

EXECUTIVE SUMMARY

STANDING DESKS: AN INNOVATIVE CLASSROOM SEATING SOLUTION

PROPOSED INITIATIVE

"Provision of an exemplary educational system that inspires all learners to achieve excellence" is the goal of District 000 of City, State. Special Education Services in District 000 strive to meet this same goal in the diverse population of students that they serve. The educational needs of these students vary in cognitive, physical, and emotional ways. No matter what the diagnosis or the issue that each student has, all these students share the critical need to have proper seating and positioning to be successful in the classroom. An intervention which is now popular in the classroom is the **standing desk**. A standing desk provides comfortable, ergonomically correct positioning and may help improve attention, focus, and behavior. The **Standing Desk** will revolutionize the way students position themselves in the classroom to optimize their success.

TARGET POPULATION

Students with IEPs who have not responded to traditional seating interventions. These include students who are overactive and "just can't sit still", students who are disruptive, and students who are underactive and need arousal to attend and focus.

GOAL

The goal of this grant is to provide standing desks to students with IEPs who may benefit from alternate seating to improve their academic progress or classroom behavior.

PERFORMANCE MEASURES

Each student's data will be interpreted individually to determine if a standing desk was beneficial for them. Students will need to have a 25% improvement in their individual criteria for standing to be deemed beneficial. Then the students will be evaluated as group to determine if 40% of the students had an improvement of at least 25% with their individual criteria.

This project will be deemed successful if 40% of the students show improved classroom focus or behavior from utilizing the standing desk.

PLAN OF ACTION

Students with IEPs will be selected to participate in this project by their teacher. They must be using adapted seating currently which is not producing the desired results or have used seating interventions in the past which were not successful. The teacher will determine the criteria on which the student will be evaluated. The criteria will relate to an IEP goal or objective. Data will be taken over a five week period with both a conventional sitting classroom desk and a standing desk. Data will then be analyzed by a team that has not been involved in the project including a teacher, occupational therapist, and physical therapist.

PURPOSE/NEEDS STATEMENT

"Provision of an exemplary educational system that inspires all learners to achieve excellence" is the goal of District 000 of City, State. Special Education Services in District 000 strive to meet this same goal in the diverse population of students that they serve. The educational needs of these students vary in cognitive, physical, and emotional ways. No matter what the diagnosis or the issues that each student has, all these students share the critical need to have proper seating and positioning to be successful in the classroom. Personalized, appropriate seating can improve student's academic performance and physical comfort at school. Each student has a right to have the best seating available so that they perform their school functions at their highest possible level.

Conventional seating interventions have included such items as seat cushions, footrests, ball chairs, and hand fidgets but many times these are not enough to make a difference in students focus, attention, or behavior. An intervention now used in many classrooms is the **standing desk**. A standing desk is a desk tall enough for a student to stand at with an attached dynamic footrest. A stool is also provided to the student for occasional seating during the day. A standing desk provides comfortable, ergonomically correct positioning and it may help improve attention, focus, and behavior. **Standing desks** may revolutionize the way students position themselves in the classroom to optimize their success.

TARGET POPULATION

Students with IEPs who have not responded to traditional seating interventions are the target group. These include students who are overactive and "just can't sit still", students who are disruptive, and students who are underactive and need arousal to attend and focus.

The desk allows students to stand, be more alert, and to fidget with their feet on the dynamic footrest. Use of the footrest is critical as a calming mechanism for overactive or disruptive students and as an arousing mechanism for underactive students.

GOAL

The goal is to provide standing desks to those students who may benefit from alternate seating to improve their academic progress or classroom behavior.

The use of the desk will not just be beneficial to the student using the desk but to their classmates and their teachers. The student will be able to attend and focus more easily while standing and releasing their energy in a constructive way. By standing and moving their feet on the dynamic footrest, they will be able to regulate their activity level by either increasing or decreasing the amount of time they spend standing and fidgeting. Their teachers will benefit by not having to interrupt instruction for redirection or reprimands, lessons will proceed more smoothly, and more time can be spent on academics versus discipline. Classmates will also benefit as they will also be able to focus instead of being distracted by those students who "just can't sit still". It is a winning situation for the whole classroom.

APPROACH

SELECTION OF STUDENTS

Students will be selected for a two week trial of a standing desk by the following criteria:

- IEP student
- Student has tried conventional seating interventions such as seat cushion, ball chair, hand fidget, or a footrest without the significant improvements
- Student has normal sitting balance which would allow safe stool sitting at standing desk

CRITERIA

Many different criteria can be used to evaluate the success of the student with the standing desk. It is your choice to determine what you want to evaluate to determine the success of your grant. You must be able to measure it objectively. Whatever you pick, take before and after data to compare. Do a chart and attach it to the grant.

Focus Measurement– Time on task during a particular daily routine (during silent reading time measuring time spent actually looking at book for a five minute period), task completion (number of lines written during journaling or number of math items competed in five minutes), attainment of an IEP goal, academic progress, or test scores.

Behavior Measurement – Disruptions during direct instruction, bathroom breaks, number of motor or sensory breaks needed, circling the room, verbal or physical outbursts, IEP goal attainment, or academic progress.

On the non statistical side, you can interview the teacher regarding their feelings about the classroom environment, ask parents if they have noticed a difference in their child's behavior at home, note if teacher feels other classmates are benefitting from the student's improved behavior. Although this is subjective, the attitude of the teacher is critical in student success.

METHOD

Data will be collected on the criteria selected before the standing desk is used and after it has been used. The two weeks previous to use, the student will be sitting in a traditional classroom desk and data will be collected in the same way each day at the same time. The student will then be introduced to the standing desk and will use the desk for one week without data collection to account for the novelty factor of using the desk. Data will then be collected for the next two weeks as the student uses the standing desk in the exact manner it was collected during the two weeks prior to the standing desk use.

These quantitative measurements can be taken easily and in a non-subjective way. A classroom assistant will be instructed in the data collecting procedure, leaving the teacher available for instruction. This assistant will have no knowledge about the project and why the data is being taken so as not to prejudice the results.

CURRENT STANDING DESK RESEARCH

Early standing desk studies focused on the effect they have on childhood obesity with increased calorie expenditure. Studies have shown that elementary students using standing desks burned an average of 17% more calories while using the standing desk than their non-standing classmates. A two year study of elementary students showed a statistically significant decrease in BMI in those who used standing desks compared to their non-standing peers.

There is current research related to standing desks and their impact on focus and behavior. A recently published study found that students at standing desks had a 7-14% improvement in cognitive performance in several memory tasks. Some standing desks have dynamic footrests on them to help students fidget with their feet as fidgeting research shows that fidgeting helps with memory retention. Visit www.footfidget.com and click on articles/research for specific research studies and their results.

EVALUATION

Each student's data will be interpreted individually to determine if the standing desk was beneficial for that student. Then the students will be evaluated as group to determine if the standing desks benefited the group as a whole.

An average will be taken of the daily data accumulated for the two weeks the student was sitting in a conventional desk and the two weeks that the student was utilizing the standing desk. This before and after data will be compared and if there is a 25% positive difference in the data, it will determine that the standing desk has improved the focus or behavior for the student utilizing the standing desk.

Then the students will be compared as a group. If 40% of the students have benefited from the standing desk as noted above, then it will be determined that the standing desks were beneficial to the group as a whole.

Teachers will also be interviewed to determine if qualitative changes to their classroom environment have occurred. This input is critical as the teacher's acceptance of standing desks will play an immeasurable role in this intervention's success.

This project will be deemed successful if 40% of the students see positive results (improvement in their own positive criteria of at least 25%) from using the standing desk.

There will be other benefits to this project. It will be an individual success story for each of the students who has a 25% increase in their own criteria. For these students, the standing desk will have made a difference in their school day. Providing access to standing desks for students and increasing teacher familiarity with the benefits of standing desks as a seating intervention will also make this project a success.

QUALIFICATIONS/PERSONNEL

Special Education Department of District 000 is best suited to do this project due to the large number of students enrolled in its various programs and the multitude of needs of these students, many of whom are already utilizing some type of adapted seating.

Teachers of special education classrooms, resource teachers, and school occupational and physical therapist will be the primary sources of referral for those students who may benefit from participation in this Standing Desk project. The teacher will determine which criteria will be selected for each student. Each student will have their own selected criteria. A classroom assistant will be instructed in data collection. The data will be evaluated by a team, unrelated to the project, consisting of a teacher, physical therapist, and occupational therapist.

BUDGET

Standing Desk Conversion Kits, designed by Classroom Seating Solutions, LLC, will be used to convert current classroom desks into standing desks. This Kit is a way to recycle the current classroom desk and is an economical means of providing a standing desk. Stools from National Public Seating Corporation will also be used as they are economical and adjustable so that the correct height stool will be available to each student.

10 Standing Desk Conversion Kits @ \$119.99 each	\$1199.90
10 adjustable stools @ \$40.00 each	\$ 400.00
TOTAL	\$1599.90

SUSTAINABILITY

If student success increases with the use of the standing desk, more desks will need to be secured as the number of students needing the desk increases. The Conversion Kits and stools used in this study are affordable and may be added to the equipment budget for special education each year or to the district's general equipment budget. State and federal grants and private foundations grants may also be available to help purchase more standing desks to help make a positive influence on the performance of students during their school day.