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ABSTRACT

The WCPSS Student Survey is administered each year to measure students' perceptions about their learning experiences. Approximately 70,000 students from grades 5 through 12 responded in the spring of 2019. The majority of students had positive perceptions of their schools and teachers, were hopeful about their future, felt supported by their family, and had friends at school. Rates of agreement declined from 5th grade to 12th grade in response to items about Control and Relevance of School Work. In contrast to lower grade levels, students in higher grade levels had an increased level of agreement on four out of seven civic engagement statements. In addition, for some survey questions, there were differences in the extent of agreement between male and female students, and across ethnic groups. Details of the survey results by each domain are summarized in the report below.

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INTRODUCTION

Each spring, the Wake County Public School System (WCPSS) surveys elementary, middle, and high school students about their perception of various aspects of their learning experiences. The purpose of the survey is to provide WCPSS with feedback that can be used for evaluation and planning. School administrators and program evaluation staff can use the survey results as a benchmark while tracking changes over time and comparing a school to the district average. The differences between one school's results and the district average might lead to insights about school practices relevant to student engagement.

In the spring of 2019, the WCPSS Student Survey was administered online to all students from the 5th grade through the 12th grade in WCPSS schools. The survey contained questions/items from the Student Engagement Instrument (Appleton, Christenson, Kim, & Reschly, 2006), which measures students' connectedness to school on five dimensions: Teacher-Student Relationships, Control and Relevance of School Work, Peer Support for Learning, Future Aspirations and Goals, and Family Support and Learning. In addition, two items measuring rigor, seven items measuring civic engagement, and one item for creativity were included in the survey.

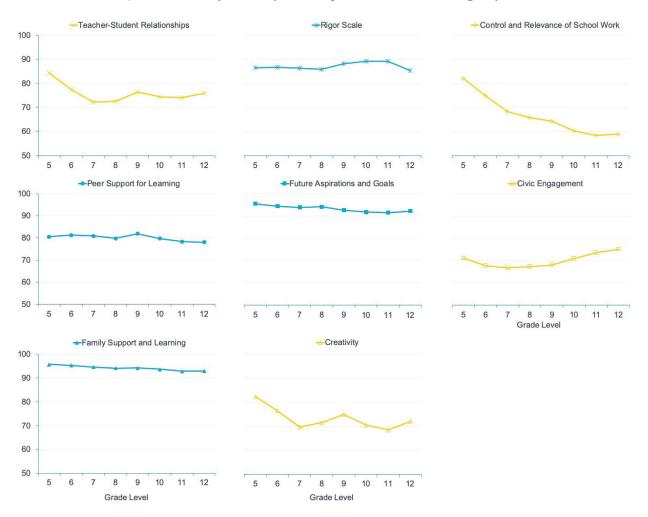
A total of 69,237 students from 187 schools responded to the survey. The overall response rate in 2018-19 to the survey was 69%.

RESULTS

Survey results varied depending on the grade levels and survey domains (Figure 1). Four out of the eight domains did not have large differences in students' agreement across grade levels. However, among the other four domains (teacher-student relationships, control and relevance of school work, civic engagement, and creativity) the degree of agreement was different across grade levels. Percent agreement on control and relevance of school work items decreased significantly from 5th grade to 12th grade. Students' agreement on the teacher-student relationships and creativity domains generally went down from 5th to 12th grade, but also showed some fluctuations. The domain-average agreement on creativity decreased from 5th to 7th grade, bounced up from 7th to 9th grade, decreased from 9th to 11th, and then increased slightly from 11th to 12th grade. For civic engagement, students in 11th and 12th grade agreed more with the survey statements than other students. In addition, for some survey questions, there were differences in the extent of agreement between male and female students, and across some racial groups.

Patterns in percent agreement in 2019 were similar to results from prior years. For details and comparison across years, please refer to previous student survey results published by the WCPSS Data, Research and Accountability department. Note that the 2018-19 school year was the first time the survey was expanded from grades 5, 8, and 9 to all grade levels from 5th through the 12th.

Figure 1
In most domains, students responded positively about their learning experiences.



Note: The domain-average agreement was calculated by taking the average percent agreement of all the survey questions under each domain.

The rest of this report provides a summary of students' agreement with each item by grade level. The percentage of students responding "agree" or "strongly agree" were combined to obtain an overall rate of agreement for each item.



TEACHER-STUDENT RELATIONSHIPS

Teacher-student relationships are essential in promoting a positive learning environment (Baker, 1999; Poulou, 2017). The "Teacher-Student Relationships" domain consists of nine items measuring students' perceptions of their teachers and school. **Students' responses indicated the highest agreement in teacher-student relationships in 5th grade; the agreement dropped sharply in middle school and increased slightly in high school.**

Table 1
The majority of students felt supported by their teachers.

Teacher-Student Relationships		Per	cent Ag	reeme	nt by G	rade L	evel		Grade Level
Survey Questions	5	6	7	8	9	10	11	12	Pattern (5th - 12th Grade)
Overall, adults at my school treat students fairly.	86.6	81.2	76.7	76.2	83.4	79.6	79.4	79.4	\\\-
2. Adults at my school listen to the students.	83.7	76.6	69.4	69.7	75.2	71.0	69.8	70.6	_
3. At my school, teachers care about students.	94.2	89.1	85.2	84.3	85.5	83.6	83.5	84.8	\
4. My teachers are there for me when I need them.	87.2	80.2	76.2	77.7	81.6	80.7	80.8	83.4	\
5. The school rules are fair.	80.0	71.3	61.5	58.7	70.0	64.5	63.4	63.7	V-
6. Overall, my teachers are honest and open with me.	86.6	79.5	75.7	78.2	80.0	79.8	79.3	81.6	\
7. I enjoy talking to the teachers here.	83.1	75.5	70.4	72.0	75.6	77.6	80.0	81.8	
8. I feel safe at school.	84.1	79.9	77.9	78.8	78.6	75.7	74.4	77.3	\
Most teachers at my school are interested in me as a person, not just as a student.	73.8	64.0	56.6	58.0	57.8	57.1	56.2	61.4	\



RIGOR SCALE

Research has shown that high expectations by teachers and challenging classwork are related to increased achievement (Sorhagen, 2013). The Rigor Scale survey domain consists of two items—one about the challenge of the work students are given and one about the effort students put forth to meet teachers' expectations. As shown in Table 2, **students in higher grade levels agreed more that their teachers gave them challenging work but agreed less with the other statement—"I work hard to meet my teachers' expectations."** Noteworthy, the increasing agreement in "my teachers give me challenging work" was from 5th to 11th grade; 12th graders had a lower agreement with this statement than 11th graders.

Table 2
The vast majority of students work hard and feel challenged by their teachers.

Rigor Scale		Grade Level							
Survey Questions	5	6	7	8	9	10	11	12	Pattern (5th - 12th Grade)
10. My teachers give me challenging work.	78.8	82.1	83.8	84.4	87.5	90.7	90.7	85.7	
11. I work hard to meet my teachers' expectations.	94.4	91.4	89.1	87.4	88.9	87.6	87.7	85.2	



CONTROL AND RELEVANCE OF SCHOOL WORK

Students are more likely to be interested in learning when they feel schoolwork is relevant to themselves and their future (Assor, Kaplan, & Roth, 2002). The Control and Relevance of School Work domain consists of nine items measuring students' perceptions of how well their tests/classes capture their ability/effort and how useful what they learn in school will be in their future. There were large differences in responses by grade level on most items, with students indicating much lower rates of agreement each year after 5th grade. However, students' agreement with "learning is fun because I get better at something" increased from 54% in 7th grade to 69% in 12th grade.

Table 3
Over 80% of students feel that they do well in school when they work hard

Control and Relevance of School Work		Per	cent Ag	jreeme	nt by G	rade L	evel		Grade Level
Survey Questions	5	6	7	8	9	10	11	12	Pattern (5th - 12th Grade)
12. The tests in my classes do a good job of measuring what I am able to do.	85.8	79.4	71.1	69.5	62.6	55.4	51.1	53.4	
13. Most of what is important to know you can learn in school.	82.5	72.2	60.8	56.2	48.7	39.6	35.4	35.5	-
14. The grades in my classes do a good job of measuring what I am able to do.	85.9	74.9	66.6	61.9	56.9	49.4	43.7	49.4	
15. What I am learning in my classes will be important in my future.	85.5	75.6	65.8	60.5	57.2	51.8	51.1	53.0	
16. After finishing my schoolwork, I check it over to see if it is correct.	77.8	72.6	68.0	65.0	64.5	63.5	63.5	59.0	
17. When I do schoolwork, I check to see whether I understand what I am doing.	89.1	87.0	84.4	85.3	85.9	85.4	84.8	81.6	
18. Learning is fun because I get better at something.	72.1	60.3	54.3	55.1	59.3	61.3	65.2	68.6	\
19. When I do well in school, it is because I work hard.	92.7	90.9	87.8	86.7	86.2	85.1	82.9	80.8	-
20. I feel like I have a say about what happens to me at school.	67.6	61.7	55.9	52.6	57.6	51.2	48.4	48.4	\



PEER SUPPORT FOR LEARNING

Not only do students learn from teachers and parents, they also learn from their peers. A strong peer support network can have a positive impact on student learning (Hoxby, 2000; Kiefer, Alley, & Ellerbrock, 2015). The Peer Support for Learning domain consists of six items about students' relationships with their peers. In contrast to some of the other domains, the differences in the scope of agreement among students across grade levels were not as large. A key takeaway is that the percent agreement decreased slightly from 9th to 12th grade except on the statement—"I have some friends at school." More than three-quarters of students in each grade agreed that other students cared about them and are there for them when needed.

Table 4

The majority of students felt that other students cared about them and almost all agreed that they have friends at school.

Peer Support for Learning		Per	cent Ag	reeme	nt by G	irade L	evel		Grade Level
Survey Questions	5	6	7	8	9	10	11	12	Pattern (5th - 12th Grade)
21. Other students at school care about me.	74.3	76.2	77.2	76.3	77.8	75.3	73.3	73.4	
22. Students at my school are there for me when I need them.	75.4	75.9	76.1	75.0	77.0	75.3	72.4	71.4	-
23. Other students here like me the way I am.	79.2	80.7	80.3	78.9	82.0	80.5	80.1	80.5	
24. I enjoy talking to the students here.	89.8	88.5	86.5	84.1	84.6	81.7	79.2	78.0	-
25. Students here respect what I have to say.	68.7	70.6	69.4	69.3	74.6	71.8	71.1	71.0	~~~
26. I have some friends at school.	95.4	95.8	95.9	95.3	95.1	93.8	93.7	93.8	



FUTURE ASPIRATIONS AND GOALS

When students have aspirations and goals they tend to have stronger motivation to learn (Watt & Richardson, 2008). The Future Aspirations and Goals domain consists of five items about students' future plans and their beliefs in the importance of education. **The percent of agreement generally started high and stayed high across grade levels.** Specifically, more than 95% of students in each of the grade levels (Table 5) said they "plan to continue their education following high school," and more than 90% were hopeful about their future.

Table 5

More than 95% of students planned to continue their education after high school and were hopeful about their future.

Future Aspirations and Goals		Grade Level - Pattern (5th -							
Survey Questions	5	6	7	8	9	10	11	12	12th Grade)
27. I plan to continue my education following high school.	97.0	96.9	97.1	97.0	95.1	95.6	95.9	95.7	
28. Going to school after high school is important.	94.9	94.0	92.8	92.5	88.6	87.5	87.4	88.0	
29. School is important for achieving my future goals.	94.4	92.4	91.7	92.9	92.1	90.8	90.8	91.3	
30. My education will create many future opportunities for me.	95.6	94.8	94.4	94.9	94.3	93.6	93.2	93.5	
31. I am hopeful about my future.	95.4	94.0	93.1	93.1	92.9	91.4	90.0	92.2	



CIVIC ENGAGEMENT

One of the purposes of education is to prepare civically engaged citizens (Galston, 2007). The Civic Engagement domain consists of seven items measuring students' interest in civic issues. Overall, the percent agreement on most civic engagement items increased from 9th to 12th grade. About 80 percent of students indicated that they "care a great deal about who is elected to be our next president." Many of our students indicated that they often volunteer to help others. Additionally, close to 80% of students plan to vote in most elections when they are old enough.

Table 6
Close to 85% of high school students plan to vote when they are eligible.

Civic Engagement		Per	cent Ag	jreeme	nt by G	rade L	evel		Grade Level
Survey Questions	5	6	7	8	9	10	11	12	Pattern (5th - 12th Grade)
32. I believe I can make a difference in my community.	83.1	81.2	80.1	81.6	82.9	83.1	83.9	85.7	
33. When I am old enough, I plan to vote in most elections.	77.8	78.0	81.7	83.8	84.3	88.0	89.4	90.9	
34. I care a great deal about who is elected to be our next president.	79.9	79.1	79.2	79.7	80.0	82.2	84.4	87.0	~
35. I pay attention to what is going on in the news.	58.1	57.5	59.0	62.7	65.4	68.4	71.0	75.0	
36. I think politics and government are boring.	46.8	54.9	54.4	55.0	55.7	51.3	45.3	45.2	
37. I participate in projects in my community.	68.9	61.0	56.1	53.8	54.5	57.6	59.4	61.0	<u></u>
38. I often volunteer my time to help others.	76.3	71.2	65.7	65.0	64.9	68.2	70.8	71.1	<u></u>



FAMILY SUPPORT AND LEARNING

Students depend on family support to learn and to make transitions through elementary, middle, and high school. Numerous studies suggest family involvement in children's education can make a big difference (Jeynes, 2003; Wilder, 2014). The Family Support and Learning domain consists of four items measuring students' perceptions of their family support. Over 90% of respondents across all grade levels surveyed agreed that their family/guardian(s) are reliable and supportive with regard to school. The percent of agreement started high and stayed high from 5th to 12th grade.

Table 7
Almost all students agreed that their family/guardians are supportive of their learning.

Family Support and Learning		Grade Level Pattern (5th -							
Survey Questions	5	6	7	8	9	10	11	12	12th Grade)
39. My family/guardian(s) are there for me when I need them.	95.9	95.1	94.5	93.8	93.5	92.7	92.3	92.7	
40. When I have problems at school, my family/guardian(s) are willing to help me.	95.0	94.9	93.8	93.4	93.8	92.9	91.7	91.9	
41. When something good happens at school, my family/guardian(s) want to know about it.	94.4	93.4	92.5	91.8	92.3	91.8	90.9	90.3	
42. My family/guardian(s) want me to keep trying when things are tough at school.	97.3	97.5	97.3	96.9	97.0	97.0	96.3	96.5	



CREATIVITY

Creative students are able to think creatively, collaborate with others, demonstrate courage to explore, and implement innovations (Lucas, Claxton, & Spencer, 2013). In order to understand how well teachers at WCPSS foster creativity, an item was added to the survey in 2017-18 asking students to what extent they agreed that "my teachers give me the opportunity to be creative at school" and almost 70% agreed. The percent of agreement was lower in middle and high schools compared to elementary schools.

Table 8

Students in 5th and 6th grade agreed they are given opportunities to be creative whereas at the higher grade levels the agreement was lower.

Creativity	ivity Percent Agreement by Grade Level									
Survey Questions	5	6	7	8	9	10	11	12	Pattern (5th - 12th Grade)	
43. My teachers give me the opportunity to be creative at school.	82.2	76.4	69.7	71.5	74.9	70.4	68.5	72.0	\~\	



DIFFERENCES ACROSS SUBGROUPS

In some of the domains and survey items, the degree of students' agreement differed by subgroups including gender and ethnicity. Female students had slightly higher agreement with most survey questions. Although the difference between male and female students was small in most cases, there were a few survey questions that showed a substantial gender gap in agreement (see selected examples in Table 9). For the two survey statements of civic engagement, "I participate in projects in my community" and "I often volunteer my time to help others", female students had a consistently higher agreement.

Two of the eight domains, teacher-student relationship (survey questions 1 through 9) and peer support for learning (survey questions 21 through 26), showed a difference in percent of agreement between Black and White students. Black students agreed less with survey statements under these two domains. For example (Table 9), Black students' agreement in 5th grade was 11 percentage points lower than White students in the same grade level for the survey question "Overall, adults at my school treat students fairly." In comparison, the differences between Hispanic/Latino and White students were relatively small and negligible in the two survey domains.

More details of the percent agreement by subgroup for each survey question can be found in this Appendix. In addition to the racial difference in agreement with teacher-student relationships and peer support for learning, the Appendix also shows the White and Black racial gap in percent agreement for survey questions of the civic engagement domain.



Table 9
Male students and Black students are less positive across selected survey domains.

Selected Survey Questions	Differen	ces in Per	centage Ag	reement (s	elected ex	amples)				
		Gap betw	een Femal	e and Male	Students					
		Grade 5		Grade 9						
Civic Engagement	Female	Male	Gap	Female	Male	Gap				
37. I participate in projects in my community.	72.5	65.5	7.0	58.0	51.0	7.0				
38. I often volunteer my time to help others.	79.9	72.9	7.0	69.4	60.5	8.9				
	Gap between White and Black Students									
		Grade 5		Grade 9						
Teacher-Student Relationships	White	Black	Gap	White	Black	Gap				
Overall, adults at my school treat students fairly.	88.8	77.7	11.1	86.3	74.0	12.3				
2. Adults at my school listen to the students.	86.7	73.8	12.9	77.3	63.9	13.4				
		Grade 5			Grade 9					
Peer Support for Learning	White	Black	Gap	White	Black	Gap				
21. Other students at school care about me.	78.1	66.6	11.5	81.4	67.6	13.8				
22. Students at my school are there for me when I need them.	77.4	69.4	8.0	80.4	66.2	14.2				

Note: The gap between White and Black students is the result of subtracting the percent agreement of White students by the percent agreement of Black students; the gap between female and male students is the result of subtracting the percent agreement of female students by the percent agreement of male students.



CONCLUSIONS

Moving forward, some implications of these student survey results are worthy of discussion:

- Given that students in 5th grade rated their teacher-student relationships and their control and relevance of school work much more favorably than students in other grades, is there something that middle and high schools should address to counter that decline?
- One of the takeaways from this survey is the clear differences in agreement among some racial/ethnic subgroups (see this Appendix). Although this survey does not reveal the cause of those differences, schools should use it as a starting point to discuss why Black/ African-American students in particular had systematically less positive responses than their peers in such areas as teacher-student relationships, peer support in learning, and civic engagement. Unpacking how these perceptions of school may relate to the historical gaps in achievement-related outcomes speaks directly to the district's first two Core Beliefs and could help identify targets for professional learning and other supports critical to preparing all WCPSS students for college, career, and citizenship.

REFERENCES

- Appleton, J. J., Christenson, S. L., Kim, D, & Reschly, A. L. (2006). Measuring cognitive and psychological engagement: Validation of the Student Engagement Instrument. *Journal of School Psychology, 44*, 427-445.
- Assor, A., Kaplan, H., & Roth, G. (2002). Choice is good, but relevance is excellent: Autonomy enhancing and suppressing teacher behaviours predicting students' engagement in schoolwork. *British Journal of Educational Psychology*, 72(2), 261-278.
- Baker, J. A. (1999). Teacher-student interaction in urban at-risk classrooms: Differential behav ior, relationship quality, and student satisfaction with school. *The Elementary School Journal*, 100(1), 57-70.
- Galston, W. A. (2007). Civic knowledge, civic education, and civic engagement: A summary of recent research. *International Journal of Public Administration*, 30(6-7), 623-642.
- Hoxby, C. (2000). Peer effects in the classroom: Learning from gender and race variation (No. w7867). Cambridge, MA: National Bureau of Economic Research.
- Jeynes, W. H. (2003). A meta-analysis: The effects of parental involvement on minority children's academic achievement. *Education and Urban Society*, 35(2), 202-218.
- Kiefer, S. M., Alley, K. M., & Ellerbrock, C. R. (2015). Teacher and peer support for young adoles cents' motivation, engagement, and school belonging. *RMLE Online, 38(8)*, 1-18.
- Lucas, B., Claxton, G., & Spencer, E. (2013). Progression in student creativity in school: First steps towards new forms of formative assessments. *Contemporary Readings in Law and Social Justice*, 6(2), 81–121.
- Poulou, M. S. (2017). Social and emotional learning and teacher-student relationships: Pre school teachers' and students' perceptions. *Early Childhood Education Journal, 45(3)*, 427-435.
- Sorhagen, N. S. (2013). Early teacher expectations disproportionately affect poor children's high school performance. *Journal of Educational Psychology*, 105(2), 465.
- Watt H. M. & Richardson, P. W. (2008). Motivations, perceptions, and aspirations concerning teaching as a career for different types of beginning teachers. *Learning and Instruction*, 18(5), 408-428.
- Wilder, S. (2014). Effects of parental involvement on academic achievement: a meta-synthesis. *Educational Review, 66(3)*, 377-397.



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