6| EXPLORING HOW THE USE OF METACOGNITION AND SELF-MOTIVATION IMPACTS ON PUPIL PREMIUM CHILDREN'S WRITING

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1. | INTRODUCTION

Understanding how best to support 'disadvantaged' children through education has always been of interest to me. I studied Education, Culture and Society at Goldsmiths which heavily explored the barriers that children, in particular from lower socio-economic backgrounds faced in accessing education. My previous BA dissertation and MA modules have focused on working class women and girls, and their relationship with education. Under current government policy, 'disadvantaged' children with reference to their socio-economic background, are identified as pupil premium children. As someone who self identifies as belonging to this group, especially whilst growing up, my eyes were opened. I had the tools and time to reflect on my own path through education. This has helped me understand the type of teacher I am and how I can use this to support a variety of children.

I am in my 4th year of teaching, having taught year 4, 5 and I am now in my 2nd year of teaching reception. I have had the opportunity to see how children in key stage 2, come up through the school system, sometimes without the tools they need to be successful leaners. It has been an amazing opportunity to work with the very youngest children in our school, to try and support their development in the foundation years. The school I currently teach in is a 2-form entry, inner London school, with a higher than average pupil premium intake.

This research took place over the course of an academic year from 2016-17 with a small group of pupil premium children. It is concerned with raising literacy levels, of children who historically, work at below age related as writers. This research will attempt merge a theoretical approach and my in-class experiences, to address the key research question. Using the Education Endowment Foundation, 'Teaching and Learning Toolkit' (2015) as a stimulus, the year included sessions on metacognition and own goal setting. This culminated in a writing task to compare the group's progression over the year in writing. I wanted to try and make sure that this group of children left reception as empowered and reflective learners. My hope was that they would have begun to gather a range of strategies, to approach learning with a positive mind set. In addition, feel self-motivated to learn even when faced with potentially more challenging learning activities, such as writing.

I shall begin by introducing the approach I took whilst carrying out the action research. Then I will review the current the literature around this area and explain where my action fits in with current thinking and practice. I will then discuss the observations and data relating to my pupils' learning and literacy attainment. After discussing the literature and data of interest, I will go on to discuss my actions, the outcomes of these actions and evaluate them. Finally, I will present the conclusion of my project.

1. | METHODOLOGY

Action research is defined by Carr and Kemis (1986) as being about two specific things: the first is 'action' (what you do) and the second is 'research'. This supported the notion of improving practice through action research. Research can defined, in this context, as being developing understanding about your practice. The studies developed using an Action Research approach follow an Action Research cycle. This is defined by Tripp (2003) as four main steps; Plan Action, Act Thoughtfully, Research Action and Evaluate Action. Unfortunately, due to time restraints, I was not able to carry out the full cycle. However, I did adapt the approach and use this it to inform my actions. I carried out the research which then informed my action. It is still important though that I had a clear understanding of what action research was.

"Action research is a small-scale intervention in the functioning of the real world to address practitioners own issues, and a close examination of the effects of such an intervention" (Kemmis and McTaggart, 1992). I was very interested in carrying out an action which addressed issues that I saw taking place in my own practice.

In addition to this, Bogdan et al (1992) suggest that action research "seeks to improve social issues affecting the lives of everyday people." I feel my own research and consequent actions could begin to explore how to improve some of the impact that social issues may have on the children I teach.

"The fundamental aim of action research is to improve practice rather than to produce knowledge" (Elliott, 1991). This resonated with me as I believe it is essential to always seek to improve my own teaching practice. This study would give me the opportunity to understand some of the issues the children I teach may face and adapt my teaching to support them.

2. | AREA OF CONCERN

When I was a key stage 2 teacher, I often inherited pupil premium children who were working at below age expected in writing. They presented with a 'I can't write' attitude. When looking over past data I could see that these children had always been in the 'bottom' group for writing. By using a range of strategies, I could teach the children when to use different writing devices and techniques. However, this was only ever a 'paint by numbers' guide to writing. The hardest element to tackle was the children's view of themselves as writers. Getting them to believe that they could be creative, skilled and independent writers was much tougher.

When I moved to EYFS I was able to experience the beginning stages of writing and how the children developed their view of themselves as writers. I wanted to ensure that every child I taught, in particular, pupil premium children moved into Year 1 with a positive view of themselves as writers. I wanted to set the foundations of a 'can do' attitude that was imbedded with them for the rest of their lives. If this was going to be achieved the children needed to be confident, enjoy writing and make independent choices.

Closing the gap of attainment between pupil premium students and all other students, has long been part of the government and school agenda. Most recently, the coalition government 2010 – 2015 invested 'enormous amount of money and political capital trying to close the attainment gap between children from low-incomes families, and everyone else' (Sutton Trust, 2015). With Ofsted monitoring how schools succeed in closing their own gap, emphasise on closing their own gap is very high profile for schools. Although I feel the pressure of 'data' expectations within my own setting, the experience and relationship that children from low-income families have with education, has always been close to my heart.

Reflecting on my own school's end of KS2 data, we have a good record for closing the attainment gap between pupil premium children and all other children. However, there is still a gap which needs to be closed entirely to be addressed. This is also in the EYFS setting and it is important to see where we could improve on a national level. It is vital that educational practitioners recognise 'data suggests that we still have much to do…some schools have closed the gap, but many still have a long way to go' (Sutton Trust, 2015). The national picture reflects this sentiment, with only 35% of FSM pupils achieving the expected standard in reading, writing and maths KS2 SATS compared to 57% of all other pupils (DFE, National Tables: 2016).

As I began my action, I received a list of the pupil premium children in my class, which was surprisingly small considering the schools geographical and above average pupil premium intake. It was important to remember that 'many non-FSM pupils come from lower income household than FSM' (Major et al 2015) Due to benefits such as tax credits, households are pushed through the income threshold, even if marginally. Thus, creating a fluid and sometimes unrepresentative picture of which children are really in a low income household. This reminded me that any conclusions drawn from my actions, should reflect a whole class approach, which benefits as many students as possible.

To inform my action, I needed to review which strategies had been used to support pupil premium children and their success. I began exploring how pupil premium funding was spent in schools both nationally and within my own setting. Although it is important for me to acknowledge how much of an impact using funding effectively can have, this aspect was not something I felt I could address within my own small action.

This lead me to the Education, Endowment Foundation website that produced the 'Teaching and Learning Toolkit' (2015) in conjunction with The Sutton Trust. They explain the toolkit as 'accessible summary of educational research which provides guidance for teachers and schools on how to use their resources to improve the attainment of disadvantaged pupils' (Sutton Trust, 2015). The toolkit provided a 'cost, evidence strength and impact' analysis for a variety of strategies that could be used in schools. Many strategies were of interest, however I knew I was looking to use something with a high impact for a low cost. Although feedback scored highly, I felt our school had a well-developed feedback policy and ethos already. The words metacognition and self-regulation stood out to me for several reasons, one being that I had heard and seen this word thrown around as a 'buzz' word in my recent visits to other local schools. I wanted to explore what this meant, in terms in practical application in the EYFS setting. It is suggested that 'metacognition and self-regulation has high impact for low cost, based on extensive research' (Education, Endowment Foundation 2015).

'Metacognition is the knowledge of cognitive processes' (Galton, 2006 in Tarrant et al 2016) this is referring to what we know, about how we think and learn. Researchers have explained how this term can be practically understood and applied within the classroom setting, providing teachers like myself, with a starting point to work with the children. They suggest children should 'have an understanding of how they learn…be more aware of the processes and actions they use during learning or to achieve an outcome' (Tarrant et al 2016).

It was interesting to see how self-regulation, is also translated into practical applications within the school setting. This requires the pupils to 'manage one's own motivation towards learning' (Education, Endowment Foundation 2015) which as I 'feel' from my own teaching experience, can be hard to encourage when working to a set curriculum and outcome expectation. However I felt encouraged about my own proposed actions, as I teach in EYFS, where the children are encouraged to lead their own learning. In contrast to my own 'feeling' about the constraints of teaching to a prescriptive curriculum or outcome, The National Curriculum has presented 'thinking skills' to be

taught alongside 'key skills' (QCA, 2000) such as 'information processing, creative thinking, reasoning and evaluation skills'. Initiatives such as Mantle Of The Expert and researchers such as Tarrant et al (2016) provide activities that can be incorporated into day to day pedagogy and alongside the National Curriculum.

It has been argued that using these strategies and measuring their success is unclear in younger children, namely EYFS due to theories on developmental stages. Bloom's (1956) taxonomy tools are widely used in education settings to 'access learning and structure questioning' (Tarrant et al 2016) however Tarrant et al (2016) question if the 'children have a shared understanding of what the taxonomy words actually mean'.

The importance of having a shared language and appropriate questions is echoed by Devereux (2000) who provides suggested questions to use with the pupils 'What will happen if… have you thought about…'. These examples could be applied to general activities however, Jacobs (2004) provides examples of questions 'How do you think that idea came into your mind? How do you think your writing went today?' that can be applied to curriculum areas and for my purposes, writing. They are focused on the 'thinking' skills and inviting children to reflect on their learning. Research suggests that it is important for children to have the opportunity to talk about their learning (Bruner 1960: Alexander 2004). This is supported by Vygotsky's (1978 in Wertsch 1985) theories that learning is supported and 'developed through interactions with others and a view that a higher level of achievement happens when there are others to assist us'. This implies employing these strategies with younger children could be effective. In contrast, Piaget suggests that children in the 'pre-operational' stage of development, younger than 6, cannot reason properly as they are 'egocentric thinkers'.

Ethics

When conducting research, it is essential to consider any ethical issues which may arise as a result of my action. My initial proposal had to be authorised by my head-teacher. I made my intentions clear and how I would use any data collected. I considered how I would balance the ethical guidelines by BERA (2011) which suggest explaining to the participants 'why and how' I would use any data collected. I spoke to my colleagues so that they were aware of why I was planning the activities. When speaking to the children, I explained that I was learning at school just like them and would like to do some activities with me.

In order to keep the children's identities and data confidential I used the BERA guidelines again, for example only using initials, no photographs of the children and omitting names from the examples of learning.

3. | ACTION

Using the reviewed literature and my area of concern, the following actions are intended to explore how the use of metacognition and self-regulation, can positively impact on pupil premium children's achievements. In particular, the area of literacy within the EYFS setting.

My actions were completed with a small group of 6 children who were identified as pupil premium children. This was a mixed group of children, including EAL, boys, girls and varying academic ability, all of which are factors that can also impact upon the learner. Although these areas of interest and worth acknowledging, this action has focused on exploring pupil premium literature.

Action 1 – Metacognition – Thinking about thinking

- Understanding how the children views and understood themselves as learners was my initial action. I used an action informed by my research (Tarrant et al 2016) to create a pictorial display with the small group of children. I started by setting the children a challenge within the classroom. I provided the children with 10 red bricks and 7 green bricks jumbled in a box with 3 yellow bricks. I challenged the children to make a tower of 20 bricks however only using red and green bricks. I observed the children and scribed their voices as they were working through the task.
- Next, I used a set of questions based on recommendations from the literature review to encourage the children to think about their learning process. It was important to remember that these questions were designed to be used in informal interviews. I only asked questions that were appropriate or followed on from the children's own words. We used images, scribed words and drawing to represent what they were thinking.
- Together we generated 'thinking' words and image using Communication In Print and I also provided some that I thought were appropriate to encourage the children to use. We used these throughout the action, referred to them on out thinking wall and displayed them around our learning environment.
- I incorporated our 'thinking' language throughout my day to day teaching and small group activities during group writing. This was to embed the language, skills and ability to reflect on their own learning. During the small writing groups I observed anytime the children discussed their thinking or responded to any of the questions in an informal interview.
- Finally, I asked the children to evaluate their end writing project (see action 2) answering the same questions as in the first activity.

Action 2 – Self-regulating motivation – Mantle of the Expert

- After 4 weeks of taking part in action 1 we devised a new activity based on a project from Mantle of the Expert. We carried out the activity and adapted it to suit our own environment and time restraints. This activity is designed to give them children an engaging topic, which would motivate them to talk and write about what they had done.
- Leading on from the children's learning and outcomes, we used questions to talk to me and their peers about their 'thinking'.

5. | EVALUATION OF THE ACTION

I chose to use observations and informal group interviews to evaluate the actions. The pupils were asked a set of questions informally during and after a writing activity. The informal interviews provided freedom for me to encourage the children's answers and discuss to their thinking in detail. My understanding of the term 'interview' is that it is a form of gathering data 'through direct verbal interaction between individuals' (Cohen et al, 2007). It was essential that I interacted with the children to gain an understanding of their thinking and not just through my own observations. However, interviews even informal ones may be influenced by the interviewers' bias, potentially leading the pupils' responses.

I carried out observations of the group while they were completing the activities in small groups. Observations provide the opportunity to assess what is happening during the activity and (DeMunck et al 1998) 'unscheduled events'. This is especially beneficial with younger children who

may take the lead in their own learning. It was important not to make the children feel like they had to 'perform' when I was observing them. There is potential, that if the children become aware they are being observed, they may change their behaviours. I adopted a passive role and if one the children spoke to me, I encouraged them to return to their activity. I was also able to observe things that I may not have normally seen. In contrast, it is important to remember observations only provide a 'snap shot' of a small part of the children's learning.

6. | CONCLUSION

Carrying out the research and actions has been an interesting process which has highlighted some unexpected developments. It was fantastic to have the opportunity to focus on a small group and follow through with a project. It enabled me to reflect on the process both the children and I undertake when learning.

Introducing the children to the concept of metacognition was tricky and I had already anticipated this, given my experience working with EYFS children. However, I had not taken into account how difficult some of the children would find it to express themselves.

The first activity was set out with the intention of giving the children an activity in which they had to use their problem solving skills. As Tarrant et al (2016) suggest 'metacognition skills are often associated with problem solving' and would be a good indicator of how the children used their metacognitive skills practically. My observations indicated that some of the children had good reasoning and problem solving skills. For example J used her prior knowledge to locate some extra building blocks. She was able to 'remember other learning' (Tarrant et al, 2016) and be a 'good team member' by sharing her ideas. These were two examples meta-learning strategies I was hoping to observe as the literature supports for EYFS age. However some of the children, epically K, T and S demonstrated very few meta-learning skills expected for nursery age children when faced with a problem. They tended to 'look, guess and wonder' what to do.

After the first activity I asked the children to reflect on what they had just done and what they were thinking using a devised set of questions. I was surprised by how little vocabulary the children had to express themselves. D was able to give a brief insight into how she was she 'felt' when 'learning. However, there were a lot of off topic answers, maybe due to being bored with the question and 'I don't knows'. This would suggest that even if the children were able to reflect on their learning, which supports Piaget's theory, the children were not ready to 'interact' and reflect with their peers as Vygotsky's research advocates.

This then informed my next action, to create a word bank, with supporting images to build the children's vocabulary. I used meta-learning words to inform the types of words we chose as well as the children's ideas. Using the images helped the children understand what some of the words might mean and gave them an accessible resource to use. It also gave me a tool to measure the children's progress as well as them to develop.

My focus then turned to how the children were able to understand themselves as thinkers. It was important to embed the metacognitive skills in the children before looking at the application to improve their literacy skills. I was able to observe the children, in a range of situations not just in literacy. This is a benefit of this data collection style as previously explored in the literature. It allowed me to see if the skills became embedded through 'backstage' observations (DeMunk et al 1998). I was very pleased to see that the children began to utilise and use the language they had been exposed to. In particular, the thinking brain activity allowed the children to personalise the language they had use. As well as take ownership of the words by sharing them with their peers.

The communication cards proved to be a valuable resource when used in a focused writing group. Both the children and I were able to use them as starting points for our discussions and interesting as a reflection point for solving problems. T used the cards when he wanted to focus on his writing outcome. He used the images to help him know what to do and even pointed to them.

One child, D began to use the words in her everyday language and in a range of situations such as role play. I was encourage by how much the children were recalling their problem solving skills which was impacting on their learning. For example, M remembered other learning to achieve a task and she was able to explain her thinking to me.

My observations and informal interviews allowed me to see if the children were progressing with how they reflected on their learning. I was able to compare their responses to the initial data collection. Overall I saw an improved ability to answer question relating to their learning and thinking. With a number of children, especially T, articulating his thoughts were quite difficult initially. However he did begin to use language to express his thinking. J also used words to express her thought process and directly used the communication cards to do this. I was beginning to see some of the benefits of the children's improved metacognitive skills and language. As the children were able to tell me how they learnt or felt I gained a 'greater insight into each child as a learner' (Tarrant et al, 2016). This allowed me as a practitioner, to adapt the activity as we were doing it, plan for future activities and support the children.

We reached our final action and the children took part in 'The Mantle of the Expert' activity. This element of the action was designed to create a sense of self-motivation for a writing outcome, which the children could reflect on. I aimed to assess their writing compared to a piece from before the action. Although the children enjoyed the task and became engaged with solving the problem, the written outcome was secondary to the language used in their informal interview. I also observed some of the key metacognitive skills I was hoping to see notably more than in the initial brick task. Unfortunately, this element of the actions took a side line to the children's language development. Which ultimately should positively impact on their learning and in turn writing.

The observations revealed the children 'showing others' their ideas and a lot of 'remembering other learning, cooperating, trying different ways' to solve the problem together. The analysis of the data collected suggests there was some impact on the children's understanding of how they think and learn. As they built up the language to express themselves, not only were they able to use them but hopefully understand them like the taxonomy words (Tarrant et al 2016). I am not naive enough to think this could only be a direct result of my action, however my ability to identify these skills being used more, was. It was as Elliot (1991) implied, through the action my own practice improved.

Sadly, the children easily became distracted when it came to developing the task beyond my initial input which is a shame. Reflecting on the end of the action, the activity took place in the first week of a new term and I wonder if the children were still settling back into routines at this point. Although we did get a written outcome this was a more adult encouraged task. The self-motivating action did not create the impact that I believed was potentially there.

When I set out to research my area of concern, I was determined to see an impact on some of the most academically vulnerable children in my class. It was also my aim to reflect on my own pedagogical approach and how it met the needs of those children. I would question how much of a long-term impact my action may have had on the children. I did though gain an understanding of just a small element of how to support those children in expressing themselves. I would like to think that given more time, the language and ability to reflect on their own learning would become

integral to them as leaners. Thus, having a long-term effect that would carry them through their educational journey.

As I reflect on what I will take from this into my teaching career, I would aim not to focus on seeking result in terms of data or improved writing as a measure of success. As a teacher, it is easy to lose sight of developing the children's long-term learning skills but focus on 'high' quality outcomes. This study gave me the opportunity to remember, not to focus on that one piece of assessment or display writing but to keep seeking to develop the children themselves.

If I were to carry out the action again, I would hope to be more prepared with supporting the children's language development. As this was a key element of the action which I had underestimated and had to spend a lot of time introducing to the children. It would then be possible to focus more on providing opportunities for the children to understand and apply these through problem solving. As the children continue through their school journey, I wonder if they will be given the opportunity to explicitly develop their metacognitive skills? How do children with EAL respond to developing their language skills? How would the impact of a long term action impact on pupil premium children compared to the same action of non-pupil premium children? All questions that could be explored in further action research.

7. | REFERENCES

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