

A Review of Literature Exploring the Impact of Recess on Academic, Behavioral, and Social Domains

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Abstract: *Recess is a mainstay in schools. It is assumed recess has positive impacts on the academic, behavioral, and social experiences of youth. In this systematic literature review, we explored empirical studies that examined these areas. We provide a synthesis of the literature to assist researchers and clinicians in designing effective interventions. Overall, findings indicate that recess may indirectly positively influence academic outcomes and benefits students' social engagement, but there is mixed evidence if recess directly improves problematic behavior outcomes.*

Keywords: Recess, Academics, Behavior, Social

INTRODUCTION

Recess is a crucial component of the school day, as it provides a break from schoolwork and gives students a chance to play, socialize, and engage in physical activity. Research suggests that recess is not only a time to play, but can also directly impact the classroom environment and how students perform academically. Beyond giving both students and educators a break in the day there is evidence suggesting recess is beneficial in numerous ways, such as improving students' classroom attention (Brez & Sheets, 2017), physical activity (Ridgers et al., 2010), and classroom behavior (Barros et al., 2009). There has been a nationwide push to replace recess with more academic time but there are advocates for keeping it as a mainstay in the school schedule, particularly in middle and high school (Zavacky & Michael, 2017). This literature review focused on three major aspects of recess: its academic, behavioral, and social components. More specifically, we wanted to investigate if there is evidence that recess effectively impacts the academic, behavioral, and social outcomes of students.

THE PURPOSE OF RECESS

Before engaging in our review, we needed to consider what the field at large perceives as the purpose of recess. The Centers for Disease Control and Prevention (CDC) defines recess as a “regularly scheduled period within the school day for physical activity and play that is monitored by trained staff or volunteers” (CDC & SHAPE America, 2017). Principals have reported that recess is helpful for releasing energy, improving social skills and physical activity, but also presents a risk for student injuries to occur due to poor playground environments and untrained adult supervision (Simon & Childers, 2006). Beard (2018) examined teacher and administrator

perspectives on the role of recess, identifying what they believe the value and purpose of recess is through interviewing ten teachers and five administrators. Teachers reported the purpose of recess was time for children to play in an unstructured manner, giving them time to socialize and release energy which enables them to refocus for class work. Teachers reported the value of recess was to release stress for themselves and students, to act as a reinforcement tool and promote a positive environment as well as improve student character and socialization. Similarly, the administrators reported the purpose of recess was unstructured free time enabling students to play, release stress, socialize, and take a break. They reported the value of recess was improving social skills outside of academics, improving relationships with teachers and peers and to promote their well-being and growth. Both teachers and administrators converged on the idea that recess was a critical part of the school day. Taken together, it appears that adults tend to value recess as a function of the school day that centers around improving students' capacity to learn and their social skill development outside of the classroom.

It makes sense that recess is generally designed by administrators and other professional school staff, as they hold advanced degrees in education and are responsible for designing the school day to optimize student learning. However, the students who are playing at recess may hold different views than adults on how they would like to spend this time. Since recess is designed to benefit the students, their perspective on the purpose of recess should be taken into account. To investigate this further, Massey and colleagues (2019) conducted a qualitative meta-study to determine the purpose of recess in the eyes of first through sixth-grade students by examining the meta-theory, meta-methods, and meta-data analysis of various studies. They found that most of the research-related goals were geared toward improving physical activity, but students often want recess to be a time for social engagement. This presents an issue moving forward for designing and implementing recess strategies. This discrepancy may limit the efficacy of recess programs which are only focused on improving the physical activity of students, and underscores the importance of taking students' perspectives into account when designing recess activities. The authors also note that since social activity is a primary driver in students' perception of recess, it is critical to address marginalized students who are at a higher risk of being bullied at recess as they may be more likely to have negative experiences at recess and not receive the full benefits of this break in the day.

As it appears in the literature, the stated purpose of recess varies depending on who you ask but aligns with the academic, behavioral, and social aspects of students' experiences. Therefore, it is useful to the field to explore how recess impacts these three domains. Next, we describe our methodology for exploring the literature to determine what evidence exists to support, or not support, the notion that recess does impact the academic, behavioral, and social outcomes of students.

METHODS

To determine whether recess affects academic, behavioral, and social outcomes of students, we conducted an extensive literature search. The literature search was conducted using the ProQuest database, accessed through the University of Montana's library system. The literature search was carried out in two phases: the initial search, from April 28th, 2022 to August 26th, 2022, and the search following reviewer feedback, which took place from June 19th, 2023 to July 14th, 2023. We used combinations of key words and subjects of "recess", "education", "academics", "behavior", "middle school", "playground", "classroom", "classroom management", "disruptive",

“disruptive class”, “disruptive behavior”, and “classroom discipline”, with specifiers of “interventions”, “behavior”, “safety”, “structured”, “unstructured”, “middle school”, “strategies”, “education”, “physical activity”, “social”, “gender”, “supervision”, “grades”, “academic achievement”, “math scores”, “reading scores”, “peers”, “aides”, “breaktime”, “socializing”, “social-ecological”, “meta-analysis”, “global”, “peer relationships” and “recess strategies”. There were no limitations placed on journals to allow for discovery of research from a variety of academic fields. Both qualitative and quantitative articles were eligible for inclusion. To determine inclusion of an article, abstracts were read and it was determined if the work clearly addressed our variables of whether recess affects students’ academic, behavioral, and social outcomes.

The search was limited to peer-reviewed articles published to academic journals and dissertations available in the database. The authors wanted to ensure high-quality, peer-reviewed evidence. We utilized dissertations for our review as there were, at times, limited search results from peer-reviewed journals which pertained to our research aims. Additionally, we allowed for international peer-reviewed journal publications to provide our review with results from school cultures other than the United States. We included experimental studies as well as meta-analysis in our inclusion criteria.

Exclusion criteria included abstracts that did not quantitatively or qualitatively address the research question of how recess influences the academic, behavioral, or social outcomes in schools. Once an inclusion determination was made, the articles were read and summarized. When reading all meta-analyses, systematic reviews, and experimental articles, we would review articles mentioned in each to obtain clarity of the cited research and additional information pertaining to our research aims. Upon completion of the searches, 132 articles were found to be relevant. We omitted in-depth summarization of articles where the research focus was on other parts of recess, including detailed supervision techniques, ways to enhance physical activity at recess, and specific interventions for structuring recess. Of the remaining articles, we briefly summarized the findings of 11. Using these resources, the results of the academic, behavioral, and social outcomes of recess were synthesized.

RESULTS

THE IMPACT OF RECESS ON ACADEMICS

As a part of the academic school day, recess benefits the academic portion of school in some manner or another. Even though students aren’t typically learning multiplication tables or new vocabulary words during recess, the act of playing itself is complementary to the learning environment of the classroom. Hill (2014) compared the ratio of classroom instructional time to unstructured recess time and its relationship to reading scores. The reading scores were averages drawn from the State of Texas Assessments of Academic Readiness (STAAR) test scores of fourth and fifth grade students in 146 Texas Title I schools, and qualitative telephone interviews were conducted with fourth and fifth-grade teachers. Additionally, the author obtained qualitative data of the teacher’s perceptions of how recess impacts their classrooms. The quantitative results showed positive correlations between reading scores and a higher recess to instruction ratio. This suggests that reading scores increased when the number of recess minutes were closer to the number of instructional minutes. For the qualitative results, teachers stated that recess benefitted the classroom by enhancing students’ social skills and attention in class due to these breaks during the day. These results indicate that more recess, not less, may be helpful for improving academic performance. In a similar light, Becker and colleagues (2014) found evidence that active

movement can indirectly benefit early academic achievement in children in a Head Start program. They found that active movement was related to higher levels of self-regulation, and higher self-regulation associated with higher early literacy and math achievement.

Similarly, Owen and others (2018) explored whether movement one hour prior to a class lesson would lead to higher levels of classroom lesson engagement, regardless of a lunch recess prior to the lesson. Just over 2,000 year-eight students were recruited across 14 Australian secondary schools to wear accelerometers one hour prior to a math lesson and complete a questionnaire following the lesson. There were a variety of different periods during the hour prior to math, as this was determined by each school's specific schedule. Data were collected in three sessions across the academic year. Their results indicated that moderate levels of physical activity were associated with higher levels of self-reported classroom engagement. Interestingly, they found that students reported being less engaged in the math lesson specifically following a recess break, and less engaged after a lunch break compared to other scheduled lessons. These mixed results potentially suggest that any sort of movement may be helpful for classroom engagement, but it may not necessarily have to be specific to recess. The authors did not investigate whether math scores changed over the data collection period, so it can only be speculated that increased engagement may lead to improvement in the academic realm.

Finally, Walker (2009) explored whether breaking up instructional time with recess breaks would influence Dynamic Indicators of Basic Early Literacy Skills (DIBELS) oral reading fluency abilities in 37 second-grade students in two separate classrooms. One classroom participated in a three-hour long instructional block with no recess break, while the other classroom participated in a three-hour instructional block that was broken up by recess into two smaller instructional blocks, for nine weeks. The results showed no significant difference in the oral reading fluency abilities in the two classrooms, suggesting that early morning recess did not improve this academic ability. However, the author conducted qualitative interviews with students and teachers regarding the link between recess and learning. Both teachers and students converged on the idea that recess is helpful for getting physical activity, socializing, taking a mental break, and having fun at school. Teachers and students were mixed on whether they believed recess was related to learning. Overall, the author notes that it is not the specific timing of recess in the day that is important, but rather the security of having the recess break at all during the day.

ATTENTION

The idea that recess gives students a break to play and not worry about schoolwork has long been the source of justifying it in the school day, yet more school districts are tightening policies around keeping recess in the school day in favor of replacing it with more academic time. But, if students get no breaks, how might they be expected to pay attention in class and benefit from the added academic lessons? The link between recess time and attention in the classroom is an area of particular interest, as it can offer direct evidence for why keeping recess in schools is not just important for physical and social health of the students, but how it can help in the academic realm as well. This link has been observed in students as young as preschool, where preschoolers were observed as less fidgety on recess days compared to non-recess days (Jarrett et al., 1998) as well as were more on-task in class directly following an outdoor play session (Lundy & Trawick-Smith, 2021). However, there is also evidence that active breaks show no significant impact on students' attention, yet it does not appear to be detrimental to them and it promotes good physical health (Infantes-Paniagua et al., 2021). Therefore, this area of research appears promising for the advocacy of keeping recess in the academic school day.

Brez and Sheets (2017) investigated whether there were measurable differences in children's attention and creativity before and after an unstructured recess period. They took a sample of 99 third through fifth grade students in two separate school districts. Attention was tested by reading a passage, and creativity was tested by the Alternate Use Task. Both tasks were completed by the students prior to lunch recess and upon returning from lunch recess. Their results concluded that there was a significant increase in sustained attention in students following recess, and marginal, but not significant, increases in creativity following recess. The authors note that focused attention is helpful for carrying out more complex cognitive tasks, and suggest that playing at recess could be a pathway to improving higher-order cognitive abilities. There is some qualitative evidence to support the idea that unstructured activities stimulate creative play in preschoolers (Kiewra & Veselack, 2016), suggesting that recess time may indeed be a time in the school day to foster creativity.

In a similar light, the level of effort one must put into listening is crucial to how well one can pay attention and absorb information, and is important for learning in a classroom. Due to this, Lund and colleagues (2017) investigated whether more recess would lead to less listening effort in elementary students in the classroom. Two males and females were each selected from 43 Kindergarten and 1st grade classrooms in two North Texas schools, totaling 163 students. The control school had one 15-minute recess per day, and the intervention school had four 15-minute recesses per day. Each student completed a dual-task activity: listening to and repeating long lines of numbers correctly while simultaneously performing a reaction-time task on the computer. Participants performed their tasks once during the morning (prior to recess) and once in the afternoon (after recesses). Comparing the data from the fall to the spring, the control school students had increased listening effort in the afternoon compared to the morning, whereas the intervention school had decreased listening effort in the afternoon compared to the morning. This suggests that more recess breaks may lead to less listening effort, which may lead to better attention in class and better academic performance.

Students are more likely to improve their academic performance when they are “on-task” to the lesson at hand and not “off-task” in the classroom. Stapp and Karr (2018) investigated whether a recess period would increase time spent on-task in a fifth-grade classroom. The authors observed the class consisting of 12 students and coded on-task and off-task behaviors in five-minute intervals prior to and after a 25-minute recess. Their results concluded that each of the 12 students increased time-on-task following recess. Further, 83% of students were primarily off-task prior to recess, and 100% of students were primarily on-task after recess. The authors did not note whether the observations were blinded to the condition or aim of the study. Additionally, the class periods of observation were different before and after recess, with the former condition being the general classroom setting and the latter being a different “special” period (e.g. library, music, etc.). These limitations may suggest that the observed recess effects may not generalize to a regular classroom setting, but overall, giving a recess break may help students focus in on the classroom lesson following the break.

In sum, the evidence provided indicates that recess helps students pay attention and remain on-task in class. Although there is less research suggesting that recess may directly improve academic performance, being on-task and attentive in the classroom leads to absorbing more information and a higher motivation to perform well in school, which lead to better grades. This area of research is certainly worth investigating and is an excellent avenue for continued scientific exploration.

THE IMPACT OF RECESS ON BEHAVIOR

Recess is a time where students can enjoy a certain amount of freedom relative to the rest of the school day, which at times can lead them to engage in undesirable behaviors. No matter the objective of recess, all parties can agree that the top priority is to keep students safe and make them feel safe during recess. This section reviews the current literature on the effect recess has on disciplinary outcomes in schools. A key component of maintaining appropriate behavior is proper adult supervision and playground safety. Despite the importance of this subtopic, we believe it is out of the scope of this review to go into great detail and thus will just focus on how recess affects behavioral outcomes.

RECESS' EFFECT ON DISCIPLINARY BEHAVIOR

Recess is generally seen as a time for students to take a break and play, which also influences their behavior in the classroom. There is some evidence suggesting recess can have similar effects on behavior in children diagnosed with ADHD compared to children without an ADHD diagnosis, where inappropriate behavior was observed more frequently on days without recess compared to days with recess in both groups of students (Ridgway et al., 2003). Another study found that adding fifteen minutes of recess per day decreased office disciplinary referrals (ODRs) and reports of bullying over two years, but the results were not statistically significant (Miller, 2019). These results suggest that recess may have a positive effect on students' disciplinary behavior in school, which strengthens the argument of it being a critical part of the school day.

Barros and colleagues (2009) analyzed class data from the 2001-2002 Early Childhood Longitudinal Study dataset, comparing class-wide behaviors in 8- and 9-year-olds who either received daily recess or didn't receive daily recess. In the dataset, behavior was measured through the Teacher's Rating of Classroom Behavior Scale (TRCB). The authors grouped the amount of recess exposure into two groups: "none/minimal break" or "some recess" and additionally measured the amount of physical education the students received each week. Their results found that students who received "some recess" had better TRCB scores compared to those who received "none/minimal breaks" and 65% of students had PE twice a week or less. Additionally, demographic results showed that students who received "none/minimal breaks" were more likely to be lower income, Black or Hispanic, live in the Northeast or South, and live in a medium-large city. These results indicate that frequent recess may be helpful for classroom management and improve the behavior in students, as well as suggesting the need to make recess more equitable for underprivileged youth.

Interestingly, Erwin and others (2019) found that doubling the amount of recess time in a Kentucky Title I elementary school over the course of two years led to an increase in disciplinary referrals, contrary to their original hypothesis. Their results did indicate, however, that math scores increased following the doubled recess time in school and that male and female students had similar referral numbers. African-American students had more disciplinary referrals than White students initially, but upon adding the second recess break, the disparity between race, gender and referrals lessened to a nonsignificant level. This suggests that even if disciplinary referrals may increase when increasing the amount of recess, there can still be benefits that are seen in the classroom.

Although the amount time spent at recess is important, the quality of recess is also valuable. Massey and colleagues (2021) conducted an observational study investigating whether recess quality influenced teacher-reported behavioral outcomes in students. In a final sample of 352 third-

and fifth-grade students across a diverse sample of elementary schools, teachers completed the Behavior Assessment for Children, Third Edition (BASC-3) reports for up to five randomly selected students in their classes. Observers utilized the Great Recess Framework-Observational Tool (GRF-OT) to gather recess quality data, and students completed the Classroom Assessment Scoring System-Student Report (CLASS) for classroom quality data. Their results found that recess quality did not predict problematic externalizing or internalizing behaviors or school problems, but did predict adaptive classroom behaviors. Recess quality also predicted significant executive functioning problems, resilience and emotional self-control behavioral outcomes. Additionally, increased recess time was associated with lower levels of bullying and less externalizing problems. The authors postulate that recess quality is related to prosocial behavioral health outcomes, but not clinical behavioral problems. They also noted that recess quality leads to better social-emotional outcomes compared to time spent at recess, suggesting that quality may indeed be more important than quantity in this case. Overall, these results suggest that ample recess time may improve bullying and high-quality recess can lead to more desirable classroom behaviors. However, it should not be assumed that recess can replace high-quality behavioral interventions to alleviate more serious behavioral problems.

In sum, there is evidence suggesting that having recess as a consistent part of the academic day can lead to less problematic behavior in the classroom. Although more recess may at times lead to more disciplinary referrals, this could be ameliorated by having adequate recess supervision and clear, enforced universal behavior expectations.

THE IMPACT OF RECESS ON SOCIAL EXPERIENCES

Students themselves state that recess is a time for taking a break from school and socializing with friends, which may or may not include physical activity as a central theme (Prompona et al., 2020). Although that study collected data directly from students in focus groups, there is other evidence suggesting that socialization can be a large part of recess (Amelia et al., 2018; Blatchford et al., 2003; Holmes, 2012; London, 2022; Powell et al., 2016). Pellegrini and others (2005) argue that recess is critical for developing social competencies through game-playing. They have gathered evidence supporting this claim, finding that first-graders' "game facility" predicted their social competence at the end of the year as measured by self-report and teacher ratings (Pellegrini et al., 2002). This section discusses the use of recess as a time for socializing, and specifically, whether recess affects social outcomes.

Coolkens and others (2018) conducted a randomized controlled trial comparing supervised recess to organized recess to examine the effects of students' social behavior, physical activity, and participation. Data was collected by 6-second momentary time sampling intervals for 20 minutes during recess, and student activity was coded through the System for Observing Student's Activity and Relationship during Play (SOCARP). All students received a six-day PE unit on parkour, after which the students were given the opportunity to participate in a parkour recess on days which they did not have PE. In the supervised recess, students were allowed to free play in a parkour landscape of the gym. In organized recess, PE teachers instructed parkour-related games on the parkour landscape of the gym, but they could be played without doing parkour. The authors recorded a higher number of prosocial interactions in girls during the supervised unstructured recess compared to the organized structured recess, suggesting that unstructured recess may encourage more social interactions compared to structured play. Despite these statistically significant results, the authors note their results should be taken cautiously due to the low number of recorded interactions.

There is also evidence suggesting that the social and physical components of recess extend beyond peer relationships and into the overall school climate. Haapala and colleagues (2014) investigated the interplay between physical activity at recess and peer relationships. The authors administered questionnaires asking students about physical activity at recess and school-related social factors across 19 Finnish schools, and received completed questionnaires from 1,463 students in grades four through eight. According to their analysis, physical activity at recess was positively associated with peer relationships for both boys and girls. Boys participated in more physical activity than girls in both primary and secondary school, and peer relationships were positively associated with physical activity in both primary and secondary school for boys and girls. The authors note that the benefits of creating an environment and culture which promotes physical activity may extend beyond purely physical health and lead to better social relationships in school. Of note, the authors did not mention whether this physical activity needed to be in a structured format or not, and thus provides evidence that just a general physically active environment can be conducive for better social relationships in school. These results suggest that schools ought to consider not only how recess can affect the individual student and their behavior but the impact it can have on the overall school climate.

Beyond the articles described here, the authors found little on the subject matter of how recess specifically affects social outcomes. The literature suggests that recess is important for socialization, but much of the research is involved in examining relationships within recess, and not the effect that recess has on relationships specifically. Many of the articles that revolved around social outcomes focused on improving socialization in children with autism at recess using specific interventions. While this specific topic is an important area of study, it is out of the scope of this review.

DISCUSSION

The intent of this literature review was to focus on how recess affects academic, behavioral, and social outcomes in students. The result of each of these areas are discussed in this section. Additionally, implications for practice and future research are addressed.

In terms of academics, the evidence provided suggests that recess will not necessarily increase academic scores but it will not hurt them either. The literature indicates that recess and physical activity helps improve attention and classroom behavior, which could influence academic achievement. Qualitative results from educators also suggested that the break of recess was helpful for students and themselves, and helped students stay focused and on-task during instruction. Thus, recess may indirectly influence academic achievement through more engagement in the classroom.

For the behavioral aspect of recess, there is unclear evidence regarding whether recess decreases problematic behaviors in the classroom. However, not giving students a break in the school day is comparable to not giving adults a break during the workday, as most adults tend to be more productive and better regulated when they are given consistent breaks. As children are typically less mature in terms of behavioral and emotion regulation than adults, they need this break more than adults do and should be given this time throughout the day to “blow off steam” which can lessen problematic behaviors.

Finally, there is evidence suggesting that unstructured recess facilitates more prosocial behaviors and that physical activity at recess benefits peer relationships and the overall school climate. Physical activity should remain a central part of recess, but there are some students who may prefer to use their recess time to partake in other activities, and there are other students who

may be limited in their ability to do extensive physical activity at recess. London (2022) observed that recess in middle school evolves into “breaktime,” and the author posits an interesting question: what would happen if adult-centered activities not necessarily physical in nature were introduced during this breaktime? From this perspective, the purpose of recess evolves from one of getting physical exercise in the elementary years to a more social break during the middle-school years. Giving students more options besides physical activities during their recess or “breaktime” may help facilitate the social stimulation they seek while still giving them appropriate activities to do. Some of these activities could be relatively accessible and easy, such as lawn games, board games, or large-scale versions of traditional board games, like large block Jenga or chess.

This literature review has illustrated the importance of recess in the school day. Evidence suggests that it’s helpful for students’ academic skills, social skill development and general classroom climate, and thus deserves to be a concrete part of the scheduled school day.

LIMITATIONS

We could have chosen to focus on many different subsections of interest in this paper, most notably differences in ages, recess duration, differences in urban, suburban, and rural school recesses, differences in recess experience in racial identifications, and recess experiences in students with and without disabilities. These are all relevant variables to investigate as recess involves all of them to a large extent, but for the scope of this paper we decided to omit in-depth discussion of them. Additionally, many of our articles used observation methods for data collection. Although observation data is useful, it is also important to note that the validity of collected data from observations can be unreliable, and observations themselves can be prone to measurement error. This suggests that some of the academic, behavioral and social outcomes described here should be interpreted with these considerations in mind. Finally, as we included results from international peer-reviewed journals, those results described in our review may not generalize to the United States general education system.

POTENTIAL AVENUES FOR FUTURE STUDY

Further investigating the relationship between recess and disciplinary behavior is an area of great interest. Also, research that considers the perspective of the youth, especially at the middle school ages, could be useful. The results provided here thus far indicate that there may be a link between more recess and better student behavior, but more research should be conducted to determine statistical significance and to guide policy implementation. As noted prior, there were little results for the specific effect of recess on social outcomes, and should be explored in further research. Like the Haapala (2014) study investigating recess’ impact on school climate, further exploration of the well-being of students and its relation to recess time may be worthwhile. Another area of exploration is optimizing the ratio of recess time to academic time to get the most out of both recess and academics. Despite the importance of recess in the school day, it will not have the opportunity to improve academics if there is little academic time during the day. For example, Turkey and Japan generally allot 90 minutes of the day for play across six breaks, South Africa and Portugal generally allot 60 minutes of playtime across two breaks, while the United States generally allots up to 28 minutes over two breaks and Brazil generally allots 15 minutes in a single break in the day (Beresin, 2016). The optimal ratio may depend on a variety of factors, including age of the students and the cultural, geographical and economic environment the students are raised in and educated in, and should be considered an optimal area of future study. Finally, the duration of recesses is another prime candidate for further research. Would more frequent but shorter

recesses be just as beneficial as fewer but longer recesses for students' physical activity, behavior, and social engagement?

IMPLICATIONS FOR PRACTICE

The simplest practical implication is that there is enough evidence to support recess staying in the school day. There is clear evidence that it doesn't harm students, and provides more benefits throughout various realms of the school day itself. When policymakers are deciding how to balance placing recess in a school day that is aiming to increase academic scores, they should be mindful of the fact that having recess in the day will not harm their academic work and can in some cases, improve it. Policymakers should also be mindful of the fact that social skill development is an important part of the school day in addition to academics, and recess compliments the traditional classroom environment by facilitating social skill development and improving the school climate. Ensuring that playgrounds have a variety of activities available to students is important. Not every student wants to play sport-specific games or even highly physically active activities, so supplying the playground with different low-physical activities (e.g., large chess or Jenga) ensures that all students are given opportunities to play how they would like.

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