



Does growth mindset have a positive effect on children's attitudes towards their learning?

Hoxton Garden Primary School Lower Phase

Abstract

The purpose of this study was to find out if growth mindset had a positive effect on children's attitudes towards learning, encouraging young learners to develop a mindset that supports their achievement and progress. The children who were involved within this study were all ranged from the ages of 5-8 years, both boys and girls. The study followed the impact of the implementation of growth mindset with a focus group of children. These focus children each completed a questionnaire at the beginning and end of the project so that the effect of growth mindset could be measured. For 18 weeks, the classes received targeted and discrete teaching in relation to growth mindset. They were reminded and encouraged to think about the importance of having the 'right' mind-set and were given examples of what this looks like with relation to their own learning. Teachers and pupils found that growth mindset had a positive effect on the attitudes towards learning of most pupils.

Introduction

Hoxton Garden Primary School is situated in Hackney, London. The proportion of pupils from minority ethnic groups and those who speak English as an additional language are much higher than national average. The proportion of pupils eligible for the pupil premium is also higher than average. A significant number of children enter Nursery and Reception below the expected level for their age across a number of areas of learning.

It had been discussed across Lower Phase that many children within each class had a low self-esteem in regards to their ability in learning new things, with many being identified as often showing signs of negative behaviors when applying themselves to new tasks, understanding new concepts, making mistakes and their overall attitude towards learning at school.

Carol Dweck (2006) discusses her seminal research on this topic, in her book *Mindset*. Her research shows that in the long run, people who have a growth mindset far outpace those with a fixed mindset. Her research also suggests that the difference is one of the strongest predictors of success. It is believed that those with a fixed mindset believe that intelligence and ability are fixed – something that we are born with and we can't do anything about. Research and findings suggest that those with a growth mindset believe that intelligence and ability can be developed through persistence, effort, learning from our mistakes and trying different strategies.

Research suggests that developing a growth mindset isn't just about effort. Although effort is key for students' achievement, it's not the only thing. Students need to try new strategies and seek input from others when they are stuck. They need a range of approaches other than just sheer effort to learn and improve. There is sufficient evidence to suggest that the growth-mindset approach has been used to help children feel good in the short and long terms, by helping them thrive on challenges and setbacks on their way to learning. Portsmouth University's Professor Sherria Hoskins (2016) says *'It's about the language you use with pupils. Instead of praising them around ability or static factors related to who they are – for example, saying 'you're so good at drawing' – you move to feedback based on effort, strategy and results.'*

To investigate this, three children across each year group within Lower Phase were targeted as focus children, however, class teachers were asked to implement the strategies of growth mindset with the whole class too. It was expected that the outcome of the project would result in teachers using the growth mindset theory and that the children within the classes, particularly those focus children, would develop more positive attitudes towards their own learning.

Dweck (2015) states that: *'When kids (or adults) are in a fixed mindset, difficulty makes them feel inadequate – their fixed ability feels deficient – and their confidence becomes shaky. But when they are in a growth mindset, difficulty is a natural part of learning, so they are more likely to take it in stride and find new strategies that work better. A growth mindset can be taught and, when it is, people can become more motivated, more*

resilient and more successful.' This formed the basis of the focus for teachers.

Research Process

The project was coordinated by the Phase Leader and supported by four classroom teachers. The project was undertaken with a purpose to focus on the whole class within Years 1-3, however the twelve children chosen as focus children were the ones chosen by their class teacher as individuals who were thought to possibly benefit most from the input of this research. The attitudes of these children were measured through questionnaires. One at the start of the research project and one at the end, (see appendix 4)

Within one lesson each day for the first week, the class teacher would introduce children to simple phrases and approaches they can use towards different areas of their learning that they might find more challenging, with a particular focus on the focus children. During weeks 2-18, teachers would also deliver and teach weekly Circle Times with a focus on Growth Mindset and these sessions would include whole class discussions and a range of activities that were focused on this theory (see appendix 1). Lower Phase assemblies were also focused on delivering a 15-minute focus on Growth Mindset every second week, (see appendix 2). The assemblies would be led by the Phase Leader and would include stories, reminders and encourage children's feedback in relation to what they have been learning around this approach within their own classes. Each classroom within Lower Phase also had a Growth Mindset display, (see appendix 3). This display was placed by the front of the classroom so it could be seen by all children during the carpet session and when at tables during independent work. Teachers would refer to this during inputs and often during mini-plenaries. The display consisted of examples of what the children should be thinking or saying in order to encourage the development of a growth mindset, (see appendix 3).

Weekly feedback meetings provided an opportunity for dialogue between the professionals who were undertaking the project. This provided essential feedback to the phase leader and discussion between all those involved. It allowed time to share and discuss the methods that were being used to implement strategies towards growth mindset, as well as responding to any questions members of teaching staff

had in order to move forward effectively.

Findings

The findings, from the children's questionnaires and discussion with class teachers, show that children responded very well to the implementation of growth mindset within their classrooms.

Class teachers fed back that the use of the display at the front of the classroom allowed children visual access to it at all times within each class. The class teacher would refer to it regularly, ensuring that the children were consistently reminded of these positive attitudes towards their learning. Teachers also fed back that the children would often refer to this display without being prompted. Many teachers reported that some of the children within each class would be able to give examples of the language used that had been embedded during lessons. Teachers reported that this showed verbal evidence that language associated around growth mindset was being implemented successfully. The class teacher in Year 1 mentioned that the focus children within her class appeared to be less afraid of making mistakes by the end of week 10 of the research, and this contributed to these children being more confident in answering questions within large group discussions, for example, during the carpet input.

The impact was measured through questionnaires given to the children at the start of the project in week 1 and at the end of the project in week 18 (appendix 1) Both the first and second questionnaire had the same questions that were given to each focus child across year 1, 2 and 3. Each question related to the child's own attitudes towards learning. The answers to the first 3 questions had a scale from 1-5. 1 showing a rather negative response to the question and 5 being the most positive response the child could give. The table (fig.1) on the next page shows the comparisons of each child in response to questions 1-3 from the start of the project and at the end.

Fig 1.

	Start of Week 1	Total	End of Week 32	Total
Child A (yr1) F	Qu1: 4 Qu2: 2 Qu3: 2	8	Qu1: 5 Qu2: 5 Qu3:2	12
Child B (yr 1) F	Qu1: 5 Qu2: 3 Qu3: 3	11	Qu1: 5 Qu2: 5 Qu3: 5	15
Child C (yr 1) F	Qu1: 5 Qu2: 3 Qu3: 3	11	Qu1: 5 Qu2: 5 Qu3:5	15
Chd A (yr 2/1) M	Qu1: 5 Qu2: 3 Qu3: 3	11	Qu1: 5 Qu2: 4 Qu3: 5	14
Child B (yr 2/1) F	Qu1: 5 Qu2: 2 Qu3: 5	12	Qu1: 5 Qu2: 5 Qu3:5	15
Child C (yr 2/1) F	Qu1: 4 Qu2: 3 Qu3: 4	11	Qu1: 5 Qu2: 5 Qu3:5	15
Child A (yr 2) F	Qu1: 5 Qu2: 5 Qu3: 4	14	Qu1: 5 Qu2: 5 Qu3:4	14
Child B (yr 2) F	Qu1: 5 Qu2: 4 Qu3: 5	14	Qu1: 5 Qu2: 5 Qu3:5	15
Child C (yr 2) F	Qu1: 5 Qu2: 5 Qu3: 3	13	Qu1:5 Qu2: 5 Qu3: 5	15
Child A (yr 3) M	Qu1: 1 Qu2: 3 Qu3: 1	4	Qu1: 4 Qu2: 4 Qu3: 3	11
Child B (yr 3) M	Qu1: 5 Qu2: 1 Qu3: 5	11	Qu1: 5 Qu2: 3 Qu3: 3	11
Child C (yr 3) F	Qu1: 1 Qu2: 5 Qu3: 2	8	Qu1: 4 Qu2: 4 Qu3: 4	12

The findings from fig 1 show that all focus children, apart from 2, had a higher overall score at the end of the project compared to their scores at the start. This shows that the implementation of strategies to encourage a growth mindset amongst these children may be the reason for these changes in scores and therefore this has changed their attitudes towards learning. Fig 1 also shows that girls scored themselves higher on questions 1-3, therefore showing a more positive overall attitude towards their learning.

Impact and conclusion

The overall impact of the implementation of growth mindset across lower phase classes was positive. Only 2 out of the 12 focus children did not show improvement in their attitude towards their learning, however there is evidence through their responses to the questionnaires that show there was still a positive impact and change in attitude towards their learning. The implementation of direct and discrete teaching of growth mindset, including the use of positive language from class teachers contributed towards the success of this project. The use of regular circle times, phase assemblies and mini-plenaries also contributed to this change in mindset from the children. The visual displays allowed a consistent reminder of the language and attitudes the children can use and also acted as a prompt for teachers

to refer to when appropriate.

The findings that have been identified from this research support the idea of the whole school being introduced to the teaching of growth mindset. It seems that it is a strategy, which if implemented effectively, could change the attitudes of pupils in the Upper School as well. Hoxton Garden already has many whole school values in place already that the children are very familiar with. Values such as 'perseverance' and 'resilience' very much lend themselves to the growth mind set approach, and these could be used as a starting point when introducing this to the rest of the school.

As a result of this research, it is clear to see that growth mindset did have a positive impact on the attitudes of many of the targeted pupils that have a fixed or negative mind set. If successfully implemented, the achievement and progress of other pupils may also be impacted upon

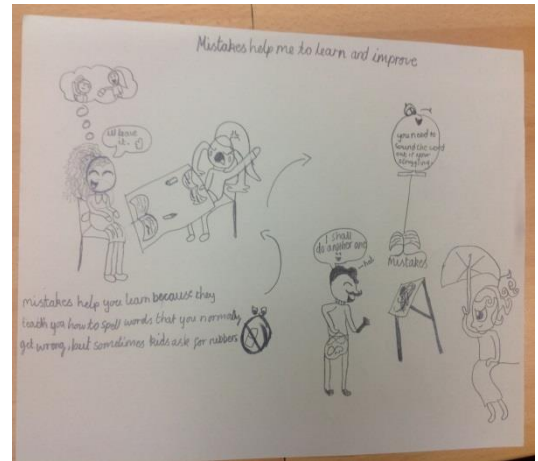
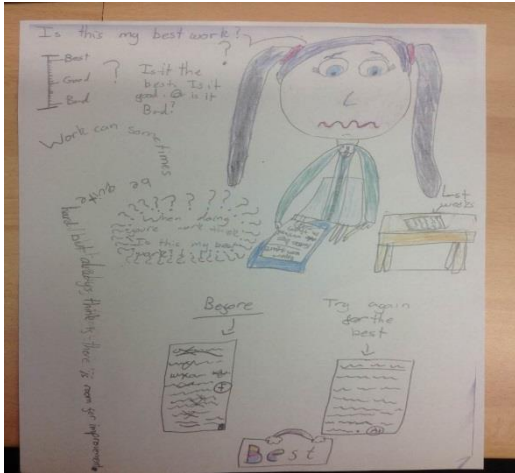
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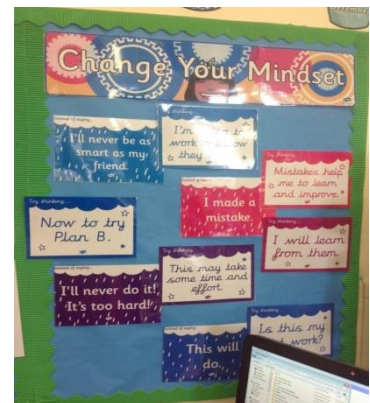
Appendix 1: Examples of outcomes from weekly circle times



Appendix 2: Growth Mindset assembly



Appendix 3: Growth Mindset class displays



Appendix 4: Examples of questionnaires from week 2 and week 18

Year Group: 1
 Term: ~~Spring 1~~ Summer 2

Do you enjoy learning? E.g. 1-not at all 5-Very much	1 2 3 4 (5)	Additional pupil comments: It's lots of fun for me!
How does making mistakes in your learning make you feel? E.g. 1-Very upset etc. 5-It's ok to make mistakes	1 2 3 4 (5)	Additional pupil comments: It's ok but you can keep on trying.
When it comes to school work, how able to you feel you think you are? E.g. 1-Not able 5-Very able	1 (2) 3 4 5	Additional pupil comments: A little bit clever.
Why do you think it is important to put effort into your work?	Pupil response: because if I try my best I can make it better.	
What do you do if you don't understand or find work too hard? How does it make you feel?	Pupil response: I put my hand up.	

Year Group: 1
 Term: ~~Spring 1~~ Summer 2

Do you enjoy learning? E.g. 1-not at all 5-Very much	1 2 3 4 (5)	Additional pupil comments: Sometimes it's easy and I get challenges that I like.
How does making mistakes in your learning make you feel? E.g. 1-Very upset etc. 5-It's ok to make mistakes	1 2 3 4 (5)	Additional pupil comments: It's ok because I can make it better.
When it comes to school work, how able to you feel you think you are? E.g. 1-Not able 5-Very able	1 2 3 4 (5)	Additional pupil comments: I'm the most clever because I never and do the right thing.
Why do you think it is important to put effort into your work?	Pupil response: It is because it needs to be neat and interesting.	
What do you do if you don't understand or find work too hard? How does it make you feel?	Pupil response: I put my hand up and ask whatever teacher is in the class.	

Year Group: 3
 Term: Spring 1

Do you enjoy learning? E.g. 1-not at all 5-Very much	(1) 2 3 4 5	Additional pupil comments: "Cos some of me's it's hard"
How does making mistakes in your learning make you feel? E.g. 1-Very upset etc. 5-It's ok to make mistakes	1 2 3 4 (5)	Additional pupil comments: "I don't mind, because sometimes I get it right"
When it comes to school work, how able to you feel you think you are? E.g. 1-Not able 5-Very able	1 (2) 3 4 5	Additional pupil comments:
Why do you think it is important to put effort into your work?	Pupil response: "Makes it easier"	
What do you do if you don't understand or find work too hard? How does it make you feel?	Pupil response: I don't do it.	

Year Group: 1
 Term: ~~Spring 1~~ Summer 2

Do you enjoy learning? E.g. 1-not at all 5-Very much	1 2 3 4 (5)	Additional pupil comments: Sometimes it's easy and I get challenges that I like.
How does making mistakes in your learning make you feel? E.g. 1-Very upset etc. 5-It's ok to make mistakes	1 2 3 4 (5)	Additional pupil comments: It's ok because I can make it better.
When it comes to school work, how able to you feel you think you are? E.g. 1-Not able 5-Very able	1 2 3 4 (5)	Additional pupil comments: I'm the most clever because I never and do the right thing.
Why do you think it is important to put effort into your work?	Pupil response: It is because it needs to be neat and interesting.	
What do you do if you don't understand or find work too hard? How does it make you feel?	Pupil response: I put my hand up and ask whatever teacher is in the class.	