongly agree	11.4%	4.3%	0.0%	2.4%	22.7%
	Agree	13.6%	4.3%	7.1%	4.9%	15.9%
	Undecided response	25.0%	17.4%	7.1%	14.6%	6.9%
	Disagree	13.6%	13.0%	64.3%	34.1%	25.0%
	Strongly disagree	36.4%	60.9%	21.4%	43.9%	29.5%
10. Math's is a useless subject	Strongly agree	13.6%	0.0%	0.0%	0.0%	13.6%
	Agree	2.3%	0.0%	0.0%	0.0%	15.9%
	Undecided response	18.2%	21.7%	0.0%	12.2%	6.8%
	Disagree	22.7%	26.1%	42.9%	31.7%	22.7%
	Strongly disagree	43.2%	52.2%	57.1%	56.1%	41.0%

Thus we can observed from the last tables the girls students seem to have negative attitudes about maths and we need to increase the percentage of the boys with positive attitudes.

The purpose of the survey was to obtain some information and baseline data for boys so we can think about an action research project for next September because we didn't have time to begin the research this year.

We plan to investigate the following and test its effect on the learning of the boys

1. Using computer in teaching(eLearning)
2. Try to use power point presentation more frequently
3. Find interesting programs to make the class more engaging
4. Using new teaching methodologies
5. Use group work as a strategy in more lessons.
6. Use math games and competitions to make the students engage in Maths.
7. Use real life examples appropriate to students needs and interests

Finally we hope our solution will increase the positive attitude toward Mats and also improve both learning and test scores.