education northwest

An Evaluation of the Beaverton School District Common Middle School Schedule

Prepared for Beaverton School District

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About Education Northwest

Founded as a nonprofit corporation in 1966, Education Northwest builds capacity in schools, families, and communities through applied research and development.

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Contents

Executive Summary

In the 2021–22 school year, Beaverton School District (BSD) implemented a new schedule for the nine comprehensive middle schools in the district. This schedule includes eight to nine daily class periods, two electives per day, and 30 minutes for lunch and recess. Math and science periods are taught as a block for a total of 126 minutes (or 63 per subject). Other courses have 42-minute class periods. All students attend a 36-minute advisory class two days per week, which reduces the lengths of other courses on those days.

Key reasons for the initial implementation of this schedule included establishing a common schedule across all nine comprehensive middle schools, increasing student access to electives, lowering elective teacher caseloads, and implementing daily physical education (PE). The shift from a humanities model combining language arts and social sciences in one class to one with two distinct classes for these subjects also informed the schedule design.

This report presents findings from Education Northwest's evaluation of the common middle school schedule (referred to in this report as *the current schedule*) using relevant research and qualitative data collected from an educator survey and 20 focus groups with educators, students, and families.

Key Terms

Educators refers to all BSD school staff members who may interact with students, including teachers, school administrators, student support staff members, and office assistants/registrars.

Teachers refers to BSD middle school staff members who provide instruction in comprehensive middle school classrooms. All teachers are also educators.

Core teachers refers to teachers who provide classroom instruction in math, science, language arts, social science, and/or PE/health.

Elective teachers refers to teachers who provide classroom instruction in Advancement via Individual Determination (AVID), applied arts/technology, fine arts, and/or world languages.

Improved access to electives refers to the increased ability of students to enroll in electives of their choice, as well as access to electives for English language learner and special education students who may not otherwise have space in their schedule to enroll in electives.

Teaming refers to regular educator collaboration that occurs during school hours. Some educators also use teaming specifically to refer to collaboration among a group of educators who share and support a common group of students.

Successes and Challenges

Results from the educator survey indicate that while educators perceive both successes and challenges associated with the current schedule, challenges greatly outweigh successes. Educators most often cited challenges included short class periods, too many transitions, and lack of time for teaming. They also mentioned high teacher caseloads and unequal class period lengths as other key challenges. Improved access to electives was the most common schedule success educators mentioned, with daily PE also noted as a success.

Impact on Instruction

Overall, educators indicated in both the survey and focus groups that the current schedule, particularly the short class periods, hinders their ability to provide effective instruction, teach required standards, and build connections with students. Less than half of BSD middle school educators believe that the current schedule provides adequate time for these activities. There are significant disparities in teacher perception of the schedule by type of course taught. Most elective teachers report that the schedule provides adequate time for effective instruction, teaching required standards, and building connections with students, while less than half of core teachers do (for more detail on these findings, refer to the full report). Differences in perception are even more dramatic between teachers of fine arts teachers and teachers in other subject areas. For example, about three-quarters of surveyed fine arts teachers agree that the current schedule provides adequate time to provide effective instruction or teach required standards, while only eight percent of language arts/social science teachers agree with this statement.

Language arts and social science teachers expressed particular concern about the impact of the short class periods on their instruction, often noting that it is not possible to cover the required curricula in the minutes allocated for their instruction. Many math and science teachers, who were more likely to report that they have adequate instructional time, are nevertheless concerned about the short class periods in language arts or social science. Some of these teachers indicated they would be willing to reduce their own instructional time to increase time for other classes.

Impact on Student Supports

Most BSD middle school educators said they do not believe that the schedule provides adequate time to support students' social and emotional needs or to offer interventions. Disparities in opinion by type of course taught were stark, with significantly fewer core teachers than elective teachers agreeing that time for these student supports was adequate. Many educators emphasized that shorter class periods and large class sizes leave little to no time for interventions. Support staff members such as counselors find that shorter class times make it difficult to support students without those students missing significant class time.

Advisory class is designed to provide students with social and emotional support and access to a trusted staff member. However, both educators and students have concerns about the class and generally favor integrating the advisory class curriculum into other courses.

Impact on Student Learning

Most educators reported that the current schedule does not provide adequate time for students to learn or engage deeply with course material. Less than a third of surveyed educators agreed that the schedule provides adequate time for these activities. Evaluators again found large differences in teacher opinions, with significantly fewer core teachers than elective teachers agreeing that the schedule allows adequate time for student learning.

Student focus group participants shared mixed feelings about the current schedule. Some explained that the shorter classes do not leave them enough time to properly absorb the material, while others worry that they would be bored in longer classes. Students and parent/guardians agreed that students have too many classes per day and a few students reported struggling to remember everything they learn in a day.

Impact on Student Behavior and Well-Being

Educators had notable concerns regarding the current schedule's impact on student behavior and well-being. Most educators said they think that the current schedule has exacerbated disruptive student behavior during transitions. In focus groups, many educators expressed concern that the increased numbers of transitions and shorter class periods are hindering students' ability to self-regulate and that students with special needs are the most negatively impacted. Educators from multiple schools also noted that the increased disruptions during passing times have led many schools to implement policies such as one-way-only hallways, prohibiting locker usage during the school day, and increased hall monitoring duties for support staff members.

Student and family focus group participants also expressed concerns about the passing times, noting that many hallway policies and 4-minute passing times can make it difficult or impossible for students to get to their next class on time and/or use the bathrooms between classes. Families and students also mentioned that many students now carry all their school materials all day because they don't have time to go to their lockers between classes. Despite these concerns from students and families, some educators cautioned against increasing transition times as they worry that more time would present more opportunities for disruptive behavior.

On a more positive note, educators, students, and parent/guardians generally agreed that having two electives per day has a positive impact on students. Most surveyed educators and teachers specifically said they believe that having two daily electives is important for student learning and well-being. Educators specified that it is important for students to have opportunities to take classes that they choose and truly enjoy. They also said that elective classes present an opportunity for students to effectively channel their energy and emotions and help create a more positive school experience. Parent/guardians and students who participated in focus groups overwhelmingly agreed

with these general sentiments. While students expressed the desire for a greater variety of electives, nearly all participating students and families said they or their child enrolled at least one of their chosen electives during this school year and enjoyed their elective classes.

Impact on Educators

Many surveyed educators felt that the current schedule has had a large impact on their ability to team with their colleagues. Just over one-quarter of surveyed educators reported having time to collaborate with each other during the school day. This impact on teachers is stratified by type of course taught. About two-thirds of fine arts teachers agreed or strongly agreed that the current schedule allows them to collaborate with other educators. In focus groups, fine arts teachers elaborated that the current schedule has increased their ability to team because they can now strategize with teachers in other BSD middle schools. In contrast, only about one-third of math/science teachers and 15 percent of language arts/social science teachers reported having time to collaborate. Many educators reported that the lack of teaming and increased caseloads makes it far more difficult to keep track of their students, which inevitably leads to more students "falling through the cracks" and not receiving sufficient attention or support.

Educators in focus groups also emphasized that the loss of time for teaming has had serious impacts on their ability to build relationships and support each other. Many educators reported feeling more isolated, stressed, or that they are failing their students. They discussed declining educator mental health and attributed these declines in part to the current schedule.

Value of a Common Middle School Schedule

Most BSD educators do not perceive a common schedule across the nine comprehensive middle schools as important. In focus groups, educators at each of the nine middle schools described the common schedule as inherently inequitable given the different student populations, numbers of students, resources and special programs that exist at each school. They would appreciate the flexibility to design a schedule that addresses their school's unique needs as well as to offer electives that align with student needs and interests.

Suggestions for Improving the Schedule

This report offers eight key suggestions for improving the middle school schedule. Some of the suggestions are based on data collected during this evaluation and a body of educational research. Suggestions without a body of research rely more heavily on the data collected in BSD and common middle school scheduling practices. These suggestions may help the district to achieve its 2022–23 strategic plan goal of optimizing school schedules and systems to support student success.

The first four suggestions are supported by strong research as well as data collected in BSD:

1. **Develop a scheduling framework that prioritizes common planning time for teaming** and **sharing common groups of students across content areas**. Many BSD educators reported that they believe they could effectively address many of the current schedule's challenges if they had the opportunity to collaborate with their colleagues and to discuss how to support the needs of individual students. Research documents a plethora of positive student and teacher outcomes associated with regular teacher teaming. Additionally, this suggestion aligns with the district's strategic plan goal of providing consistent, systematic teacher collaboration time to assess student data and improve practices.

2. **Minimize the number of transitions between classes.** Educators and students agreed that the current number of classes per day can be stressful for students. Cognitive literature suggests that interruptions to learning are associated with negative impacts for both teachers and students—particularly neurodivergent students. Research also suggests that fewer daily classes may reduce overall student workload and stress. A schedule with fewer classes per day and/or classes of equal length would reduce the number of daily transitions and may help to reduce student stress/dysregulation, disruptive hallway behavior, and the amount of homework.

3. **Integrate advisory course content into other courses and eliminate advisory class period.** Both educators and students shared a belief that advisory class time could be used more effectively if its content were integrated into other courses. Research suggests that integrating social and emotional learning content into other courses may be more effective than teaching this content in an advisory class. Eliminating advisory class would also create more day-to-day schedule consistency and provide more time for other courses.

4. **Ensure that all students have at least 20 minutes of seat time to eat lunch.** Students and parent/guardians suggest that the time currently available for lunch does not allow all students time to visit their locker, use the restroom, obtain and eat their meal at a reasonable pace, decompress, and socialize with peers. BSD currently provides 35 minutes for a combined lunch and recess period (including five minutes for transitions). Research suggests that students who have less time to eat consume less of their meal and are less likely to choose to eat fruits. The literature recommends at least 30 minutes for a lunch period (not including time for recess) to ensure all students have at least 20 minutes of seat time to finish their meal.

The next suggestion is based on data collected from BSD middle schools as well as limited research on class period length:

5. **Consider the ideal length of class necessary for effective instruction and learning.** In focus groups, educators consistently suggested a class period length of 55 to 60 minutes. Most were willing to accept shorter class periods if all class period lengths were equal and there were fewer transitions. The research on class period length is largely inconclusive and does not recommend a particular length but indicates there may be an association between longer

classes, favorable teaching conditions, and connections at school. Implementing class periods of at least 55 minutes that meet all state requirements and do not extend the school day may be challenging, but should be considered as a goal.

The report's final suggestions (6–8) are based solely on data collected from BSD educators, students, and families during this evaluation. While there is no body of research to support these suggestions, they represent consistent themes emerging from educator surveys, educator focus groups, student focus groups, and/or family focus groups.

6. Consider implementing equal class period lengths. Educator survey and focus group results suggest that longer class periods for math and science have contributed to perceptions that those subjects are considered more important than others. Equal class period lengths might improve these perceptions and provide more learning time for most course subjects. In addition, equal class periods with common passing times may reduce distractions for students currently in class as others move between classes. Common passing times for all students might also reduce disruptive hallway behavior as more teachers can be in the hallways to monitor transitions.

7. Continue to offer two electives. Most educators, families, and students who participated in the study said they appreciate having two electives. Continuing to offer two electives allows students to explore new content and to choose what they are most interested in learning, which might improve engagement with school. Scheduling time for two electives would be particularly important for English language learner and special education students, who might not otherwise be able to take any electives. Continuing to offer two electives in combination with other suggestions listed here might require some creative scheduling such as offering elective classes every other day or moving to an AB block schedule with four classes every other day.

8. Consider whether a common middle school schedule is equitable. BSD middle school educators indicated they do not believe there is a single schedule that can meet the needs of all schools, educators, students, and their families. Educators expressed concern about the lack of flexibility in the common middle school schedule to offer elective options and supports that align with student interests and needs. We suggest that the district assess whether providing some parameters and working with each school to develop a schedule within that structure would better address each school's unique needs and promote equity.

Evaluation of the Beaverton School District Middle School Schedule

This evaluation relies on research and on qualitative data collected through an educator survey and a total of 20 focus groups with educators, students, and families at the nine comprehensive middle schools in the Beaverton School District (BSD).

Education Northwest began this study by conducting a review of research on the academic and social and emotional outcomes of different types of schedules on middle school students. However, research on the effects of scheduling at the middle school level is sparse, mostly non-causal, and largely inconclusive. As such, there is little guidance in the research that can be used to recommend one schedule over another for middle school students.

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Teaming refers to regular educator collaboration that occurs during school hours. Some educators also use teaming specifically to refer to collaboration among a group of educators who share and support a common group of students.

In addition to the literature review, Education Northwest conducted a survey of BSD educators, educator focus groups, and student focus groups across all nine comprehensive middle schools, as well as two virtual family focus groups (one in English and one in Spanish). The educator survey was sent to all eligible BSD middle school educators (see key terms above). Each of these data collection methods are described in more detail below.

All data collection efforts were designed to be as inclusive as possible and to include diverse groups of participants. However, this study also did not attempt to obtain data from all middle school students or their families. It is possible that some opinions and perceptions may be over- or under-represented in the student and family focus group data.

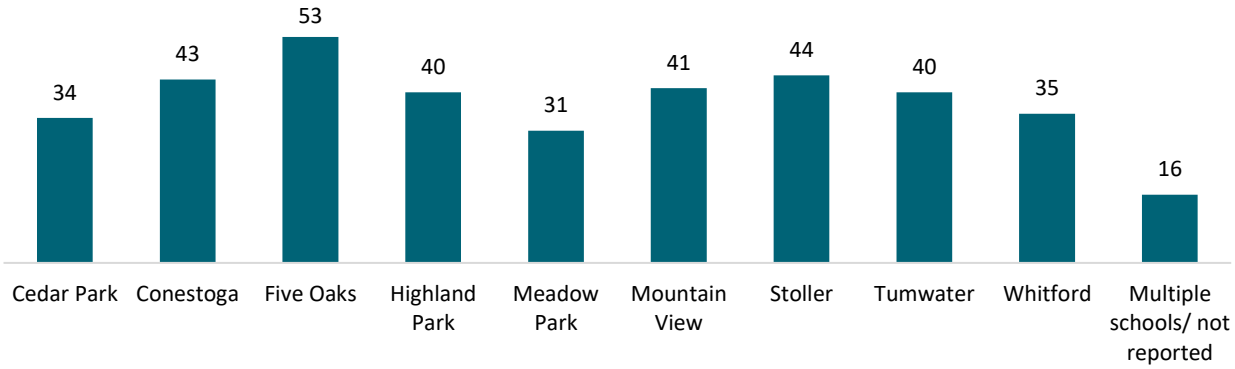
It is also worth noting that the impacts described in the study are based on descriptive data that comes primarily from self-reporting in focus groups and the survey. These are opinions and perceptions of the schedule rather than outcome data. The study was not designed to quantify the impacts of the current middle school schedule on school, staff members, or student outcomes. Collecting outcome data would require a much longer timeline than was possible or desirable for this study, as the district hoped to use results from this ten-month evaluation to inform relatively rapid decisions about the schedule.

Educator Survey

In February 2022, Education Northwest sent an online survey to 609 Beaverton middle school educators at all nine comprehensive BSD middle schools, including teachers, school administrators, student support staff, and office assistants/registrars. The survey was available for 15 days and Education Northwest sent multiple reminders to encourage participation. The survey asked educators to voluntarily report some identifying information such as roles, subjects and grade levels taught, and school. This self-reported information was used to customize subsequent survey questions and also in the analysis.

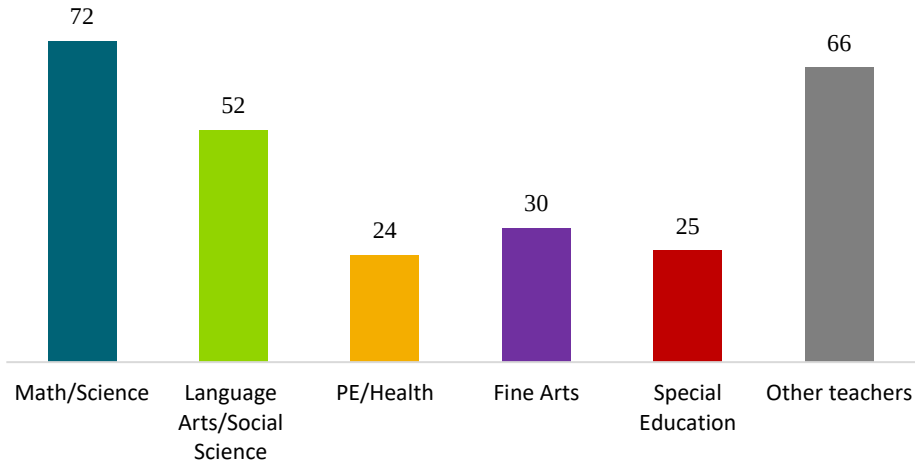
A total of 377 BSD educators provided input in the survey for an overall response rate of 62 percent. Educator survey participation varied by school (figure 1).

Figure 1. Number of educator survey participants by school



More than 70 percent (269) of educator survey participants were teachers. Math and science teachers had the highest teacher survey participation, accounting for 27 percent of participating teachers (figure 2).

Figure 2. Number of teachers who responded to the survey, by course subject



Notes: O*ther teachers* includes teachers who teach multiple course subjects (e.g., special education and math/science), teachers who preferred not to report their subject, and teachers who teach another subject such as Spanish or applied arts.[1]

Educator Focus Groups

Over the course of two weeks in March 2023, Education Northwest conducted in-person educator focus groups at each of the nine BSD comprehensive middle schools. To mitigate potential authority imbalances, we did not invite school administrators to participate in these focus groups. We also excluded administrative staff members such as registrars and administrative assistants.

The goal of the educator focus groups was to hear from a representative sample of BSD middle school educators. Education Northwest selected 10 potential participants from each school to produce a representative selection of educators across the district (not necessarily at each school). The educator survey was our first source of potential educator participants—it asked respondents who would be interested in providing additional information to share their contact information. In some cases, there were more volunteers than needed for a particular role (such as language arts/social science and fine arts) or from a particular school and we did not select all the volunteers to participate. For other roles and schools, we recruited additional educators who did not volunteer (such as English language development [ELD] teachers) to achieve a representative sample of educators.

Education Northwest staff members then sent the school principals a list of the selected educators, asking them to invite the educators to participate in the focus groups and to arrange space for these group meetings. Principals communicated with these educators, encouraged participation, and identified when selected educators were not available, necessitating the selection of a replacement.

[1] This report presents educator survey results by teacher course type and content areas. In alignment with standard reporting guidelines, some data is obscured or omitted to protect participant confidentiality.

Neither district nor school staff members were involved in selecting educator focus group participants.

A total of 76 educators took part in educator focus groups, with seven to 10 participants at each school. These educators included 35 core teachers; 13 elective teachers; 13 coaches, teachers on special assignment (TOSAs), and paraeducators; eight student support staff, six ELD and special education teachers, and one school administrator.[2] Focus group participant roles were broadly representative of educator roles in the district.

Student Focus Groups

This study included nine virtual focus groups with BSD middle school students—one at each school. Three to four students participated in each discussion, for a total of 33 participants. School principals and staff members at each school selected the participants and secured written parent consent for these students to participate. While Education Northwest encouraged principals and school staff members to select diverse groups of students, the student focus groups were not designed to be representative of student characteristics and instead prioritized recruitment to maximize student participation. To ensure student confidentiality, Education Northwest did not collect any identifying information on student focus group participants.

Family Focus Groups

Education Northwest conducted two virtual focus groups with parent/guardians of BSD middle school students. One group was conducted in English and the other in Spanish. To recruit a diverse group of parent/guardians, the district distributed an online screener (created by Education Northwest) to all middle school families. This screener was available in English and Spanish and collected information about parent/guardian availability to participate, language, school, race/ethnicity, and identification of children as talented and gifted (TAG), English language learner students, and/or special education students.

We used screener responses to select a diverse focus group. A total of 13 parent/guardians participated in May—eight in the English-speaking and five in the Spanish-speaking focus group. The participating parent/guardians included at least one parent/guardian from eight of the nine middle schools in the district, parent/guardians with at least five different reported race/ethnicities, and parent/guardians of children in TAG, special education, or not in special programs.

Research on Middle School Schedules

Ideally, research on middle school schedules could be used to help inform decisions about the middle school schedule in BSD. This literature review explores research on schedules at both the

[2] Administrators were not invited to the focus groups, but one school administrator participated without an invitation.

middle and high school levels when available. Unfortunately, research on the academic and social and emotional outcomes of middle school schedules is limited in both quality and quantity. While other districts and schools have adopted schedules similar to BSD's, there are few studies of middle school schedules and almost no rigorous ones. Schedule research focused specifically on students of color, low-income students, students with disabilities, and English learner students is even more rare.

BSD's shift to a common middle school schedule in 2021-22 with eight to nine daily class periods may have impacts on class period length, class sizes, teacher caseload, and the number of transitions between classes. First, without changes to the length of the school day, more daily class periods result in shorter class periods and less time dedicated to each subject per day. Second, an increase in the number of daily classes may change class sizes and the number of students that teachers instruct each day, although these outcomes may vary by teacher and subject. Third, more daily class periods may lead to an increase in the number of transitions between classes. This literature review is organized around the potential impacts of these changes.

Impact of Class Period Length

There is little research on the association between class period length and student academic outcomes. Existing research on class period length tends to focus on schools with block schedules, which have much longer class period lengths and fewer class periods each day and week than traditional schedules. This research on block schedules provides some information on the effects of class period length on student outcomes.

According to the research, block scheduling may help to facilitate several favorable teaching and learning conditions. For example, longer classes allow teachers to provide more individualized instruction and to use a variety of teaching strategies other than lecturing (Brown, 2001; Rice et al., 2002; Veal & Flinders, 2001; Williams, Jr., 2011). Schedules with fewer and longer classes per day tend to reduce the total number of students taught by each teacher, which may be preferable to teachers and reduce teacher stress (Eineder & Bishop, 1997; Reid, 1995; Zepeda & Mayers, 2001). There is also evidence that block scheduling helps facilitate more planning time and decreases the number of each teacher's preparation activities (Zepeda & Mayers, 2001). From a student's perspective, fewer classes per day may reduce overall workload (Reid, 1995; Freeman, 1996) and student stress (Veal & Flinders, 2001; Zepeda & Mayers, 2006). Some evidence suggests that block scheduling helps to create a learning environment conducive to building stronger relationships among students and between students and teachers (Veal & Flinders, 2001).

The research on block scheduling has shown mixed direct impacts on student outcomes. Some studies have found that schools with block schedules have better academic outcomes, including higher math achievement scores (Mattox et al., 2005; Olofson & Knight, 2018), higher language arts achievement scores (Olofson & Knight, 2018), higher general academic performance for middle school students (DiRocco, 1999), and higher standardized testing scores for high school students (Evans et al., 2002).

Other studies, however, found that block schedules do not have a significant positive or negative impact on middle school students in math achievement (Allen Gill, 2011; Falk, 2009; Schroth & Dixon,

1995), language arts achievement (Allen Gill, 2011; Falk, 2009), reading comprehension (Bush, 2003), or science achievement (Falk, 2009). At the high school level, the literature indicates that students in schools with block scheduling perform at similar levels to students in schools with traditional schedules in writing on standardized tests (Gruber & Onwuegbuzie, 2001) and worse in math, (Gruber & Onwuegbuzie, 2001; Rice et al., 2002), language arts, science, and social studies (Gruber & Onwuegbuzie, 2001). While there are no meta-analyses on the effect of block scheduling on academic outcomes at the middle school level, multiple meta-analyses at the high school level have found that block-scheduling does not produce significantly better academic outcomes than traditional scheduling (Holley & Park, 2017; Zepeda & Mayers, 2006).

The research on block scheduling and students with disabilities is mostly based on case studies with very small sample sizes and shows mixed results. Grade nine biology scores were similar for students with disabilities in block and traditional schedules (Bonner, 2012). However, non-academic outcomes such as teacher and student satisfaction, student-teacher relationships, feelings of inclusion, and variety of teaching strategies were more positive in block scheduling for students with disabilities (Blass, 2002; Bottge et al., 2003; Harrington, 2015; Rettig & Colbert, 1995; Vermillion, 1998; Weller, 2002).

The mixed research findings on block scheduling also apply to students of color. One middle school study found better academic outcomes in math and language arts among Black and Hispanic students in block schedules (Allen Gill, 2011). Several studies at the high school level found block scheduling to be associated with positive outcomes for Black students, such as higher biology scores (Bonner, 2012) and lower rates of failing GPAs (Spencer-Pugh, 2002). Conversely, other research has found that outcomes for students of color in block schedules were similar or worse than for students in traditional schedules. For example, a study comparing block and traditional schedules found no differences among Black and Hispanic students in math growth between grades 5 and 8 (Trlica, 1998). At the high school level, Black students in block schedules had similar scores to Black students in traditional schedules in English, writing, math (Chen et al., 2020; Wright, 2010) and biology (Chen et al., 2020). Finally, some research has found lower achievement for students of color under block schedules, including for Black high school students in math (Wright, 2010; Ryals-Jenkins, 2007) and for Hispanic high school students in math, English, science, and social studies (Ryals-Jenkins, 2007).

Overall, and across specific student populations, it is unclear whether block schedules and longer class periods are more advantageous for student outcomes than traditional schedules or shorter class periods. However, some evidence does suggest that block scheduling and longer class periods may have positive impacts on teaching and learning conditions.

Impact of Class Size

In contrast to the dearth of research on class period length, there is a plethora of research directly studying the effects of class size on student academic and non-academic outcomes. One of the most prominent of these studies is the Tennessee Student/Teacher Achievement Ratio (STAR) experiment (Word et al., 1990), which found that students placed in smaller classes (13–18 students) from kindergarten to grade 3 performed significantly better in terms of GPA, standardized testing, and disciplinary issues than students placed in larger classes (22–28 students). Another key study was

performed by Molnar et al. (1999) as a series of annual evaluations of the Wisconsin Student Achievement Guarantee in Education (SAGE) class size reduction program. This study replicated the STAR experiment and found significant positive effects of smaller class sizes on academic outcomes and fewer disciplinary issues for elementary students in Wisconsin, and particularly for students of color.

Research has demonstrated that the benefits attributed to smaller class sizes in K–3 may continue through middle and high school. These extended benefits include higher standardized test results (Krueger & Whitemore, 2001), higher graduation rates, and higher college attendance (Dynarski et al., 2013). A review of class size literature by Mathis (2017) showed that these longer-term impacts appear to be particularly beneficial for students of color and students from low-income households.

However, critics claim that the short- and long-term benefits of smaller class sizes rapidly diminish when implemented after grade 3, including in middle and high school (Chingos & Whitehurst, 2011). Research at the middle school level appears to support these claims. Analyses by Alspaugh (1994), Caldas (1993), Davis and Jordan (1994), and Rumberger (1995) failed to find significant positive effects of reducing middle school class sizes on academic outcomes, and Alspaugh found that *larger* class sizes led to higher grade 6 math achievement.

While there is little research documenting the impact of smaller middle school classes on student academic outcomes, there is some evidence that smaller class sizes in middle school may improve some non-academic outcomes. Middle school students in schools with smaller classes rated their engagement with school and their own self-esteem more highly than did students in middle schools with larger class sizes (Dee & West, 2011; Matthis, 2017). Middle school students in smaller classes also report higher-quality interactions with their teachers and their peers (Camacho et al., 2022; Voight et al., 2015).

Lower class sizes at the middle school level appear to have positive non-academic benefits for students of color in particular. Research has shown that in addition to the benefits mentioned above, Black and Hispanic students in middle schools with smaller class sizes tend to report feeling safer than those in middle schools with larger classes sizes (Voight et al., 2015).

Impact of Increased Transitions

While there is little direct research on student transition times, cognitive literature indicates that interruptions tend to lead to a decrease in complex task performance across all ages (Kliegel et al., 2008). Classroom interruptions are no different, and research has shown that they decrease student attention and learning and can cause increased teacher stress (Leonard, 2001, 2003). At the elementary school level, students on the autism spectrum and students with learning- and attention-related disabilities tend to struggle with interruptions and task switching more than neurotypical students (Buck, 1999; Sterling-Turner & Jordan, 2007). While this research is not specific to middle school, it does suggest that increasing the number of transitions could impede learning for all students, and particularly for neurodivergent students.

Evaluation Findings

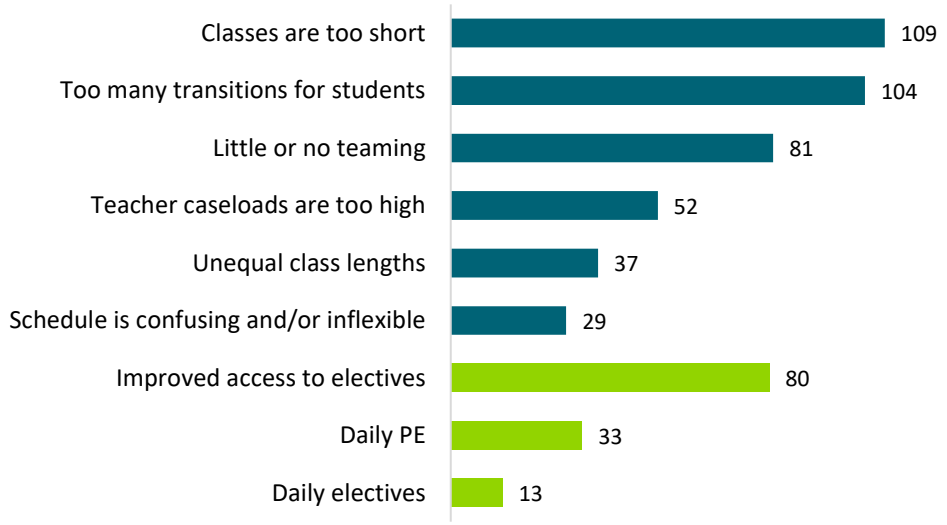
This section presents evaluation findings on the current BSD middle school schedule based on an analysis of the data collected from educators, students, and families. Quantitative data from the survey is presented in figures throughout the report. Evaluators used inductive coding methods to analyze all open-ended responses from the survey and focus groups to allow themes to emerge from the data. This involved the development of thematic codes based on the data and analysis of these codes to assess relative prevalence of each theme. The findings are organized in the following sections:

1. Successes and Challenges of the Schedule
2. Impact on Instruction
3. Impact on Student Supports
4. Impact on Student Learning
5. Impact on Student Behavior and Well-Being
6. Participant Schedule Preferences
7. Value of a Common Middle School Schedule

Successes and Challenges of the Schedule

While educators varied in their perceptions of the schedule, negative views greatly outweighed positive ones in the educator survey. Coded open-ended responses from the educator survey show the relative prevalence of schedule successes and challenges (figure 3). The most reported schedule challenges were that classes are too short, there are too many transitions for students, and there is little-to-no teacher teaming to support instruction. In terms of successes, educators reported that they appreciate the increased access to electives for all students and the daily PE classes.

Figure 3. Number of surveyed educators who reported each of the following successes and challenges of the current schedule in open-ended responses



Notes: See key terms for definitions of increased access to electives.

Source: Authors' analysis of Beaverton School District middle school educator survey data.

These successes and challenges of the schedule impact instruction, student supports, student learning, student mental health and well-being, and educators and are discussed throughout the report.

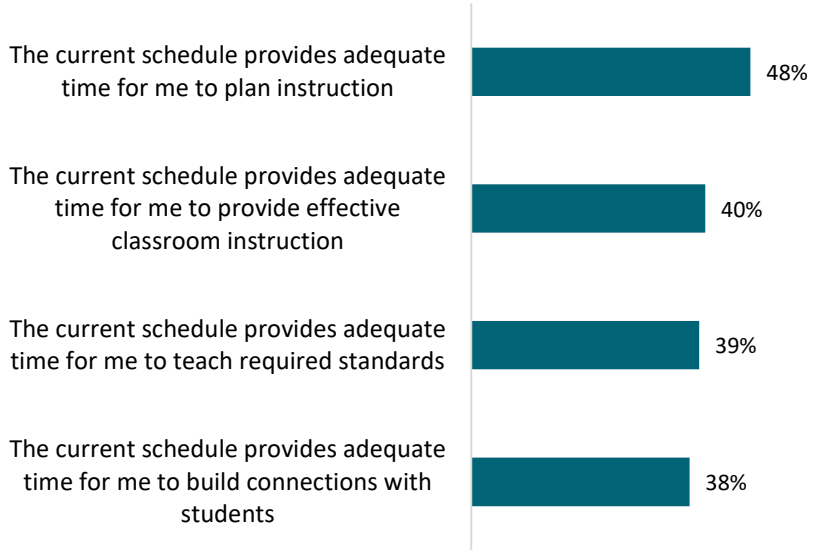
Impact on Instruction

This section describes educator and student perceptions of classroom instruction under the current middle school schedule.

Educators reported that the schedule does not provide favorable conditions for instruction

Overall, educators did not perceive the current BSD middle school schedule to be favorable for their own instructional practices. Fewer than half of educators surveyed reported that the schedule provided adequate time to plan or provide instruction, to teach required standards, or to build connections with their students (figure 4).

Figure 4. Percent of educators who agreed or strongly agreed with the following statements about instruction



Notes: Total number of responses vary for each survey question. Only teachers were asked to respond to the first three statements, while all educators were asked to respond to the final statement (on connections). See appendix tables A1, A2, A3, and A4.

Source: Authors' analysis of Beaverton School District middle school educator survey data.

These findings suggest that the current schedule may impede the district's ability to implement two goals described in the district's strategic plan: equitably implementing a high-quality curriculum and consistently using high-leverage teaching strategies in all content and courses.

Short class periods and large numbers of students per teacher may hinder effective instruction and teacher ability to build connections with students

In open-ended survey responses, 85 educators out of 377 who responded to the survey indicated that class periods were too short, while another 52 described the class sizes and/or teacher caseload (numbers of students per teacher) as too high. Seventy educators wrote that the schedule limited their ability to build connections with students and 18 educators reported that the schedule limited their ability to provide meaningful feedback to students. A selection of their responses follow.

"I'm not exaggerating, simply stating a fact, when I say that I'm responsible for teaching DOUBLE the content, and DOUBLE the students, with a record-low amount of time given to any group of students. I can't be nearly as effective in my instruction when the workload is so much higher. I definitely can't form the strong connections with 200 students that I previously formed with 100 students, and that breaks my heart. Building strong communities and meaningful connections used to be one of my biggest strengths as a teacher, not to mention a source of joy, but now it's impossible. The days are spent in survival mode."

– Social science teacher

"I have removed a lot of interactive projects and group work because I simply do not have enough time for them. This takes away a lot of the engagement in a class that is difficult for many students. I have ten very complex standards to meet and with the short schedules, I have no real idea how to get them all in … This year, we have just ended the first semester and there are large numbers of students who I think I have heard speak once or not at all. I have not shared stories about myself or talked about their weekends or extracurriculars. It is horrible."

– Language arts teacher

"42 minutes is not enough to get through content, allow kids to practice motor skills, make an impact on their fitness, have dialogue about important and required health topics and concepts. All PE & health instruction is just shoving information down their throat just to get through it all."

– PE/health teacher

The short class periods make it difficult or impossible for many teachers to provide instruction that meets their own expectations and the expectations of the district. Teachers expressed frustration that they cannot cover the required content and skill or go into the instructional depth that students need.

"Mondays and Tuesdays, we have 37 minutes. My plan periods do not align. So we're talking 37 minutes in the morning and 37 minutes in the afternoon for prepping for three classes. I mean if I didn't do work at home, my classroom [and] what I would be teaching would look very different. It would be not up to the standard that I want to deliver or that I think out of respect for my students they deserve."

– World languages teacher

"Our language arts-adopted curriculum cannot be taught within a 37-minute period. So, we've been given a curriculum from the district without proper time to implement it."

– Language arts teacher

> *"I think there's two instructional impacts. I think the first instructional impact is we can develop concepts, but we can't elaborate on them in the timeframe that a lesson exists in. And I think the second impact is when we're working with a text, we can get meaning out of a text, but we can't go deep and do multiple readings of a text for different purposes. Both of those are critical skills for getting into high school ... for anything."*
>
> – Social science teacher

Educators who participated in focus groups consistently mentioned that the short class periods make it difficult to build connections with students. Large class sizes also make it difficult for teachers to provide in-class support for students or get to know individual students during the class periods.

> *"I would say the number one success of being a teacher is making connections with students, and when they connect with you, they'll do anything for you, and we can't do that with the schedule. It all comes to relationships with the kids that we are unable to have because of the schedule."*
>
> – Social science teacher

Math and science teachers appreciate the longer class periods available for their courses. However, many of these teachers are sympathetic with other teachers who have less time to teach and connect with students.

> *"With the longer class period, that's something that I really do have the luxury of, is actually working one-on-one with a lot of the students to really try to support all those learners who aren't ready for this math. I actually have that time … to just really walk around and really help support and keep them moving in a positive direction. And I can't imagine doing the same thing in one of the shortened class periods and being able to give even a quarter of the kids the support they need."*
>
> – Math teacher

Students may be overwhelmed with the amount and timing of homework

Teachers discussed several impacts that the schedule may have on student homework. First, teachers cannot coordinate large projects and tests because they no longer have time to collaborate and discuss. Therefore, different teachers end up assigning these projects and tests at the same time. Some teachers report that many students simply do not complete their homework.

> *"And I hear from students when I'm in health that when I have to give homework in health, I see the groan on their face 'cause they're like, 'I have homework in six other classes already, that's all due [tomorrow].' And so I just wonder what the implications of that are, as stress levels of having homework every single night for six different classes."*
>
> – PE/health teacher

"[Students]'re like, 'You should see our homework on Thursday. No one talks about it. And everyone assigns us big projects at the same time because nobody's talking about it.'"

– Social worker/counselor

Teachers are concerned that other teachers are assigning daily homework. One perceived impact is that students do homework from one class during another class or simply do not do their homework at all because they are overwhelmed.

"I see a lot more kids doing homework in my class for other classes and vice versa. I see it all the time because they're just trying to get caught up from what just happened."

– Paraprofessional

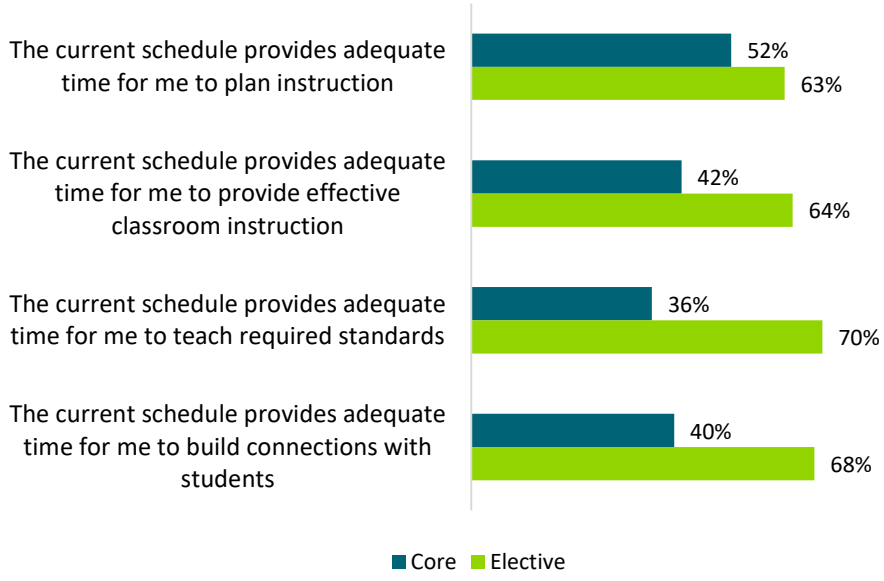
"Even the thought of assigning homework sometimes to finish what you didn't finish … But they're just so tired. This schedule is like, they can't even … By the end of the day, to go home and expect them to do more things and transition yet again, that's not possible."

– Science teacher

Core teachers, and particularly language arts and social science teachers, emphasized the negative impacts of the schedule on their instruction

Core and elective teachers perceive the impacts of the schedule on their instruction very differently. While 70 percent of elective teachers reported that the schedule provides adequate time for them to teach required standards, only 36 percent of core teachers agreed (figure 5). More than two-thirds of elective teachers (68 percent) reported having time in their schedules to build connections with students. However, only 40 percent of core teachers said they believed they have sufficient time to build connections.

Figure 5. Percentage of teachers who agreed or strongly agreed with the following statements about instruction, by course type

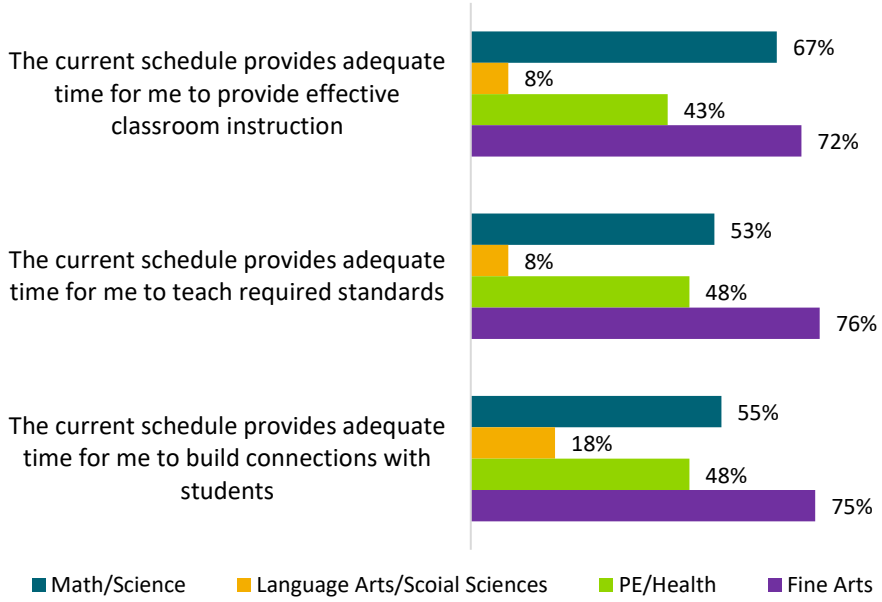


Notes: Total number of responses vary for each survey question. Only teachers were asked to respond to the first three statements, while all educators were asked to respond to the final statement (on connections). See appendix tables A1, A2, A3, and A4.

Source: Authors' analysis of Beaverton School District middle school educator survey data.

Differences in perceptions of the schedule are particularly dramatic between language arts/social science teachers and fine arts teachers. Seventy-two percent of fine arts teachers reported that the schedule allows time for them to provide effective classroom instruction, while only eight percent of language arts/social science teachers reported having adequate time (figure 6). Math and science teachers were considerably more likely than their language arts/social science peers to agree that they had adequate time for instruction, which may reflect the longer math and science class periods.

Figure 6. Percentage of teachers who agreed or strongly agreed with the following statements about instruction, by course content



Notes: Total number of responses vary for each survey question. Only teachers were asked to respond to the first three statements, while all educators were asked to respond to the final statement (on connections). These results include teachers only. See appendix tables A2, A3, and A4. Categories includes teachers who teach math or science or both, and teachers who teach language arts and social science or both but excludes those who teach across content areas (e.g., math and language arts).

Source: Authors' analysis of Beaverton School District middle school educator survey data.

Notably, not all core teachers reported negative impacts on instruction. In open-ended educator survey responses, 18 math and science teachers reported that the current schedule did not greatly impact their own instruction.

> *"Since math has more time than other subjects, I feel like we do have time to meet standards and teach grade level content. However, I feel like this comes at the cost of other subjects not having enough time, especially language arts. Their reading skills greatly impact their ability to engage in math content."*
>
> – Math teacher

There were also interesting differences in opinions of the schedule between math and science teachers. Two-thirds of science teachers (67 percent) reported having time to teach all required content and skills, while only 43 percent of math teachers reported having enough time. This may in part reflect the district's accelerated math curriculum for all students, which complicates the amount of time math teachers believe is necessary for math instruction.

"I'd say, one of the reasons math has 60 minutes is because the district has chosen to continue to go forward with accelerated math, which is impossible, and no one can actually teach it in the time period, unless you have amazing kids. So, that extra time, we need that time to even get close or towards that. But, if the district backed off of [accelerated math for all], then 50 minutes [for a class period] would be fine I think."

– Math teacher

Many fine arts teachers reported that the current schedule is beneficial for their instruction

Some teachers noted in both open-ended survey responses and educator focus groups that the current schedule has positive impacts on their instruction. Most such comments came from fine arts teachers, and many specifically mentioned the positive impacts of having daily classes on their instruction and their ability to build connections with students. Fine arts teachers also perceived smaller caseloads as a positive development.

"I see students every day and am able to reinforce concepts better. They are making more progress than the previous schedule. The daily repetition allows them to learn more effectively and I am covering more content. With the previous schedule, there were weeks when I would see students one day. Connections are equally benefitting from the daily instruction."

– Fine arts teacher

*"I have less preps and less students. *I do not teach 400–600 kids with class sizes of 50+ *I do not have 5–10 preps anymore, only four. *I get the kids every day. It makes a huge positive impact on their behavior in class having consistency that only daily class will provide … Their growth in my elective class grew 3x as much vs every other day. This makes them more excited because they see their growth easier. *Teaching 200 kids daily allows me to actually get to know a lot of my kids better."*

– Fine arts teacher

"I no longer have a case load of 300 and can actually provide my students with real feedback when grading. I see them every day which means I do not have to review everything I teach each time they come to my classroom. After routines are taught, I have plenty of time to teach skills, standards, and projects while also running an art classroom with supplies."

– Fine arts teacher

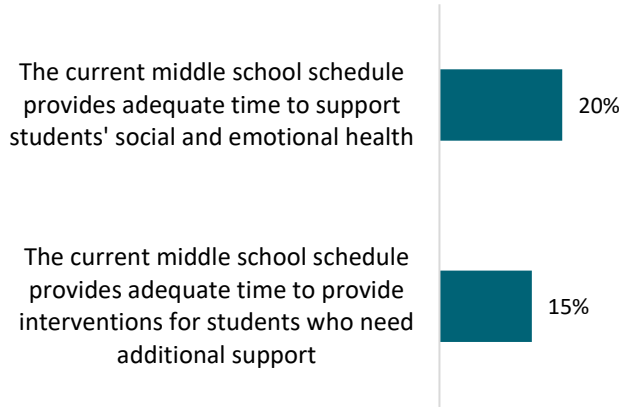
Impact on Student Supports

This student support section describes the effect of the schedule on the district's ability to provide interventions and to support students' social and emotional health.

Educators reported that the current schedule limits interventions and social and emotional support services

Only 15–20 percent of surveyed educators agreed that the schedule allows them sufficient time to provide interventions for students who need them or to support students' social and emotional health (figure 7).

Figure 7. Percentage of educators who agreed or strongly agreed with the following statements about student supports



Notes: Total number of responses vary for each survey question. See appendix tables A5 and A6.

Source: Authors' analysis of Beaverton School District middle school educator survey data.

According to these findings, the current schedule may hinder middle schools' ability to implement at least two of the district's strategic plan goals: implementing evidence-based interventions and implementing strong support systems for students' social and emotional, behavioral, and academic needs.

Educators report very few options for supporting students who struggle academically

Few surveyed educators (15 percent) reported that the schedule provides adequate time to support students who are struggling academically. School-day academic support can be provided within existing classrooms by teachers and support staff members as well as through pull-out support services. Teachers within the classroom are often the most immediate source of student support. Of surveyed BSD educators, 157 indicated in open-ended survey responses that the short class periods and large class sizes make it difficult or impossible to address students' needs for additional supports within the classroom setting.

> *"There is not time for in-class intervention; I have scaffolded content, but I don't have time to help students during class time who need reading or writing intervention. Prior to this, there was time for small groups during the core block time."*
>
> – Language arts teacher

> *"Middle school teachers do not have time to intervene. Some teachers have classes of 35+ students in a 37-minute class. Without instruction, that leaves one minute per student for intervention. Students are not receiving the interventions they need [and] more interventions are needed than ever before."*
>
> – Special education teacher

As discussed in more detail in the *Impact on Educators* section, the lack of teacher teams that share common groups of students across course subjects makes it challenging to identify students who need support and to strategize about how to support these students.

> *"Before this current schedule, we had grade level teams. Teachers regularly were able to meet because they had a common plan[ning period] and/or their classrooms were close together. It was easy for us to find out from each other if a particular student was exhibiting the same kinds of struggles in each of our classes and to have quick chats about what we each were doing that was working or not. It's much more difficult to do this now."*
>
> – World languages teacher

In addition to the ability to support students within the classroom, educators discussed how few services to help students who are struggling academically are available outside of the classroom.

> *"Regular reading intervention classes and math Intervention classes were cancelled from the schedule. Middle school intervention classes are necessary for students who struggle, to support their skill development in preparation for high school."*
>
> – Teacher on special assignment

> *"I have not seen any intervention or remedial courses outside of the SPED department … Many students who need support but do not qualify for SPED fall through the cracks. That is a HUGE number of students we're not serving in the way they need. This is an urgent situation."*
>
> – English language development teacher

Staff members reported finding it difficult to provide social and emotional support services to the students who need them

Only one out of five surveyed BSD middle school educators reported that the schedule provides adequate time to support students' social and emotional health (figure 7). In both surveys and focus groups, student support staff members reported that it is difficult to pull students from their classes to provide needed support. This is due in part to the short classes and may also be due to the need for more extended hallway and lunch/recess supervision duties. Social workers and counselors believe that this increased duty-time takes away from their ability to help students.

"As a counselor I am unable to provide effective counseling due to the class times being so short. By the time I get anywhere with a student, they've missed an entire class period."

– Social worker/counselor

"And then to add that layer for counselors, we were told at a district-level that all middle school counselors were to do 80 minutes of duty every day. We're doing more than that because now we're hallway monitors too and we have a morning duty. Then when I did the math, this was last year, it was like 80 minutes a day. That takes 80 minutes [away from] actual counseling support [time]. I'm kind of doing it on the fly out at recess and lunch."

– Social worker/counselor

Educators and students agreed that advisory class content could be improved by integrating it into other courses

While some students enjoy advisory class, nearly all students who commented on advisory class in focus groups said that advisory is not a good use of time. Students noted that that some of the lessons are interesting, but most of the class time is not productive. The class provides time for many students to do homework and socialize, but the twice-a-week class makes the rest of the schedule more confusing and cuts into the time for other courses. According to students, most of the advisory class content could be integrated into courses such as health or social science.

"Advisory cuts into the school day. I like it, but I struggle to find what I'm supposed to be doing in advisory after the early activity."

– Middle school student

"I'm not gonna lie. I don't really learn that much in advisory, and I feel like it's kind of pointless. We just use that time to talk with our friends. I feel like it should be more like a study hall."

– Middle school student

"I think {advisory}'s useless. Most of the topics that are taught are important but could be taught in other subjects."

– Middle school student

In focus groups, educators suggested integrating the content of advisory class into other courses. They said this would be advantageous for several reasons. First, removing advisory class from the schedule would provide more time for other classes and reduce the number of transitions. Second, it would provide a more consistent schedule from day to day. Finally, integrating advisory class content into other courses would allow teachers to build better relationships with students when covering delicate social and emotional topics.

"When you have kids in your advisory that you teach later in the day, you're able to reinforce those ideas that they're learning in advisory, like the SEL lessons or the things like that. They come up in just regular conversation about whatever."

– Fine arts teacher

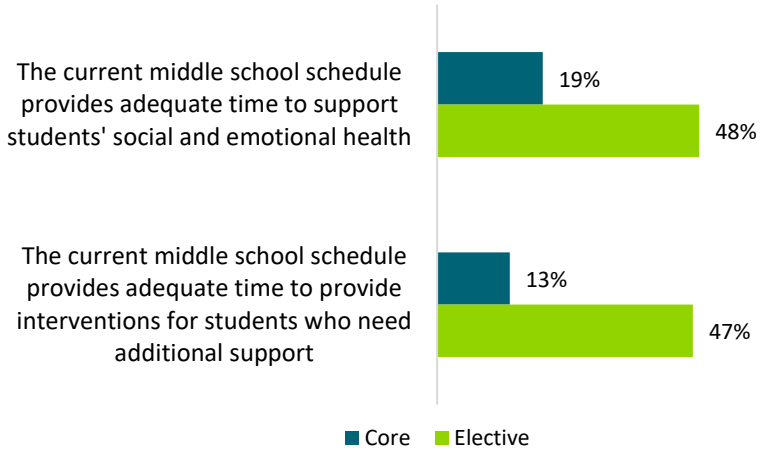
"Most of the students in my advisory class, I do not teach for math … I strongly say, 'Can we please have kids on our advisory that we also teach?' Because it's hard to build a relationship with students two days a week when you do not have them at any other time. So, I feel so strongly about that."

– Math teacher

Elective teachers and particularly fine arts teachers reported fewer negative impacts of the schedule on student supports

There were substantial differences by type of course taught in educators' reported perceptions of the schedule's impact on student supports. Fewer than half of core and elective teachers said they believed the schedule provides adequate time to support student social and emotional health or to offer interventions, but a larger percentage of elective teachers perceive the time available for the supports as adequate (figure 8). Thirteen percent of core teachers reported that intervention time is adequate, while 47 percent of elective teachers agreed. There were similar differences between the proportions of elective and core teachers who said they believed there is adequate time to support students' social and emotional health.

Figure 8. Percentage of teachers, by course type, who agreed or strongly agreed with the following statements about student supports



Notes: Total number of responses vary for each survey question. See appendix tables A5 and A6.

Source: Authors' analysis of Beaverton School District middle school educator survey data.

There were also huge differences by course subject taught in teacher perceptions of student support. More than half of fine arts teachers (56 percent) reported that time for interventions is

adequate, compared to 17 percent of math and science teachers. This is not surprising, given that few students need interventions in elective course content. Half of fine arts teachers (50 percent) believe that the schedule provides adequate time to support students' social and emotional health, while only 20 percent of math and science teachers agree (appendix table A5).

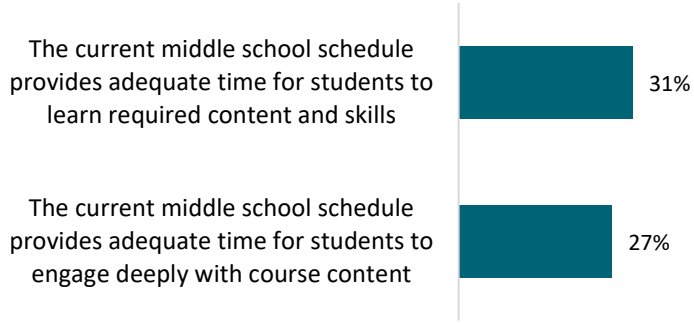
Impact on Student Learning

This section summarizes perceptions of the current schedule's impacts on student learning and engagement.

Educators said they believe that the middle school schedule impedes student learning

The ability of educators to provide effective instruction and connect with students has an impact on student learning and engagement. Thus, schedule impacts on instruction may also impact student learning. Less than a third of surveyed BSD educators reported that the current middle school schedule provides time for students to learn required content and skills or to engage deeply with content that may promote student learning (figure 9).

Figure 9. Percentage of educators who agreed or strongly agreed with the following statements about student learning



Notes: Total number of responses vary for each survey question. See appendix tables A7 and A8

Source: Authors' analysis of Beaverton School District middle school educator survey data.

More than one-hundred educators (105) shared concerns in open-ended survey responses that the schedule does not provide sufficient time for students to engage deeply with course content or to finish their work in class. Some educators shared that it is challenging to design a lesson that teaches content and includes time for students to process or practice the new content and skills. Survey responses also indicate that the short class periods may also not allow sufficient time for teachers to help students with their work in class.

> *"Strictly speaking from a PE standpoint, by the time we get into class, settled, and attendance taken, we have less than 30 minutes to teach and perform activities and skills. This impacts skills mastery paths dramatically."*
>
> – PE/health teacher

"For non-Math and Science classes, students arrive, get settled and then it's time to go. 35–40 minutes does NOT allow a deep dive into anything. For EL students who need extra scaffolding, it doesn't give us time to work with them efficiently."

– Language arts teacher

"Engagement in my classes is off the charts low. I am an extremely experienced teacher who usually has engaged students and very few failures, and last year and this year, the inability to teach in depth or interact with and assist my students appropriately has resulted in huge numbers of disengaged students who are not completing work, and a significant slowdown in the learning even of those who are working hard."

– Language arts teacher

A substantial number of educators (53) reported in open-ended survey responses that students are less engaged with learning and/or are learning less under this schedule. They attribute lower engagement to short class periods that impede effective instruction, the number of classes per day, and the number of transitions between classes.

"It is more difficult for students to engage in learning activities when they are being rushed and stressed by not having enough time. Many students need more time to process how to engage and need more time to be able to connect. Because research tells us that when we connect with students, they will be more likely to engage, which will only enhance their learning."

– PE/health teacher

In focus groups, educators frequently raised the topic of students' inability to stay engaged in each class and throughout the school day. Educators expressed particular concerns that the short class periods are not preparing students for the longer AB block schedule currently in place in comprehensive BSD high schools. Math and science teachers also commented on the inability of many students to maintain focus through their longer classes.

"I mean the schedule doesn't really prepare our kids, especially our eighth graders who are transitioning to high school and are being expected to follow a much longer stamina routine in their classes. They're not building that stamina here with our current schedule. We're really not setting our high school up very well for success either."

– World languages teacher

"I find it challenging to get my students to sustain themselves through the longer period that I do have in math, to allow for that time. I find myself doing a lot of behavior management, rather than being able to do independent work with most of the class in small group reteaching or stuff with the rest."

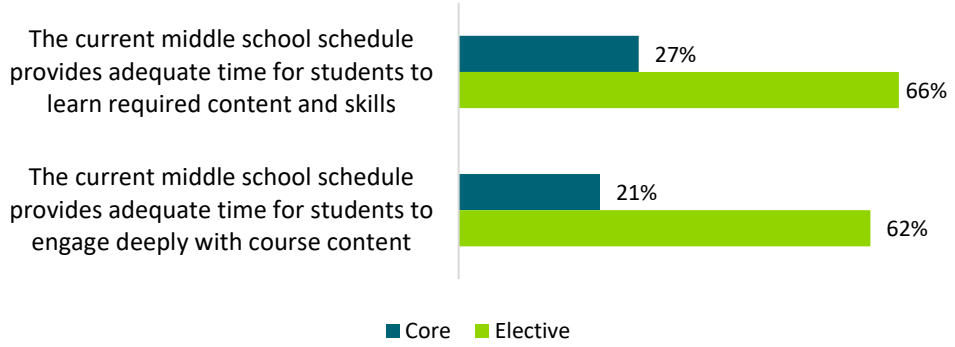
– Math teacher

Educators' perceptions of student learning suggest that the current schedule may make it challenging to achieve several strategic plan goals, including teaching and nurturing cognitive and behavioral skills and ensuring that every student demonstrates progress toward achieving the standards.

Perceived impacts of the schedule on student learning and engagement were strongly associated with teacher course subjects

Core and elective teachers' responses suggest they perceive the impact of the schedule on student learning quite differently. In surveys, 62–66 percent of elective teachers indicated that the schedule provides enough time for students to learn required content and skills and to engage deeply with course content, while 21–27 percent of core teachers shared these beliefs (figure 10).

Figure 10. Percentage of teachers, by course type, who agreed or strongly agreed with the following statements about student learning

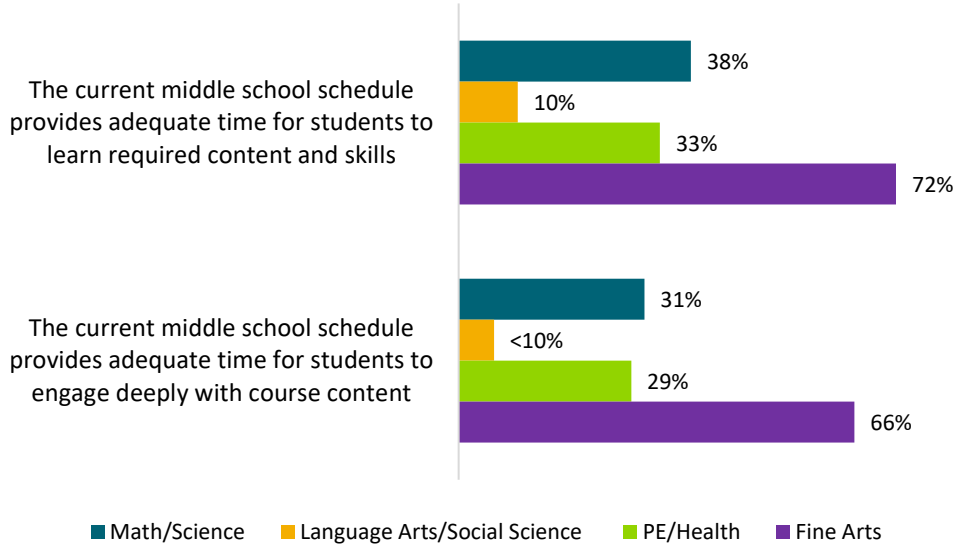


Notes: Total number of responses vary for each survey question. See appendix tables A7 and A8.

Source: Authors' analysis of Beaverton School District middle school educator survey data.

Further breakdown of survey responses by content area reveals that 72 percent of fine arts teachers agreed that students in their classes have adequate time to learn required content and skills, although fewer than half of other subject area teachers and only 10 percent of language arts/social science teachers agreed (figure 11).

Figure 11. Percent of teachers, by course content, who agreed or strongly agreed with the following statements about student learning



Notes: Total number of responses vary for each survey question. See appendix tables A7 and A8. Categories include teachers who teach math or science or both and teachers who teach language arts and social science or both but excludes those who teach across content areas (e.g., math and language arts). One percentage is obscured due to low numbers of responses.

Source: Authors' analysis of Beaverton School District middle school educator survey data.

Both math and science teachers reported perceiving fewer direct impacts from the schedule on students in their classes compared to other core subject teachers. In open-ended survey responses, some math and science teachers highlighted that the impacts of the schedule on student learning are not the same across all subject areas.

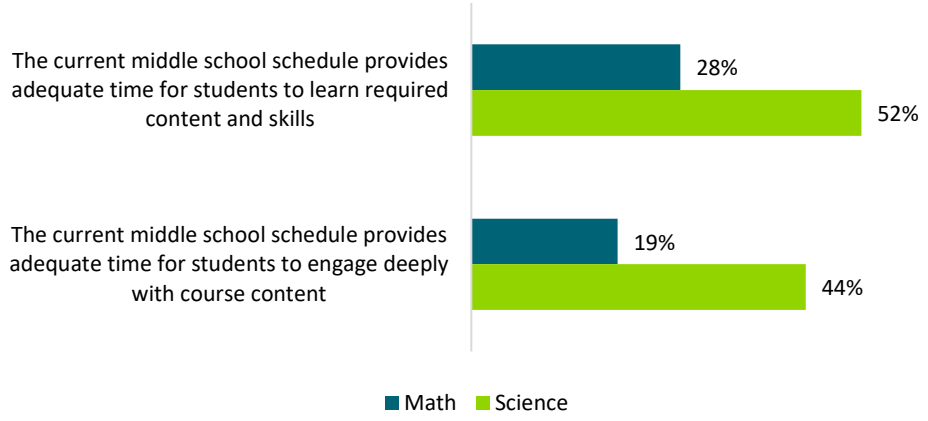
> *"For [my non-math class], by the time my students have heard directions/instruction they have little time to work and by the time they get into a groove, there is little time left in class. For my math class, which is over an hour, I end up with extra time where some kids are finished and I don't have time to move forward. I could give up 5–10 minutes so that all classes had equal amounts of time."*
>
> – Teacher of multiple subjects

Science teachers view the impact of the schedule on student learning more favorably than math teachers despite the equal lengths of their respective class periods. Forty-four to 52 percent of science teachers said they believe the schedule provides adequate time for learning and deep engagement while 19–28 percent of math teachers reported the same (figure 12). As previously noted, this finding may be due in part to the district's accelerated math curriculum for all students, the pace of which impacts the time available for students to learn math.

"I teach science and I find the 60 minutes perfect amount of time, but the other classes are struggling."

– Science teacher

Figure 12. Percentage of teachers who agreed or strongly agreed with the following statements about student learning, by course subject



Notes: Total number of responses vary for each survey question. See appendix tables A7 and A8. This figure includes teachers who teach math only as math teachers and science only as science teachers. It does not include teachers who teach multiple subjects such as math and science or math and language arts.

Source: Authors' analysis of Beaverton School District middle school educator survey data.

Fine arts teachers' opinions of the schedule also varied. In open-ended survey responses, 16 teachers reported that students are more engaged in the fine arts classes they teach while eight fine arts teachers noted that class period lengths are too short.

"The schedule has significantly improved the amount of student learning accomplished in all elective classes. Students are consistently learning and retaining 3 times the amount they did with the previous schedule."

– Fine arts teacher

"Previously, electives in our building were 45 minutes every other day. The new schedule has doubled instruction time and significantly reduced learning loss."

– Fine arts teacher

"The classroom is a revolving door. Kids are always moving to their next class. They are not able to be in the environment long enough to absorb any info or feel they have time to invest in it. It's way too easy for them to give up when things get hard because after all they are in a new class in a few more minutes."

– Fine arts teacher

While some students reported feeling that the current schedule does not offer enough time for learning, others said they like the schedule

Some students and parent/guardians shared concerns about the short class period length and how this may impact students' ability to learn. A few noted that short classes may negatively impact student ability to succeed in high school.

> *"It's not about boring. School is not supposed to be the greatest thing ever. It is about preparation and learning. I do get bored in class sometimes, but I still learn when I'm bored. [The class length that] contributes to learning would be the best option."*
>
> – Middle school student

> *"I would definitely bring up the fact that sometimes we have a little over half an hour just to learn stuff that we are going to carry with us through high school … I don't think a little over half an hour is enough time to fully take in what the teacher is saying."*
>
> – Middle school student

> *"If we had longer classes, that gives us more time to work in class and less homework, which I think all of us could agree, that's much better. It also prepares us for high school. I think it'd be better for that."*
>
> – Middle school student

In addition to feeling rushed through individual classes, some students and their parent/guardians also feel as though they have too many classes per day, reporting that it is difficult to manage so many classes and subjects.

> *"I would like to have only 4 classes per day. You would learn a lot more and school is about learning. We don't have enough time to learn and you can forget homework for 8 classes. The day would feel shorter and you could do work in class."*
>
> – Middle school student

> *"I would change the number of how many classes there are, honestly, because I think it's way too many classes. And you learn stuff, right? Like you learn so much stuff that day. Sometimes you just can't get in your head."*
>
> – Middle school student

> *"We're getting to a point where we might have to pull our daughter and put her in [a different school] or something because of how much anxiety and stress this whole … how crammed everything is. It's just an incredible amount of stress on her. So, it's more of a negative than a positive every day."*
>
> – Parent/guardian of a middle school student

These negative perceptions about the schedule were not universal among students. Some middle school students said they believed the current schedule provides adequate time for them to learn and some of these students (and parent/guardians) shared that they worry that longer classes would result in boredom.

> *"I don't mind the class length. It is enough time to learn without being bored."*
>
> – Middle school student

> *"In one of my kids' classes, they join math and science and it ends up being a very long class. I would not be in favor of [longer classes]."*
>
> – Parent/guardian of a middle school student

Impact on Student Behavior and Well-Being

This section documents the impacts of the schedule on student behavior and well-being as well as participant suggestions for improving the schedule to enhance student well-being.

Educators reported concerns about the impact of the numerous daily transitions on student behavior

Student mental, social, and emotional health; behavior; and overall well-being have been a particular concern of educators across the country since students returned from distance learning. BSD educators indicated they understand that the reasons for their concerns are multi-faceted, but some suggested that the schedule is contributing to particular negative student mental, social and emotional health, and behavioral outcomes in the district.

Nearly three-quarters of surveyed educators (71 percent) indicated that the schedule has led to an increase in disruptive hallway behavior (appendix table A9). In open-ended survey responses, 103 surveyed educators documented the negative impacts they believe the schedule is having on student social and emotional health and 80 described the negative impacts that the schedule may be having specifically on student behavior. Educators said they are concerned that the short classes and frequent transitions are hindering students' ability to self-regulate. Thirty-three surveyed educators noted that the schedule may be especially harmful for students with special needs.

> *"Students have less time to interact in the classroom with their peers or in the hallways/at lockers. They are rushed between classes with no time for interacting with peers. Emotionally, they are exhausted with the workload of 8/9-class days. Behaviorally, they are more disruptive and have shorter attention spans because they haven't been able to interact with their peers and/or have been sitting in desks for 8 classes a day."*
>
> – PE/health teacher

"As somebody who works with students on the autism spectrum and also a lot of students who have experienced trauma, they're already heightened, and to go through this constant changing of classes, and transitioning can be very stressful. And it just amplifies all the more, their stress and cortisol. They never have the chance to really come down. Then, if you're in that heightened state, you're not learning."

– Counselor/social worker

"There are so many transitions during the day! ... Keeping up with that many classes is A LOT even at the high school level. College students take between 3-5 courses on average. We are asking our students who have little to no executive function to manage 8 classes a day?!?"

– Science teacher

While there are many causes of disruptive middle school behavior, BSD middle school educators reported that the number of transitions during the day leads to behavioral disruptions. Schools have tried to mitigate problematic hallway behavior through measures such as one-way-only hallways, prohibiting locker use during the day, and extended hall monitoring duties for counselors and other staff members.

"Spending so much of their school day in transition causes students stress and anxiety. Halls are where much of the bullying and negative interactions between students happen. In addition, we know that developmentally the more transition, the more dysregulated kids are, and dysregulated kids are kids who act out."

– Language arts teacher

"Now it feels like the kids are on a conveyor belt, being rushed from class to class all days. We're not connected, and that's showing up big time in student behavior. Anxiety levels are at an all-time high. I've never seen so many kids burst into tears in class, often when asked very simple, low-stakes questions. The disrespect for teachers, peers, and the school in general is outrageous."

– Social science teacher

The number of transitions in the current schedule may make it challenging for the district to achieve its strategic plan goals of creating strong systems of support for students' social and emotional and behavioral needs, teaching and nurturing cognitive and behavioral skills, and ensuring that every student feels safe.

Students would appreciate more time between classes, but educators shared reservations

One of the most common topics of discussion in the student and family focus groups was the short time available to get from one class to the next. Although four minutes may be sufficient time to move between some classes, many students reported that it is not enough time to use the

bathroom, use lockers, or to move between classes in distant parts of the school. One-way hallways, crowded hallways, and the location of bathrooms and lockers were frequently-cited barriers to effective movement in the hallways.

> *"I go from social studies to PE and I have barely enough time to get there even speed-walking. That is even without talking to other students or dawdling. I think we should have a little more passing time."*
>
> – Middle school student

> *"I think it's 4 min for us. I don't really like that that very much. For example, I go from third period, which is on one side of the school, and then I have PE and I'm doing a health unit right now, which is upstairs, and the very other opposite corner of the school. And I genuinely do not have enough time to go from one point to the next. And we have one-way halls, which also slows us down."*
>
> – Middle school student

> *"We have 4 minutes, and maybe another minute would be a lot better … We aren't allowed to go to the restroom the first 10 minutes or the last 10 minutes of class and a line builds. So sometimes you won't be able to go to the restroom that period at all."*
>
> – Middle school student

As a result of these passing times and school rules around locker use, many students report not using their lockers at all during the day and carrying heavy backpacks and other supplies for most of the school day.

> *"My son is in jazz band, and he has an instrument that is very large and he also plays [other instruments]. So he has to put away all of this equipment and then run to class with some of his instruments. So again, the 4 minutes are not enough, because he is always late, and for when he gets to—it's just so complicated to deal with. And most of the time he doesn't even go to his locker to get his notebooks."*
>
> – Parent/guardian of a middle school student

> *"The lockers are old and take time to open. I just carry my books around. If I go to my locker, I'm late to class."*
>
> – Middle school student

> *"My backpack is super heavy—27 lbs. I can't go to my locker when I need to. I am getting back problems. It keeps getting heavier because I can't put stuff away and keep adding."*
>
> – Middle school student

Students' concerns about tardiness may be exacerbated in middle schools without class bells. In those schools, teachers are responsible for letting students out on time and sometimes do not, cutting into passing time. Many of the students in focus groups reported feeling stress about their inability to get to some of their classes on time.

> *"When we get a tardy or something, the people who didn't, who haven't gotten tardies get rewards, and that makes sense. But if we get one tardy, and it's because our [previous] teacher forgets to let us out of class [on time], and then we're a minute late or 10 seconds late … We were not tardy because we wanted to be … We were tardy because of the teacher."*
>
> – Middle school student

> *"Sometimes in PE, you go to your locker to change your shoes, like if you have sandals on. Then you have to come back. And sometimes you might be late and you might get detention for that."*
>
> – Middle school student

While some educators said they understand the need for breaks for students during the school day, few advocated for longer passing times between classes. Educators suggested that some of the poor student behavior was due to the return from distance learning (which coincided with the new schedule) in 2021–22. However, there are also concerns about longer passing times potentially leading to more problems in the school hallways.

> *"Four minutes is kind of the sweet spot, if kids are getting to class because they can, in four minutes. Three starts pushing it a little bit."*
>
> – Social science teacher

> *"We have too many passing times. We have a lot of naughty behavior that happens. We had five minutes last year. There's a reason we came down to four minutes. I would never urge for more time. The kids take advantage of that time. It's almost always when we did have had fights in the building and mostly it's my kiddos, but they meet up in the bathroom and do naughty things. It provides more opportunity for kids to meet and make choices that we'd like them to not make. So again, I would urge for less transitions and not more time."*
>
> – Social worker/counselor

Educators also believed the schedule could be improved by providing common passing times. The current schedule with varying class times (due to the longer math/science block) results in some students transitioning while others are in class. Educators said this can cause distractions for the students who remain in class. A number of educators suggested that equal-length class periods with common passing times would allow for all teachers to be out in the halls supervising transitions and reducing problematic student behavior.

"So, if we were going to move to a seven-period schedule where all of them are equal, we would have seven or six passing periods or whatever, but they would all match. So, all the teachers are out together. All the kids are out together."

– Math teacher

"The amount of transitions. There's so many for students and because of the wonky math/science schedule, there's transitions happening all the time and it's so disruptive in my classes when I'm like, oh, around this time I can't do anything because it's going to be so obnoxious out in the halls."

– Social science teacher

Lunch and recess provide a welcome break for students, but some students find that the time to eat and socialize is inadequate

According to some students, the time available for lunch and recess is too short for them to eat their lunch. This appears to be particularly true for students whose classes are a long way from the cafeteria, for students who may be slower eaters, and for students who wait in the hot lunch line to select their lunch. The time available for lunch and recess was also a primary concern of parent/guardians we spoke with during focus groups.

"We should get a little more time for lunch and recess, because I feel like I have to go to my locker before lunch to go get my lunch box and waste a lot of time. It feels like I only have 5 min and I'm not really able to eat much."

– Middle school student

"There are a lot of students who get hot lunch and you have to wait in line and it takes time and then you find a seat. There is not much space to eat peacefully. Recess is short. It is the only time to have a break and it's only 15 minutes."

– Middle school student

"Kids have to wait in line, go to their locker, grab their lunch bags. Even if they don't, just getting through the halls down there, it's an absolute nightmare. By the time [my daughter] finds a place to sit, she is literally scarfing, inhaling her food. She tells me other kids don't have a chance to eat."

– Parent of a middle school student

Both educators and students emphasized that electives provide an opportunity for students to explore new content, decompress, and socialize

A majority of surveyed educators (58 percent; appendix table A10) said they believe it is important for students to have two daily electives, with 53 percent of core teachers and 77 percent of elective teachers emphasizing the importance of two electives per day. According to elective teachers, and especially fine arts teachers, elective classes offer students a break during their school day, including time to explore content, move around, socialize, and take a break from the academic rigor of other

courses. Survey and focus group input from elective teachers suggests that electives may help to address students' social and emotional needs.

> *"Students have an opportunity to take their favorite class, regardless of the subject, every day. That means there is at least one thing they can be excited about in their school day."*
>
> – Fine arts teacher

> *"And the other neat thing with a lot of the electives and PE, we are SEL. The kids learn how to take those emotions in the arts and find an avenue to put that and make it go somewhere, how to take their emotions …They can put it into something, whether they're putting it in a drawing or blowing it through an instrument."*
>
> – Fine arts teacher

> *"One student told me he loved having shorter classes and more breaks—it gave him a chance to reset more often. I know that is not true of all of them. But having two electives is soooo meaningful—I wouldn't want to change the schedule if we had to change that."*
>
> – Fine arts teacher

Students, during focus groups, overwhelmingly supported having two electives per day. Students expressed that they like having some choice about what courses they take to prepare themselves for high school and college and/or simply because they enjoy the content. Other reasons that students shared for enjoying electives included having a break from core classes, interacting with friends, and having less academic rigor.

> *"Electives are the classes you pick to pursue. Core classes can be fun too, but electives make it better."*
>
> – Middle school student

> *"There is a ton of work in middle school. I love to succeed in school. Electives help you have fun and avoid burnout. They are a bit of a break from stress of school."*
>
> – Middle school student

> *"What I like about electives is that I can talk with my friends, and we're doing the work. But the work is a little bit more chill."*
>
> – Middle school student

Most of the students and the parent/guardians who participated in focus groups indicated that students enrolled in at least one of their elective choices and often both. Some of the students who did not get one of their top choices still enjoyed the electives that were assigned to them. At least a few students would appreciate more elective options, such as dance, as well as additional options for art, technology, and language electives. A couple of students mentioned a desire for electives that

rotate throughout the year in grades 6 through 8, to enable more exploration of subjects and ensure they do not get stuck in an elective course they do not enjoy.

> *"You have to take four electives in 6th grade. I would like 7th and 8th to be more like that to have more options. I was online in 6th grade, so I didn't have that option."*
>
> – Middle school student

Impact on Educators

This section describes the impact of the schedule on the time available for educators to collaborate with each other and communicate with families. We also discuss the self-reported impacts of the schedule on educators' mental health and well-being.

Educators said the current middle school schedule leaves little time for them to team with one another

One of educators' most expressed concerns about the schedule was that it does not allow them time to collaborate with each other in any systematic way during school hours. This concern was reflected in both survey and focus group data.

District leadership has articulated that common planning times and shared groups of students should be a priority for schools. According to district leaders, the current schedule allows for planning times that exceed the contractual minimums in the collective bargaining agreement. However, this does not ensure that there are *common* planning times for educators across subject areas or among educators who share the same students.

School administrators reported that they cannot always schedule common planning time for educators across subject areas within the confines of the current schedule. The number of classes per day and the longer math and science classes make it difficult or impossible for school administrators to design a schedule that both provides common planning time for teachers across subject areas and that allows educators to share common groups of students. Surveyed educators expressed frustration with the schedule's impact on teacher teaming.

> *"As an experienced and highly competent building schedule builder, I was still unable to guarantee common plan[ning time] for the inter-disciplinary teams that we were barely able to cobble together this year … Common plan[ning] is limited in scope."*
>
> – School administrator

> *"When many of your core teachers are teaching multiple grade levels on multiple schedules—it is hard to coordinate these conversations and experiences."*
>
> – School administrator

> *"It is really hard to meet with the three different people that I am supposed to be collaborating with during my plan time since they all have different schedules and plan times due to us teaching multiple grades."*
>
> – Social science teacher

Twenty-eight percent of educators reported that the schedule provides adequate time for them to collaborate with other educators.[3] The lack of adequate time to team has impacted educator ability to systematically discuss students during "kid chats"—an opportunity for educators to meet to discuss concerns about individual students or groups of students, share strategies to address their concerns, and to monitor student progress.

> *"Previously when we'd have kid chats by team, we'd be able to get through as many kids as we needed in however much time we had. And now it's four kids per grade level, maybe once a month."*
>
> – Science teacher

> *"Teaming took care of a lot of issues that we're now facing, especially with mental health support, keeping track of kids, providing a cohesive behavior plan for students and just I feel like a lot more kids fall through the cracks because if I'm trying to handle my 140 kids by myself, and I can't keep track of them all. But if I know I have a team, and you're really working on this kid and you're really working on this kid, we can make a lot more strides. And I think a lot of that's been lost."*
>
> – Science teacher

> *"There are kids who should be referred that are not being referred, and they're just going to be passed on another year, and maybe another year."*
>
> – Teacher of multiple subjects

Some educators shared concerns that because time to collaborate is limited, they are unable to coordinate contacts with families. This makes it challenging to plan for and hold parent-teacher conferences.

> *"[Before the implementation of this schedule], we could take on certain kids and then that parent had me as the point person. And I could talk to two or three other teachers, get their input, and contact that parent. Now any parent could have potentially eight teachers contacting them in any given day…I would have no idea if she contacted a parent about the same thing that I'm contacting [about] unless we already had an established relationship ... So I think parents are also getting, I'm speaking for parents, but annoyed with the amount of emails that they get from so many people."*
>
> – Science teacher

[3] Nearly half (46 percent) of educators also reported that the schedule does not allow time to participate in professional development, but this was not widely discussed in the survey or focus groups (see appendix table A14).

Many educators reported the schedule makes them feel isolated, stressed, and ineffective

Prior to the implementation of the current schedule, experienced BSD middle school educators relied on relationships with colleagues to support each other. Experienced educators may still have such relationships outside of common planning time, but most teachers reported there was little or no time for teaming across subjects. Educators expressed concerns that the lack of time to team is leading and will continue to lead to educators feeling unsupported and leaving the school, district, or profession.

> *"This schedule is extremely isolating for staff. It feels like we are all alone. This is due to the lack of teaming and the lack of common plans with our teaching partners."*
>
> – Social science teacher

> *"I was in a different [BSD middle school] building last year and we had a lot of new and first year teachers and they were all just floundering. Multiple people quit teaching after last year as a new teacher just because if you are on a content team, you have people to help you with content. But if you're on a team for the kids, you have people to help and support you with those behaviors."*
>
> – Science teacher

Eighteen educators directly attributed some negative educator mental health outcomes to the schedule in open-ended survey responses. Many of these responses, as well as those conveyed during focus groups, suggest that many educators are overwhelmed and feel ineffective, due in part to the schedule. Some educators said they are considering leaving the school or field as a result.

> *"It's the number of students we have per day. The kids that I normally could help that I cannot help and I see them failing and I don't have anything in me to help them. I cried in front of my class this year because I was just feeling such frustration because they feel frustration, and they just can't do it. We're failing these kids."*
>
> – Social science teacher

> *"As a lifelong educator, I really don't know if I will continue teaching next year … I love it too much, but I dread … I mean stress, anxiety … I am done with this schedule and this intensity, it's not worth it anymore, and that's really sad to me because this was my passion and my career, but I don't think I want to do it anymore. And if it doesn't change next year … I feel for all the rest of my colleagues that are here, because it's not good for the kids."*
>
> – Language arts teacher

"I've talked to so many middle school teachers in the last two years who have said, I have never felt this overwhelmed, this stressed out, this powerless to do my job and do my job well. I think there's been a lot of teachers who have left. I think this year, we will continue to see a lot of teachers who leave … It's provided work conditions for teachers that are untenable. Anecdotally, I know a lot of folks who are struggling with mental health issues because of this."

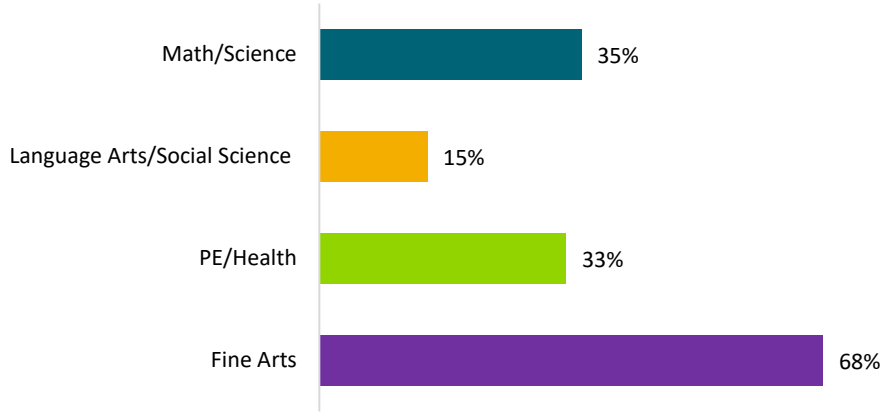
– World languages teacher

Based on evaluation findings from BSD educators, the current schedule may impede the ability of the district to implement the district's strategic plan goal of providing consistent, systematic teacher collaboration time to assess student data and improve practice.

Fine arts teachers reported fewer negative impacts of the schedule on their ability to collaborate with each other

More than two-thirds of BSD middle school fine arts teachers (68 percent) reported that they are able to collaborate with other educators. In contrast, 15 percent of language arts and social science teachers reported that they have time to collaborate (figure 13).

Figure 13. Percent of teachers who agree or strongly agree with that the schedule allows them to collaborate with other educators, by course content



Notes: Total number of responses vary by course content. See the details on numbers of responses in appendix table A13. Categories includes teachers who teach math or science or both, and teachers who teach language arts and social science or both, but exclude those who teach across content areas (e.g., math and language arts)

Source: Authors' analysis of Beaverton School District middle school educator survey data.

Fine arts teachers reported in the survey and in focus groups that the common middle school schedule has created some new opportunities for collaboration with other elective teachers in the school and across the district.

> *"I am now able to collaborate with my colleague across the district regularly. Because the schedule is the same amongst the middle schools, we can DM, email, or call each other because our plans line up! It makes life easier."*
>
> – Fine arts teacher

Participant Schedule Preferences

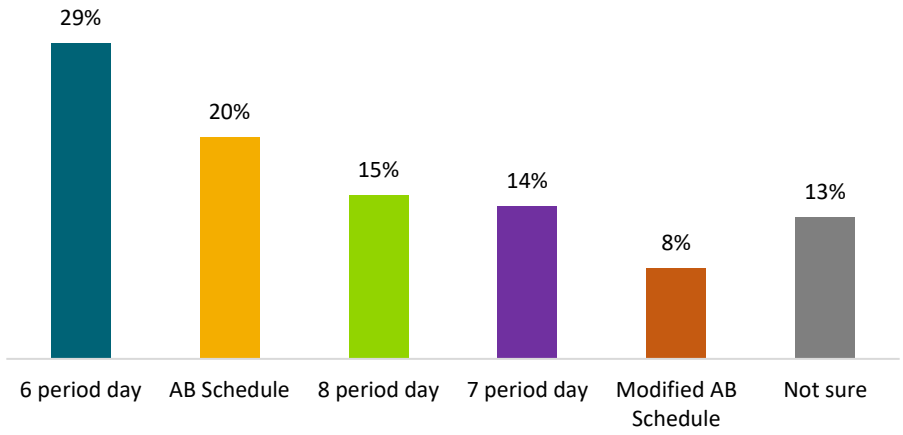
This section summarizes the schedule preferences of educators, students, and parent/guardians who participated in this study. These preferences represent a wide range of experiences, perspectives, and opinions of the schedule and, as such, sometimes conflict. Nonetheless, there were some areas of relative agreement about ideal class period length among educators.

There was no clear consensus among educators on a preferred middle school schedule

The lack of clear preference about the middle school schedule is clear in the educator survey responses as well as focus groups. Educators noted that there are pros and cons to every schedule and that no single schedule will satisfy everyone. In the educator survey, the most common schedule preference was for a 6-period day (figure 14), selected by 29 percent, followed by an AB schedule, selected by 20 percent.[4] Schedule preference varied by school, with educators at some schools sharing a clear preference while at another school there were similar preferences for each of the five schedule options that appeared in the survey. Educators' preferred schedule may be based on experiences with past schedules, schools' student populations, the existence of special programs, educators' role within the school, and a host of other factors.

[4] The educator survey asked BSD middle school educators what schedule they would recommend for the future and provided space for educators to add more detail about their preference. Open-ended survey comments offered critical context for educator preferences and in some cases prompted evaluators to recode their preference to align with the description. For example, this included recodes for educators who selected "8-period day" but described a block schedule with a total of eight periods—four every other day.

Figure 14. Percentage of educators who prefer each type of schedule

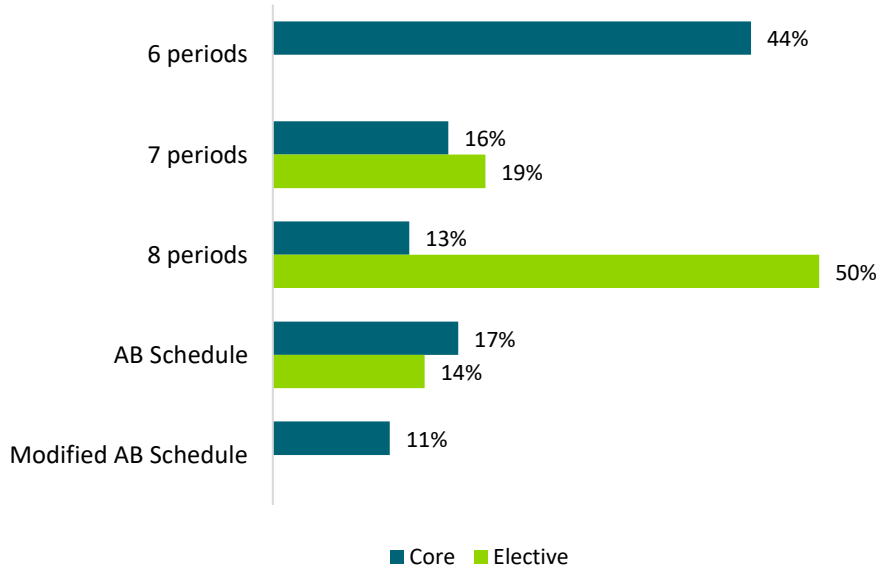


Source: Authors' analysis of Beaverton School District middle school educator survey data.

Core and elective teachers prefer different types of schedules

Core and elective teachers reported vastly different experiences with the current schedule, and these experiences likely impact their schedule preferences. Teachers' schedule preferences in the educator survey differed starkly according to the type of courses they teach. Core teachers were more than three times as likely to prefer a 6-period day (44 percent; figure 15) than an 8-period day (13 percent) Conversely, 50 percent of elective teachers prefer an 8-period day.

Figure 15: Percentage of teachers, by course type, who preferred each type of schedule



Notes: Some results are not presented here due to low number of responses.

Source: Authors' analysis of Beaverton School District middle school educator survey data.

Though lacking consensus on a preferred schedule type, surveyed educators provided a variety of suggestions in the survey open-response spaces. Some involved maintaining aspects of the current schedule, while others included ideas for changing the current schedule. A few of these suggestions directly or indirectly conflict. In open-ended survey responses, ten to fifteen educators recommended each of the following:

- Eliminate advisory class or reduce time for advisory class
- Prioritize a schedule that allows for teacher teams
- Reduce the length of the math and science class block to provide more time for other subjects
- Continue to offer two electives at a time
- Offer only one elective at a time
- Continue to offer PE daily

Educators and students generally agreed that equal class period lengths would reduce some of the problems associated with the current schedule, and many educators suggested 55–60-minute class periods as ideal

As discussed previously in the Impact on *Impact on Student Learning* section, students shared a variety of opinions on the length of their class periods. A substantial number of students said they would like to have longer classes than they currently have (other than math and science). Some students recommended having classes with equal lengths to increase consistency and reduce confusion. However, other students expressed contentment with the current length of classes and said they are worried that they would be bored in longer classes.

> *"I think it is nice to have longer classes because you're able to get more work done without having to finish it early instead of do it on another day and maybe able to do longer assignments."*
>
> – Middle school student

> *"I feel like each single class should be the same, the same length of time, so that we know how long the courses are."*
>
> – Middle school student

> *"I like my schedule. It's not too long to where I get bored, but long enough to get my work done."*
>
> – Middle school student

Asked specifically about an AB block schedule, students at every school were willing to consider it. While some students expressed worry about long classes leading to boredom, other students indicated they see benefits in the AB schedule. Parent/guardians also had some concerns about an

AB schedule but noted that an AB schedule in middle school may help to prepare students for the AB schedule in BSD high schools.

> *"An AB schedule would be really nice. I could keep stuff in my backpack or at home. We would have more class time to learn. I forget things after all of my classes. I'm not worried about only having classes every other day because we would have more time to learn each day."*
>
> – Middle school student

> *"High school has a block schedule. I'd love for him to have exposure to that and be aware of how that goes. And if it is a longer class period, I want him to have practice sitting and paying attention, and if he can't do that, I don't want to throw him in the high school and be, 'Oh, figure it out.' Right?"*
>
> – Parent/guardian of a middle school student

Most educators in focus groups described ideal class period length as 55–60 minutes. Educator suggestions ranged from a minimum of 45 minutes, to accommodate equal class period lengths across subjects, to a maximum of 90 minutes on a block schedule, accompanied by modifications to instruction. Most math and science teachers indicated they perceive their current class period lengths of 58 to 63 minutes to be sufficient. However, many said they are still concerned about inequitable class period lengths across subjects and the number of transitions for students.

> *"Right now we have 60 or 65, which is a teeny bit long … It's just like 55. It was kind of a sweet spot. But 48, I think I would I advocate for that if we were to all have that. It would bring consistency, changing at the same time, all teachers out in the hallway because half of them aren't teaching."*
>
> – Math teacher

> *"This is not the right schedule. This is not fair to any of our kids or our staff members. But having 60 minutes for math is phenomenal and that is a good amount of time and that works really well."*
>
> – Math teacher

Value of a Common Middle School Schedule

One key reason for implementing a new middle school schedule in 2021–22 was to create a common middle school experience across all nine comprehensive BSD middle schools. This common schedule replaced schedules that differed across schools. Another reason for implementing the common middle school schedule was to ensure that students transferring between two district middle schools would have access to the same course offerings with the same class period lengths.

Many educators reported that the common middle school schedule is inequitable across schools

Although there was some variation among educators, most BSD educators did not perceive a common schedule as important, and many perceived the common schedule as inherently inequitable. This sentiment emerged during educator focus groups at each of the nine middle schools. Educators described different student populations, numbers of students, resources, and special programs that make each middle school unique. A schedule and electives that works well at one school may not meet the needs of another school. Some educators noted that the option schools in the district do not have to abide by the current schedule because they too have fundamental differences.

> *"Things are different at different middle schools without the schedule. And we have option schools that have completely different schedules. So, it feels weird [that] the core, what five, six middle schools have to all be on the same schedule. Yet some at a highly proficient middle school can have intervention, but other schools have to fit the schedule even though it doesn't work for them. It goes against what equity is. We're going back to equality, not equity."*
>
> – English language development teacher

> *"They keep talking about equity. And to me, equity doesn't mean everybody has the same thing. Isn't the definition of equity is it's not equal? It's each school has what they need for the population that they're serving. So if we're serving a demographic that needs X, Y, Z, then we should be providing those things for them. Not that we're the same across the district. So, I feel like you have to look at the demographic of your building and say, "Okay, this is what these students need." And provide those supports for those students. And it might be different building to building."*
>
> – Math teacher

With regard to electives, educators shared that they would like to see options that align with student interests and needs. Educators at one school reported that a particular current elective option is consistently ranked low in student forecasting, suggesting that it is less popular and may not be a great option for that school. Educators at other schools indicated they would like to bring back popular elective classes that are no longer offered under the current schedule. Across schools, there was interest in additional elective options such as languages other than Spanish and home economics/cooking.

> *"That's the whole reason we did this. We all have to be the same. We used to have the most incredible Home Ec. program here, but we were the only one who had Home Ec. anymore. And so we had to get rid of that because nobody else had Home Ec."*
>
> – Science teacher

> *"If there's a big group of kids that are really interested in science here, having a science-type elective or another tech elective or something would be great. Whereas in another school, the interest might be dance or something. So yeah, I agree with having the same number of choices per subject basically, but maybe not exactly the same class."*
>
> – Fine arts teacher

Educators did perceive value in courses that would allow students to transfer between schools without major disruption to learning. That is, they advocated for a set of common courses with the same curriculum taught in the same order.

> *"At least the comprehensive schools need to have very similar schedules. Because we do have a transient population that bounces between the schools that are close to each other … I think we'd have to really look at the numbers of how many students move schools in the school year, in our district … I think there's quite a few. But I guess that would be just looking at the numbers. If it's more than 20%, than the need for a common schedule for the comprehensive [middle schools] makes a lot more sense. If there isn't a huge transient group, then that's not a big issue."*
>
> – Language arts teacher

According to district data, 213 BSD middle school students (2.8 percent of BSD middle school students) transferred between comprehensive middle schools in 2021–22.

Suggestions for Improving the Schedule

Based on the extensive input from educators, students, and families collected via the educator survey and a total of 20 focus groups, this study has identified eight key priorities for adjusting the middle school schedule. Some of the suggestions are based on data collected during this evaluation and a body of educational research. Suggestions without a body of research rely more heavily on data collected in BSD and common middle school scheduling practices. These suggestions may help the district to achieve its 2022–23 strategic plan goal of optimizing school schedules and systems to support student success.

Suggestions 1–4 are supported by strong research as well as data collected in BSD:

1. **Develop a scheduling framework that prioritizes common planning time for teaming** and **sharing common groups of students across content areas**. Many BSD educators reported that they believe they could effectively address many of the current schedule's challenges if they had the opportunity to collaborate with their colleagues and to discuss how to support the needs of individual students. Research documents a plethora of positive student and teacher outcomes associated with regular teacher teaming. Additionally, this suggestion aligns with the district's strategic plan goal of providing consistent, systematic teacher collaboration time to assess student data and improve practices.

2. **Minimize the number of transitions between classes.** Educators and students agreed that the current number of classes per day can be stressful for students. Cognitive literature suggests that interruptions to learning are associated with negative impacts for both teachers and students—particularly neurodivergent students. Research also suggests that fewer daily classes may reduce overall student workload and stress. A schedule with fewer classes per day and/or classes of equal length would reduce the number of daily transitions and may help to reduce student stress/dysregulation, disruptive hallway behavior, and the amount of homework.

3. **Integrate advisory course content into other courses and eliminate advisory class period.** Both educators and students shared a belief that advisory class time could be used more effectively if its content were integrated into other courses. Research suggests that integrating social and emotional learning content into other courses may be more effective than teaching this content in an advisory class. Eliminating advisory class would also create more day-to-day schedule consistency and provide more time for other courses.

4. **Ensure that all students have at least 20 minutes of seat time to eat lunch.** Students and parent/guardians suggest that the time currently available for lunch does not allow all students time to visit their locker, use the restroom, obtain and eat their meal at a reasonable pace, decompress, and socialize with peers. BSD currently provides 35 minutes for a combined lunch and recess period (including five minutes for transitions). Research suggests that students who have less time to eat consume less of their meal and are less likely to choose to eat fruits. The literature recommends at least 30 minutes for a lunch period (not including time for recess) to ensure all students have at least 20 minutes of seat time to finish their meal.

The next suggestion is based on data collected from BSD middle schools as well as limited research on class period length:

5. **Consider the ideal length of class necessary for effective instruction and learning.** In focus groups, educators consistently suggested a class period length of 55 to 60 minutes. Most were willing to accept shorter class periods if all class period lengths were equal and there were fewer transitions. The research on class period length is largely inconclusive and does not recommend a particular length but indicates there may be an association between longer classes, favorable teaching conditions, and connections at school. Implementing class periods of at least 55 minutes that meet all state requirements and do not extend the school day may be challenging, but should be considered as a goal.

The report's final suggestions (6–8) are based solely on data collected from BSD educators, students, and families during this evaluation. While there is no body of research to support these suggestions, they represent consistent themes emerging from educator surveys, educator focus groups, student focus groups, and/or family focus groups.

6. **Consider implementing equal class period lengths**. Educator survey and focus group results suggest that longer class periods for math and science have contributed to perceptions that

those subjects are considered more important than others. Equal class period lengths might improve these perceptions and provide more learning time for most course subjects. In addition, equal class periods with common passing times may reduce distractions for students currently in class as others move between classes. Common passing times for all students might also reduce disruptive hallway behavior as more teachers can be in the hallways to monitor transitions.

7. Continue to offer two electives. Most educators, families, and students who participated in the study said they appreciate having two electives. Continuing to offer two electives allows students to explore new content and to choose what they are most interested in learning, which might improve engagement with school. Scheduling time for two electives would be particularly important for English language learner and special education students, who might not otherwise be able to take any electives. Continuing to offer two electives in combination with other suggestions listed here might require some creative scheduling such as offering elective classes every other day or moving to an AB block schedule with four classes every other day.

8. Consider whether a common middle school schedule is equitable. BSD middle school educators indicated they do not believe there is a single schedule that can meet the needs of all schools, educators, students, and their families. Educators expressed concern about the lack of flexibility in the common middle school schedule to offer elective options and supports that align with student interests and needs. We suggest that the district assess whether providing some parameters and working with each school to develop a schedule within that structure would better address each school's unique needs and promote equity.

"It also goes back to that idea of, 'where are our priorities?' It's awesome that kids get to have two electives each day. And it's great that they get have PE. But at the expense of not knowing how to read … I mean, we've got to kind of look at where our priorities are because you can't have everything. And this schedule is prioritizing something over other things that are root problems and that's causing it to feel like chaos."

– Language arts teacher

Appendix A: Survey Results by Question

The following tables present the results of each educator survey question overall, by course type (core, elective), and by course content (math/science, language arts/social science, PE/health, fine arts, special education, other teachers, and math and science teachers individually). When the number of respondents giving a particular answer is less than five, these numbers are not reported to preserve anonymity of respondents.[5]

Impact on Instruction

Table A1. The current middle school schedule provides adequate time for me to plan instruction

	# who agree or strongly agree	# who disagree or strongly disagree	Total respondents
Overall (teachers only)	112	121	233
Core teachers	71	66	137
Elective teachers	25	15	40
Math/science teachers	43	23	66
Language arts/social science teachers	17	33	50
PE/health teachers	11	10	21
Fine arts teachers	16	9	25
Special education teachers	6	12	18
Other teachers	19	34	53
Math teachers only	25	12	37
Science teachers only	17	10	27

[5] To avoid double-counting educators who teach more than one content area, the results exclude these individuals on a case-by-case basis. Thus, an educator who teaches both math and science is counted once as a math/science teacher but excluded from the numbers of math teachers.

Table A2. The current middle school schedule provides adequate time for me to provide effective instruction

	# who agree or strongly agree	# who disagree or strongly disagree	Total respondents
Overall (teachers only)	93	138	231
Core teachers	57	79	136
Elective teachers	25	14	39
Math/science teachers	44	22	66
Language arts/social science teachers	4	45	49
PE/health teachers	9	12	21
Fine arts teachers	18	7	25
Special education teachers	-	-	18
Other teachers	16	36	52
Math teachers only	23	14	37
Science teachers only	20	7	27

Table A3. The current middle school schedule provides adequate time for me to teach required standards

	# who agree or strongly agree	# who disagree or strongly disagree	Total respondents
Overall (teachers only)	91	141	232
Core teachers	49	87	136
Elective teachers	28	12	40
Math/science teachers	35	31	66
Language arts/social science teachers	4	45	49
PE/health teachers	10	11	21
Fine arts teachers	19	6	25
Special education teachers	-	-	18
Other teachers	22	31	53
Math teachers only	16	21	37
Science teachers only	18	9	27

Table A4. The current middle school schedule provides adequate time for me to build connections with students

	# who agree or strongly agree	# who disagree or strongly disagree	Total respondents
Overall (teachers & other educators)	115	191	306
Core teachers	55	81	136
Elective teachers	26	12	38
Math/science teachers	36	30	66
Language arts/social science teachers	9	40	49
PE/health teachers	10	11	21
Fine arts teachers	18	6	24
Special education teachers	6	12	18
Other teachers	20	31	51
Math teachers only	19	18	37
Science teachers only	16	11	27

Impact on Student Supports

Table A5. The current middle school schedule provides adequate time to support students' social and emotional health

	# who agree or strongly agree	# who disagree or strongly disagree	# who are not sure	Total respondents
Overall (teachers & other educators)	67	238	26	331
Core teachers	26	97	12	135
Elective teachers	22	18	6	46
Math/science teachers	13	42	9	64
Language arts/social science teachers	6	-	-	50
PE/health teachers	7	-	-	21
Fine arts teachers	14	9	5	28
Special education teachers	-	-	-	19
Other teachers	16	-	-	58
Math teachers only	-	27	-	36
Science teachers only	8	-	-	26

Table A6. The current middle school schedule provides adequate time to provide interventions for students who need additional support

	# who agree or strongly agree	# who disagree or strongly disagree	# who are not sure	Total respondents
Overall (teachers & other educators)	50	272	7	329
Core teachers	18	-	-	136
Elective teachers	21	-	-	45
Math/science teachers	11	-	-	64
Language arts/social science teachers	-	46	-	51
PE/health teachers	-	-	-	21
Fine arts teachers	15	10	-	27
Special education teachers	-	-	-	18
Other teachers	11	-	-	57
Math teachers only	-	-	-	36
Science teachers only	6	-	-	26

Impact on Student Learning

Table A7. The current middle school schedule provides adequate time for students to learn required content and skills

	# who agree or strongly agree	# who disagree or strongly disagree	Total respondents
Overall (teachers & other educators)	76	168	244
Core teachers	37	100	137
Elective teachers	31	16	47
Math/science teachers	25	40	65
Language arts/social science teachers	5	46	51
PE/health teachers	7	14	21
Fine arts teachers	21	8	29
Special education teachers	-	-	19
Other teachers	17	42	59
Math teachers only	10	26	36
Science teachers only	14	13	27

Table A8. The current middle school schedule provides adequate time for students to engage deeply with course content

	# who agree or strongly agree	# who disagree or strongly disagree	Total respondents
Overall (teachers & other educators)	67	177	244
Core teachers	29	108	137
Elective teachers	29	18	47
Math/science teachers	20	45	65
Language arts/social science teachers	-	-	51
PE/health teachers	6	15	21
Fine arts teachers	19	10	29
Special education teachers	-	-	19
Other teachers	18	41	59
Math teachers only	7	29	36
Science teachers only	12	15	27

Impact on Student Behavior and Well-Being

Table A9. The current middle school schedule has led to an increase in disruptive student behavior in the hallways

	# who agree or strongly agree	# who disagree or strongly disagree	# who are not sure	Total respondents
Overall (teachers & other educators)	182	50	25	257
Core teachers	74	20	9	103
Elective teachers	11	-	-	30
Math/science teachers	38	12	6	56
Language arts/social science teachers	26			34
PE/health teachers	-	-	-	13
Fine arts teachers	7	-	-	17
Special education teachers	12	-	-	17
Other teachers	27			41
Math teachers only	20	-	-	31
Science teachers only	17	-	-	23

Table A10. It is important for students to have two electives each school day

	# who agree or strongly agree	# who disagree or strongly disagree	Total respondents
Overall (teachers & other educators)	156	113	269
Core teachers	60	53	113
Elective teachers	24	7	31
Math/science teachers	28	26	54
Language arts/social science teachers	19	23	42
PE/health teachers	-	-	17
Fine arts teachers	-	-	19
Special education teachers	8	9	17
Other teachers	27	18	45
Math teachers only	16	14	30
Science teachers only	10	12	22

Impact on Educators

Table A11. The district considered educator input prior to implementing the current schedule

	# who agree or strongly agree	# who disagree or strongly disagree	# who are not sure	Total respondents
Overall (teachers & other educators)	41	209	30	280
Core teachers	9	92	8	109
Elective teachers	20	-	-	33
Math/science teachers	5	46	7	58
Language arts/social science teachers		-	-	37
PE/health teachers	-	-	-	14
Fine arts teachers	12	-	-	18
Special education teachers		13	-	20
Other teachers	11	33	6	50
Math teachers only	-	28	-	33
Science teachers only	-	17	-	23

Table A12. The transition to the current BSD middle school schedule has gone smoothly

	# who agree or strongly agree	# who disagree or strongly disagree	# who are not sure	Total respondents
Overall (teachers & other educators)	39	229	12	280
Core teachers	10	-	-	109
Elective teachers	16	-	-	33
Math/science teachers	5	-	-	58
Language arts/social science teachers	-	-	-	37
PE/health teachers	-	-	-	14
Fine arts teachers	10	8	0	18
Special education teachers	0	-	-	20
Other teachers	11	-	-	50
Math teachers only	-	-	-	33
Science teachers only	-	17	-	23

Table A13. The current middle school schedule provides adequate time for me to collaborate with other educators

	# who agree or strongly agree	# who disagree or strongly disagree	Total respondents
Overall (teachers & other educators)	87	227	314
Core teachers	37	97	134
Elective teachers	25	14	39
Math/science teachers	23	42	65
Language arts/social science teachers	7	41	48
PE/health teachers	7	14	21
Fine arts teachers	17	8	25
Special education teachers	-	-	18
Other teachers	18	34	52
Math teachers only	13	24	37
Science teachers only	8	18	26

Table A14. The current middle school schedule provides adequate time for me to participate in professional development

	# who agree or strongly agree	# who disagree or strongly disagree	Total respondents
Overall (teachers & other educators)	141	168	309
Core teachers	64	70	134
Elective teachers	24	15	39
Math/science teachers	38	25	63
Language arts/social science teachers	19	31	50
PE/health teachers	7	14	21
Fine arts teachers	17	8	25
Special education teachers	12	6	18
Other teachers	23	28	51
Math teachers only	18	17	35
Science teachers only	18	8	26

Appendix B: Supplemental Research

This section presents additional research on components of the schedule that evaluation participants identified as important. The literature review that appears earlier in the report focuses on outcomes associated with schedule changes: the impact of class period length, class size, and number of transitions. During evaluation data collection, study participants emphasized the importance of teaming and a longer lunch period, and advocated for integrating social and emotional learning content into academic courses instead of including it in a distinct advisory class. This appendix presents the literature available on these three priorities.

Impact of Teaming

The most consistently-discussed topic during educator focus groups and the survey was the current schedule's impact on teachers' ability to team. Teachers (particularly core teachers) were concerned that the schedule reduces their ability to team effectively and negatively impacts the quality of their work and the school climate in general.

Teaming has been a key part of middle school education since the early 1990s and is currently a staple of the middle school structure (Arhar, 1997; Boyer & Bishop, 2004). Research on teaming is fairly extensive and overall strongly suggests that teaming has many positive benefits for both students and teachers.

Research shows that students have higher academic achievement across core content areas (Arhar, 1997; Erb, 2000) and higher scores on math and reading standardized tests (Flowers et al., 1999; Flowers et al., 2000; Ronfeldt et al, 2015) at schools with significant teaming. The positive effects of teaming on student outcomes are particularly salient for low-income students (Erb, 2000). Teaming helps equalize achievement for students across all levels of economic privilege (Arhar, 1997). Schools with teams also report better social and emotional outcomes for students such as higher engagement at school (Arhar, 1997; Erb, 2000) and lower stress (Erb, 2000).

Teachers benefit considerably from being able to team. Research has shown that in comparison to schools that do not team, teachers at schools with regular collaboration report a better work climate and higher job satisfaction (Arhar, 1997; Flowers et al., 1999; Erb, 2000). Teachers at schools with teaming also report feeling more effective and empowered in their positions (Arhar, 1997; Erb, 2000). Teaming helps to increase communication between educators and parents, something that is often a struggle to achieve (Flowers et al., 1999). Some research has even demonstrated that when teachers can team, they can better tailor their teaching to the needs of individual students and allocate their time to support the students who have the greatest need (Erb, 2000).

Overall, research on teaming shows very positive effects for both students and teachers. This research also highlights that for teaming to be effective, it should be deliberately planned and implemented. Common planning time for teachers on the same team is essential. One of the biggest benefits of teaming is the opportunity for teachers to coordinate lessons and discuss student progress, challenges, and other key information in a way that allows them to improve student supports (Erb, 2000; Flowers et al., 1999). Common planning time is the best way to achieve this—

research shows that among schools in which teachers team, those with more common planning time had greater gains in student achievement than those with less common planning time (Flowers et al., 1999).

The effectiveness of teaming is influenced by the size of the teams. Schools with fewer students per educator team tend to have more positive outcomes. Most of the literature agrees that teams sharing 90–100 students (or fewer) have the largest positive impact. Some research finds that teams with more than 120 students yield diminished benefits (Erb, 2000), while other research suggests that teams can still have notable positive effects at 120 students or more (Flowers et al., 2000). It is clear that the number of students per team is a relevant factor to consider when implementing effective teaming.

Impact of Lunch Period Length

In focus groups, a substantial number of students and parent/guardians noted that the existing time for lunch/recess often does not provide sufficient time for students to eat. We reviewed the literature on lunch periods to better understand the most important criteria in promoting healthy lunch consumption. Research indicates that at the middle and high school level, students need 20–25 minutes of seat time[6] to calmly eat until they are full and recommends 30 minutes, including transition time, to ensure all students have at least 20 minutes to eat a healthy lunch (Cohen et al., 2016).

Students and parent/guardians in the focus groups reported that students often have 15 minutes or less to eat after accounting for the time it takes to get to the cafeteria and, if applicable, to wait in the hot lunch line. This BSD finding aligns with many studies that demonstrate that students often have notably less time to actually eat their food than the length of the lunch period would suggest (Bergman et al., 2000; Buergel et al., 2002).

Research consistently finds that when lunch periods are too short for students to calmly eat their food, they simply eat less food and tend to sacrifice fruits and vegetables first (Gosliner, 2014; Cohen et al., 2016), which could be detrimental to their development during adolescence. Additionally, the increased nutrition and physical activity associated with longer lunch times has been connected to better academic performance (Cohen et al., 2016). Together this research suggests that the 35-minute combined lunch/recess periods (including 5 minutes for transitions) may not, in practice, provide enough time for students to finish a healthy lunch.

Impact of Social and Emotional Learning/Advisory Class

One of the focus group participants' more consistent suggestions about potential changes that could improve the schedule was to integrate advisory course content into other classes and remove the advisory period altogether.

[6] Seat time refers to time spent sitting at a table and eating and does not include the time walking to and from cafeteria or waiting in line for food.

The effectiveness of social and emotional learning curricula is well-studied, and a comprehensive literature synthesis by Domitrovich et al. (2017) highlights how well-implemented social and emotional learning curricula are effective tools for improving both academic and social and emotional outcomes for students. There is also research demonstrating the effectiveness of social and emotional learning at the middle school level in particular (Green et al., 2021). The role that advisory periods play in the effective implementation of social and emotional learning curricula, however, is a distinct question that necessitates its own review of the literature.

Targeted research on the impact of advisory periods is relatively scarce. The research that does focus on advisory periods, however, suggests that while personalized and social and emotional learning-focused interactions with students yield positive academic and social and emotional benefits (McClure et al., 2010), distinct advisory periods do not improve academic or social and emotional outcomes for students (McClure et al., 2010; Stawick, 2011). Other research even suggests that social and emotional learning curricula that is integrated directly into course content as opposed to in a distinct class may be more effective at improving student outcomes (Moore McBride et al., 2016). Overall, these findings indicate that a distinct advisory class is not necessary for students to gain the benefits of social and emotional learning content.

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