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# Assessing Core Competencies: Results of Quantitative Literacy & Reasoning Assessments

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Graduating Seniors  
2019 Fañomnåkan

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## Quantitative Literacy and Reasoning Assessment Results Highlights

### 2019 Fañomnåkan

The Quantitative Literacy and Reasoning Assessment (QLRA), an online multiple-choice test, developed by Dr. Eric Gaze at Bowdoin College is a tool for assessing quantitative literacy among US four-year colleges and universities. The University’s Mathematics Department began using this instrument in 100 and 400 level Math courses since 2014. The University Assessment Committee adopted the QLRA in 2017 as the Institutional Instrument for Institutional-Level assessment.

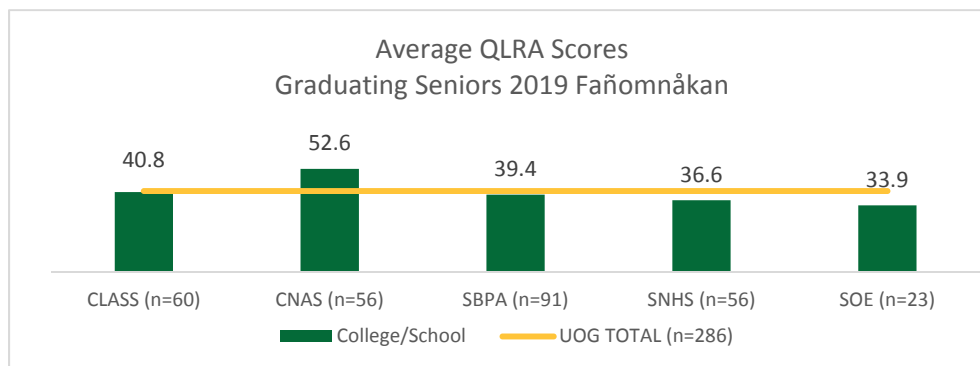
Possible scores for this assessment range from 0% through 100%. Of the 286 graduating seniors who took the assessment across all disciplines, the average score is **41.3%**. This score is a 3-percentage point increase from when the test was first given institution wide in Fañomnåkan 2017.

To serve as a factor in the analysis of results, students were asked if they took the following courses at UOG: MA-085: Fundamentals of Math, MA-110: Basic Mathematical Applications, and MA-151: Introductory Statistics.

49% of seniors who indicated they had taken MA-085 received an average score of 36.1% while the students who did not take MA-085 scored an average of 46.3%. While this course is not required, students who get placed into developmental math must pass this course before proceeding with MA-110 or higher.

58% of seniors indicated they took MA-110 and they received an average score of 38.2%. The 42% who did not take MA-110 received an average score of 45.6%. Although MA-110 is a general education requirement, students may opt to take an equivalent course or higher.

51% of seniors had taken MA-151 and their average score was 39.4%. Those who did not take the course received an average of 43.2%. It is interesting to note that the average score of students who took Introductory Statistics were slightly lower than those who did not take the course.

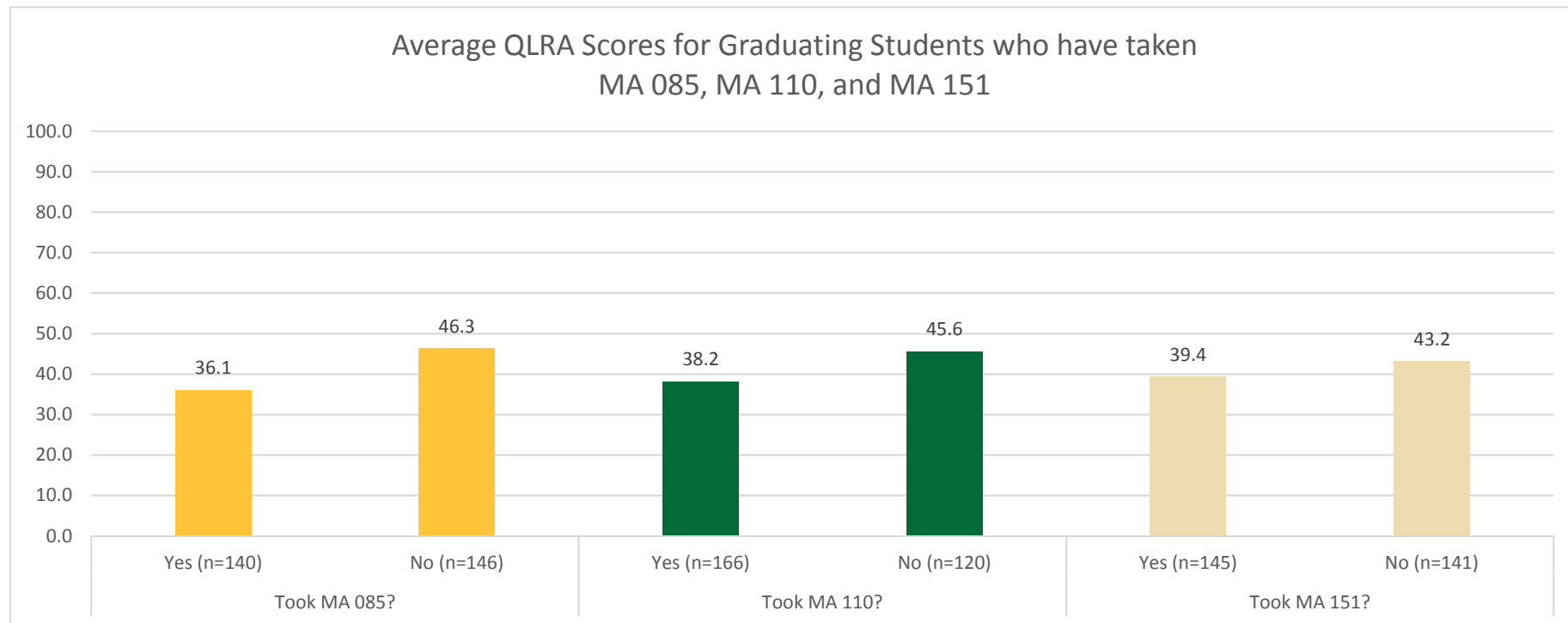


This graph displays the average scores of students in each college/school with the UOG average trendline at 41.3%.



2019 Fañomnåkan Quantitative Literacy and Reasoning Assessment Average Scores by Course for Graduating Seniors

	Total	Took MA 085?		Took MA 110?		Took MA 151?	
		Yes	No	Yes	No	Yes	No
<b>Count</b>	286	140	146	166	120	145	141
<b>Percent</b>	100%	49%	51%	58%	42%	51%	49%
<b>Avg Grade</b>	41.3	36.1	46.3	38.2	45.6	39.4	43.2
<b>Std Dev</b>	17.9	15.0	19.1	16.4	19.1	17.0	18.7

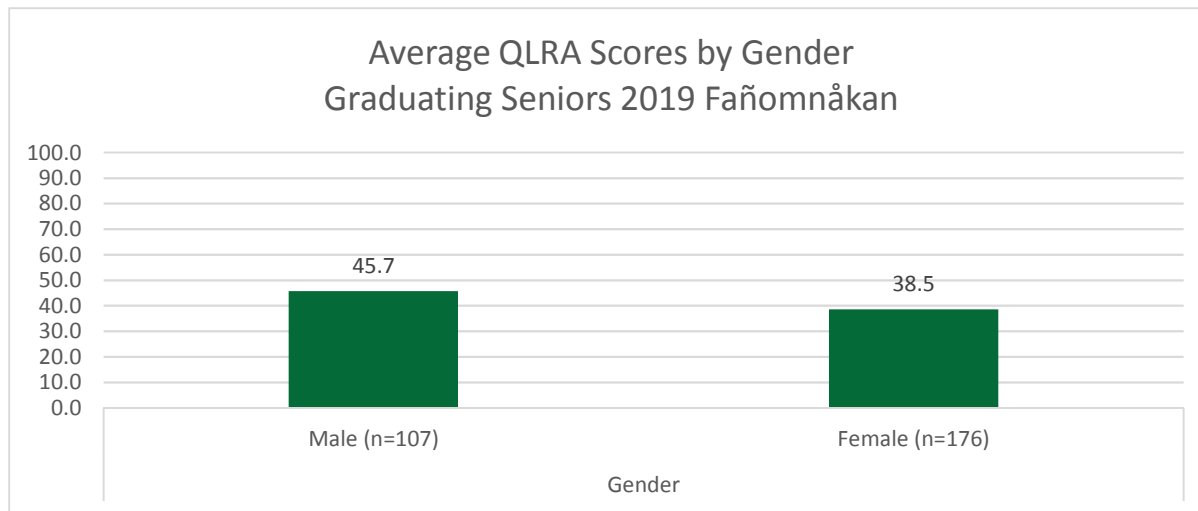




2019 Fañomnåkan Quantitative Literacy and Reasoning Assessment Average Scores by Gender for Graduating Seniors

	Total	Gender	
		Male	Female
<b>Count</b>	286	107	176
<b>Percent</b>	100%	37%	62%
<b>Avg Grade</b>	41.3	45.7	38.5
<b>Std Dev</b>	17.9	20.1	16.1

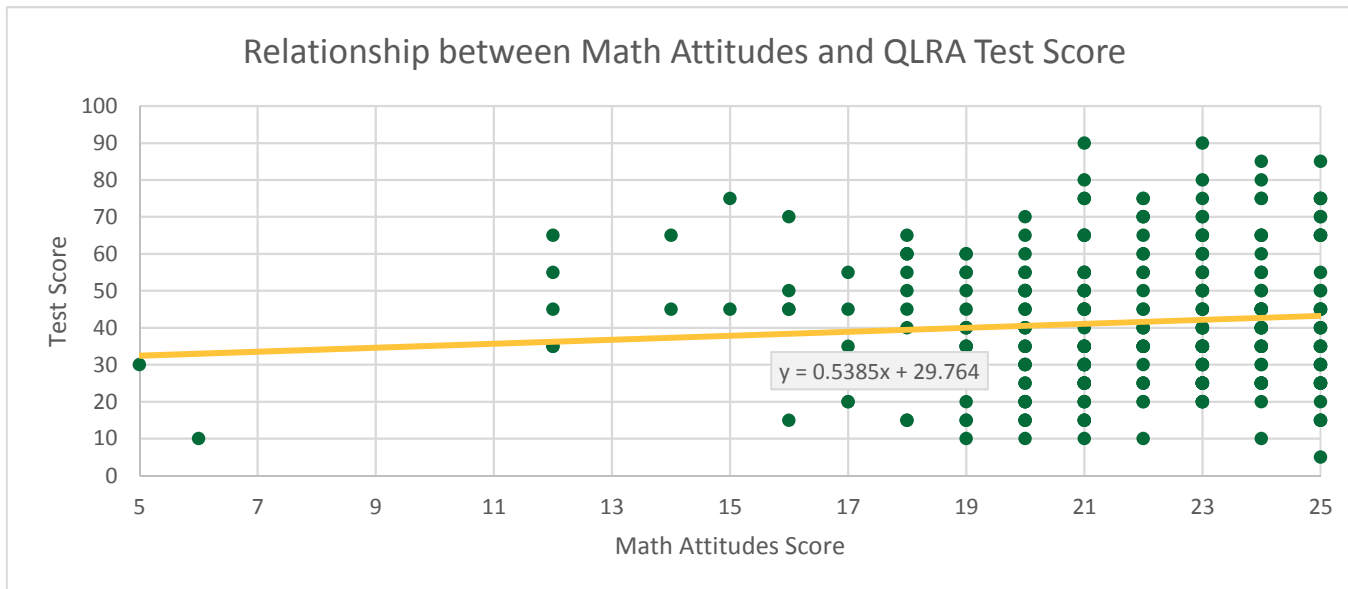
Three students declined to specify gender





2019 Fañomnåkan Quantitative Literacy and Reasoning Assessment Math Attitudes - Indirect Assessment

Question	Response	Count	Percent
Numerical information is very useful in everyday life	Strongly Agree	190	66%
Numbers are not necessary for most situations	Strongly Disagree	65	23%
Quantitative information is vital for accurate decisions	Strongly Agree	148	52%
Understanding numbers is as important in daily life as reading and writing	Strongly Agree	210	73%
It is a waste of time to learn information containing a lot of numbers	Strongly Disagree	174	61%



Higher Math Attitudes Scores correspond to more positive attitudes towards Math.