Mind the Gap: an exploratory investigation of a family learning initiative to develop metacognitive awareness

Abstract

Mind the Gap is a family learning project aiming to facilitate intergenerational engagement with learning in schools through the vehicle of a stop-motion animation project¹. Implicit in the animation process is reflective and strategic thinking that helps to make the process of learning explicit (Learning to Learn: Wall et al. 2010). The animation project takes place in school and targets Year 4 children (aged 8 and 9 years old) and their dads/ male guardians. The project is accompanied by staff development in school to promote the same Learning to Learn (L2L) approaches across curriculum and home/school boundaries. A team of researchers at Durham University is engaged in two projects, firstly developing better understanding of the intervention elements and, secondly, evaluating the impact. This paper will focus on data arising from the former and will explore the space for family learning created in the project. We propose that the context of an inherently challenging animation project, which includes schools, parents and children working together in new ways to learn new skills associated with information technology and creative story making, increases the likelihood of dialogue about learning. It opens up the possibility of new relationships between home and school as well as increasing the potential for learning based conversations that could be lifelong and lifewide.

Keywords

family learning, learning to learn, metacognition, home-school partnership, fathers, intergenerational learning

Background

Mind the Gap is a family learning project aiming to facilitate intergenerational engagement with Learning to Learn (L2L) through the vehicle of a stop-motion

¹ http://www.campaign-for-learning.org.uk/cfl/Projects/mind the gap project and programme.asp

animation project. Implicit in the project is reflective and strategic thinking (Moseley et al. 2005) that helps to make the process of learning explicit: to develop metacognitive awareness (Flavell 1977). This approach is allied with the Education Endowment Foundation's *Teaching and Learning Toolkit*², which places metacognitive awareness as one of the key strategies for raising attainment with an estimated average impact of 8+ months (Higgins et al. 2013).

The animation project takes place in the school environment, but often after the normal school day, and targets children and their dads/ male guardians. It is accompanied by staff development to promote the same metacognitive strategies (in line with L2L philosophies: reference Wall et al. 2010) across the curriculum and home/school boundaries.

Our team of researchers engaged in two related projects in partnership with the Campaign for Learning, a UK based education charity, which developed the initial idea for the project. The first, sponsored by Esmee Fairbairn (2011-2012), aimed to develop a better understanding of the project elements, the learning environment, and the factors that lead to family learning. The second, funded by the Education Endowment Foundation (EEF: 2012-2014), was a systematic evaluation using a randomized control trial of the impact of a standardised version of the project on participant children, teachers and schools. This paper focuses on our findings from the former project. In particular, we explore how the project developed a context for talk about learning and the development of metacognition. Thus we show how L2L philosophies can support parental engagement in learning (their own and their child's).

Learning to Learn (L2L) as a pedagogic concept has become common in English schools (Wall et al. 2010). It aims to introduce innovative pedagogies that support making the process of learning explicit. This draws on theoretical and pedagogic traditions such as: metacognitive awareness; thinking skills; self-regulation; habits of mind, dispositions; self-efficacy and self-esteem in relation to learning; but in the main concepts are fluid, reacting to the pedagogic and policy environment (Wall 2010). In previous L2L projects,

_

² http://educationendowmentfoundation.org.uk/toolkit/

also coordinated by the Campaign for Learning (Wall et al. 2010), the key was finding the 'space' (time, environment, and stimulus) for all participants (teachers and students) to voice perspectives on learning (Wall 2012). As such, this 'space' facilitated metacognitive awareness (Flavell 1979). In addition, many teachers saw the relevance of extending L2L across home-school boundaries (Hall et al. 2005). This was found to be very powerful and enhanced the children's metacognitive awareness (Hall et al. 2005; Wall et al 2009). Thus the resulting definition of L2L focused on the importance of making the process of learning explicit, lifelong and lifewide (Wall et al. 2010).

Research on family learning shows that, once socio-economic status is accounted for, the biggest influence on children and young people's motivation and attainment is parental support (for example, Desforges and Abouchaar 2003; Harris and Goodall 2007). But what this parental engagement looks like is up for debate; there is much variation in the type of intervention and therefore the impact and process that is studied. Most research in the field is concerned with literacy development (for example, Wade and Moore 2000; Wagner et al. 2002). However, many of these family literacy programmes have been criticised for having a dominant 'deficit discourse' (Anderson et al. 2010: 41), with, in some cases, the resulting relationship accused of being more aligned with overt surveillance (Crozier 1998). In this model a one-way delivery model of school practices and cultural values (Rocha-Schmid 2010) can result. Wolfendale (1996) suggested a change, specifically that projects should induct parents into school processes, curriculum and teaching and learning approaches. Others talk about partnership working rather than an oppositional model; however in practice the way this is managed can be questionable with faults tending to lie on all sides (Crozier 1999). Any approach needs to consider the affordances and constraints that operate in an interaction between home and school, between teachers, parents and child.

Involvement in family learning projects can have a positive effect on parent learning identity (Swain et al. 2014) and an explicit focus on the parents' needs can increase impact (van Steensel et al. 2011). Indeed where parents were involved in the L2L project (Wall et al. 2009) there was an increase in their metacognitive awareness alongside their child's. As a result in Mind the Gap there has been a strategic refocusing of the initiative away from an explicit family-school relationship. Partnership

approaches are about the parent and child with the focus on the learning experience rather than anything more school-led or formal.

Another special characteristic of this project is the focus on dads/ male guardians. In the majority of family learning programmes fathers tend to be reluctant or absent (Macleod 2008; Freeman et al. 2008). Yet the research shows that when fathers do have high levels of involvement (Flouri and Buchanan 2004; Roopnarine et al. 2006), and show interest in their children's education (Nord 1998) there is greater progress, more positive attitudes and higher expectations (for example, Hill and Taylor 2004; Goldman 2005). Despite this body of evidence, family learning programmes that specifically involve fathers and male guardians are relatively rare. Mind the Gap aims to fill this void.

In this paper, therefore, we explore the space for family learning created in the project and the engagement with L2L that resulted. We propose that the context of an inherently challenging animation project, which includes schools, dads and children working together to learn new skills associated with information technology and creative story making, increases the likelihood of dialogue about learning. It opens up the potential for new relationships between home and school, as well as increasing the potential for learning based conversations.

Mind the Gap

The key focus of Mind the Gap was the animation project. This consisted of 5 sessions (10 hours in total) where children and their parents worked together to create an animated film. These sessions were coordinated by a facilitator who helped participants to consider and reflect upon how they were learning. The child invited their parent/guardian to take part in the project through drawing a 'wanted poster', thus the contract was immediately suggested to be between the child and the adult without the schools' explicit involvement. The target was father or male guardians, but where this was not possible the child invited the adult of their choice. The facilitator also trained the school staff in how to embed L2L approaches in their work, and how to develop a strategic approach to effective parental engagement.

The 5 sessions were carefully designed to encompass elements such as story planning, modelling, trialling the equipment, exploring different animation techniques, filming, and editing Each element was matched to a L2L theme based on one of the 5Rs developed by the Campaign for Learning³: Readiness, Resourcefulness, Resilience, Responsibility and Reflectiveness (Wall et al. 2010). The progression through the programme was carefully mapped to ensure the L2L elements and the animation process were closely associated and therefore maximised opportunities for transfer. This process was standardised using a number of resources including goal and reflection sheets that allowed the families to record their learning experiences.

Table 1: The 5 sessions and their content

Session	L2L focus	What actually happens	
1	Readiness	Introduction from facilitator	
		 Show of previously made films 	
		Introduction to L2L	
		 Use modelling clay to consider 'what kind of learner am I?' 	
		 Experimenting with animation technology 	
		 Complete goal and reflection sheets 	
2	Resourcefulness	 Frequently described as 'creative' activity by facilitators 	
		 Use craft materials to make sets and characters 	
		Story planning using templates	
		Complete goal and reflection sheets	
3 Responsibility		The most technical session in which families need to get	
		to grips with the software	
		 Some completion of story planning 	
		Complete model making	
		Start filming	
		 Complete goal and reflection sheets 	
4	Resilience	Continue to use the software to make the film	
		 Adjust models and storyboard to fit practical constraints 	
		of filming and project timings (the full 6 episodes of Star	
		Wars is not possible!)	
		 Complete goal and reflection sheets 	
5 Reflection • Finish films		Finish films	
		Add sound and credits	
		Share films with the wider group	
		 Reflection on what has been learned/achieved 	
		Complete goal and reflection sheets	

-

³ http://www.campaign-for-learning.org.uk/cfl/index.asp

Key staff in each school were encouraged to attend sessions to ensure clear communication of the process and intent of the sessions undertaken by the pupils and their families. Along with the staff training this aimed to ensure that the schools and the teachers could maximise the transfer of the strategies into practice and enable better communication about learning to learn as something to facilitate learning skills and dispositions lifelong and lifewide.

This project design was based on a number of assumptions. Firstly that parents, particularly dads/ male guardians, are an untapped resource of support for a child's learning (Flouri and Buchanan 2004; Nord 1998; Roopnarine et al. 2006). Secondly, many parents do not understand the crucial role they have in a child's learning, or even if they do, they do not know how to support their child effectively (Wolfendale 1996; Rocha-Schmid 2010; van Steensel et al. 2011). Finally, that if parents are taught how to help their child, and teachers also encourage learning dispositions, pupils will perform much better at school (Hall et al. 2005; Wolfendale 1996). We recognise that the statements above are ambitious, however it was thought that the animation project could create a space where these issues could be tackled. It was a novelty, and hence motivating. In addition, the use of animation and ICT meant that both adult and child were at some point in the position of 'learner', challenged by their novice status, and at other times the 'teacher', facilitating the learning of their partner.

Methodology

As previously stated, this paper reports on findings from the Esme Fairbairn funded research and development project only focusing particularly on the animation element. Using exploratory case study methodology (Yin 2008) we explored the way the schools and families were engaged in a dialogue about learning within the Mind the Gap context. We targeted the following question:

• How do the characteristics of the Mind the Gap project facilitate family learning? The considered results would support the current projects' schools and families, as well as influencing future facilitators, projects and research.

The purpose of any case study approach is to 'illuminate the general by looking at the particular' (Denscombe 2007, p.36). It allows for 'rich' exploration of social situations and context dependent knowledge. This style of investigation is imperative to explore a research project that aims to facilitate learning through dialogue and relationships. Specifically, we looked at the complex social situations across the projects and schools. Also, as Mind the Gap was a family learning project, we examined the interconnectedness of the learning process with the relationships of the participants.

The sample was an opportunist one, with all participant schools located in areas of educational challenge. Individual cases were self-selected on the basis that they were schools that had been recruited to the project by the Campaign for Learning. The research was presented as part of the project and in participating the schools were consenting to take part. Research took place in 6 schools in Tyneside and Sheffield, 4 primary and 2 secondary, from May to July 2012. Every school involved in the project and each instance of the intervention was included, allowing us to consider the individuality of each setting and infer transferable findings for different contexts beyond the project. We were able to consider factors, such as: type of school, proportion of EAL, level of social and economic deprivation, and setting.

The multiple case study comprised primarily of school-level cases. However participating families and teaching staff from individual schools could be treated as embedded units (Yin 2008), constituting the larger case in which emerging findings were brought together thematically. Data about the units was extracted from multiple sources including video, observation, teacher interviews (n= 6, 1 per school), and family data from the project reflection activities (see figure 1 as example). Each case was automatically bounded by the practicality of how many participants it was possible to facilitate in delivering the intervention, likely to be between 5 and 18 family groups usually comprising of an adult (usually a parent, but could be grandparent, uncle etc.) and a child. Although in some cases other members of the family attended – other adults and/or siblings. The facilitators chose to be inclusive and rather than prevent the family participating allowed variations on the parent-child dyad aimed for. The duration of the observation mirrored the intervention, with two hours a week for five weeks.

A staged model of analysis was used. The first phase occurred during the data collection period when researchers observed the project sessions and then discussed their initial impressions with team members. Once the data collection was complete the whole data profile was watched/read in its entirety for further impressions and interpretations. Multiple researchers completed these stages allowing us to discuss, confirm and triangulate emerging ideas and themes. This allowed us to come up with a loose organisation of themes with which to structure the next stage. Next the data was interrogated in depth to delve into and explore key elements within each of the identified themes. This reading aimed to look at the bigger picture as well as the detail of each theme as exemplified in the different embedded cases. It also identified any factures or disturbances, in the data set. Finally a deductive coding was applied to the video to explore the type of talk (Crabtree and Miller 1999), the on/off task behaviours and the occurrence of cognition and metacognition (using Moseley et al.'s (2005) model). This change in the style of coding enabled a cross-referencing of data types that could confirm or dispute the robustness of our understanding of the data set. The use of several researchers allowed for triangulation of the results (Denzin 1984). In addition, our analysis was aware of the potential bias of the different facilitators and teachers involved.

This paper focuses on the trends that emerged around the development of learning behaviours and metacognitive awareness.

Findings

Our findings from the analysis are organised into three key areas: creating a context for making the process of learning explicit, a partnership for learning, and relationships for effective engagement in family learning. The concept of partnership was seen coded as distinct from relationships because it is such a key narrative in the family learning literature, but as the data were coded it was also possible to see two distinct components to the way individuals operated with each other in the project context. Partnership for learning was characterised by a collaborative commitment to learning aims and objectives resulting in very obvious actions that supported communication and outcomes that were mutually beneficial. Whereas the category exploring the

relationships was more about the basis and process of working together, not necessarily with the same agenda. We accept however that the two aspects are mutually dependent and operate in a virtuous cycle.

Creating a context for making the process of learning explicit

Initial introduction to the project as a whole and to the interwoven learning process of animation and L2L components influenced the depth of family engagement with learning. There was usually limited time to introduce and explain the learning process at the outset and there was an understandable, yet often unrealistic reliance on the school to follow this up. If common messages were not established in initial meetings with the school, as a result of constrained opportunities for the team to talk to schools, then the whole process could be derailed. This could set up a snowball effect from something like a session time alteration, a curtailed set up meeting or a destabilized and/or shortened launch event. These were all relatively simple occurrences resulting from common school circumstances yet they had significant consequences for the project.

The physical environment had a considerable influence on the potential of the project to nurture learning and family voice. Logical choices of environment in which to run the project were IT rooms and classrooms (or art rooms if they existed). However, the classroom environment seemed more conducive to the project than the IT room did, as was noted by the facilitator: 'there was a much nicer atmosphere with light and space'. When using IT rooms, banks of desks confronted everyone and computers automatically created defined spaces for each family to work within and a barrier to others.

'The sessions were delivered in the IT suite, with the computers creating a 'barrier' and to an extent, distraction'. (CFL facilitator).

Working in a classroom with laptops enabled interaction between families and gave equal status to all of the active elements of the project: ICT, art and craft, discussion of learning goals.

Crucial to supporting the project in this context was the facilitators' ability to improvise and adapt to challenging situations. They took steps to re-engage families and support

them to co-operate with each other when the process or their relationships became challenging. School coordinators praised the flexibility of the CFL facilitators:

'Parents asked to adjust the timings and have the project during the school day as it met their needs better and fitted in with mosque.'

'[Facilitators] recognised the needs of our parents and pupils and adjusted things accordingly.'

While the majority of comments on CFL's facilitation of the project were positive, where they were negative, this seemed to be based on a misunderstanding of the aims of the project, following a compromised introduction (or sometimes a teacher or Teaching Assistant not having been included in the initial discussions). The main challenge was in helping the schools and the teachers and families to understand that the animation process was a vehicle for learning and developing relationships, rather than an end in itself. Without knowing this, much of the project activity could seem inappropriate or become a chore: 'Some parents were unaware of how it all related to the making of an animated film' (teacher). While it might have been possible to make the project goals more explicit in terms of L2L, this may also have resulted in reduced engagement of families, for whom the animation was the 'carrot'. There was a 'catch 22' situation in how the project and the delivery of it by facilitators was set up as a context for the learning to take place. The staff training element aimed to engage the schools in taking an active role in promoting this, in seeing learning as something that was lifewide, but the extent to which this was taken forwards did vary considerably across contexts.

In addition to the physical space and the logistical arrangement, the design of the project was critical in facilitating family engagement with learning on a productive level. The animation process provided a context in which there was appropriate challenge as well as motivation to succeed, generating a positive learning environment. The role switching that automatically occurred within families, with participants moving from teacher to student and back, was naturally occurring and yet noteworthy in many cases. The reflection and strategic thinking activities enabled the learning process to be made explicit to the participants and facilitated conversations on ways to improve. This was supported by the development of the relationships. Table 2 develops these ideas across the 5 sessions of the programme.

Table 2: Session impacts on relationships

Table 2: Session impacts on relationships				
Session number and L2L skill	Activity	Impact on relationships		
1.Readiness	 Introduction. Showing previously made films. Introducing L2L. Using craft materials to think about learning. Experimenting with technology. 	Uncertainty/inspiration, according to the family relationships and influenced by existing skill levels and level of co-owned ideas and influences		
2.Resourcefulness	 Frequently described in creative terms by facilitators. Using craft materials to make sets and characters. Story planning. 	Where there are challenges in relationships, these begin to show and there is disputation/distance. Generally, this is countered by the inspiration and drive to make the film. Where teamwork in relationships is more solidly established, families are on task and appear motivated, beginning to allocate tasks and roles and recognising the opportunity to understand each other better.		
3.Responsibility	 The most technical session in which families need to get to grips with the software. Some completion of story planning. 	Parents and children appear more focussed and more serious. Parents can be struggling to learn to use the software and have less capacity to support children – sometimes children are left out or become disengaged. Some families can get frustrated and where there are challenges, this can cause dispute. In other families, children are more IT savvy than the adult and have a chance to 'teach their parents'. The L2L emphasis on responsibility often results in consideration of role and task allocation and of communication.		
4. Resilience	Continuing to use the software to make the film	Families are being more reflective about their progress, often considering their relationships as part of this. As a result, adjustments and efforts to improve ways of working together can often be observed. In some cases there is an increased sense of closeness. Families are more relaxed about what they are doing and in the way they work with each other. They are more likely to think together and 'beyond the box'. They appear more confident and more strategic in their actions.		
5. Reflection	 Finishing films Adding sound and credits Sharing films with the wider group Reflecting on what has been learned/achieved 	Often, where families have previously had relationships in which learning has seemed a stressful experience, there is a recognition that having fun and being relaxed while learning is not only a possibility, but an aid to learning. Generally, families appear to share a sense of achievement about their accomplishments. The practical requirements of the session bring adults and children more physically close together.		

Session 4 was notable in marking a turning point in which a change was often observable. Families had acquired, to varying degrees, an understanding of setting goals and reflecting on their learning, along with vocabulary that enabled them to do

this. This often resulted in a more effective, united approach suggesting developed metacognitive skills

The context was shown to be a complex entity that comprised the physical environment and was reliant on logistical arrangements; however in the majority of cases the power of the project design and the complex inter-relationship between the animation process and L2L had the most influence on supporting engagement with learning. The learning focus was most immediately on the process of animation, the creative process and the associated ICT skills and techniques, but most could be translated this beyond the boundaries of the project: into family practices and, where teachers were actively involved, then into classroom practice. Where staff were involved and attended the animation project sessions then this was further extended into classroom practice and the changed role of the family as learning entity could be maxmimised.

A partnership in learning

Partnership emerged as a major issue across many of the case studies, predictable in light of the commentary in the area (for example, Crozier 1999). Projects were most successful where strong home-school partnerships were established at the outset. This was particularly pertinent around recruitment of families and was largely based on existing home-school relationships, although the process of getting the children to invite their parents to participate meant that some family members who had previously been more distanced from school activities were recruited. The project also worked to deflect attention from this being a 'normal' family learning activity in school.

Once the project was up and running, we observed multiple learning partnerships interacting in complex ways that led to both challenges and opportunities for learning. This was not restricted to a simple process of learning about animation, as many families initially thought, but a multi-directional opportunity for parent to learn from child, child to learn from parent, families to learn from other families, families to learn from facilitators and teachers and for teachers to learn from and about families. As discussed, the L2L focus on making the process of learning explicit helped to privilege these partnerships.

At one of the schools, for example, a child set a goal '...to help my mum' while a mum from a different family in the same group wanted to see how her child 'works best and her grasp of concepts.' Many of the families also talked about learning together and were clearly conscious of this opportunity, as reflected in goals such as 'learn how to be confident whilst working together', 'team work with child' and 'we want to believe in each other, work together and achieve.' Families in this school spent time working together in cluster groups during the first session, supporting each other to engage in a context where language and understanding were a potential barrier. Another family reflected that they had fun 'working as a team with other people.'

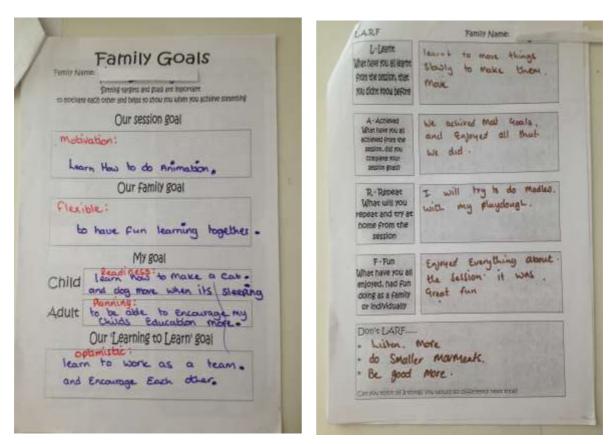


Figure 1: Examples of goal and reflection sheets used by families

Facilitators worked hard to understand the dynamics within each family so as to support their learning. The sensitive observations they made at the end of each intervention reflected their understanding of individual families:

'What stood out was that there was an interesting mix of families. One where there were serious challenges between Dad and daughter but Dad learned a lot through the course. In another family Mum was very reluctantly engaged and the son had a lot of enthusiasm, but Mum confessed in the end that she had enjoyed some of it.'

A typical comment from school coordinators was that the facilitators 'recognised the needs of our parents and pupils and adjusted things accordingly.' Also, school staff were able to deepen their insight of family dynamics:

'From a school perspective, it was great to get to see how the children worked alongside their parents, to watch them playing and learning together...It helped me to understand what's happening at home.'

What emerged was a complex dynamic with challenges and opportunities. Factors that contributed to this balance included: the ratio of families to facilitators; the learning environments available; the starting points of individual families; and practical situations with software and resources. Added to this was the complexity of the individual family in terms of skills, knowledge and the ability to work together.

Overall, the process valued and maximized the pre-existing knowledge and skills of all participants and gave opportunities to apply and share these with other participants. Thus whilst the title of the project refers to gaps in attainment, it might also be applicable to more general gaps in learning which are filled, in part, via the participants' experiences of partnership.

Key to the project was the way in which the child and guardian interacted and learned *together* on their journey through the animation process. There were a variety of scenarios in terms of the distribution of pre-existing skills and knowledge amongst families. Whilst for many families, ICT was the hook, children often equaled or surpassed adults in their level of ICT skill and confidence. Where grandparents attended, this was sometimes more the case. However, occasionally, adults had an existing interest in ICT and animation that they were keen to use and enhance. While it was often the children who would produce ideas for the animation, this process was very much negotiated between adult and child and sometimes it relied on the adult to know when to hold back. At times, the desire to make a slick film meant that adults

were tempted to take over, believing that this would produce the best result. The translation of ideas into physical sets and characters and the manipulation and filming of these again required negotiation. This relied on both technical and creative skills and sometimes the prior experience of adults in order to see the big picture and manage the stepped process.

The trickiness of the animation process and the need to keep going despite any challenges, required motivation, resilience and belief in the value of the end product (usually, particularly at the outset, this was focused on the animation as opposed to broader learning). Even in families where the challenge of working together seemed the greatest, the 'carrot' of producing the animation was enough to ensure the completion of the project. As a Head Teacher said, referring to the value of the project for all of the families:

'It was great for them to be able to produce something that looked like magic but they knew what the tricks were.'

For one family this incentive was so strong for the child that his mother, who was largely disinterested, had almost no choice but to attend sessions. This mum's disengagement was reflected in both the group verbal communication and the Mind the Gap paperwork being completed almost entirely by her son. Her interventions were almost always attempts to control the child's behaviours, which she seemed to see as problematic and related to his autism. For instance, goals written by the mother included 'Sit on my seat politely', 'Behave', 'Don't sing Southpark songs'. However, the involvement of the school in this scenario, whilst silent, legitimised the child's enthusiasm so that it would have looked uncaring if she had left. Given such parental disengagement from this child's learning, the project became a vehicle for his mother to come to understand more about how he learns and what he can achieve. There is the potential for longer term impact on their relationship and their learning. Video footage shows the family working more physically close to each other during the last project session, seeming to connect and engage more. This was a family in which there were well-established barriers to learning, difficult to break through but for whom the project made an in-road.

In the most successful partnerships, where substantial distance was travelled in developing metacognition, there was a realization that the making process was of value and can be used to greater benefit. This was exemplified by another family, initially in frequent disputation, who realized that they could use the project as a creative vehicle through which to develop their relationship and learning. They made a conscious decision to focus in on creativity and teamwork, supported by the goal and reflection framework in place and recognized at the end of the project that they had accomplished more than simply making a film, they had improved their teamwork. This was a great accomplishment for a father and daughter who had previously not been able to talk without arguing. Dad wrote as a goal, 'to be able to listen more to my child and have a nice time doing things together' and both contributed to goals such as 'listening to each other's views', 'to have lots of fun and have something we can both share for years to come', 'to get on better together…communicate a bit more'.

These comments were interspersed with references to the creative elements of the project such as having the goal 'for our creativeness to show in the film' and reflection such as having learned 'how creative we can be with a little money and how to rely on each other' amongst similar statements. This family may have travelled a great distance in becoming closer and understanding each other, simultaneously developing metacognition. The development of metacognitive knowledge is evident in their recognition that they needed to 'relax more, make it more fun at times' and in their reflection on the project as a whole, (Veenman and Spaans 2005):

'It gave us a new aspect on a whole lot more about what we have made together. I am happy to take this information to the next level at home and make a home movie film.'

Speculating, perhaps this metacognitive ability brought them closer together, enabling them to reflect on their situation more clearly. Their chosen emphasis of addressing how they worked together supported the development of metacognition: firstly, by supplying them with a focus for improvement in their recognition of teamwork as a challenge for their learning; and secondly, by facilitating a development of their relationship the process enabled them to be more discursive, reflective and subsequently, more metacognitive. Finally, their metacognition further supported their

relationship. There was a cumulative effect in terms of the metacognitive process that hinged on their focus on teamwork.

With such a complex set of requirements inherent in the making process there emerged the need for adult and child to negotiate their learning process and maximize on what each other could offer in order to achieve their goals. Inevitably, this also meant that adult and child were able to improve or cement their partnerships more generally. There was differentiation in what could be achieved by families depending on the starting points of their partnership. While most developed metacognitive knowledge and skill, for some even a tiny footstep into metacognition was a giant's stride.

Relationships for effective engagement in family learning

Stronger relationships supported better learning dialogue. It became very apparent that the Mind the Gap programme created a context where relationships with others were very important for successful outcomes. We saw examples of development in the interaction between parent-children; family–family, parent-teacher, and teacher-family. The latter was particularly interesting as the teacher began to see the child as embedded in the family in a way they had not done previously. As such, they began to get a nuanced understanding of how the family context influenced the child, not just in a societal way, but also regarding engagement with learning.

The dynamic that the project brought into play opened up new avenues for family learning engagement. Through first-hand, co-involvement in the learning experience, which, as described previously, contained unfamiliar challenges for the adult as well as the child, children were party to *how* their parents/guardians learned. By disrupting the norms of home/school dynamics, providing unfamiliar contexts and new learning experiences, the project automatically placed the adult in a role-model position in terms of how they went about their learning. In the eyes of their child, they were transformed from being providers of knowledge and instruction to demonstrators of how to navigate new challenges.

Meeting the 'vision' laid out by the family for making a great film, usually required work beyond the project sessions, with families often making sets and scenery at home; hence extending home learning, beyond the typical reading and homework. The commitment

that the project frequently generated resulted in increased discussion in order to complete necessary tasks (see table 2). Dialogue around the practicalities spilled fluidly into discussion around learning in the goal setting and reflective aspects of the project. As such, adult and child were developing their 'voice' through a context that facilitated discussion by breaking norms and inspiring novel ways of working.

An emphasis on teamwork emerged strongly from the project duration in one school. This enabled consideration of how relationships develop (or not) through the sessions and whether there is a consistent pattern. Three of the families at this school exemplified differing scenarios, starting points and challenges. Evidence suggests that in families where there was a previous strong relationship, where there was enthusiasm from the parent and a willingness to make the project work for the family, more metacognitive activity was possible. One family began the project with a goal of 'to be able to agree on what we will be doing and to listen to each others ideas'. Video footage shows all three family members staying on task throughout sessions, even when challenged by technical aspects of the making process. This helped them examine their learning more closely. Later in the project, their reflective comments demonstrate a good level of metacognitive knowledge and skill, seeming to surpass the understanding of many other families in their broader group:

'We communicate well but realized that one person could be left out so we'll try harder to all have something to do this week'

'We have completed our session goal, we all had a job to do'.

This is not to say that such families necessarily traveled the furthest in terms of developing metacognition.

The majority of participants had a changed relationship with learning through participation in the project. This could be one or a combination of:

- a change in learning dispositions and aspirations;
- reassessment of the role of learning in different activities;
- better understanding of their own and others' learning process;
- improved empathy around learning affordances and constraints;
- increased range of potential learning role models; or
- an adjustment in thinking about what effective learning looks like.

This development was well framed within the animation element of the project supporting reflection on what had worked. In some families, it was very difficult to make an impact, which substantially supported the development of metacognition. At times, such challenges may have been beyond the scope of the project and the facilitators; however, the evidence suggests that even when the family context is very challenging, some degree of impact is possible.

The practical requirements of the project, including the physical demands which bring parent and child physically closer, as well as the mental challenges of learning new technical skills, seem to challenge families initially but ultimately, result in bringing them together. Sometimes this was recognised by the families with typical reflection consisting of 'work as a team', 'work well together', 'we have fun doing it as a family.'

In interviews, teachers noted that parents/guardians were more likely to engage with activity in school and in their children's learning as a result of the project. One teacher commented that parents are 'more comfortable in being involved in their children's learning'. Possibly as a consequence, parents have asked the school for 'more courses especially around ICT and new media'. In terms of major learning outcomes, teachers reported 'increased confidence of both parents and children' and that they are more confident and willing to try. Additionally, pupils have been keen to talk about the project with their peers.

Conclusion

The project aimed to change the dynamics around parental engagement with school. It refocused the partnership between home and school on learning; learning not as routed in the academic, but rather something that could be, lifelong and lifewide, shared and fun. The animation project, with its combination of ICT, art and creative storytelling, was an activity that could be seen as less like formal education yet still inducted the families into the ultimate business of schools and learning (Wolfendale 1996). By making the process of learning explicit and giving the family a vocabulary to talk about learning the project allowed the development of a family learning voice therefore enabling a different kind of partnership between home and school.

The focus on dads/male guardians was successful in getting the hidden families involved in a school engagement project; although we do not have data as to whether this was more or less impactful than that if there had been a more general invitation. The animation and ICT hook was a good motivational tool for getting these other family members involved and certainly the majority of dads/male guardians that took part seemed to enjoy the quality time with their child (and vice versa). It will be interesting in the EEF evaluation to explore this aspect and its effect more strategically.

The complexity of the relationships and therefore partnerships in operation during the project were difficult to untangle. However it does appear that the focus on learning helped to put partnerships on a less confrontational level. Learning was something all participants were involved in, with different gaps, affordances and constraints. This enabled the different positioning of participants, taking different roles at different times. In particular, this was useful in the parent-child dynamic. It facilitated positive dialogue and, even where the relationships were challenging.

The L2L approaches were woven throughout the Mind the Gap project with different emphasis depending on the session and stage. This ensured the majority of families could engage with the process metacognitively. The ICT element acted as motivation and a hook for recruitment and retention, but also supported learning partnership by in many cases leveling the playing field for participants and ensuring a teamwork approach to achieving the end product of a film. The animation process was inherently challenging and as such meant the family members needed to be supportive of each other, be resilient and reflective on their experiences. All of which facilitated authentic learning as something the family could have ownership of. Learning in this context was unthreatening, demystified and was a successful experience, which for some (parents and children) was a revelation.

In addition to the families learning about learning (the school's domain), the fact that the project occurred in school meant that, by proxy, teachers could learn about family approaches and attitudes to learning as a 'learning focused' partnership (home domain). This was particularly novel and insightful as in most cases the family unit was

represented by the dads/male guardians and their child and this did not represent the usual view for the school. Therefore, and building on the work of Roopnarine et al. (2006) and Goldman (2005), the school began to see the child as embedded in the family with all of its associated, dispositions and attitudes to learning. Of course this necessitated a certain level of engagement on the schools' behalf with the dual outcomes of the project, animation *and* learning, and therefore the set-up of the project was paramount. However the school setting also meant barriers for some parents for whom it may not have had pleasant memories.

By setting up a context where the family can learn together, the focus turns to learning as a process (L2L) with both partners on an equal footing (created by the introduction of ICT and animation) and as such the power dynamics were played with. Moreover, the context, as set up by the fit of L2L to the animation process, meant that the participants (families and school staff) enabled a different kind of partnership than was previously explored by the majority of the schools. This was seen as the major success of the project and gave a different emphasis to the parental engagement activity. Most schools saw this as something to be celebrated and built upon.

References

- Anderson, J., Anderson, A., Friedrich, N. and Kim, J.I. (2010) Taking Stock of Family Literacy: some contemporary perspectives, *Journal of Early Childhood Literacy*, **10**(1): 33-53
- Baumfield, V.M., Hall, E., Higgins, S. & Wall, K. (2009). Catalytic tools: understanding the interaction of enquiry and feedback in teachers' learning. *European Journal of Teacher Education* **32**(4): 423-435
- Crabtree, B.F. and Miller, W.L. (1999) *Doing Qualitative Research (2nd Edition)*, London: Sage Publications
- Crozier, G. (1998) Parents and Schools: partnership or surveillance? *The Journal of Education Policy*, **13**(1): 125-136
- Denscombe, M. (2007) *The Good Research Guide*, Berkshire: McGraw-Hill International Denzin, N. (1984) *The Research Act Englewood* Cliffs, NJ: Prentice Hall

- Desforges, C. and Abouchaar, A. (2003) The Impact of Parental Involvement, Parental Support and Family Education on Pupil Achievements and Adjustments: A literature review, London: DfES. Available at:

 http://bgfl.org/bgfl/custom/files-uploaded/uploaded-resources/18617/desfor-ges.pdf (accessed 18th Feb 2014)
- Flavell, J. H. (1979) Metacognition and cognitive monitoring: a new area of cognitive developmental inquiry, *Cognitive Development*, **34**: 906–911.
- Flouri, E. and Buchanan, A. (2004) Early Father's and Mother's Involvement and Child's Later Educational Outcomes, *British Journal of Educational Psychology*, **74**: 141-153
- Freeman, H., Newland, L.A. and Coyl, D.D. (2008) Father beliefs as a mediator between contextual barriers and father involvement, *Early Child Development and Care*, **178**(7&8): 803-819
- Goldman, R. (2005) *Fathers' involvement in their children's education*, London: National Family and Parenting Institute
- Harris, A. and Goodall, J. (2007) Engaging Parents in Raising Achievement: Do parents know they matter? London: DCSF. Available at: http://dera.ioe.ac.uk/6639/1/DCSF-RW004.pdf (accessed 18th Feb 2014)
- Higgins, S., Katsipataki, M., Kokotsaki, D., Coleman, R., Major, L.E. and Coe, R. (2013) *The Sutton Trust Education Endowment Foundation Teaching and Learning Toolkit*.

 London, Education Endowment Foundation. Available at:

 http://educationendowmentfoundation.org.uk/index.php/toolkit (accessed 19th Feb 2014)
- Hill, N.E. and Taylor, L.C. (2004) Parental School Involvement and Academic Achievement: pragmatics and issues, *Current Directions in Psychological Science*, **13**(4): 161-164
- Macleod F. (2008). Why fathers are not attracted to family learning groups? *Early Child Development and Care*, **178**(7–8), 773–783
- Moseley, D., Baumfield, V., Elliott, J., Higgins, S., Miller, J. and Newton D. P. (2005)

 Frameworks for Thinking: a handbook for teaching and learning Cambridge:

 Cambridge University Press
- Nord, C.W., Brimhall, D. & West, J. (1997) *Fathers' involvement in their children's schools* (NCES 98-091). Washington, DC: U.S. Department of Education, National Center

- for Education Statistics. ED 409 125. Available at: http://files.eric.ed.gov/fulltext/ED409125.pdf (accessed 19th Feb 2014)
- Rocha-Schmid, E. (2010) Participatory Pedagogy for Empowerment: a critical discourse analysis of teacher-parents' interactions in a family literacy course in London, *International Journal of Lifelong Education*, **29**(3): 343-358
- Roopnarine, J.L., Krishnakumar, A., Metindogan, A. and Evans, M. (2006) Links between parenting styles, parent-child academic interaction, parent-school interaction, and early academic skills and social behaviors in young children of English-speaking Caribbean immigrants, *Early Childhood Research Quarterly*, **21**: 238-252
- Swain, J., Brooks, G. and Bosley, S. (2014) The Benefits of family learning provision for parents in England, *Journal of Early Childhood Research*, **12**(1): 77-91
- Van Steensel, R., McElvany, Kurvers, J. and Herpich, S. (2010) How Effective are Family Learning Programs? Results of a meta-analysis, *Review of Educational Research*, **81**(1): 69-96
- Veenman, M. V. J., & Spaans, M. A. (2005). Relation between intellectual and metacognitive skills: Age and task difference. *Learning and Individual Differences*, **15**: 159–176.
- Wade, B. and Moore, M. (2000) A Sure Start with Books. Early Years, 20: 39-46
- Wall, K. (2010) Learning to Learn: Ten Years on, *Learning and Teaching Update*, Issue 33: April 2010
- Wall, K. (2012) "It wasn't too easy, which is good if you want to learn": An exploration of pupil participation and Learning to Learn. *The Curriculum Journal*, **23**(3): 283-305
- Wall, K., Hall, E., Baumfield, V., Higgins, S., Rafferty, V., Remedios, R., Thomas, U., Tiplady, L., Towler, C. & Woolner, P. (2010) *Learning to Learn in Schools Phase 4 and Learning to Learn in Further Education Projects,* London: Campaign for Learning
- Wall, K., Hall, E., Higgins, S., Leat, D., Thomas, U., Tiplady, L., Towle, C. and Woolner, P. (2009) *Learning to Learn in Schools Phase 4 Year One Report*. London: Campaign for Learning
- Wagner, M., Spiker, D., and Linn, M. (2002) The Effectiveness of the Parents as Teachers Program with Low-income Parents and Children, *Topics in Early Childhood Special Education*, **22**(2): 67-81

- Wolfendale, S. (1996) The Effectiveness of Family Literacy. In: Wolfendale, S. and Topping, K. (Eds.) *Family Involvement in Literacy: Effective Partnerships in Education*, London: Cassell: 131-146
- Yin, R.K. (2008) *Case Study Research: Design and Methods (4th Edition)*, London: Sage Publications