

Study 15: Academic Interventions and their Impacts

How This Study Has Been Designed

We are a group of educators who work with elementary and upper school students. We believe that academic interventions critically impact our students. As part of the Building Bridges to Equity grant, we wanted to better understand how academic interventions work in grades K-8 in the Cambridge Public Schools. We framed our study with two main research questions:

- 1. How do educators and administrators talk about the ways academic interventions are structured across the district?**
- 2. How do students describe their experiences participating in academic interventions? And, how do they talk about the impact of interventions on students' schedules, sense of belonging, and academic growth?**

How Study Has Been Designed (cont.)

We created a survey of 15 questions around the structure of interventions for administrators and/or interventionists or coaches to help answer our first research question:

How do educators and administrators talk about the ways academic interventions are structured across the district?

The following slides show the data we've received.

Surveys were emailed out in February 2019.

We received survey results from:

- 7 elementary schools
- 5 upper schools

The survey included

- Multiple choice / select all that apply
- Short answer / open response
 - We pulled direct quotes from some short answer questions, and also coded these responses to create quantitative data
 - Questions had multiple responses per school when more than one person responded to the survey

Findings from School Surveys

How are academic interventions structured across the district?

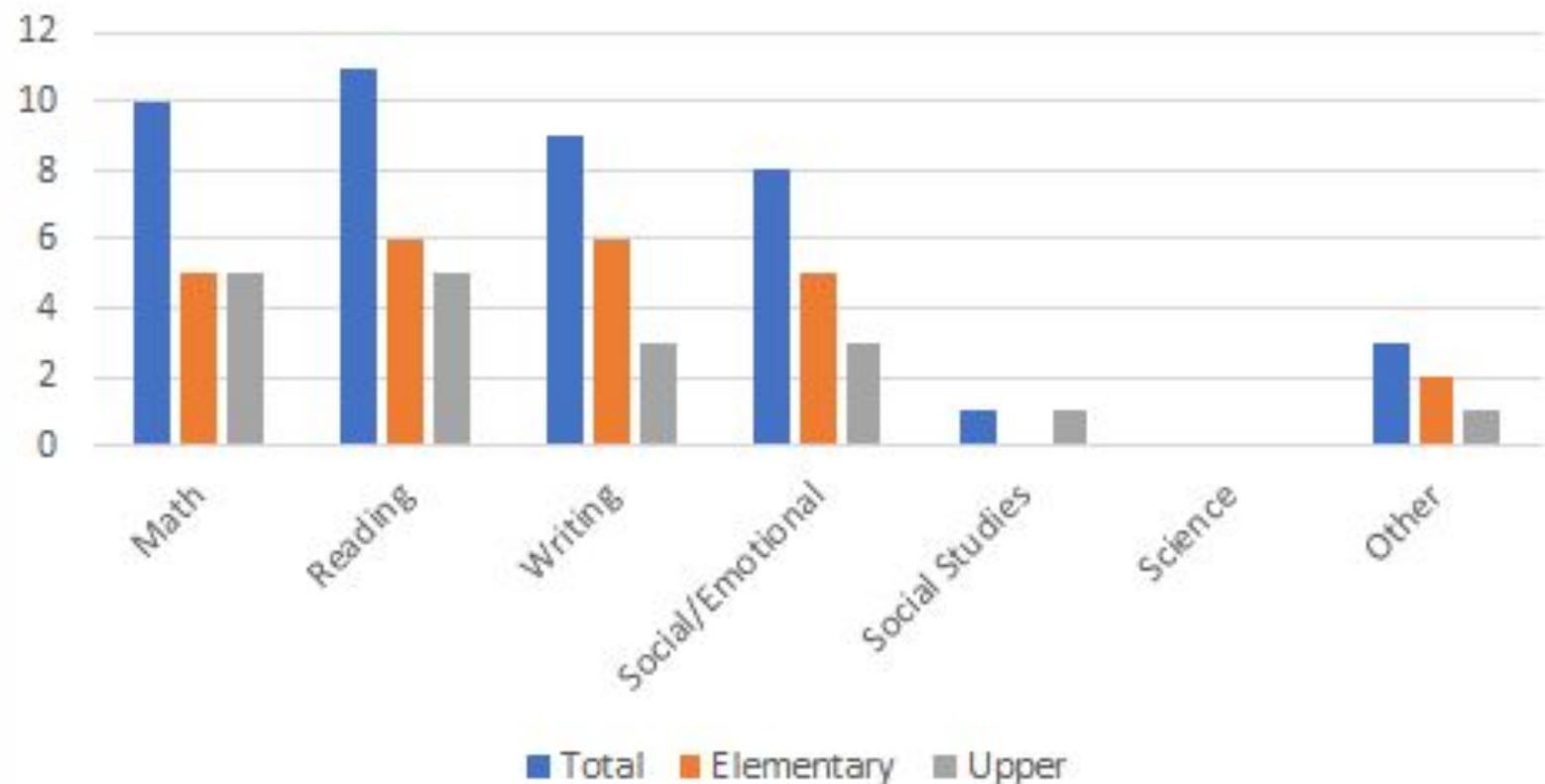
- There is quite a range of interventions taking place, with **variation** in subjects offered, scheduling, and evaluation / assessment practices both **within and across schools**.
- Elementary schools are somewhat more likely to have **shorter intervention blocks and fewer weeks of intervention** before reassessing.
- Most **academic intervention occurs during regular academic class time** as opposed to a dedicated intervention block.

Findings from School Surveys

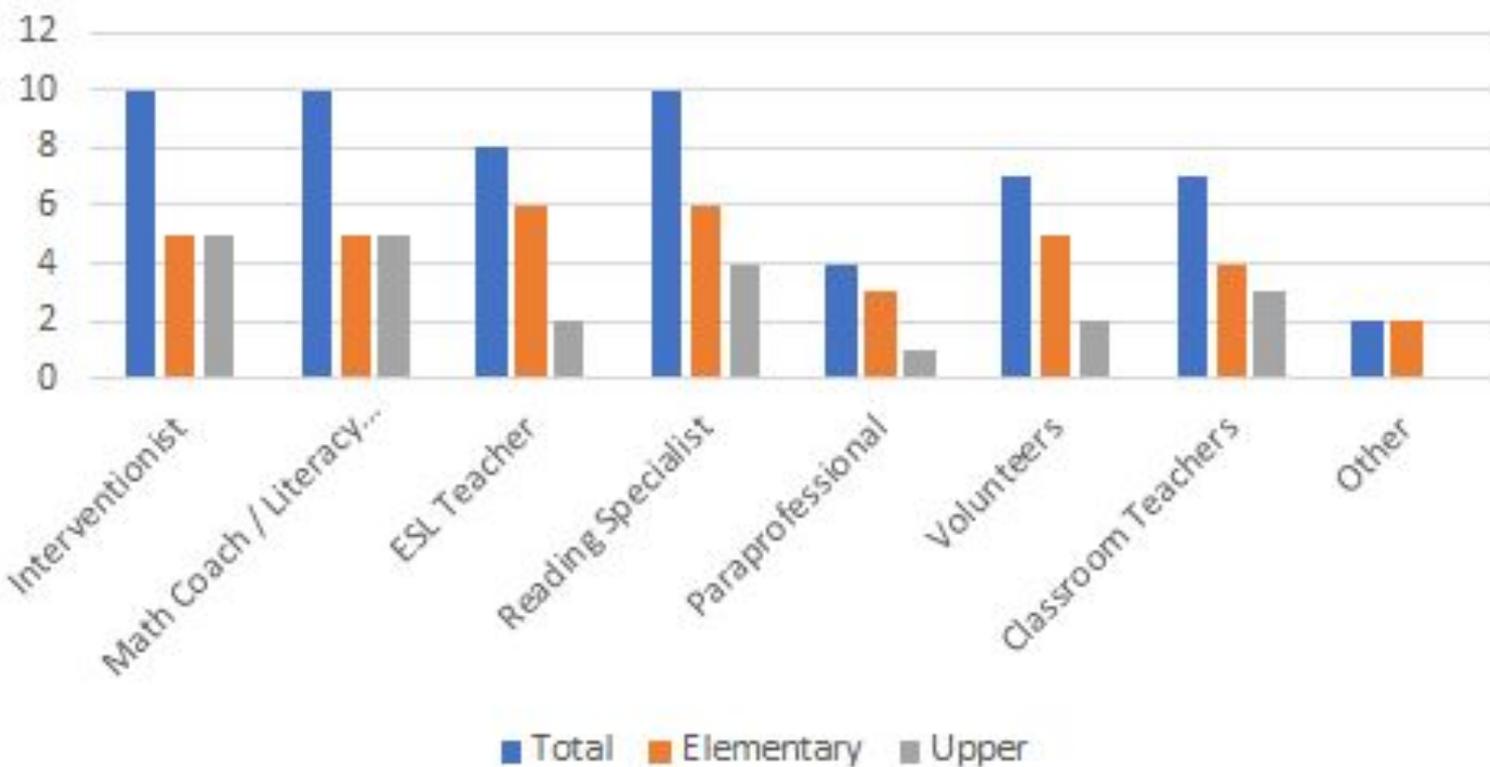
How are academic interventions structured across the district?

- **Not all schools formally track demographic data** of students receiving interventions, but many have noticed trends.
- Many respondents describe a **disproportionate representation** of certain demographic groups amongst those students who receive interventions.
- Many respondents suggest a **desire to change** the interventions currently taking place, citing **concerns** about demographics, students' schedules, and students' "integration" in the regular classroom.

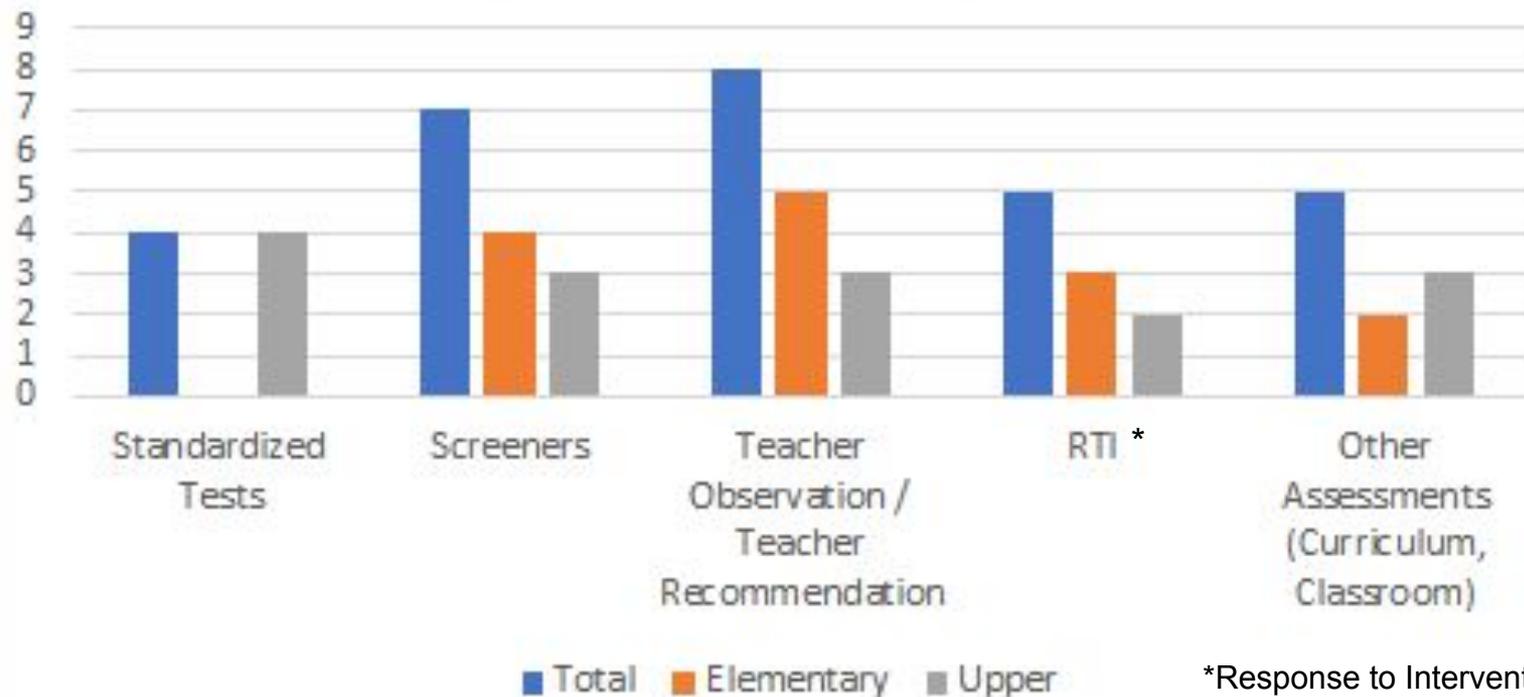
Academic Areas of Interventions



Who provides academic interventions?

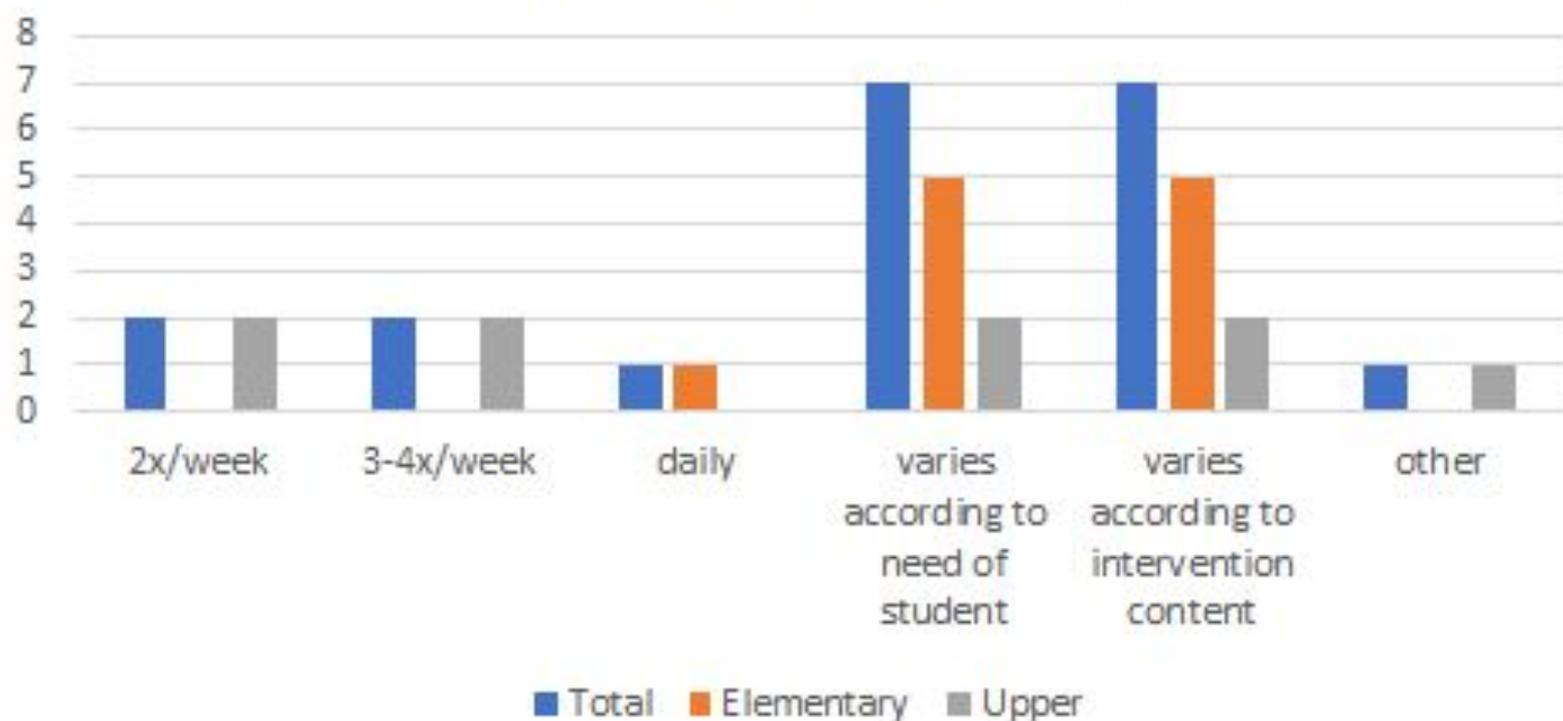


What kind of information is used to identify students for interventions?

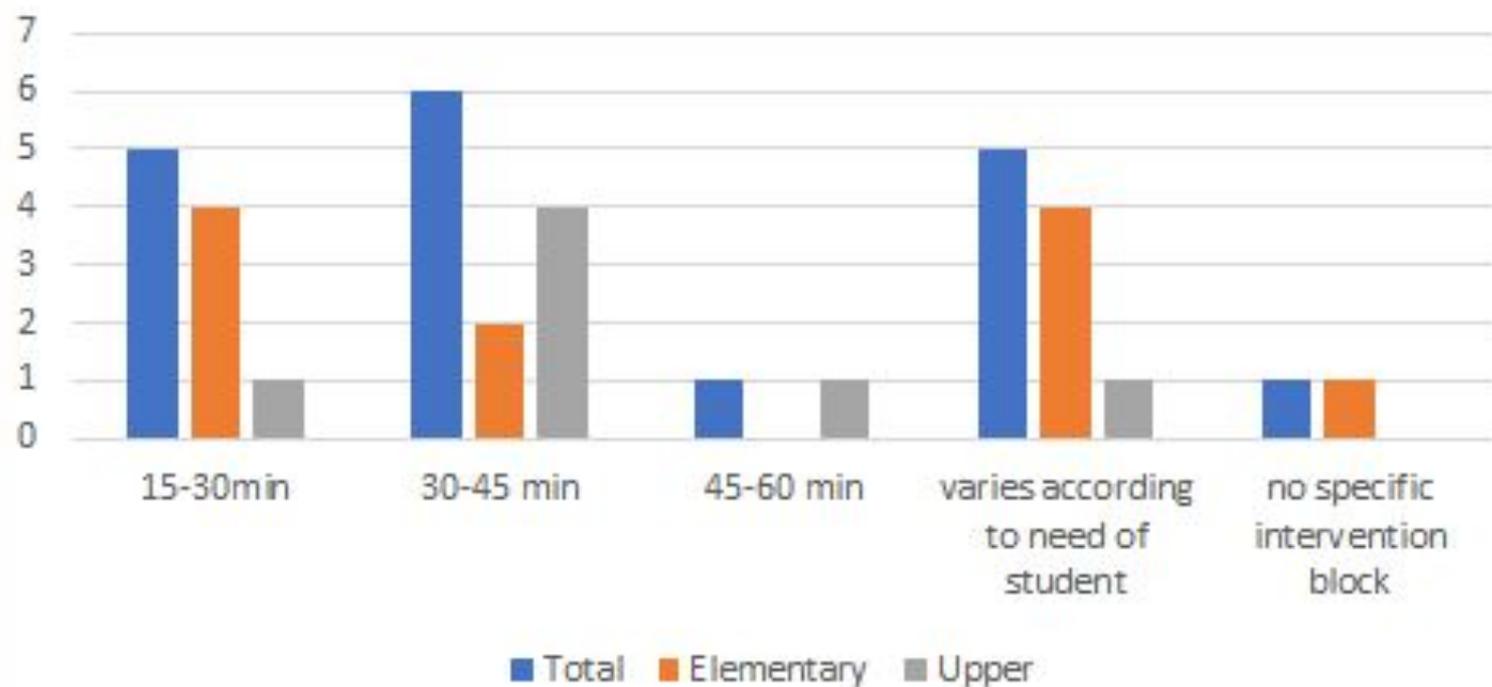


*Response to Intervention:
scheduled school-based data
meetings

How many times per week does an academic intervention typically occur?

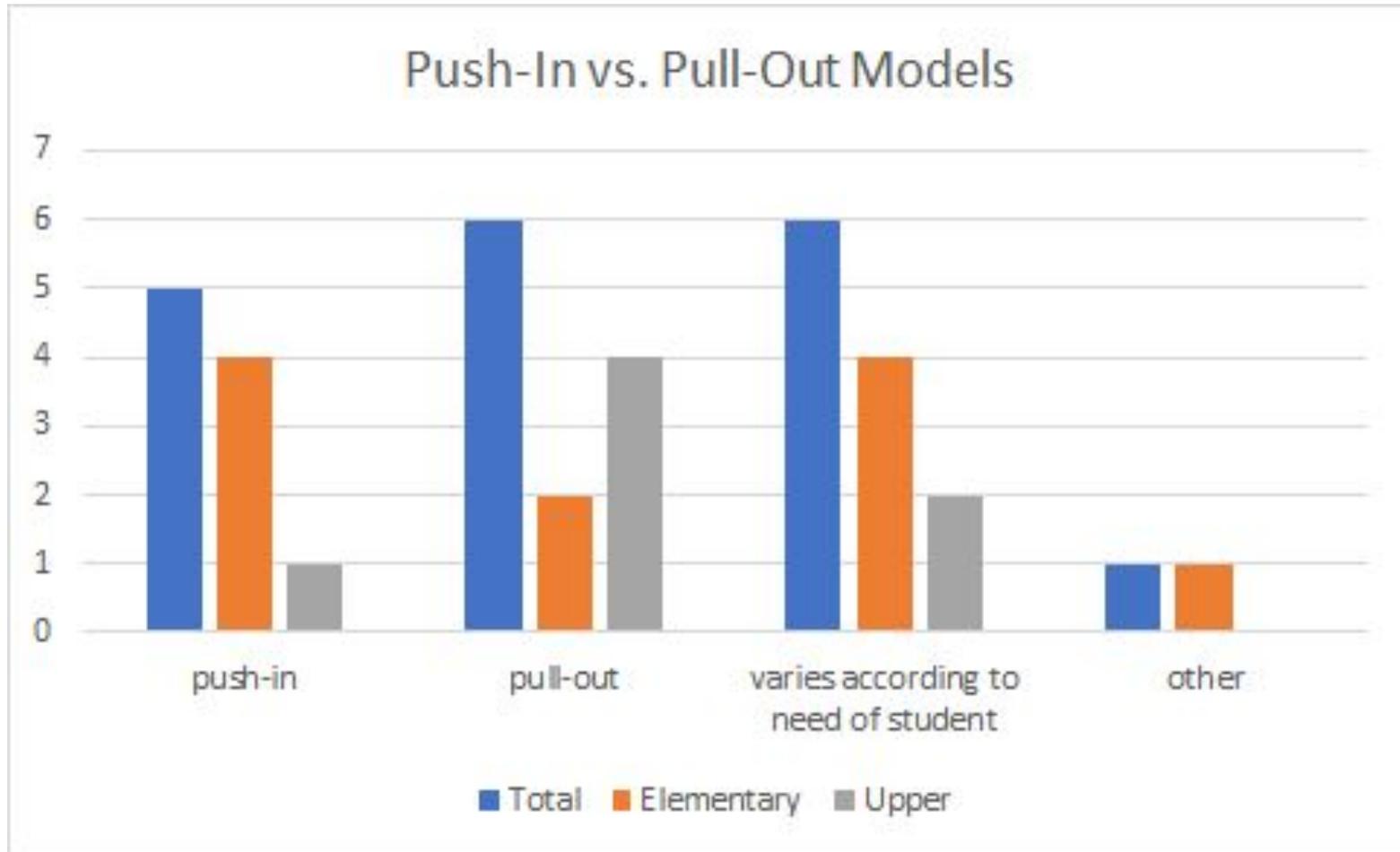


What is the length of a typical intervention block?

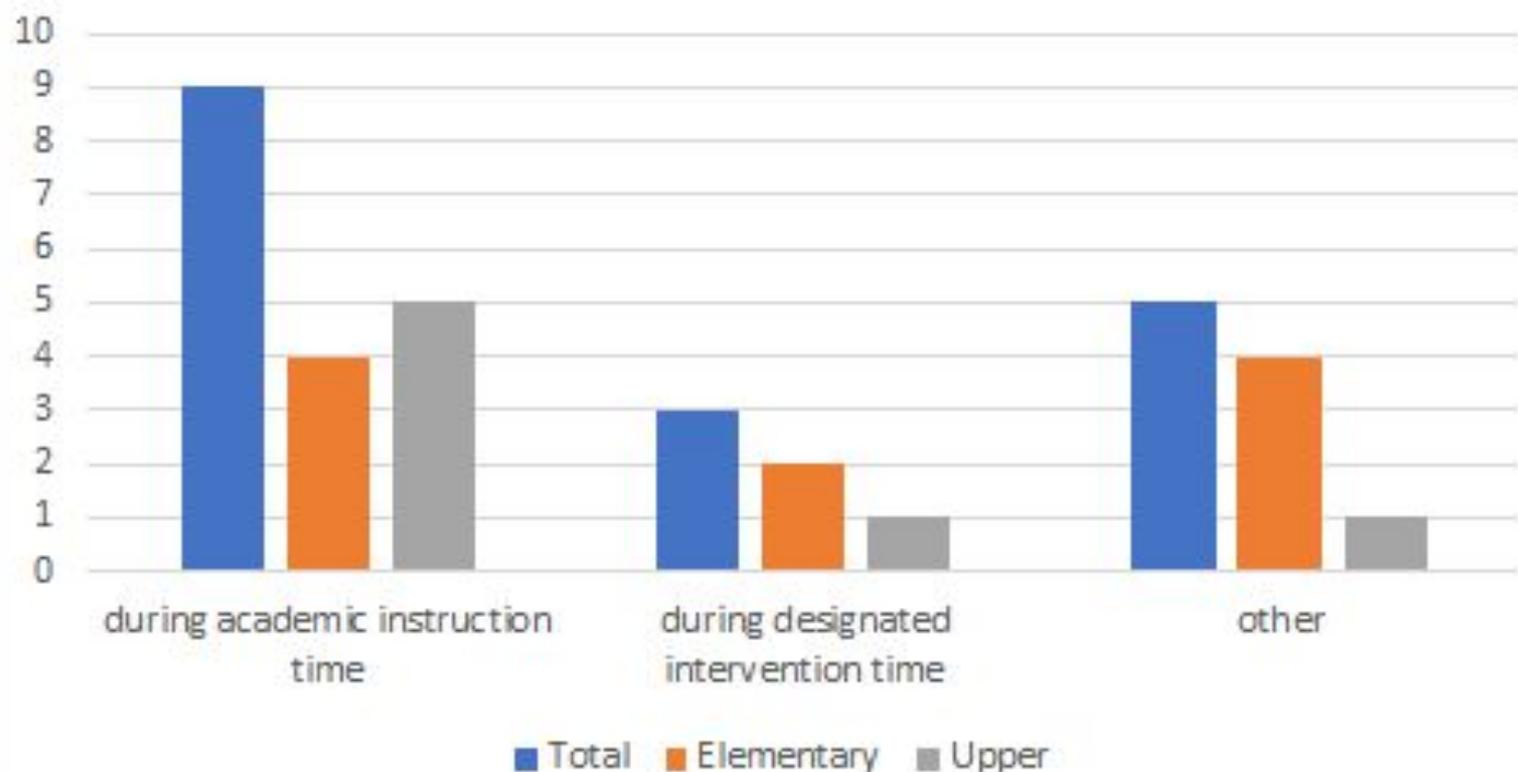


In a push-in model, an interventionist joins the student in the classroom.

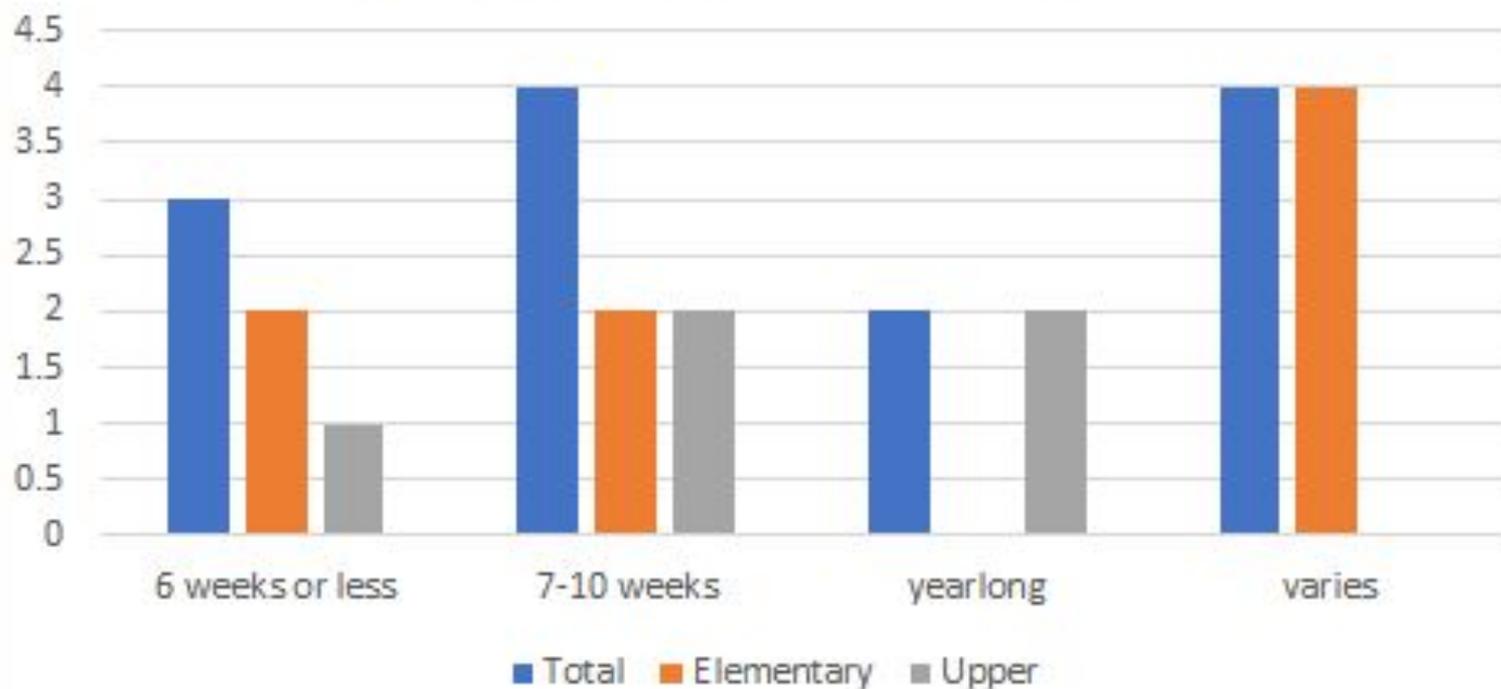
In a pull-out model, the student goes with an interventionist to a different classroom or learning space.



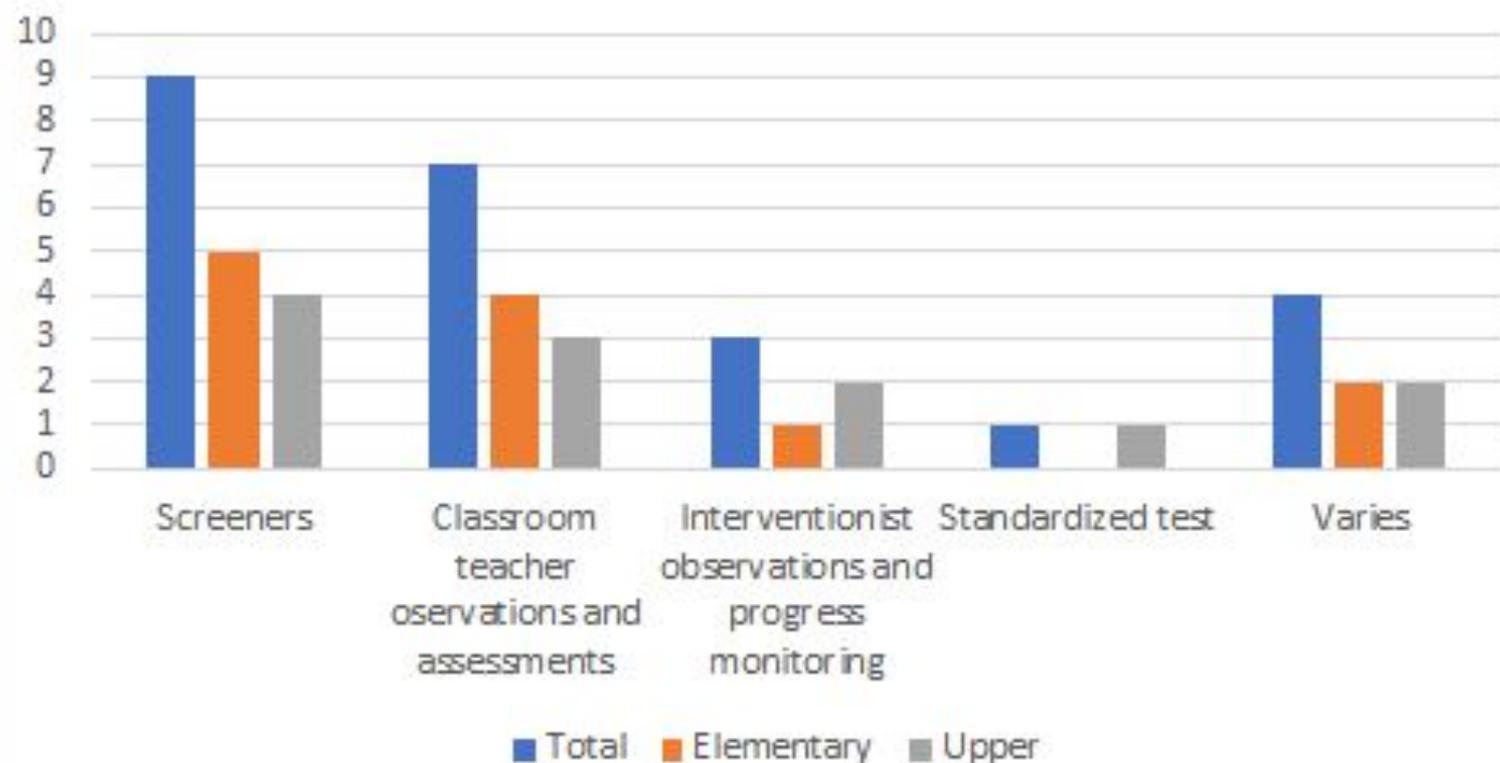
When do intervention blocks typically occur?



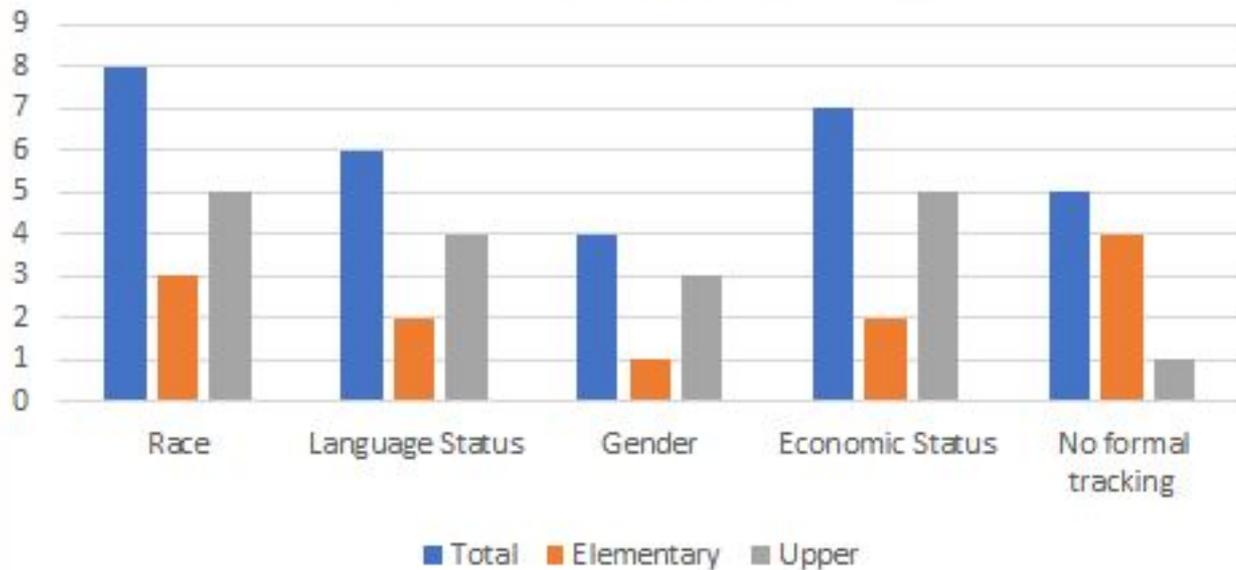
For how many weeks does an intervention typically last before reassessment?



How is student progress evaluated?



Does the school track demographic data on students receiving interventions?



“It’s hard to dis-aggregate these students from the demographics of the entire school”



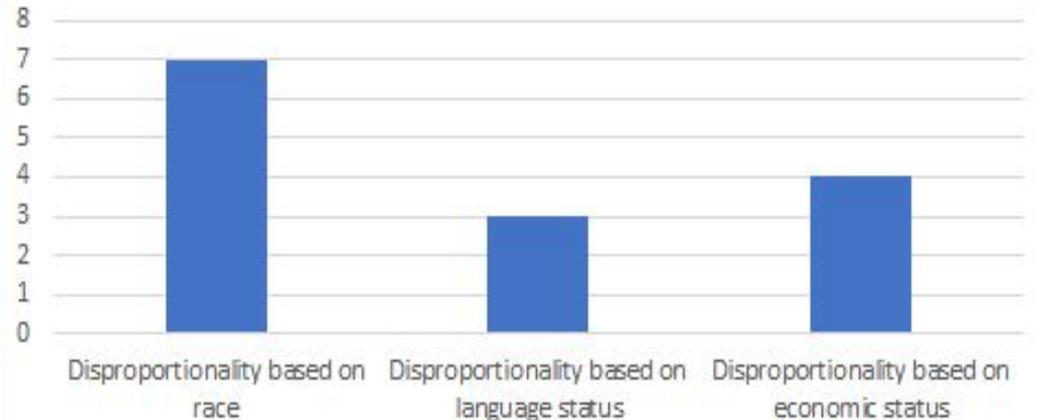
“we do not keep this data in a single file/location”

“These students are overwhelmingly students who have IEPs and students of color and students with low economic status”



“This bothers us and we are engaged in some deep equity work to address it.”

Schools that mentioned disproportionality or over-representation of certain groups within their population of students receiving interventions.



School administrator and coach comments about intervention models at their schools

“[Yearlong intervention] prevents [students] from re-integrating into classes once a skill is mastered. This model needs to be reassessed.”



“[Tracking] is something we’re looking at more.”



“We are looking at this closely and discussing how to use a push-in model for interventions so that student don’t end up with a fragmented academic day.”

Questions Raised from School Surveys

- How should we interpret the demographic disparities in students receiving intervention? Is there a bias in the methods used to identify students for intervention?
- Is there a common definition of intervention across the district, and a common theory of change to shape how interventions are designed?

How Study Has Been Designed (cont.)

We created a survey for students in grades 3-5 and grades 6-8 with 16 and 17 questions, respectively. The survey asked about interventions they receive in order to better understand the impact of intervention structures on students' academic progress, self-esteem and sense of belonging within the classroom.

How do students describe their experiences participating in academic interventions, and how do they talk about the impact of interventions on students' schedules, sense of belonging, and academic growth?

The following slides show the data we've received.

Surveys were shared with various teachers and interventionists at different schools.

We received survey results from:

- 18 elementary school students
- 57 upper school students

The survey included

- Multiple choice / select all that apply
- Short answer / open response

11 students in grades 3-8 were also interviewed. Quotes from their interviews and from open response survey questions are included to help illustrate students' perceptions of their academic interventions.

Findings from Student Surveys

How do students experience
academic interventions?

Student participants often spoke about their experiences in interventions by describing their relationships with teachers and peers in the context of these interventions.

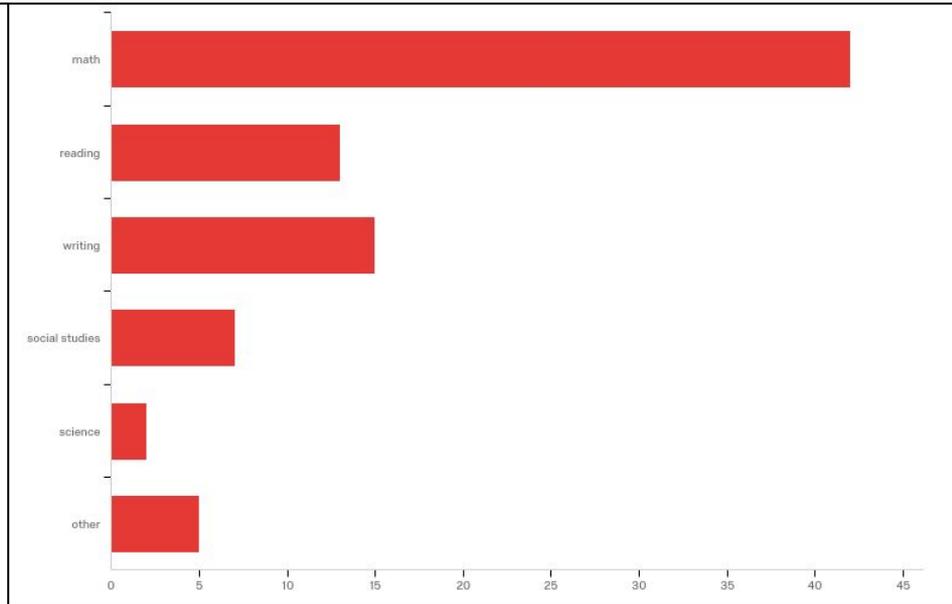
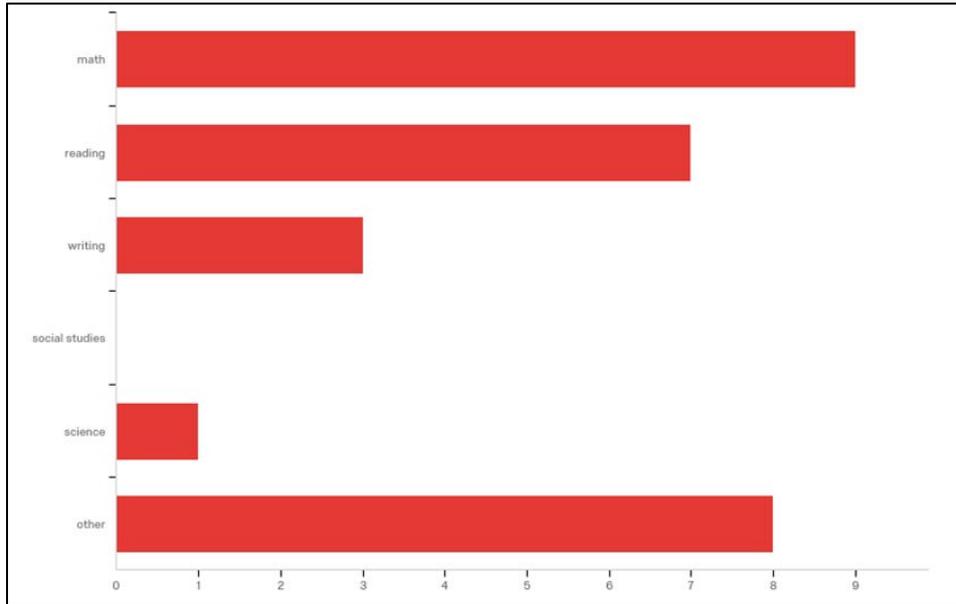
- Impact of Relationships with Teachers: Many students explained their sense of feeling “more or less like myself” by writing and talking about their relationships with teachers, both positive and negative.
- Students’ Concerns about Peers: Many students spoke about the effect of being in an intervention on their peer relationships. Students saw intervention as either a way to catch up with their peers or felt singled out by their participation. There were concerns from both elementary and upper school students about what peers thought about them getting intervention.

What subjects do you receive extra academic help in?

Students could check all that apply.

3-5

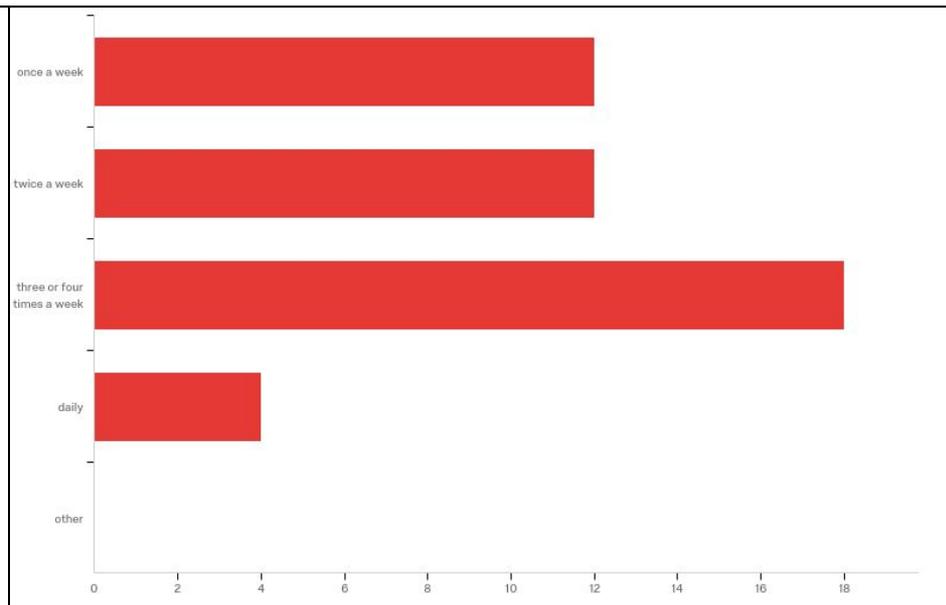
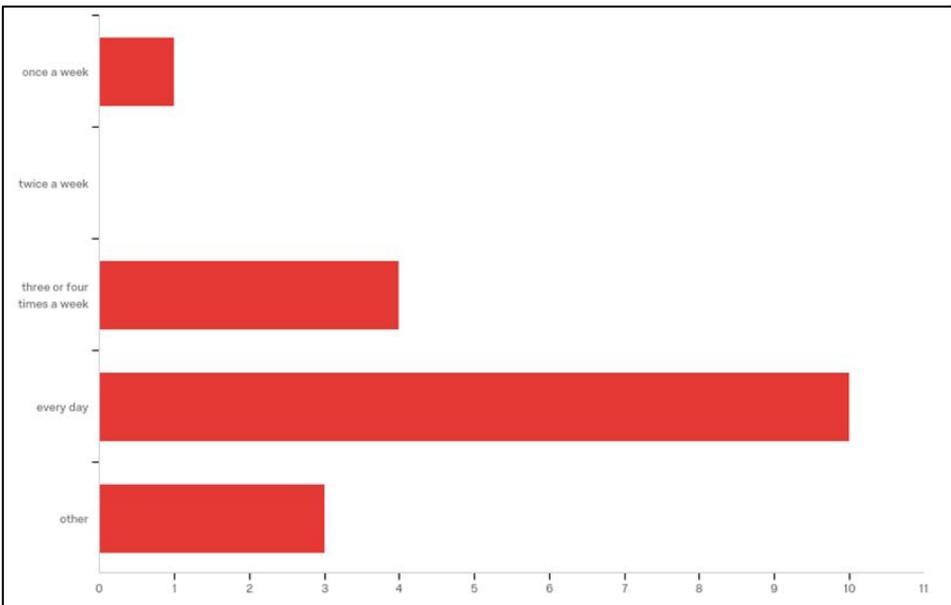
6-8



How often do you get extra help in school?

3-5

6-8

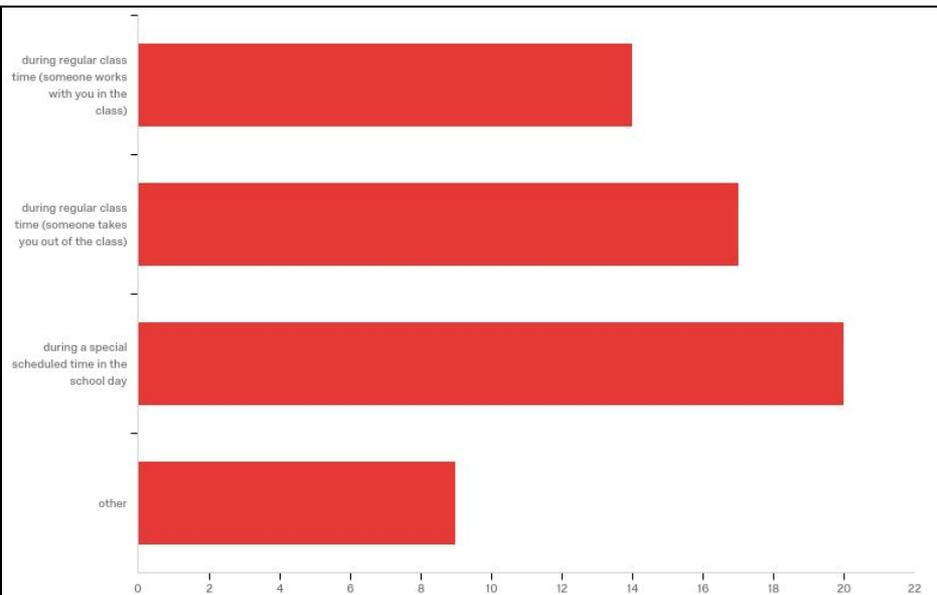
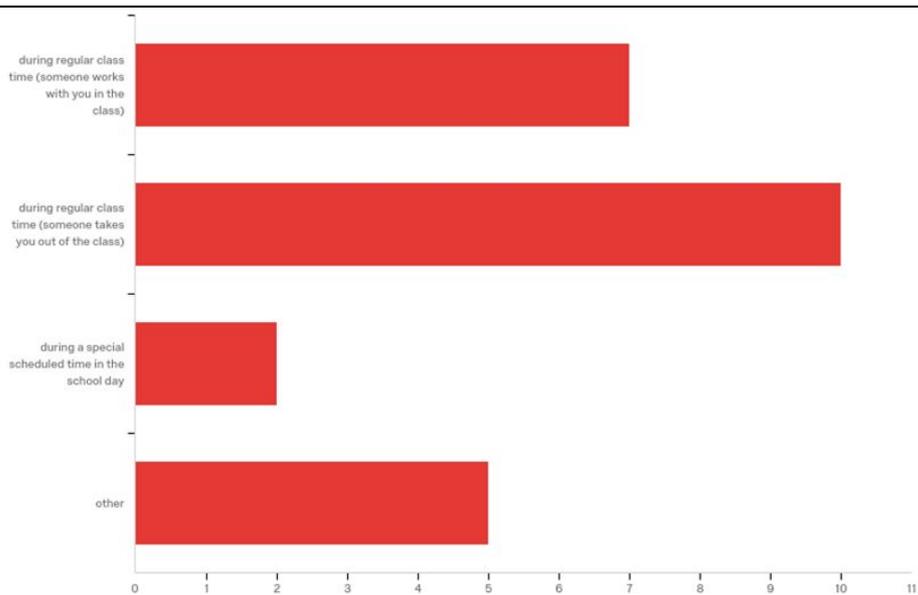


During what part of the school day do you get extra academic help?

Students could check all that apply.

3-5

6-8



Student thoughts on intervention scheduling

“I don’t like it because it takes my outside time in the morning.” (3-5)



“They get to go outside and play and we have to be stuck in a hot room.” (3-5)



“Instead of academic [intervention] I could have been doing Spanish class which is my favorite class” (6-8)

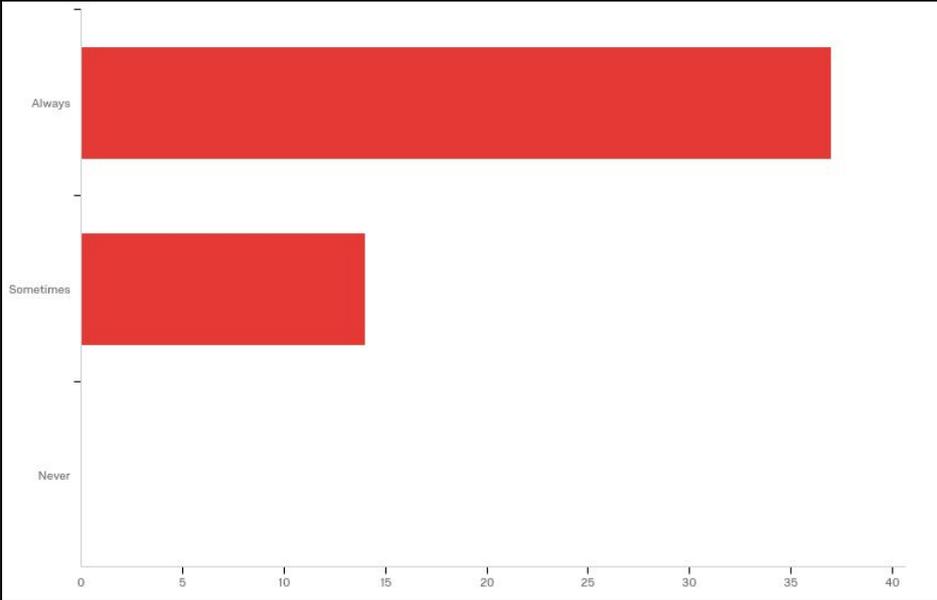
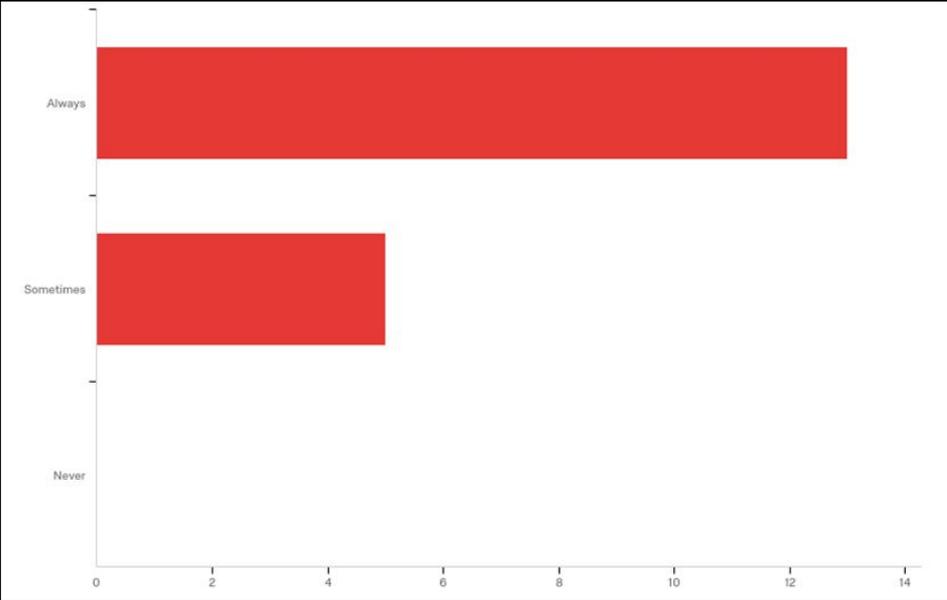


“I was kind of angry that I wasn’t doing world language anymore, but otherwise, I was like “extra time to learn stuff? Cool.” (6-8)

Do you feel respected by the teachers who give you extra academic help?

3-5

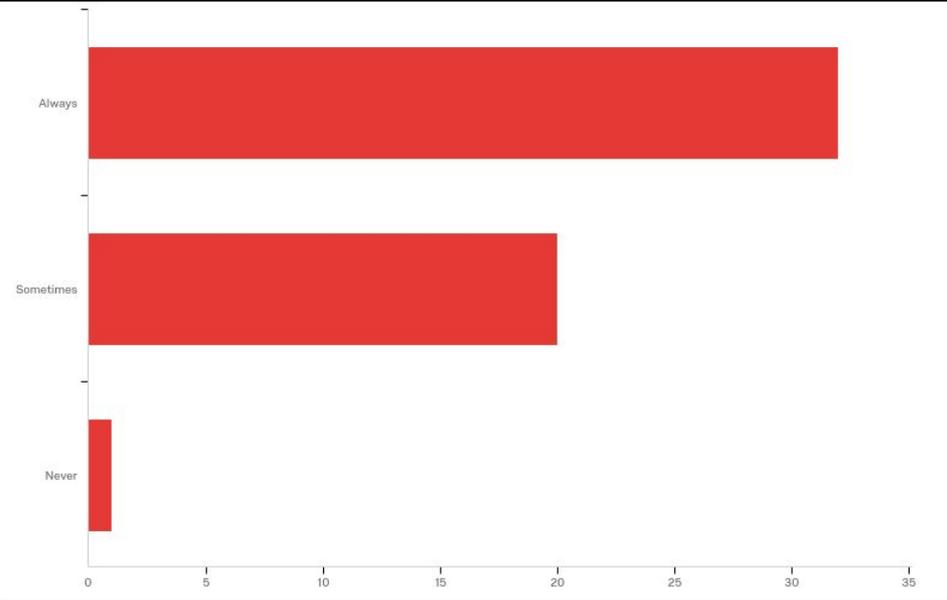
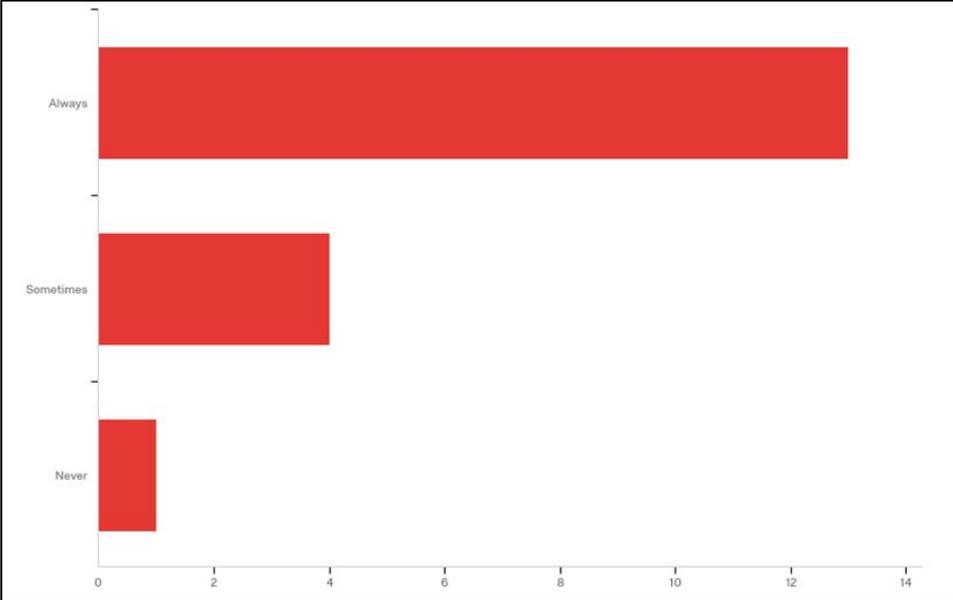
6-8



Do you feel respected by your regular classroom teachers?

3-5

6-8



Student responses highlighted positive relationships with intervention teachers

“I think I can be myself because the teachers respect me always” (6-8)



“I feel like I can talk about my problems” (6-8)



“I have fun playing games with [intervention provider]” (3-5)



“I don’t feel judged by my teachers for getting extra help” (3-5)



“Like if we don’t get something, and we’ve been doing it for a few weeks, she’ll take her time and continue to help us with it.” (6-8)

Student thoughts on negative or too much attention because of interventions

“Some people are on my back all the time and sometimes it’s just irritating” (6-8)



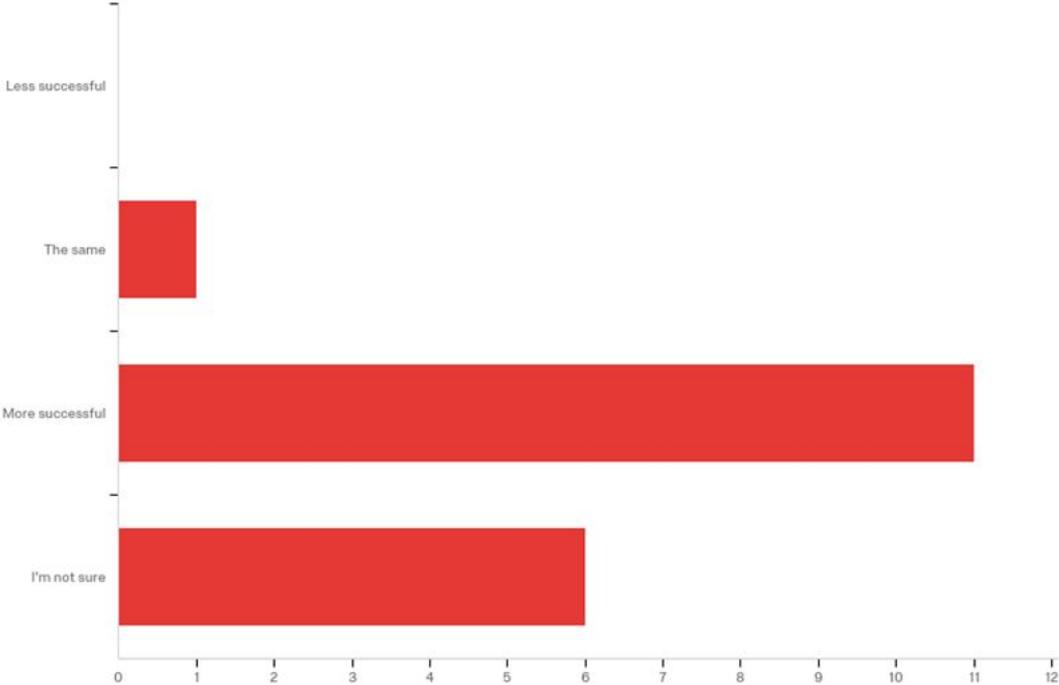
“I feel like I get all the attention and I don’t like that, depending on the situation” (3-5)



“They would say, “Oh, you get extra help in math” or something like that. It really doesn’t feel good.” (3-5)

Elementary students were asked if getting extra help made them feel MORE or LESS successful in that subject.

3-5



Students feel they are learning

“I get help then I can use it after in the class.” (3-5)



“The more I get help the more I learn and the more I feel good.” (3-5)



“It helps me keep up.” (6-8)



“A topic that will come up in class, and I’m like, “I know about this” because of what we’ve done in here.” (6-8)

3-5 Students were more likely to describe intervention as fun

“I like playing games with my teachers.” (3-5)

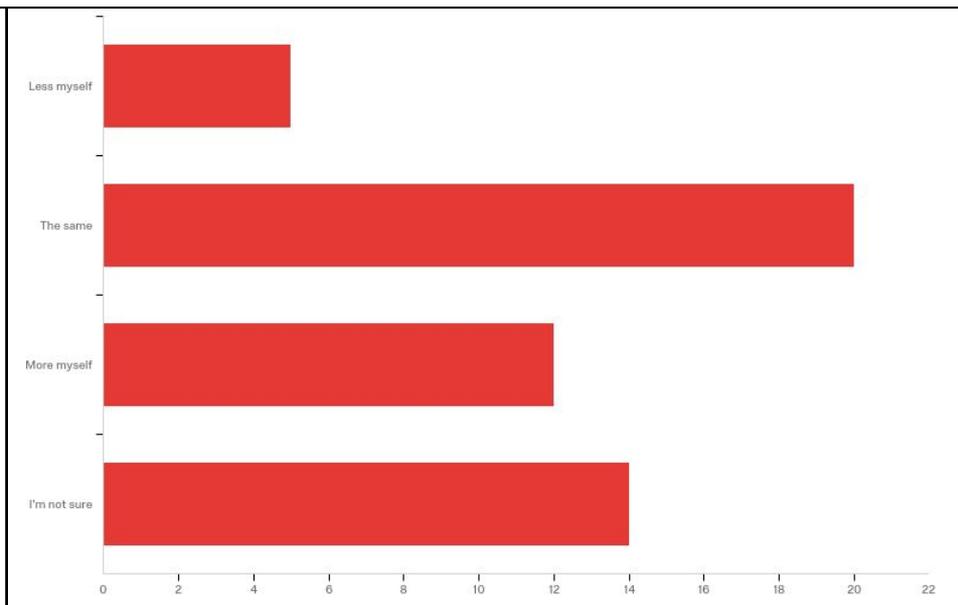
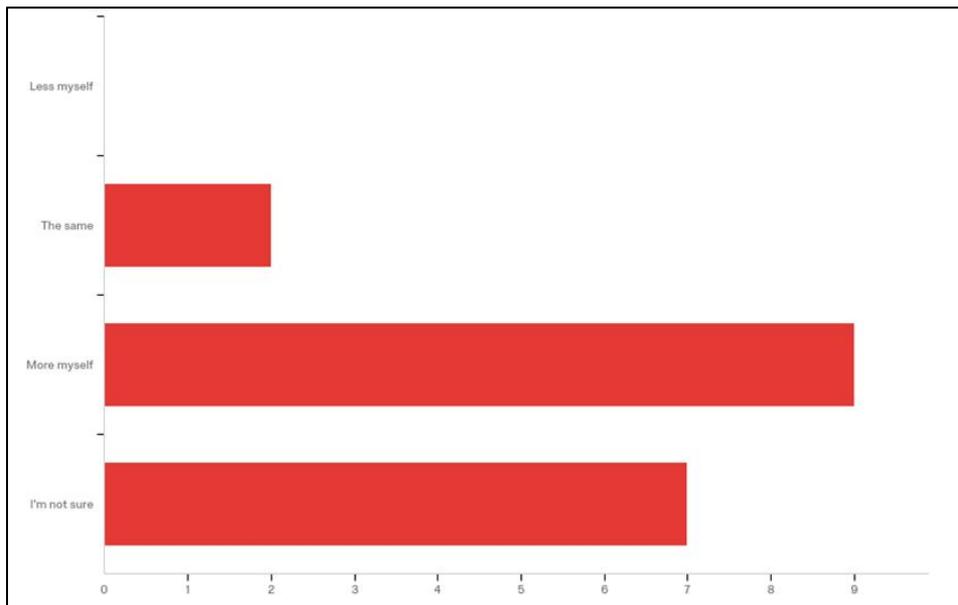


“Having fun and learning” (3-5)

Does getting extra help make you feel MORE or LESS like you can be yourself at school?

3-5

6-8



Some students feel more themselves during intervention time



“When I come in here, it feels like a space where I can, um, freely, like -- I can do -- I don’t how to explain it but I can be who I am in this class, instead of having to do something I’m not comfortable with, I feel like if I don’t want to do something I’m not comfortable with I don’t have to.” (6-8)



Some students say they are not defined by their academic intervention

“I don’t change who I am based on what I know / don’t know. I’m me and my knowledge can’t change that” (6-8)



“I feel the same.” (6-8)

Concern about what peers think or comparing self to peers

“During school it kind of just brings more attention to yourself or some people think, ‘Oh they are going with a teacher because they are dumb.’” (6-8)



“I don’t understand things as fast as everyone else and I don’t want to stop people just because I don’t understand it” (3-5)



“Getting extra help makes me weird feeling because other people in our class don’t get some extra help on math like I do” (3-5)

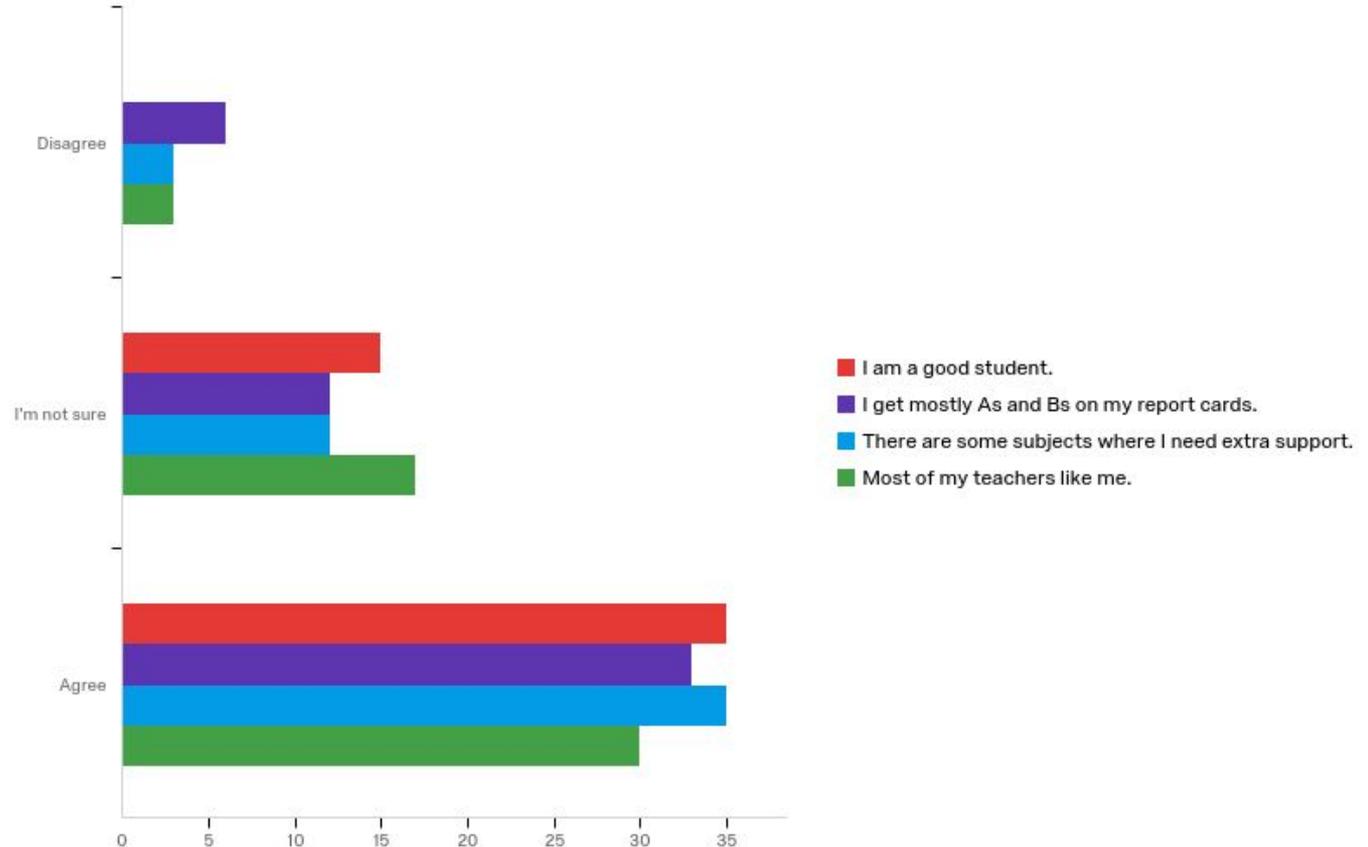


“[Intervention] makes me be on the same level as other students and friends (6-8)



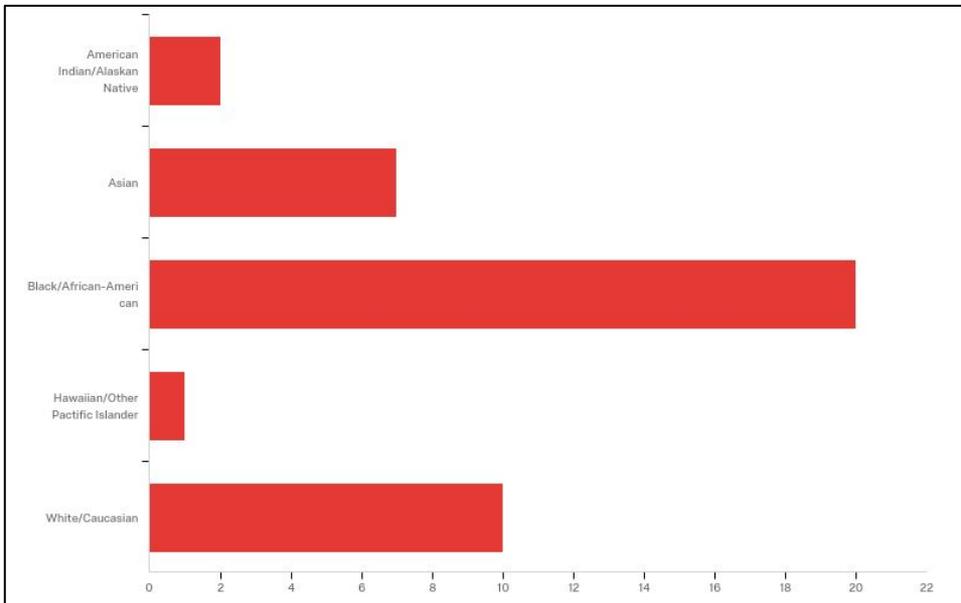
“So no matter what your grades are you’ll get bullied for it. If you get low grades, then you’re stupid but if you get high grades then you’re like a dork or something.” (6-8)

Upper school students were asked to respond to the following statements.

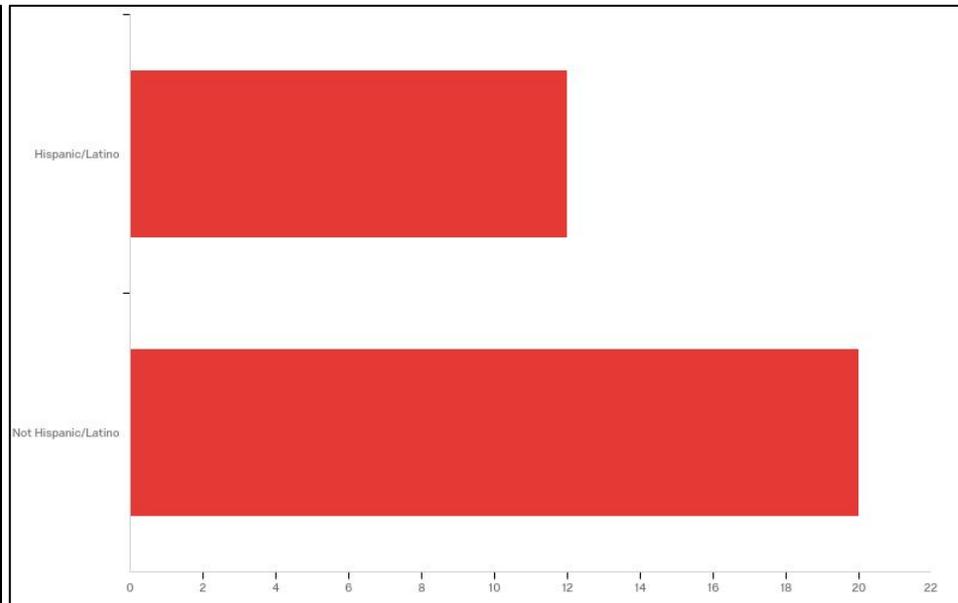


Upper school students were asked to identify their race and ethnicity as it is listed in Aspen (optional).

6-8

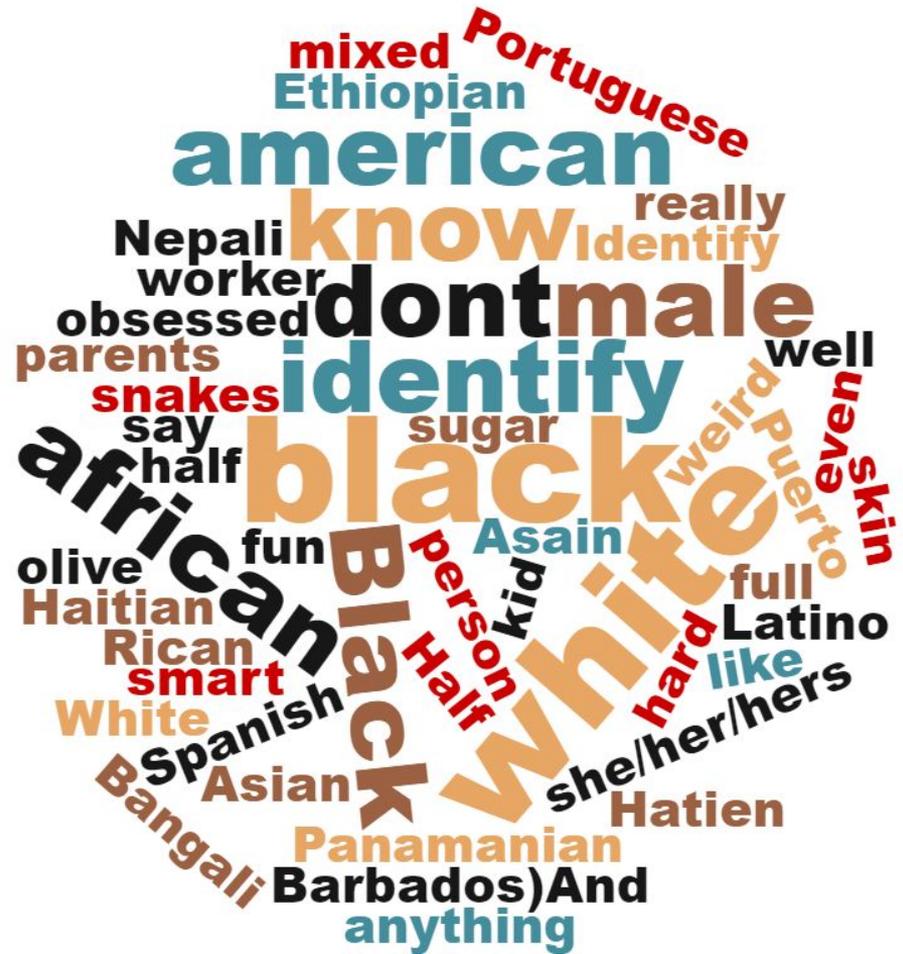


6-8



Upper school students were then asked how THEY identify themselves (optional).

6-8



Quotes that raise more questions

“So instead of academic I could have been doing Spanish class which is my favorite class but I have to be in academic support and on the bright side i get a head start on all of my assignments in the classes I work on in this class.”

Question this raises: How much does personal agency impact students' perception of intervention?



“It makes me feel more myself cuz I feel like that I can admit that I need academic help more than when I don't get help. It also helps me get better grades which makes me feel more like myself.”

Question this raises: How does intervention impact a student's ability to advocate for themselves?

Suggestions for Further Learning

- Conversations about intervention should happen at multiple levels (across grades, subject areas, school) to have a better understanding on what is being done for intervention and theories of change around these strategies.
 - Consider tracking data longitudinally to see if students' needs are being met and they are able to exit intervention programs over the course of their K-12 careers
 - Conduct interviews and/or give surveys to students periodically throughout the year to ensure you are hearing their voices on interventions' impact on their schedule and whole self.
- Find ways to strategically reach and hear feedback from families of color, and make sure we are aware of whether or not responses from families to district- or school-based surveys are representative of the entire student body.
 - We found that we got a lot from a little - we ended up with so much data and learned a lot with somewhat limited resources and time. We encourage schools to continue thinking about equity in interventions by focusing on even just one specific question to investigate and work on in a systematic way.