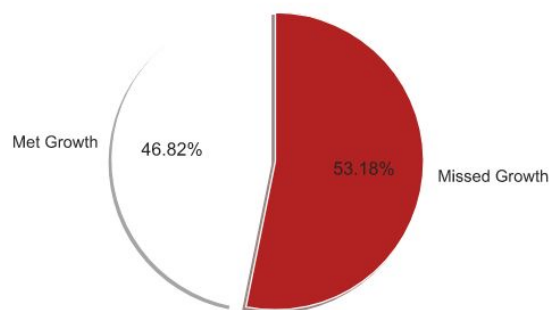# Enhancing Education Data Challenge

Challenge:
53% of students failed to hit projected growth from Fall to Winter!

Fall to Winter Projected Growth Results

Met Growth 46.82% — 53.18% Missed Growth

Areas of Improvement: Students, Teachers, Content

Which subject do students struggle more in? → **Students struggle more in Mathematics**, with about 40% scoring below average.

Reading Assessment

In the fall, **5/10 classes had lower class averages** than the average score on the exam. Those same 5 classes also were below average for the winter exam, with the percent of students meeting their projected fall to winter growth **below 50%**.

Classes below average for both Fall and Winter: ELA Commons, Denton, Hagerstown, Howard, VMH

Within the Reading portion, students struggled most on **Informational Text: Key Ideas and Details**, with over **55%** of students scoring below average in the fall and **51%** in the winter.
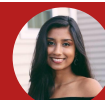
Math Assessment

For the winter exam, the average score was higher than the fall, however **6/10 classes had lower class averages**, with students meeting **with over 60%** of students in those classes not meeting their projected fall to winter growth.

Classes below average for both Fall and Winter: Math Commons, Denton, Hagerstown, Howard, VMH

Within the Mathematics portion, students struggled most on **Statistics and Probability,** with over **70%** of students scoring below average in the fall and **72%** in the winter.

Recommendations:

1. Increase focus in Mathematics instruction, specifically within **Statistics and Probability.**
2. Within Reading instruction, increase focus on **Informational Text: Key Ideas and Details.**
3. Increased attention towards classes **underperforming on both** Fall and Winter exams on areas of most improvement.
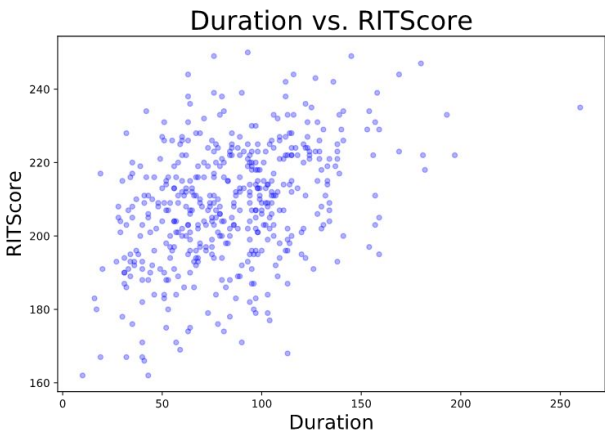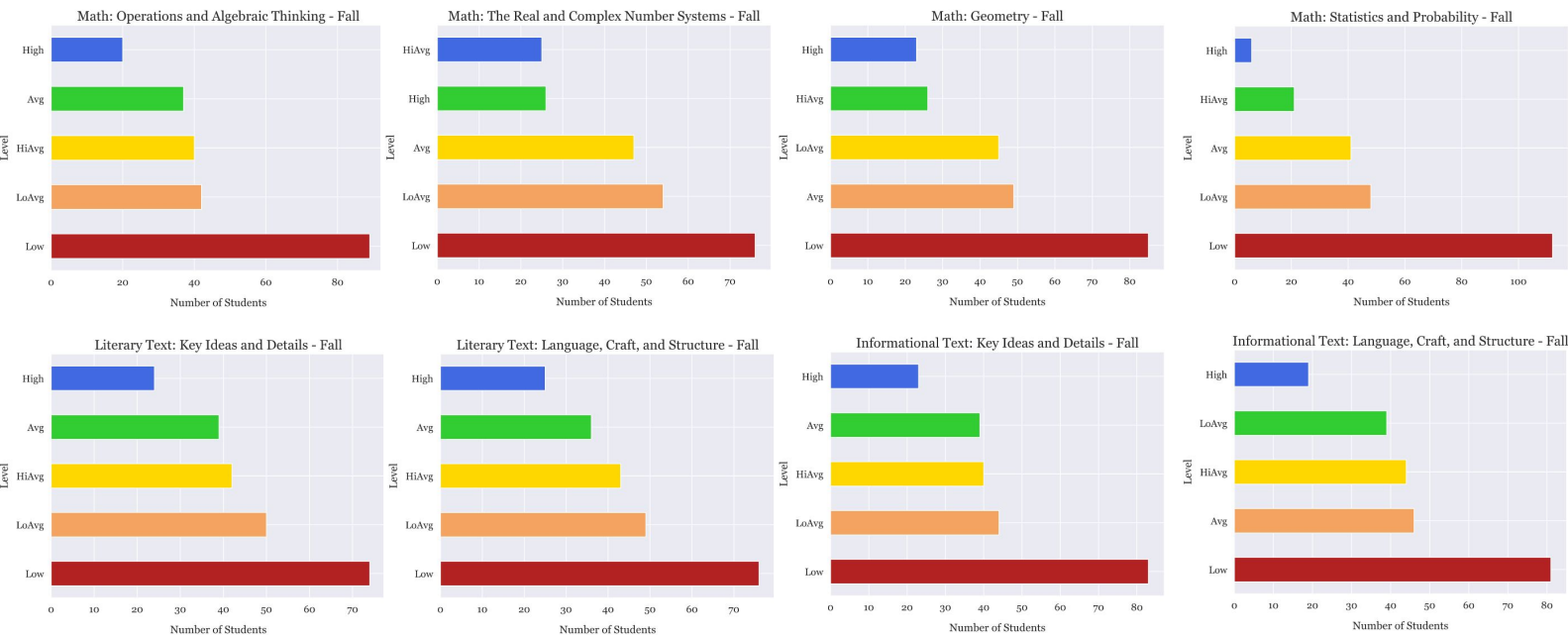
Data Trends

The test-taking duration and the raw score had a 0.40+ correlation coefficient, indicating that on average, students spending more time on the test earned higher scores. Students can be encouraged to take their time on tests to increase their probability of a higher raw score.

Duration vs. RITScore

Subject Goals Results Distribution

Math: Operations and Algebraic Thinking - Fall

Math: The Real and Complex Number Systems - Fall

Math: Geometry - Fall

Math: Statistics and Probability - Fall

Literary Text: Key Ideas and Details - Fall

Literary Text: Language, Craft, and Structure - Fall

Informational Text: Key Ideas and Details - Fall

Informational Text: Language, Craft, and Structure - Fall

Fall ELA Average Score: **205.78602620087335**
Classes that performed below average:

Name	Score
Commons	200.56
Denton	203.83
Hagerstown	197.28
Howard	201.77
VMH	203.70

Winter ELA Average: **209.7391304347826**
Classes that performed below average:

Name	Score	% EG	Subject
Commons	204.80	24.00	IT: LCS
Denton	204.39	21.74	LT: KID
Hagerstown	206.25	50.00	V: AU
Howard	206.67	41.67	LT: LCS
Oakland	209.32	15.79	T: KID
VMH	206.45	22.73	IT: KID

Fall Math Average Score: **211.14473684210526**
Classes that performed below average:

Name	Score
Math Commons	202.44
Math Denton	205.77
Math Hagerstown	204.52
Math Howard	206.50
Math VMH	208.00

Winter Math Average Score: **213.9301310043668**
Classes that performed below average:

Name	Score	% EG	Subject
Commons	205.63	25.00	Stat & Prob
Denton	208.88	16.67	Stat & Prob
Hagerstown	209.63	37.50	Op & Alg
Howard	213.04	34.78	Stat & Prob
Oakland	212.85	25.00	Stat & Prob
VMH	210.77	18.18	Stat & Prob