

HOW THE IMPLEMENTATION OF FLEXIBLE SEATING ARRANGEMENTS WITHIN A YEAR 5 CLASSROOM IMPACTS STUDENT ENGAGEMENT AND ACADEMIC PROGRESS

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Introduction

This research project was developed after observing that a number of my students were not sitting at our traditional, neurotypical style tables and chairs, along with a wheelchair-aided student who was struggling to sit at the higher, Year 5 tables and chairs.

This prompted me to think about my own primary school experience, in which I hated sitting on a chair all day long. I began to research the 'Starbucks classroom' model, which led to learning about how the different academic, emotional, and physiological needs of students can be met within a classroom environment.

Differentiation by outcome and activities is a part of how teachers are assessed as educators, but why are our classrooms not differentiated?

Literature Review

The two main aspects of my research were Maslow's Hierarchy of Needs (1943) and Howard Gardener's Theory of Multiple Intelligences (1983). Maslow discussed how people move through the five stages of needs to reach the pinnacle of self-actualization. This action research aims to demonstrate how students who feel content and happy within their classroom can access the greater hierarchy of needs, such as self-confidence and self-actualization.

Gardener explores the idea that human intelligence comprises a variety of modalities rather than one single ability. The Theory of Multiple Intelligences explores eight different intelligences. If this is to be believed, many schools use the Cognitive Abilities Test (CAT4) results to lead teaching and learning in the classroom and planning, the children who learn in a kinesthetic mode are being forced to sit in their seats all day and are not being enabled to learn to the best of their ability.

Further research into 'flexible classrooms' found a plethora of blogs, videos, and pictures from educators with their own experiences, ideas, and advice. A TEDx talk, 'Reimagining Classroom: Teachers as learners and students as leaders' (Dezler, 2015), discusses how we must embrace the students of today, to reimagine tomorrow. Dezler opens her episode with a teacher's example of a boy who hated school. She quickly moves on to point out how classrooms and learning environments have not changed for the past 70 years. She admits that she is seeing her classroom, students, and their learning journeys differently. To be able to reimagine tomorrow, we, as teachers, must learn how to use the power; our classrooms need to be less teacher-centred and more child-centred.

Methods

Action Research is a perfect opportunity to explore many aspects of a flexible seating classroom, from the perfect seating arrangements, students' attitudes towards school, and the progress that students can gain from learning within a flexible seating classroom.

This led to three research questions:

- Question 1: What makes an effective flexible classroom setup?
- Question 2: How does a flexible seating classroom impact students' view of school?
- Question 3: Can a flexible seating classroom have an impact on academic progress?

Methodology

Following an initial conversation with my class regarding the seating setup and arranging the tables into different layouts, we decided to try out an alternative seating arrangement focused on flexible seating.

Participants

The whole class of 24 students aged between 8-10 were involved in a large part of this research. I also selected 6 students who were chosen as part of a focus group. These students were identified as those who may benefit from alternative seating options (see **Figure 1**).

Data Collection

Through this research, a variety of quantitative and qualitative data was collected via an Microsoft Forms Questionnaire, which focused on the students' attitude towards school, the analysis of Pre and Post-Topic Maths Assessments conducted every few weeks in term 2.A and 2.B/3.A, which was then compared to the assessments that took place during term 1.A and B, interview discussions of open conversation with 6 focus children before, during, and after the implementation of a flexible seating classroom, and finally, observations made by class teachers regarding the general class behaviour.

Data Analysis

While analysing my quantitative data, I took the pre-topic assessment score and the post-topic assessment score and found an increase in marks between them. I then took all increases from each test in T1. A and B and divided by the number of tests completed in the term (7). This gave me my before results. I repeated the same process with the pre- and post-topic assessment results for T2.A, T2.B, and T3.A to find the after results. This was then converted into a bar chart to show the significant difference in the scores before and after the implementation of a flexible seating environment.

Results

What makes an effective flexible classroom setup?

There are and always will be hundreds of different options for seating that people would like to see in a classroom. Due to the different needs and learning styles that students experience throughout their learning journey, an effective classroom is based on personal opinion and is dependent on the individual (see **Figure 2**).

- Students suggested many different ideas about what an ideal classroom would look like to them (see **Figure 2**).
- Students had their preferred areas to sit in the new classroom, and they also had their least favourite areas. (see **Figures 3.2 and 3.3**).
- They also suggested what could improve the classroom environment (**Figure 3.1**).
- For a flexible classroom to be most effective, it needs to be effectively flexible. Not stationary. Not fixed. Truly flexible. It takes time, money, and patience to make it work.

How does a flexible seating classroom impact students' view of school?

The progress made by students showed a significant increase in students' attitudes to school. As my focus group results improved their confidence during lessons changed.

- Students reported that they felt comfortable, calm, relaxed, and focused. (see **Figure 4**).
- 3 out of the 6 focus children expressed a low score regarding how they felt about school, stating that they found the classroom boring before we introduced a flexible seating classroom.
- 20 out of 24 students stated that 'being comfortable in the classroom' was within the top 3 of importance to make school a happy place.

Figure 1
Focus Group. A few images of ways in which some of my students would sit on their chairs at the standard classroom tables.



Figure 2
Question 1



Figure 3 – Results from MS Forms Questions
Figure 3.1

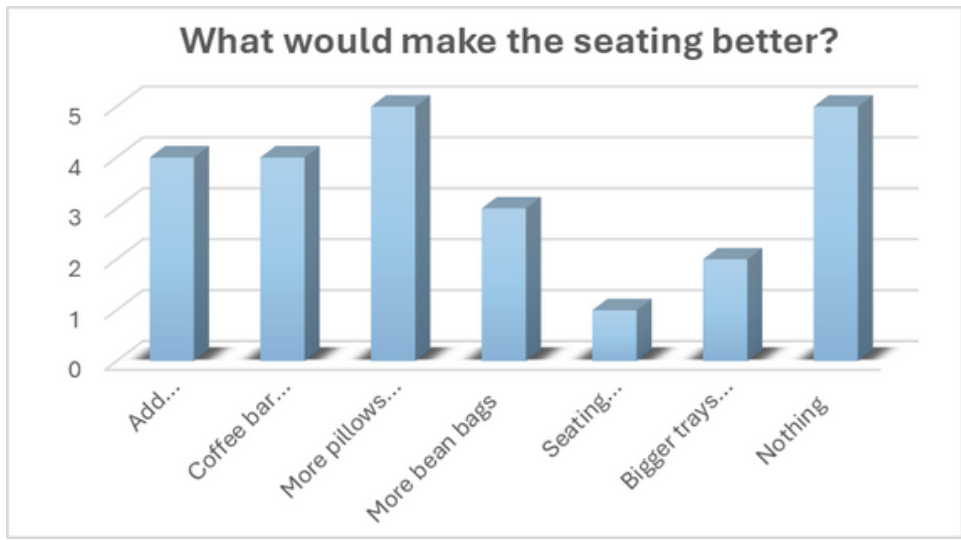


Figure 3.2

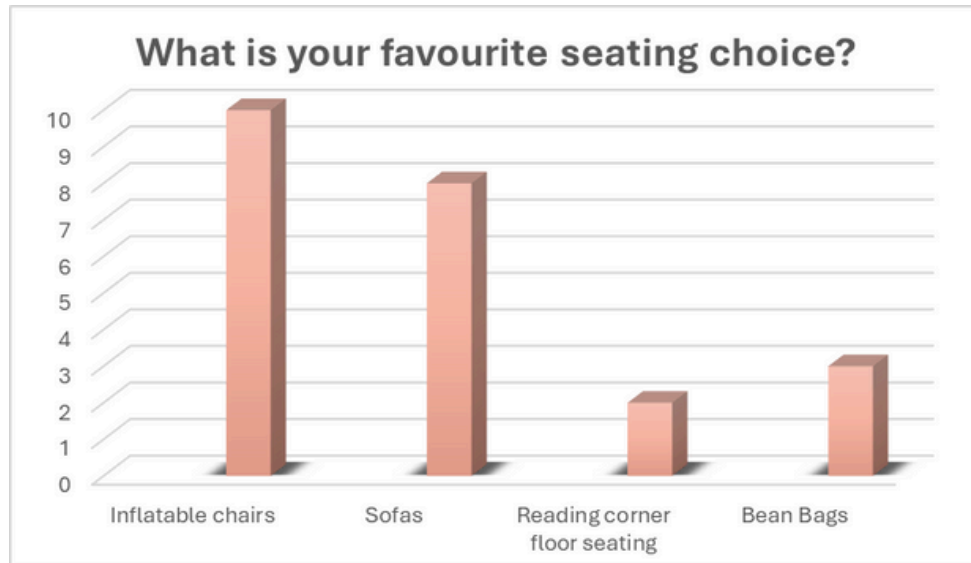


Figure 3.3

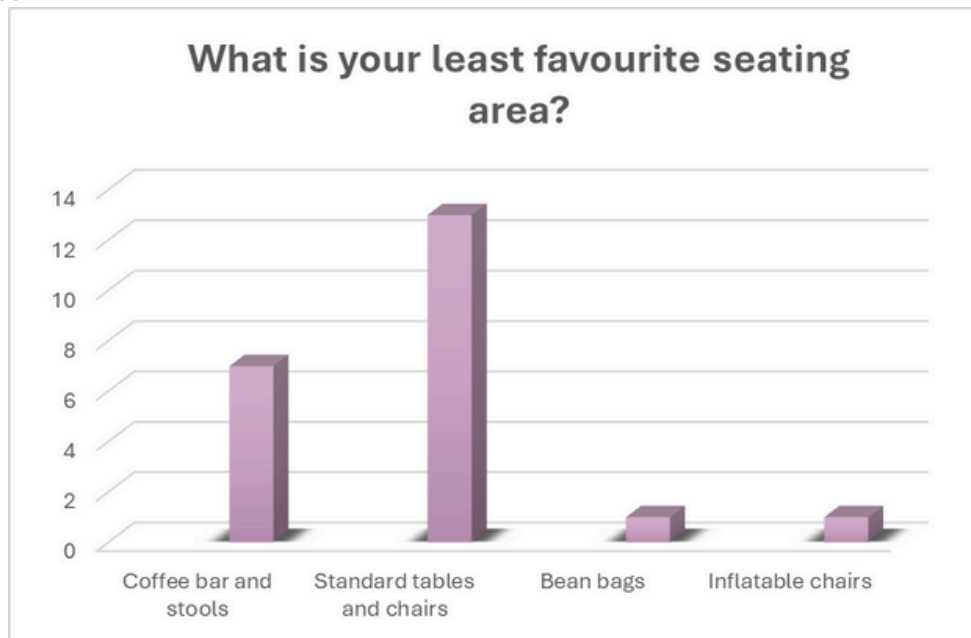
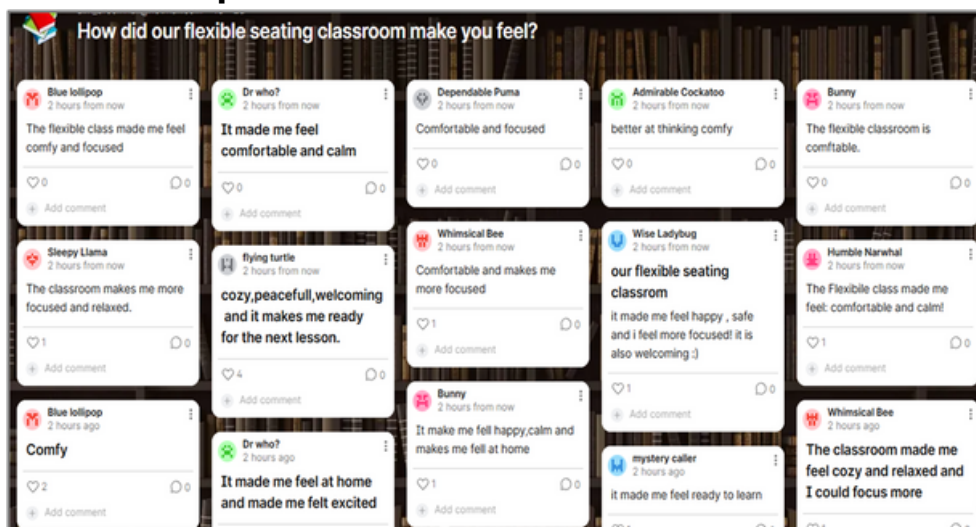


Figure 4
Question 2 Padlet responses



Can a flexible seating classroom have an impact on academic progress?

It is simple to see that after the implementation of flexible seating within my classroom, there has been greater progress between pre- and post-topic scores in Maths (see **Figure 5.1**).

- Children 2 and 6 gained great post-topic scores, showing greater learning taking place in the flexible classroom environment. (see **Figure 5.2**).
- Child 3 has not shown greater differences, which supported a cause for concern flag between me and our inclusion department, encouraging a more in-depth look into this child's learning needs and an external assessment recommendation. (see **Figure 5.2**).
- Children 4 and 5 have made some progress between pre- and post-topic assessments, but not as extensive as other children. There has been an increase in their reading age since the implementation of the flexible classroom (noted from Star Reader assessment results when doing general reading progress reports) (see **Figure 5.2**).

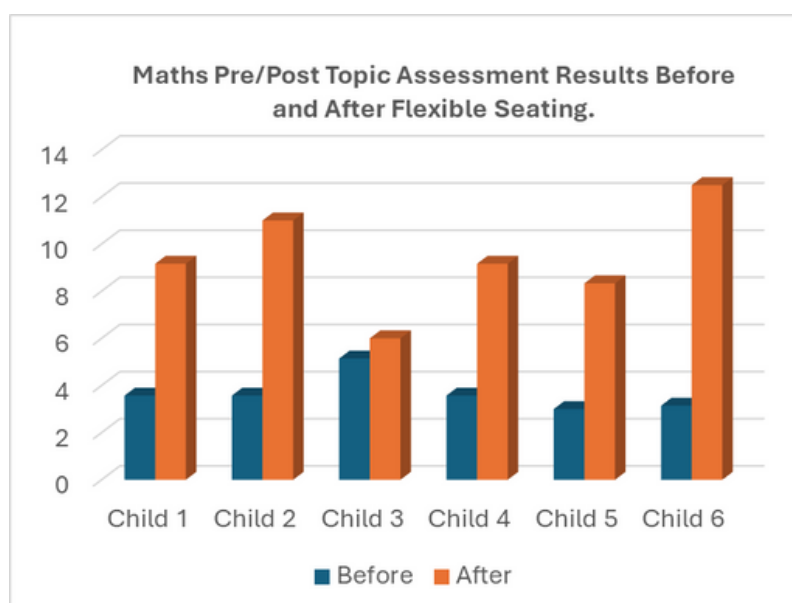
Figure 5.1

Table of Results from Pre/Post Topic Assessments in T1.A/B compared to Results from Pre/Post Topic Assessments in T2.A/B and T3.A.

	Before	After
Child 1	3.57	9.17
Child 2	3.57	11
Child 3	5.14	6
Child 4	3.57	9.17
Child 5	3	8.33
Child 6	3.14	12.5

Figure 5.2

Bar Chart of Results from Pre/Post Topic Assessments in T1.A/B compared to Results from Pre/Post Topic Assessments in T2.A/B and T3.A.



Discussion

Purposeful For Learning?

Maslow: Students expressed that it was important to feel comfortable and relaxed at school. These feelings support Maslow's Hierarchy of Needs, lower down with a feeling of security and safety within the classroom. As students' progress grew, so did their confidence and self-esteem, and this led to some self-actualisation.

Gardener: EVERY CHILD IS DIFFERENT! Children learn in so many ways; children feel comfortable in different positions. Giving students are large array of sitting options in one classroom can feel overwhelming at first, but once they have found the spot, they can focus on their learning, and growth and progression will follow.

Implications, Limitations, and Recommendations

Implications:

Teachers should take into consideration adapting their classroom environment to integrate flexible seating options along with their traditional seating options. Stakeholders should consider the positive implications of flexible seating when making decisions on creating an inclusive environment suitable for all students and their learning needs.

Limitations:

As this research only focused on a small group of 6 students, it cannot be declared that flexible seating works for all. Using a wider group of learners at a variety of levels working at a variety of paces would create a larger source of data to compare the before and after results.

Future Recommendations:

It would be useful to collect longer-term data to analyse the effects of flexible seating, including PT's and NGRT results, Science Pre and Post Topic Assessments, STAR Reader Assessments, and SPAG.com assessment results, to show greater patterns in progress over a full academic year. The research could focus on SEND/ELL/EAL students within one flexible seating classroom, one set up in each year group in Lower and Upper KS2, or the research could be conducted in each year group within a mixed class.

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