

8-2017

# Flexible Seating in the Early Childhood Classroom

Chasity L. Hardin

*Northwestern College - Orange City*

Follow this and additional works at: [https://nwcommons.nwciowa.edu/education\\_masters](https://nwcommons.nwciowa.edu/education_masters)



Part of the [Early Childhood Education Commons](#), and the [Special Education and Teaching Commons](#)

---

This Article is brought to you for free and open access by the Education at NWCommons. It has been accepted for inclusion in Master's Theses & Capstone Projects by an authorized administrator of NWCommons. For more information, please contact [ggrond@nwciowa.edu](mailto:ggrond@nwciowa.edu).

Flexible Seating in the Early Childhood Classroom

Chasity L. Hardin

Northwestern College

Orange City, Iowa

### Abstract

Flexible seating has become a recent trend in education. As teachers try to reach the different needs of learners, flexible seating is another way to allow students to comfortably be engaged in learning. Flexible seating gives children the power to choose. Giving them the power of choice, gives students ownership over their participation and engagement in the classroom. Flexible seating can include a variety of options including scoop rockers, pillows, disc o' sits, standing desks, therapy balls, and many more options. Some professionals are beginning to note that students are often more engaged in their learning when flexible seating options are offered within the classroom. This literature review will highlight the benefits that come along with offering flexible seating in a classroom for both special education and general education students. In the future, active research on this topic would be beneficial considering the information gathered in this review.

### Flexible Seating in the Early Childhood Classroom

There are endless possibilities when it comes to offering flexible seating within a classroom. As teachers, are continuously trying to reach the variety of needs presented within classrooms on a daily basis. Sensory issues that may underlie behavior problems are often ignored or not addressed due to lack of knowledge in assessment and intervention strategies (Schilling, 2004). Many teachers have noticed that students are actively engaged and focused when utilizing flexible seating options within the classroom. Unfortunately, little research has been conducted with Early Childhood as a specific focus. Therefore, the discussion will highlight the benefits of flexible seating in classrooms as a whole.

### **Literature Review**

Many classrooms seating looks like it did several years ago. Teachers expect students to come in and sit at assigned seats all day and be engaged in educational tasks continually. Engagement continues to be a struggle in schools across America. Flexible seating has become a recent trend in education, because it has been found that with flexible seating comes student engagement. When sitting in a coffee shop you see people sitting in a variety of seats happily engaged in their work. Some people choose the traditional chairs and tables; others choose big comfortable chairs (Delzer, 2016). Adults are expected to make decisions and choices for themselves such as where to sit when walking into a room. Often adults choose where they feel most comfortable which varies from person to person and day to day.

Studies on classroom seating suggest that sustained sitting in regular classroom chairs is unhealthy for children's bodies, particularly their backs (Schilling, 2004). Many professionals have found that movement within the classroom increases student engagement. Flexible seating allows a child to have the sensory stimulation desired while completing educational tasks.

Simple in-class activities can boost performance. Studies suggest that children who participate in short bouts of physical activity within the classroom have more on-task behavior, with the best improvement seen in students who are least on-task initially (Mahar, 2006). Teachers should encourage students to stand up and move around at least every hour, the impact of even leisurely movement can be profound (Jiminez, 2017). Although flexible seating is a new trend throughout classrooms in the United States. The idea of flexible seating has been around for several years. European schools have been using therapy balls and other types of dynamic seating devices in the classroom as chairs to improve back health since at least 1988 (Schilling, 2004). Some immediate benefits of flexible seating include burning more calories, using up excess energy, improving metabolism, increased motivation and engagement, creating a better oxygen flow to the brain, and improving core strength and overall posture (Dezler, 2016). It is widely known that physical activity is linked to higher academic performance, better health, and improved behavior.

Researchers Beth Pfeiffer, Amy Henry, Stephanie Miller, and Suzie Witherell (2008) set out to study the effectiveness of the Disc 'O' Sit cushion for improving attention to task among students with attention difficulties. The study was conducted among second-grade students, who

demonstrated attention difficulties in the academic setting. The Behavioral Rating Inventory of Executive Function (BRIEF) was completed on each child. The BRIEF consists of two indexes: the behavioral regulation index (BRI) and the metacognition index (MI). The global executive composite (GEC) is the combined score of both indexes. Students who scored 15 or more on the observational forms were identified as having significant attention difficulties. The Disc 'O' Sit cushions were placed on students' regular classroom seat for two hours a day for a two-week period. The researchers anticipated that the Disc 'O' Sit cushion would have a medium sized effect on attention to task. Each student's teacher completed the BRIEF before the study period; answers were based on the student's attention skills for the two-week period just before the study began. After the two-week trial with Disc 'O' Sit cushions for the test group and without for the control group, teachers completed the BRIEF on each student again. The GEC scores of the control group decreased by .85% showing no significant difference in the pretest and posttest mean scores. The GEC scores of the treatment group decreased by 13.33% revealing a significant change in the treatment group pretest to posttest. The results indicated that using a Disc 'O' Sit cushion increased attention to task in second-grade students. The BRIEF showed significantly lower scores after the trial period suggesting that attention to task may improve when using a Disc 'O' Sit cushion with children who have attentional issues in the second grade. Additional research is needed to examine effectiveness of Disc 'O' Sit cushions with increasing

attention to task for a wider age range and larger population of students in the school setting (Pfeiffer, 2008).

Caroline Umeda and Jean Deitz (2011) conducted a research study to investigate the effects of therapy cushions on the in-seat and on-task behaviors of two kindergarten students with autism spectrum disorder during math activities. This study found that there were no significant changes in the in-seat or on-task behaviors of either participant with cushion use. Participant one's on-task percentages for the initial baseline never exceeded 50%. After the acclimation phase, the percentages ranged from 20% to 63% in the first intervention phase not indicating any substantial increase to on-task behaviors. Teacher reported that participant one's attention to task appeared better when sitting on the standard classroom chair. Participant two's percentages were low and variable across all phases of the study. However, the teacher did report noticing less backward head turning and less backward tilting of the chair during periods of cushion use. There were not any negative effects of the cushion use reported by the teacher (Umeda & Deitz, 2011).

Students within the classroom do not know life without constant connectivity, Wi-Fi, and a global audience (Dezler, 2016). Teachers must expect students to make choices and solve problems independently. They will not be able to succeed at this if adults are continuously solving problems and making decisions for them as they progress through school. The classroom environment presents a sensory-rich backdrop of noise and movement against which students

must attend to academic activities and routines (Umeda, 2011). With flexible seating, teachers are giving students the opportunity to learn about themselves and choose where they are able to better engage and participate in activities. Instead of directing them to a seat, children are expected to choose a seat that best fits them as an individual.

Engagement is a big concern throughout schools in America. Along with the concern for increasing engagement comes the concern for increasing motivation. Often teachers ask the question, how can I make a child care? Instilling intrinsic motivation into students overnight is not something that is realistic. Intrinsically motivated behaviors are performed out of interest and enjoyment of the activity for its own sake (Stefanou, 2004). Researchers set out to find the effect of autonomy-supportive practices within the classroom. They believed that increased opportunities for student choices would in turn increase intrinsic motivation amongst students. It was found that although choice and decision-making are fundamental, simple choices alone are not enough to engage students in academic tasks (Stefanou, 2004). There is a lack of understanding from a motivational perspective in the educational field. Teachers utilize IQ and standardized testing to measure how well a child should do in the classroom, but often teachers do not get the expected results from their “smartest” kids. Psychologist Angela Duckworth (n.d.), studied adults and kids in a variety of settings trying to find out who was successful and why. In each of the different situations one characteristic stood out as a predictor of success, it was grit.



Grit is passion and perseverance for very long-term goals. Grit is having stamina. Grit is sticking with your future, day in, day out, not just for the week, not just for the month, but for years, and working really hard to make that future a reality. Grit is living life like it's a marathon, not a sprint (Duckworth, n.d., 3:01).

Studies found that grittier kids were significantly more likely to graduate. It is unfortunate that science knows very little about grit and how to build it among students. The more information that is found on the topic the more grit we can instill in students.

Often seating arrangements are put into place within the classroom to lower disruptive behavior from students. When self-selecting seats students often sit near other students that they enjoy “socializing” with outside of school.

Completing schoolwork is a potentially high-effort response with potentially low-rate and poor-quality reinforcers, which often are delayed. Schoolwork also is in competition with disruptive behavior, which is a potentially low-effort response that can gain immediate access to a high-quality reinforcer (i.e., peer attention) (Bicard, 2012, p.407).

In the study by Bicard et al. (2012) teacher versus student seat selections were investigated. The study found that during group seating, disruptive behavior increased by 198% when students chose seats (1.31 per minute) compared to when teachers selected seats (0.44 per minute).

During individual seating disruptive behavior increased by 210% when students selected seats (0.65 per minute) compared to when teachers selected seats (0.21 per minute). This research

showed that within group and individual seating arrangements, disruptive behavior occurred drastically less when the teacher selected the students' seats (Bicard, 2012). Through this study, the importance of clear boundaries with flexible seating is made clear. When allowing students to choose their seats clear expectations must be laid out. Students must also know that you reserve the right to move them at any time if they are not fully engaged and able to work in their self-selected spot (Dezler, 2016).

Researchers Rachel Wannarka and Kathy Ruhl (2008) conducted research to determine the importance of classroom seating arrangements. Seating arrangements have the potential to help prevent problem behavior that decrease student attention. Researchers Wannarka and Ruhl (2008) searched two educational databases and one psychological database. Moore and Glynn (1984) found that a student's location in the classroom is related to the number of questions received from the teacher. In addition, Granstrom (1996), not surprisingly, found that students at the back of the classroom tend to interact with each other more frequently than those seated at the front, potentially adversely affecting their attention to the task (Wannarka, 2008).

Results of the synthesis suggest that dependent on the academic task should dictate the seating arrangement. Teachers that want to maximize on-task behavior during independent work should utilize rows. When brainstorming is desired clustered desks or semi-circles, should be utilized. They found that there was not one single classroom seating arrangement that promotes

positive behavior for all tasks. The available research has found that whether the task is interactive or independent should help a teacher decide the arrangement.

Researchers Fernandes, Huang and Rinaldo (2011) have found that the overall comfort level of a classroom environment plays a factor in student achievement and success. When students feel that, their classroom environment is pleasant and comfortable they generally demonstrate an increase in participation. The increase in participation among these students then leads to higher achievement. It was also found that different seating arrangements foster different social interaction opportunities. As stated in other studies, it was found that nonlinear seating arrangements often allow for more social interaction between students and students and teachers. Using rows and columns may increase on-task behavior when working on independent task, but will decrease student communication.

Many things may affect a student's seat of choice within a classroom. It is found that a student who sits in the center front of the room is often more engaged and eager to learn, but many things may cause the student to choose a specific seat. They may feel social pressure to join a group or late arrival to class may leave them selecting an undesirable seat option. No matter what seating arrangement is offered within a classroom where a student sits will affect the resources available and the overall learning experience the student is exposed to (Fernandes, 2011).

As a professional, the author has tried variations of flexible seating within their early childhood classroom. In the authors classroom the following options are offered for seating: scoop rockers, sit spots, stools, floor pillows, and yoga balls. Using flexible seating the author has found that students are more engaged in their learning experiences. Students that typically are inattentive to tasks are able to attend to tasks for longer periods when sitting in a self-selected seat. By allowing students to choose their own seats, they are able to ensure that the seat provides them with the desired sensory experience. The students in the author's room consist of a combination of special education and general education students. The author has seen the benefits of increased attention to task among all students. The benefit with flexible seating is there is an option that suits each child's needs. When implementing flexible seating it is important to establish clear boundaries so that students understand what the expectations are. Within the author's classroom each seating option is introduced to students explaining how they are to be used. After each option was introduced to the students, each child tried every seating option so they could learn and understand how their body reacted to each seat. This allows the children to learn about themselves and find the best option for them. Each child typically has a favorite spot and seating option, but they also like to switch it up and change seats. Students are allowed to change seats as long as they are actively engaged in our learning experiences and are not causing a distraction for other students. At the preschool level, flexible seating looks slightly different from other grade levels. Most of our instruction in preschool is whole group or small

group instruction. During whole group instruction, students select their seats and bring them to our “meeting area” at the front of our room. Students also move their seats with them during small group instruction to each station in the Daily 3 rotation. Flexible seating has transformed my room and allowed the students to have the opportunities to make choices that affect their educational experience.

In conclusion, flexible seating in the classroom can help increase engagement and motivation amongst students. Flexible seating has the immediate benefits of burning more calories, using up excess energy, improving metabolism, increased motivation and engagement, creating a better oxygen flow to the brain, and improving core strength and overall posture. Through the combination of utilizing seating arrangements and flexible seating within the classroom, teachers are able to lower disruptive behavior and increase attention to tasks. Seating options within the classroom is one variable in students learning that the teachers have control over. Flexible seating provides students with the power of choice. Giving students the power of choice, gives students ownership over their participation and engagement in the classroom.

## References

- Bicard, D., Ervin, A., Bicard, S., & Baylot-Casey, L. (2012). Differential effects of seating arrangements on disruptive behavior of fifth grade students during independent seatwork. *Journal of Applied Behavior Analysis, 45*(2), 407-411.
- Delzer, K. (2016, April 22). Flexible seating and student-centered classroom redesign. <https://www.edutopia.org/blog/flexible-seating-student-centered-classroom-kayla-delzer>
- Duckworth, A. L. (n.d.) Retrieved July 18, 2017, from [https://www.ted.com/talks/angels\\_lee\\_duckworth\\_grit\\_the\\_power\\_of\\_passion\\_and\\_perserverance](https://www.ted.com/talks/angels_lee_duckworth_grit_the_power_of_passion_and_perserverance).
- Fernandes, A.C., Huang, J., Rinaldo, V. (2011). Does where a student sits really matter? - The impact of seating locations on student classroom learning. *International Journal of Applied Educational Studies, 10*(1), 66.
- Jimenez, Y. C. (2017). Flexible and alternative seating in classrooms. Retrieved July 08, 2017, from <https://jae.adventist.org/en/2017.1.7>.
- Mahar, M. T., Murphy, S. K., Rowe, D. A., Golden, J., Shields, T., & Raedeke, T. D. (2006). Effects of a classroom-based physical activity program on physical activity and on on-task behavior in elementary school children. *Medicine & Science in Sports & Exercise, 38* (Supplement).
- Pfeiffer, B., Henry, A., Miller, S., & Witherell, S. (2008). Effectiveness of disc ‘o’ sit cushions

on attention to task in second-grade students with attention difficulties. *The American Journal of Occupational Therapy*, 62(3), 274-281.

Schilling, D. L., & Schwartz, I. S. (2004). Alternative seating for young children with autism spectrum disorder: Effects on classroom behavior. *Journal of Autism and Developmental Disorders*, 34(4), 423-432.

Stefanou, C. R., Perencevich, K.C., DiCintio, M., & Turner, J.C. (2004). Supporting autonomy in the classroom: Ways teachers encourage decision making and ownership. *Educational Psychologist*, 39(2), 97-110.

Umeda, C., & Deitz, J. (2011). Effects of therapy cushions on classroom behaviors of children with autism spectrum disorder. *The American Journal of Occupational Therapy*, 65(2), 152-159.

Wannarka, R., & Ruhl, K. (2008). Seating arrangements that promote positive academic and behavioural outcomes: A review of empirical research. *Support for Learning*, 23, 89-93.