How can continuous provision be adapted and enhanced to improve boys' achievement in Reception?

Orchard Primary School, EYFS

Abstract

The purpose of this study is to explore how the gap between boys' and girls' achievement in EYFS can be reduced through independent learning opportunities which encourage development of language skills, provide context for learning and links to active or real-life experiences. The study monitored three identified boys in the Reception year and tracked their progress from the Autumn Term to the end of the Spring Term.

During the research process both the construction and water areas were identified as key areas for development, these became focus areas for the research project. The findings within this project concluded that the introduction of focussed challenge activities, open-ended resources, clear modelling and adult facilitation led to increased verbal communication between boys. More consistent observations of problem solving and critical thinking were noted and progress seen in children making links to multiple areas of learning during their independent play.

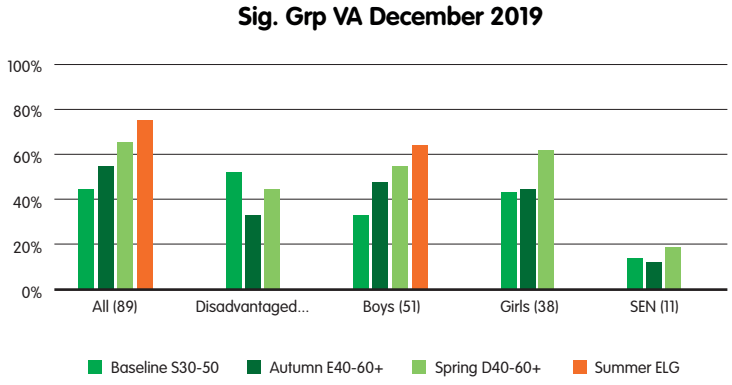
Introduction

The research focussed on understanding how continuous classroom provision can be enhanced to support boys' development through their independent learning, during the Reception year. The investigation was conducted at a three-form entry primary school situated next to a large housing estate in Hackney. The school is multi-lingual and has a diverse mix of cultures and ethnicities. The research was led by the EYFS Phase Leader and supported by two class teachers, an apprentice teacher and three support staff. The research topic was chosen after summative end of year data for the academic year 2018-19 showed significant difference between the achievements of Reception boys compared with girls (fig. 1). The focus on boys' achievement was also identified as an area for development in the School Self-Evaluation; "To ensure that the pitch and access to independent learning for key groups, including disadvantaged pupils and boys in EYFS." (Orchard School Self-Evaluation, 2019/20).

% at a Good Level of Development				
GLD: Prime Areas: PSE, PD, CLL, Specific areas of: Literacy and Maths				
	Badeline S30-50	Autumn E40-60+	Spring D40-60+	Summer ELG
All (89)	46%	57%	65%	74%
Disadvantaged (19)	52%	32%	47%	(23) 65%
Boys (51)	32%	48%	55%	65%
Girls (38)	63%	66%	82%	(39) 87%
SEN (11)	13%	13%	18%	(12) 17%
Apple (30)	53%	57%	67%	77%
Elm (30)	52%	59%	67%	70%
Cherry (29)	31%	52%	66%	(30) 77%

Fig. 1 Orchard Primary School EYFS Summer Data Analysis 2018-19[7]

Boys' underachievement is an issue across the entire developed world, only in Scandinavia do boys achieve at roughly the same rate as girls (where children don't start formal schooling until they are seven). In the UK boys underperform compared to girls in all seventeen areas of learning (fig. 2).



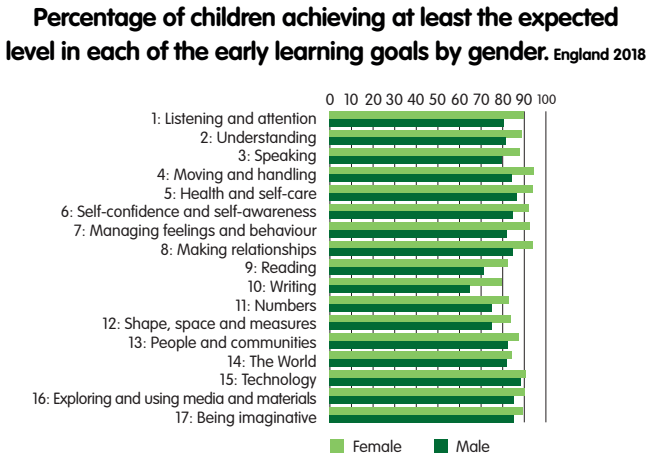


Fig. 2 EYFS Profile Results in England 2018[8]

The team were keen to take on the gender achievement gap for the research project having noted the lack of engagement of some boys in their independent learning, particularly when accessing the outside area. It became even more clear that ensuring boys receive the best start to their education was vital in the context of our school when in September 2019 all staff received Cultural Competence training by the Hackney Learning Trust (now Hackney Education). The training revealed some alarming statistics linked to Black Caribbean and Black African boys' achievement in school, particularly linked to exclusion rates in Primary and Secondary schools.[9] At the end of the academic year 2018-19 data showed 37.6% of Orchard Primary School pupils in years 1-6 were of Black African or Black Caribbean origin and while all groups made more than expected progress evident through internal data tracking, the progress of Black African boys was below that of all pupils.

The first part of the research project was to explore the theories explaining the gender gap between girls and boys, through reading and research. Tricia Maynard (2002) states that the choices parents make for their children (e.g. names, toys, clothing and hobbies) profoundly influence children's understanding of their gender role within culture and society. Sandra Bem (1983) echoes this, explaining the impact of gender stereotyping based on societal biases in her journal, 'Gender Schema Theory and Its Implications for Child Development'. She explores some of the processes by which gender stereotypes become psychologically ingrained in our society; through upbringing, media exposure, school and other forms of cultural transmission, Bem writes; "By the time they are four or five, for example, girls and boys have typically come to prefer activities defined by the culture as appropriate for their sex and also to prefer same-sex peers". Initial learning walks and observations of the environment followed by team discussions identified this to be a common theme among many Reception boys; boys typically gravitate to the same types of play, (e.g. construction, outdoor play), requiring regular adult intervention to try something new. Alistair Bryce Clegg (2012) describes this as 'low impact play'. He writes; *"Children like to do things they are good at, they are often not willing to take on a task if there is potential to fail so they return to doing what they can do well, and because they can do it well, they enjoy it."* He describes the importance of planning continuous provision for skill development that focusses on process over outcome and encourages decision making and creativity, to ensure high-level engagement. Gary Wilson (2007), one of the country's leading experts on raising boys' achievement, describes the importance of addressing the gender achievement gap in the Early Years. Wilson writes; *"The problems begin early, and that is precisely where we need to address them. Boys are often significantly less independent than girls prior to starting school and differences in language development are evident right from the early years."* Wilson (2016) describes how girls can use between ten and thirty times more language in their play than boys, which can profoundly impact boys' development, meaning opportunities for talk and language development in the Early Years environment is essential.

[7] Percentage of boys receiving GLD (Good Level Development) at the end of academic year 18-19 was 65%, compared to 87% of girls, a 22% difference

[8] Girls continue to perform better than boys in all of the early learning goals. The gender gap for the percentage achieving at least the expected level is largest in writing (12.8ppts), reading (10.5ppts) and exploring and using media and materials (10.1ppts). The gap is the smallest for technology (2.9ppts).

[9] At Primary School Caribbean boys made up 22% of fixed-term exclusions in 2014 compared to 5% of the school roll. At Secondary School Caribbean boys made up 17% of fixed-term exclusions in 2014. This compares to Caribbean boys making up 5-6% of the school roll. (2018)

From this reading and research, the critical question was developed: 'How can continuous provision be adapted and enhanced to improve boys' achievement in Reception?' The research process was designed to explore how the Reception learning environment can support boys' learning through encouraging communication, independence and challenge.

Research Process

At the start of the research process baseline data was collected for three Reception boys, all of whom were working below age-expected level upon entry into Reception. Class teachers identified these children as regularly choosing to play at the same activities (typically construction and outdoor play), and frequently engaging in 'low-impact play', using limited language with their peers (Appendix 3). The selected focus children were then tracked at data collection points throughout the duration of the research project.

	CL	PD	PSED	L	M	UW	EAD
Child A	30-50d	30-50e	30-50d	30-50d	30-50s	30-50d	30-50d
Child B	30-50d	30-50d	30-50d	30-50d	30-50d	30-50d	30-50d
Child C	30-50e	30-50e	30-50d	30-50e	30-50d	30-50d	30-50e

Fig. 3 EYFS Baseline Data

In order for the research project to have maximum impact it was clear that staff training for the EYFS team was going to be crucial to develop an awareness of the needs of the boys in our setting, and become adept at valuing their strengths (Wilson, 2016). In January, a CPD session was delivered by the EYFS Phase Leader to all EYFS teaching staff in the Viridis federation on the topic of raising boys' achievement. The training focussed on considering what the barriers to boys' learning are in the EYFS, and how our provision can be adapted to suit their needs. This training was then adapted and delivered to all support staff the following week. To ensure boys' learning was at the forefront of the minds of all staff when planning and preparing resources and activities, 'boys' learning' was added as a rolling agenda item, discussed weekly by teaching staff during every EYFS Phase Meeting, and support staff meeting. Staff were encouraged to reflect on what boys had been engaging with in the previous weeks, and to suggest opportunities for future learning experiences.

Learning walks of the setting were conducted by the Early Years teaching staff, as well as the Phase Leader and Deputy Head. The 'Construction Area' was quickly identified as an area for development in each classroom. It was noted that many boys were choosing to engage in 'low impact play' for long periods of time (Appendix 4), with some resources noted as being age inappropriate (e.g. large Duplo blocks which provide less fine motor challenge at Reception age). Such resources were removed from the Reception classrooms and replaced with more open-ended materials (e.g. large boxes of wooden blocks and small parts such as sticks and pebbles) 'Construction Challenges' were added to the construction area in each classroom. The aim of these challenges was to provide children with a starting point for their independent construction and provide adults with prompts to encourage communication and discussion.

The Water Area in the EYFS outside space was also identified as an area for development; despite being set up with a weekly enhancement (such as sea creatures or tea cups and teapots), the children were observed engaging in low impact play, with limited use of language (Appendix 1). Similarly to the construction area, a 'water challenge' was added and planned for by staff each week. Resources were added such as buckets, stands and guttering to aid larger scale play and problem solving.

Finally, EYFS staff identified that, in order for boys to engage effectively with the challenges and enhancements, they needed to be thoroughly introduced and clearly modelled. Over the initial first few weeks of the research process staff trialled different ways of introducing activities at the start of the day (e.g. sharing images of resources on the whiteboard, bringing resources to the carpet). Teachers found the most effective method of introduction was to conduct a 'walk around' with the children, visiting each learning area in turn and showing the children how the resources could be used, and explaining any new challenges. They found they were able to create a sense of excitement about learning opportunities and that boys were then much more likely to access the resources, as well as model effective use of language.

Findings

The challenge enhancements to areas such as the construction and water areas began as a simple child-friendly question and an image, displayed on the whiteboard or laminated on the wall. Feedback and reflections from EYFS teachers during phase meetings identified that, although the challenge was popular at the start of the week, boys were engaging with it much less by the end of the week. It was decided that the challenges would be changed twice weekly, and a new challenge introduced on a Wednesday of each week. The challenges were then enhanced with key questions to support adult facilitation (see fig. 4) and to encourage further talk and language development among the children during their play. When suitable, staff began to add enhancements to support the completion of the challenge; for example, a basket of small world animals was added when the challenge was to make a zoo.

Fig. 4 Construction Challenge Example

New resources such as blocks for construction and large guttering for water-play were well utilised by staff when setting up activities, making these areas more visually appealing to the children (fig. 5) and therefore more widely accessed. However, the increased popularity of the water and construction areas was identified as a concern by staff who felt that the spaces had become too crowded for children to explore the resources fully. In response to this staff introduced a limit to the number of children who could play at each area, with a maximum of 5 children able to work at each area at one time. This was facilitated by teachers and support staff and was effective in ensuring children had access to the resources, and the space and time to communicate with each other effectively.

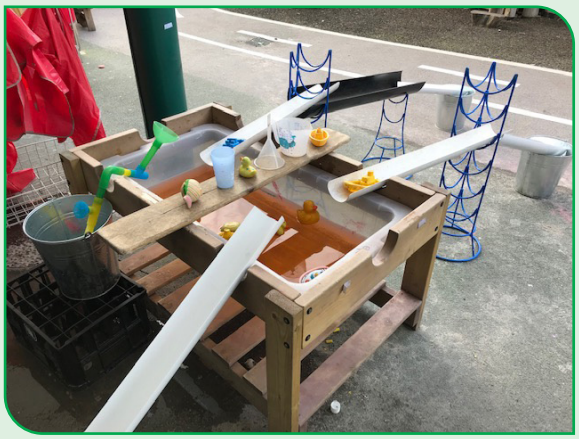


Fig. 5 Water area with enhancements

By the end of the Autumn Term, data showed that progress had already been made in all areas of learning, with the gap closing in some areas. PSED was the most improved area, with all focus children now working at age appropriate level.

	CL	PD	PSED	L	M	UW	EAD
Child A	40-60e	30-50s	40-60e	30-50s	40-60e	30-50s	30-50s
Child B	30-50s	40-60e	40-60e	30-50s	40-60e	30-50s	30-50s
Child C	30-50s	30-50s	40-60e	30-50s	30-50s	30-50s	30-50s

Fig. 6 EYFS Data end of Autumn 2

Images of children's play in the construction areas**,** when compared to early observations from November, (see Appendix 4 and 5) show children working more collaboratively and on a much larger scale, using the open-ended resources such as small blocks, shells and pebbles. Even more significantly, observations of the focus Reception children playing at both the construction and water areas taken in March showed significantly more use of language during their play (Appendix 2 and 6) as well as evidence of children thinking critically, asking questions and problem solving. The observations also show increased adult interaction to extend children's learning, and make links to other curriculum areas, for example, directing the children to the modelled example on the board to encourage children to make some signs for their zoo (Appendix 6).

Data collection at the end of the Spring Term showed significant progress for the 3 identified focus children. The data shows all three children working at age related level in almost all areas of learning, with the exception of Literacy and Expressive Art and Design for Child B, and Understanding the World and Expressive Art and Design for Child C.

	CL	PD	PSED	L	M	UW	EAD
Child A	40-60d	40-60d	40-60d	40-60d	40-60d	40-60d	40-60d
Child B	40-60s	40-60d	40-60d	40-60e	40-60d	40-60d	40-60e
Child C	40-60d	40-60d	40-60d	40-60d	40-60d	40-60e	40-60e

Fig. 7 EYFS Data end of Spring 2

Impact and Conclusion

Evidence concludes that enhancing the construction and water area with bi-weekly challenges and open-ended resources, paired with effective adult modelling, had a significant impact on how boys engage with independent learning. The evidence gathered through observations of children's independent play show examples of increased verbal communication between peers, examples of problem solving and critical thinking, and children making links to multiple areas of learning such as literacy and maths. Data collected at three points in the year show significant progress for the three focus children in all areas of learning. Spring data shows all three children were on track to receive Good Level of Development (GLD) at the end of the year.

This research highlighted the importance of staff understanding and awareness of boys' specific needs, to ensure effective facilitation of learning. Feedback from CPD training shows staff now demonstrate a much deeper understanding of some of the early barriers to boys learning, and how they can be overcome. Further CPD is recommended for the Autumn Term next year to ensure boys' achievement is kept at the forefront of practitioners' minds and that new teaching staff are adequately trained.

Further to this, the research has highlighted the following next steps in order to continue to support boys' achievement and close the attainment gap:

1. CPD for staff in Year 1 to support transition in to KS1, ensuring teachers understand how boys learn best, supporting them to plan skills-focussed lessons that link to real-life experiences.
2. Develop partnerships with parents through Coffee Mornings and information hand-outs, to raise awareness and support understanding of how parents can support active and practical learning at home.
3. Develop and train male KS2 students as 'mentors' to Reception boys to support and model independent play, based on Gary Wilson's 'Transformer Scheme' (Wilson, 2016).

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Appendix 1 - Images of water play November 2019

Appendix 2- Water play example observation March 2020

Child A and Child B are playing at the water area. They are working on the water challenge to get the duck to travel into the bucket. Child A scoops some water with a jug and pours the water onto the top of the guttering.

Child B: *"Stop, stop! It's going on the floor!"*

Child A: *"Oh no there's a hole! Quick catch the water!"*

Child B gets a bucket and places it under the place where the water is leaking.

Child A: *"It's pouring the wrong way!"*

Child A and Child B continue to pour water onto the guttering and it continues to pour the wrong way.

Adult: "*What could you do to help the water travel down to this bucket?* [at the end]*"*

Child B: *"We need to lift it up a bit so it goes down. Down this way! [points to the far end of the guttering]"*

The children work together to lift the guttering up at one end, putting it on a higher rung on the stand. They both take scoops of water into their containers and pour. They cheer as the water pours to the bucket at the end of the guttering. Child A places a duck at the top of the guttering and they pour water above it, causing it to travel down into the bucket.

Appendix 3 - Construction area example observation November 2019

Child A is playing with the Magnatiles in the construction area. He makes a triangular prism shape and pours in some lego, he then puts a triangle shape on top to close his prism and shakes it to make a noise. "It's a shaker! It makes a sound!"

Child A begins to move his prism around the floor like a car, making car noises.

Appendix 4- Images of Construction Play November 2019

Appendix 5- Images of construction play March 2020




Appendix 6- Construction play example observation March 2020

Child A and child B are playing with their peers at the construction area. They are working on the construction challenge which is to create a zoo. They use the blocks to make 'enclosures' for the animals.

Child A: *"This is the fence! So the animals can't get out. The hippos can go in here but they need some water!"*

Child B: *"We can use the blue magnatiles for the water! Look, this one's big! We need more blue ones!"*

Child A: *"I've got some more blue ones here you go! Splash splash splash! Hippos love water!"*

The children choose different bricks to create another enclosure, working together to place the blocks in a large rectangle shape. They place two lions inside. Child B places a cheetah in the enclosure.

Child A: *"I've got a baby lion look! Oh no a cheetah can't go in here! This is for the lions!"*

Adult: *"I wonder why the cheetah can't go in the enclosure with the lions?"*

Child A: *"Cheetahs will fight with the lions, it's not safe. And cheetahs are too fast!"*

The children choose green Magnatiles to go in the bottom of the lion enclosure for grass.

Adult: *"I wonder how people will be able to find our zoo to visit? What do you notice the child has done on the board?"*

Child A: *"We can make a sign!"* [Child A turns to child B] *"Do you want to help?"*

Child A retrieves some yellow card from the writing area. He folds one sheet in half. He sounds out 'zoo' and writes it on his sheet of card using cursive letters. He writes 'lion' and 'hippo' and stands it by the zoo.

Child B: *"I'm going to make some tickets so people can pay to go to the zoo! It can be 10 pounds!"*

He cuts some squares of card and writes '10p'. He then sounds out 'ticket' and records the sounds he can hear.