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April 24. 2023

**TO:** Dr. Jessica Boston Davis, Assistant Superintendent of Academics

FROM: Alicia Kersten, Principal of Somerville High School

RE: School Improvement Plan (SIP) Memo to School Committee for the 2022-2023 School Year

CC: Dr. Jeff Curley, Interim Superintendent; SPS School Committee

School Mission

Somerville High School's mission is reflected in our Highlander Habits, a list of skills that Somerville High School is committed to having all students master over their time at SHS for post-secondary readiness and success. This graduate profile was created using the input of faculty, student, and parent focus groups as part of the Envisioning the Future of SHS project funded by the Barr Foundation. Teachers, counselors, and administrators use the Highlander Habits in a variety of ways. These skills are embedded into classroom assignments, and students receive feedback on how they are mastering the skills. Students are recognized by their teachers and the SHS Community for exemplifying the skills through the "Highlander of the Quarter" awards program. Somerville High School is also connecting these skills to our out-of-school learning opportunities and internships.
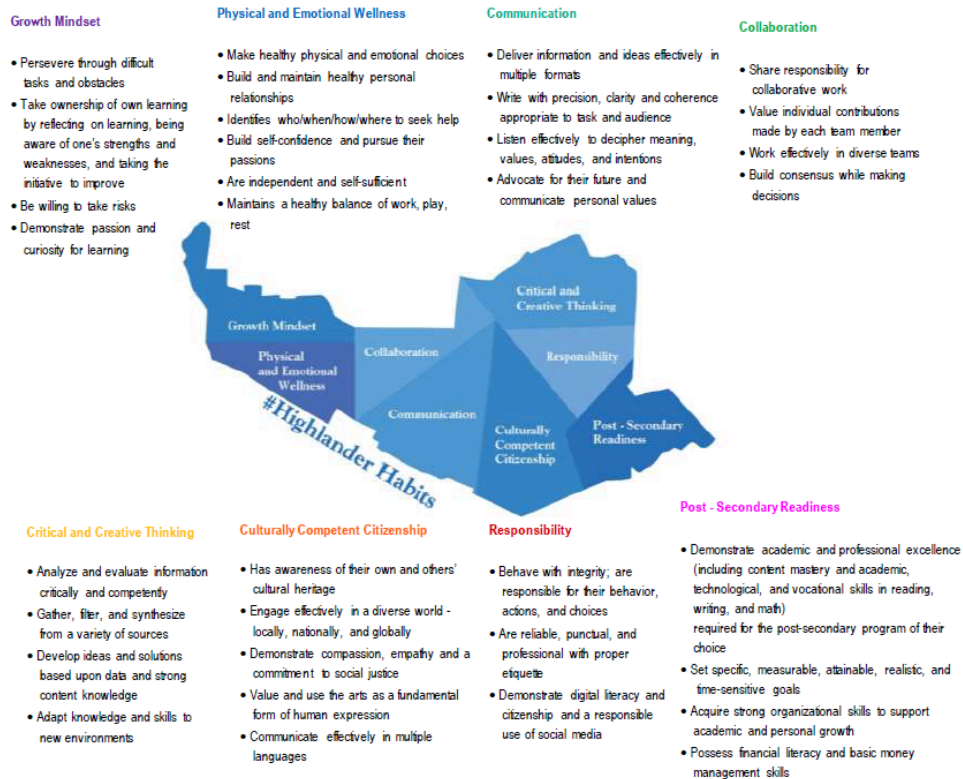
Background Information

Somerville High School is an urban city adjacent to Boston covering approximately 4.1 square miles, with a population of just over 79,000 according to the 2021 census. Expanding public transportation has led to gentrification, dramatically changing the city ethnically, linguistically, and socio-economically and leading to a shrinking "middle." Some of the aspects of the city that attracted people, such as ethnic restaurants and multicultural experiences still exist, but are decreasing as the cost of housing rises. The median income is $102,311, and the per capita income is $53,279. The poverty level is 11.3%.

The 2021 census states that for those over the age of twenty-five, 91.4% have a high school diploma or higher, with 65.7% achieving a bachelor's degree or higher.

Somerville Public Schools consists of eleven schools: one comprehensive high school, one alternative 9-12 high school, one alternative 6-8 school, seven elementary schools one elementary charter school, one high school charter school. In 2021-22, these schools served 4,673 students. The high school is a comprehensive high school with a career and technical education program available to all students who wish to pursue that path.

In the 2022-2023 school year, enrollment by race/ethnicity stood at 9.3% African-American, 5.7% Asian, 47.3% Hispanic, .2% Native American, 34.7% white, .1% Native Hawaiian/Pacific Islander, and 2.7% multi-race, non-Hispanic. 17.9% of students are classified as English Language Learners, and 54.9% speak a language other than English as their first language. 55.3% are classified as low-income, and 18.5 % as Students with Disabilities. Overall 65.3% of students are classified as high needs.

Somerville High School regularly celebrates its students, including but not limited to quarterly Highlander awards, an annual academic awards night, an annual career and technical education banquet, theatre arts and music productions in the fall/winter and spring, an annual fine arts showcase in May, and an annual Highlander Association awards night for athletics.

The per pupil for FY21 was $23,046, which is above the state average. The budget for SY22 was $99,566,946, of which $84,267,002 was from local appropriations. The City of Somerville is generous with its budget, particularly in terms of taking care of targeted needs for students and staff.

The dropout rate for SY21 decreased, down to 1.1% from 1.6% in SY20. Over that same time period, attendance rates increased from 94.1% in 2020 to 94.8% in 2021. Seventy-four percent of students from the class of 2021 went on to pursue either 2- or 4-year degrees with another four percent electing some other type of post-secondary training program. Two percent planned to enter the military. Fourteen percent stated that they were going to enter the workforce after

graduation; this figure includes those who plan to continue their career path from our career and technical education program.

Somerville High School partners with many area businesses for employment and internships, including CVS CareMark, MassHire, Local 103 (Electrical Union), Local 328 (Carpentry Union), and several other local establishments. The Somerville Mayor's Program also employs students every year. Students may also participate in dual enrollment or early college courses through Cambridge College and Bunker Hill Community College. Several other colleges and universities offer professional development for staff as well as opportunities for summer programs for students. Lastly, this year we began a collaborative internship with Harvard Radcliffe.

Focus Areas: At the Intersection of Academics, Equity, and Social Emotional Learning

Somerville Public Schools is focused on academics, equity, and social emotional learning. Rather than create a separate goal for each of these focus areas, each of the Somerville High School School Improvement plan goals touches on all of them. Our focus on improving attendance will result in improved academic performance, and involves strengthening social emotional health. Our focus on improving the failure rate in required classes relates to equity, academics and social emotional learning; Our focus on more thoroughly measuring student well being will help us understand our students' Social Emotional Health and allow us to create more targeted goals in the future.

Focus Area #1: Reduce School and Class Absences

We will reduce our unexcused school and class absences by at least 10% over the SY23 and SY24 school years.

Rationale and Theory of Action

Regular school and class attendance is crucial to student success. We consistently see correlations between good grades, higher test scores and regular attendance, and, conversely, correlations between poor grades and lower test scores with excessive absences. A review of the data indicates that Somerville High School has had a decrease in its overall attendance rate, and continues to have a high rate of class avoidance, AKA "Class Cuts." Last year's MCAS data indicated a correlation between absenteeism and failing MCAS scores, and we had an increase in the number of students who did not sit for the test. For example, of the 70 students who failed the Biology MCAS in June 2022, 64.3% missed 18 or more days of school.

Our theory of action is that if we can increase school and class attendance, we can increase students' academic performance as well as their overall sense of well being. A root cause investigation suggests that students do not attend school and avoid class when they do not feel connected to staff and peers, when they do not see the relevance of their coursework, and when they feel a class is too challenging or too easy. In addition, both staff and students report that students are more likely to avoid school and class when they do not receive immediate consequences/notice from school and parents/guardians.

Currently, Somerville High School has several systems in place to encourage students to attend school and class. For the past few years, Somerville High School has been working with a well-developed "Tier 1 guide" that details the steps school staff (teachers, deans, administrators etc) should take when students avoid class. The steps include calling home, assigning lunch detention, assigning in-school suspension, contracting with students/families, referring students to the community teams for additional supports/interventions. In terms of school attendance, this year Deans have been calling home whenever a student is not at school but the absence has not been reported by a parent/guardian, and the high school has begun enforcing its five unexcused absence policy.

Based on this data, analysis of root causes, and analysis of current systems, our theory of action is that if we can help students feel more connected to staff and students and feel more in control of their learning, we can improve school and class attendance. In addition, if we can ensure that existing systems are being followed consistently and implement improved, effective Tier 2 systems that provide support to students, we will increase school and class attendance

Relevant Data

Chart 1: Student Attendance SY22 Last year's overall attendance rate marked a decrease from the typical rate in recent years, which hovered around 93%. In addition, the number of students who were "chronically absent" rose 30-50% over previous years. While some of this data is likely attributable to COVID outbreaks and COVID protocols of keeping students out of school, it is possible that COVID does not entirely account for the increase, and this data should be monitored this year.

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Student Group	Atten dance Rate	Avera ge # of Abse nces	Abse nt 10 or more days	Chro nicall y Abse nt (10% or more)	Chro nicall y Abse nt (20% or more)	Unex cused > 9 days
All Student	88.9	18.7	62.3	37.9	16.6	55.0
Female	88.7	19.0	63.8	39.4	16.0	56.0
Male	89.0	18.5	60.9	36.4	17.4	53.9
Low Income	86.9	21.7	67.2	45.1	21.6	62.5
High Needs	87.0	21.4	67.0	45.4	21.4	62.0
LEP English language learner	82.2	26.3	71.3	58.8	33.1	69.1
Students with disabilities	87.9	20.6	68.7	42.1	18.2	61.7
African American/Black	89.5	17.8	62.4	36.2	14.2	48.9

Student Attendance (2021-22) - End of Year

American Indian or Alaskan Native						
Asian	91.3	14.5	43.9	31.7	13.4	41.5
Hispanic or Latino	86.4	22.3	69.1	47.4	23.2	64.8
Multi-race, non-Hispanic or Latino	92.1	13.9	53.8	15.4	11.5	50.0
Native Hawaiian or Pacific Islander						
White	91.6	14.7	56.1	26.7	8.5	45.0

Chart 2: SY 23 Quarter 1 Class Avoidance (Documented "Cuts") This data, drawn from suspected class "cuts" that have been reported by teachers and confirmed by Deans, likely does not reflect the actual totals, which are presumably higher. No notable differences across grade levels were evident in the data, though there were about 15% more documented cuts by tenth graders. We are still analyzing the data for race, gender, MLE and Special Education status. We are also analyzing the data to determine the types of classes and time of day most class avoidance occurs.

Number of Class Cuts	# of students
1 - 5	219
6-10	30

11-15	12
16-20	6
20-30	11
30+	7
Total number of students who cut at least one class	287

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<u>Root Cause Investigation/Plan</u>

What do we think are the root causes of class avoidance? What steps do we need to take to determine root causes?

Potential Root Causes	Data to support claims about root causes
Don't see purpose of attending class/passing class - already far behind with credits, already failing class, didn't choose the class	- Interviews with Deans and Assistant Principals
Don't have good relationships with peers in class or teacher	
Class is not at right level - too challenging or too easy	

Action Steps to Determine Root Causes
Survey students and track data during check-ins with Deans. Include reasons students feel they are avoiding class AND incentives/consequence/supports they feel would help them be more likely to attend class (January- February 2023)
Conduct in-depth conversations with students with 10 or more unexcused class absences; include parents/guardians, teachers, and support staff interviews (January-February 2023)
Further analyze data: types of classes cut most often, time of day (January -February 2023)

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Action Steps:

Our action steps focus on:

- Ensuring we continue to collect accurate data
- Monitoring the impact of existing and new potential systems
- Helping students change behavior

Strategy	Milestones of success	Timeline
1. Monitor fidelity of following Tier 1 guide steps; support staff/improve Tier 1 guide as needed	Data analysis of random sample of students to see if steps are being followed	Ongoing
2. Monitor impact of current Tier 1 guide progressive action to assess impact on changing student behavior.	Steps on the Tier 1 guide result in improved class attendance	Ongoing
3. Revise and clarify options for Tier 2 interventions for students who continue to avoid class; implement system that allows for improved communication between academic staff, community staff, support staff, students, and families; implement system that supports the goal setting and progress monitoring	Students who have not responded to Tier 1 interventions have a clear plan of action that is developed and monitored by a team of staff from different parts of the school experience; students' attendance improves	Ongoing
4. Support implementation of the "SHS Common Practices," specifically in the area of utilizing classroom practices that let students know they are "valued members of the community."	Myvoice survey data; repeat January survey of students who are avoiding class to analyze change in reasons they are avoiding class	

Focus Area #2: Reduce Failure Rates in Core Academic Courses

We will reduce College Prep failure rates in required Core Academic Classes (math, English, social studies, and science) by at least 10% over the SY23 and SY24 school years.

Rationale and Theory of Action

Over the years, Somerville High School has noted a relatively high failure rate in its core academic (required) courses at the College Prep (CP) level. We have chosen to focus on this metric for several reasons including but not limited to: Students in CP classes disproportionately represent students in historically marginalized groups, including students of color, low income students, and students on IEPs; failing classes puts students at greater risk for dropping out.

From 2016-2018,the high school focused on reducing these failure rates through improving instruction, building time in the day for Academic Support for high-risk students, and proactively monitoring students at risk for failure. By implementing these strategies, we were able to have some success in reducing the failure rates in the core academic classes, particularly for students without excessive absences. Since 2015 when we began tracking data, CP classes have had a failure rate ranging from 25%-10%; while we were able to begin reducing failure rates, the pandemic disrupted our work and failure rates in CP classes have returned to higher levels.

We want to continue our focus on this metric and our efforts to reduce the failure rate for several reasons. For one, an analysis of the SY23 Q1 failure rates indicate that failure rates in CP classes continue to be high in several subjects, particularly among our 11th grade students. An analysis of the Quarter 2 failure data indicates that there are a disproportionate number of students of color, low income students, and MLE or recently FLEPPEd who are failing required classes. In addition, we want to monitor the failure rates as we implement several new initiatives. We are raising expectations and increasing rigor across the board, we are implementing more heterogeneous Open Honors courses, and we are more strictly enforcing our attendance policy, which sets the highest grade for students with six or more unexcused absences at 59. It is imperative that we monitor our failure rates as we implement these changes to make sure we are providing ample support and that the changes - which are designed to benefit students - are not having an adverse impact. In addition, focusing on failure rates will allow us to continue monitoring the impact of remote schooling on our students, and adjust our supports as needed.

Our theory of action is:

If….

- SHS students are empowered to attend school regularly, receive high quality classroom instruction, feel a sense of belonging and connection in their school and their classrooms, are
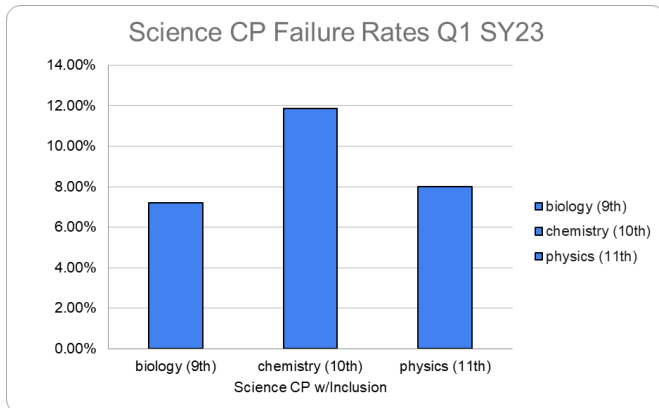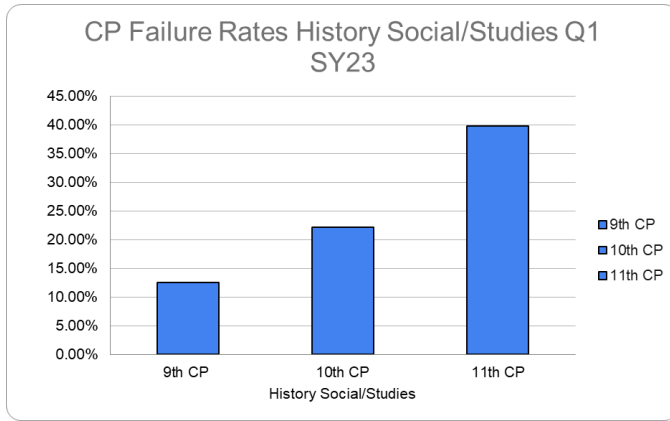
given instruction with high expectations and high support, and are proactively monitored and provided appropriate accommodations and support

Then….

- students will receive the enriching, engaging learning experiences they need and deserve along with appropriate support, and failure rates in CP and CPS classes will drop and students will be more confident learners.
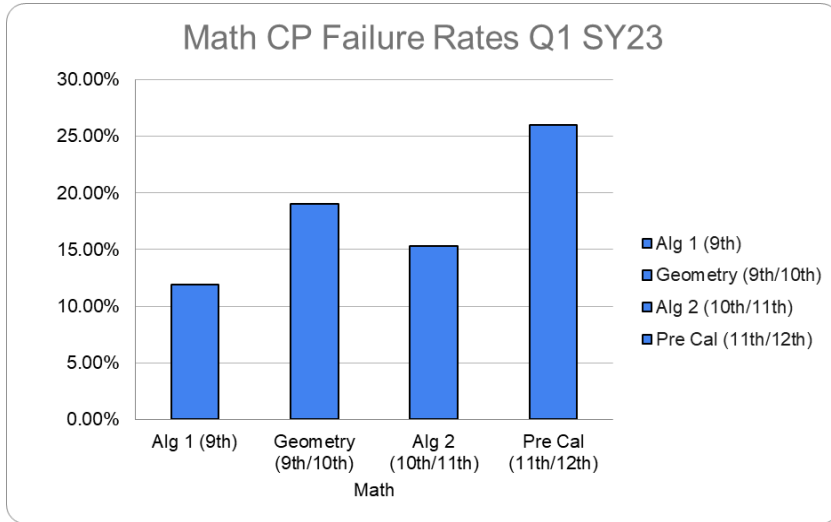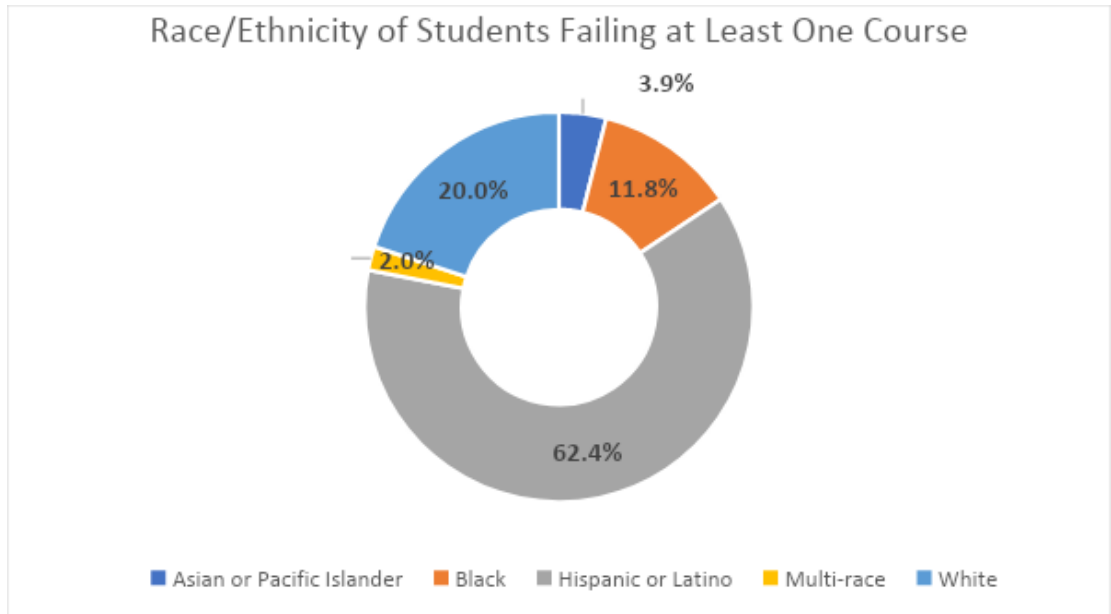
Relevant Data

Chart 1:

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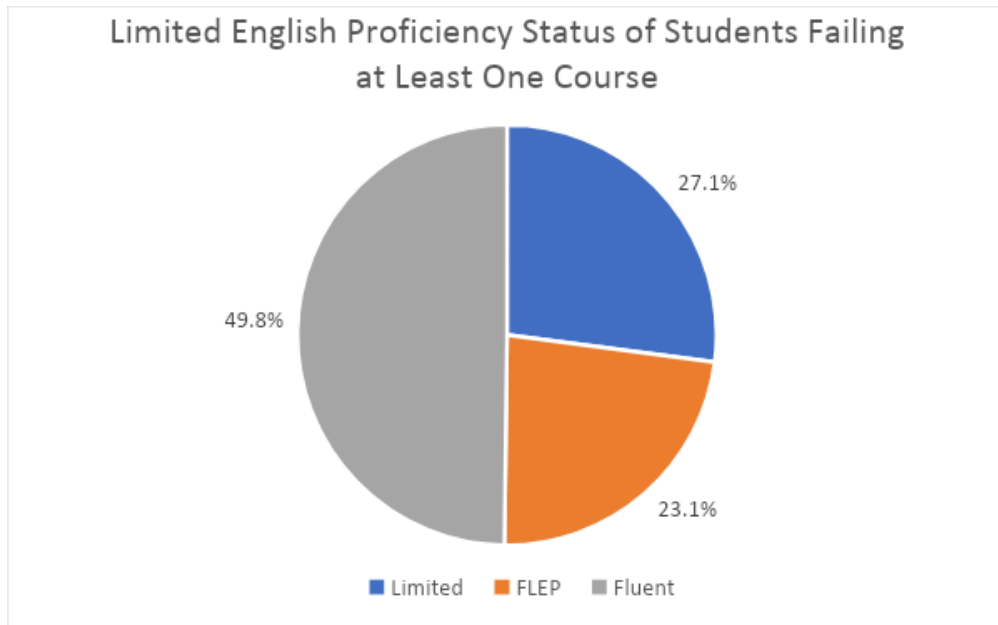**Education • Inspiration • Excellence**

Math CP Failure Rates Q1 SY23

- Alg 1 (9th)
- Geometry (9th/10th)
- Alg 2 (10th/11th)
- Pre Cal (11th/12th)

Chart 2:

SY23 Quarter 2 Demographic Data - Demographics of students who failed at least one CP Core Academic Class

Race/Ethnicity of Students Failing at Least One Course

- 3.9%
- 11.8%
- 2.0%
- 20.0%
- 62.4%

Asian or Pacific Islander Black Hispanic or Latino Multi-race White

Low Income Status of Students Failing at Least One Course

30.4%

69.6%

■ Not Low Income ■ Low Income

Limited English Proficiency Status of Students Failing at Least One Course
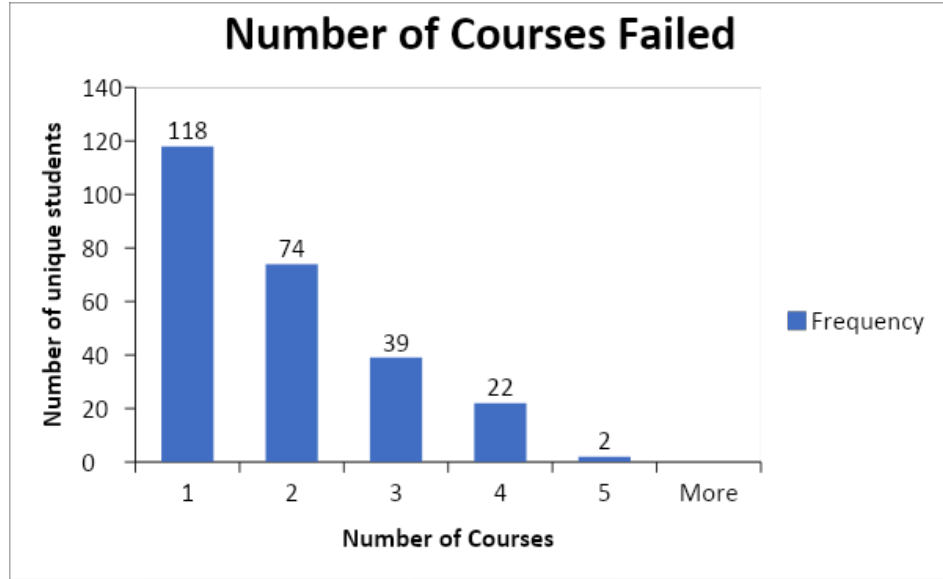
27.1%

49.8%

23.1%

■ Limited ■ FLEP ■ Fluent
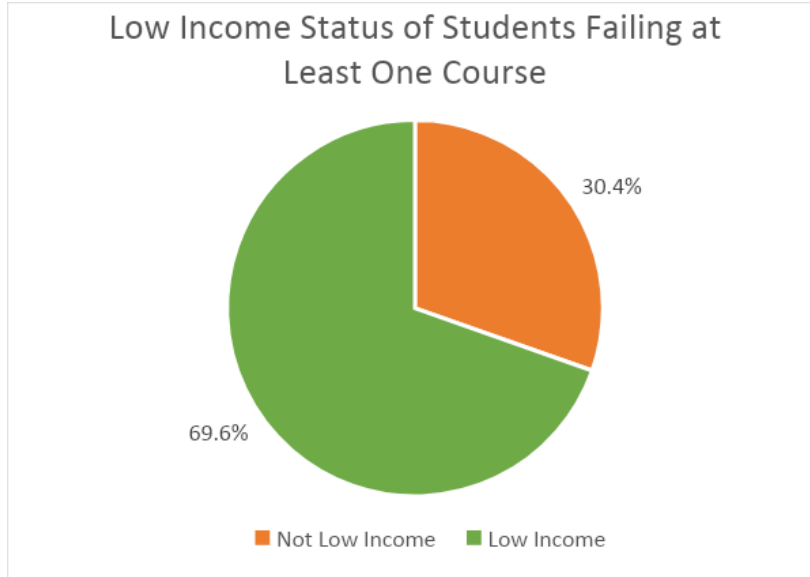
Chart 3:
SY23 Quarter 2 - 225 discrete students failed at least one core academic course. The chart below shows how many courses students failed

Number of Courses Failed

a.

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Root Cause Investigation/Plan

Root Causes	Data to support claims about root causes
- Students do not have skills and/or work habits to complete rigorous work; students are dependent learners	- Past focus groups; individual interviews with students; teacher observations
- Appropriate academic support/accommodations not provided in classrooms	
- Student requires additional support required (emotional/academic)	
- Need for increased communication with parents/guardians	
- Excessive absences/tardies	
- Lack of interest in subject matter	
- Not feeling connected to teachers and classes	- Myvoice Survey data; interviews with students;
- Gradebook categories/systems that lead to more failures	Gradebook analysis conducted by Department Heads/teacher teams analyzing gradebooks

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Action Steps:

Our action steps focus on:

- Ensuring we continue to collect accurate data
- Monitoring the impact of existing and new potential systems
- Helping students change behavior

Strategy	Milestones of success	Timeline
1. Improve Instruction and the classroom experience. Support implementation of the "SHS Common Practices," (aligned with Hammond) specifically in the areas of community building, growth mindset, productive struggle, and differentiation; ILT Working Groups focused on improving instruction and classroom experience; provide additional professional development/increase time dedicated to teaching and learning	- Student survey feedback indicating students feel more connected - Observations of teachers showing that teachers are using practices	On going
2. Monitor implementation of Tier 1 Guide Academic Supports, with a focus on making support plans for students, monitoring success, partnering/communicating with parents and guardians and other school support staff	- Data analysis of failing students with teachers; - Fewer students needing Tier 2 supports	On going
3. Develop additional Tier 2 supports as needed, including but not limited to increased access to tutoring, individualized support plans, restructuring of support classes, pull out and push in supports; Analyze and adjust	- student failure rates improve after Tier 2 supports implemented	

existing Tier 2 supports		
4. Implementing principles of Grading for Equity school wide - common grading categories, common practices around number and variety of assessments	- Student failure rates improve after grading practices implemented	on-going
5. Consider new schedule that includes more time for teacher common planning and student support; increase time for teachers to focus on teaching and learning		Spring/Summer 2023
6. Continued Focus Groups with Students		

Focus Area 3: Collect data from at least 80% of students to more accurately measure social emotional well being and wellness. Review the data and adjust this plan accordingly.

Every year, the Somerville Public Schools central office asks schools to administer the Conditions for Learning survey. The results of this survey are used to adjust our support services at SHS. In SY22, fewer than 250 students completed the survey. This year we aim to have 80% or more of students complete the survey so that we can more accurately measure emotional well being and wellness.

Strategy	**Milestones of success**	**Timeline**
1. Communicate with students, families and staff about the importance of the survey		
2. Set aside protected time during class for ALL	- Over 80% completion rate	April 2023

students to complete the survey. Have staff monitor survey completion		