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Play to Learn: A case-study of parent/carer and child engagement with a physical activity website resource

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Abstract

In 2007 Sport Wales produced guidance for practitioners delivering the new Foundation Phase curriculum for children aged 3-7 years. A focus was on physical development and in 2009 a resource entitled *Play to Learn* was developed supported by a website launched in 2011. The present study addresses (non-)engagement with the website. Based on a qualitative study (interviews and focus groups) with a small cohort of parents from a primary school in South Wales, the findings revealed some of the reasons for only low levels of engagement from parents / carers. ‘Hard copy’ resource materials were considered more useful than electronic media.

Keywords: play, physical activity, parental engagement, website

Introduction

Play to Learn is an educational resource and training package for schools and nursery settings that was launched and ‘rolled out’ in Wales in 2010. It originates from a Welsh Government ¹ initiative in 2007 linked to a three-year project about physical literacy (see Whitehead, 2010) within the Foundation Phase curriculum (i.e., for three to seven year olds). Importantly, it was recognised that parents / carers were key stake-holders if the initiative was going to be successful (Bruce, 2001, Edwards, 2002, Santer *et al.*, 2007, Whalley *et al.*, 2007), hence an emphasis was placed on enabling parents / carers to help children become physically active together.

Soon after the introduction of *Play to Learn* a small-scale preliminary study was conducted with a group of parents to address its implementation [removed for blind review]. In-depth interviews were conducted with parents / carers from a school in the South Wales Valleys and there was general agreement that *Play to Learn* was fit for purpose. Suggestions were made that included bringing the characters in the resource to ‘life’ by creating a short DVD, programme or website. This suggestion was well-received and a *Play to Learn* website developed during the 12 months that followed.

With 3D animation and an interactive platform, the website was designed to enable parents / carers to help inspire young children to become more physically active (see <http://sportwales.org.uk/community-sport/education/play-to-learn.aspx>). Housed within the Sport Wales ² portal, the *Play to Learn* website has four pages: ‘Learn skills’ (at three levels of physical challenge), ‘play games’ (like ‘Pebble plop’ – a target throwing game, and ‘Dragon dance’), ‘Story time’ (three books – ‘Megan and the Baby

¹ The Welsh Government had been known as the Welsh Assembly Government prior to May 2011.

² Sport Wales was known as the Sports Council for Wales until March 2010.

Dragon’, ‘The Beach Party’, and ‘Planet Play’), and ‘Meet the gang’ (characters with whom children can embark on their *Play to Learn* experience). There is also a ‘For grown ups’ page with advice for parents / carers to facilitate children’s physical activity.

Launched in July 2011, the webpage was marketed in Foundation Phase schools and nursery settings across Wales (see figure 1) ³. It was intended that one of the outcomes was to support parents / carers in their engagement with physical activity, and to develop and consolidate children’s physical movement skills (see figure 2).

[Figures 1 and 2 about here]

The present study is an examination of the experiences of engagement and non-engagement with the *Play to Learn* website through the experiences of a small group of parents / carers from a primary school in the South Wales Valleys. In particular, it addresses three substantive research questions: (i) what were the characteristics that influenced patterns of (non-)engagement with the website? (ii) which characteristics of the website had the greatest impact on engagement and why? and (iii) in what ways did the website lead to change(s) in behaviour amongst participants?

The paper includes a theoretical underpinning for the work and a policy context (in the section that follows), and then a brief note on method. The main findings are presented around three key themes linked to the explicit research questions – the types of engagement and non-engagement as well as the reasons for them, the impact of the website, and behaviour change amongst children and their parents / carers. Overall, it transpired that contrary to the findings of the preliminary study (and perhaps even counter-intuitively), the website as an electronic medium did not prove to be successful without supporting ‘hard copy’ materials. Finally, there is a short summary.

³ Inevitably, it is not possible to capture the interactive functionality of the website from ‘screen-shots’ alone. But it is possible to convey a flavour of its style and purpose.

Background and context

Play and physical development

Pioneers of child psychology Piaget *et al.* (1976) and Vygotsky (1978) have argued that play is central to children's development and therefore is a necessity rather than a luxury (Duncan and Lockwood, 2008). It is not, of course, the only way that children learn (Bruce, 2001) – they also learn by observing and imitating others, joining in games and learning through teaching. A continuum exists that denotes the differing roles of the child and adult. It moves from free-flow play where the activity is child-initiated, through to those that are more structured and adult-led (Ryall *et al.*, 2013).

Educational discourses reveal a dichotomy about perceptions of work and play – the former being valued and latter regarded as trivial (Santer *et al.*, 2007). In schools, practitioners often feel conditioned by policy requirements, attainment targets and inspection, and there is a need to moderate some deeply embedded attitudes and appreciate what children can achieve through meaningful play (Moyles, 2010). Children engage in play at home and at school, indoors and outdoors (Smolak *et al.*, 1998). Young children learn most through first-hand experiences and play provides opportunities for risk-taking, problem-solving, self-understanding and tolerance of others (Ryall *et al.*, 2013). As well as exhibiting cognitive and physical abilities through their play (Moyles, 2010), children also have an outlet for creativity and imagination (Bruce, 2001). Yet in spite of these many benefits, adults often place restrictions on children which stifle opportunities to play (Scarlett *et al.*, 2005), concerns about safety and child protection result in children often being confined to playing in the home rather than outside or in the street (Mulvihill *et al.*, 2000; O'Brien *et al.*, 2000; NICE 2007).

The policy context

Prior to 2008 the delivery of the National Curriculum in Wales for three to seven year olds placed emphasis on teaching (not learning) and was dominated by adult selected and adult-led activities. There were few opportunities for innovation or a child-centred focus, and resulted in a ‘one size fits all’ approach. In 2008 the introduction of the new Foundation Phase curriculum was a clear attempt to cater for the needs of individual learners and addressed the developmental stages rather than chronological age. Play and experiential learning were central to its design in order to promote exploration, imagination and discovery through learning, but also sparked initial controversy among practitioners and parents mainly through misunderstanding of the value of play (DCELLS, 2008).

Physical development was one aspect of the Foundation Phase curriculum for which the contribution of play was relatively well understood and featured two important aspects – ‘learning to move’ and ‘moving to learn’. Each enables children to develop their ‘physical literacy’. Yet declining participation in physical activity is a characteristic of the transition from childhood to early adulthood (Santer *et al.*, 2007), so positive experiences in the early years are pivotal to the long-term social welfare ambition of securing sustained lifelong physical activity. Intervention studies in many parts of the world that have sought to increase levels of activity and/or discourage inactivity amongst children and young people have had variable levels of success (Brunton *et al.*, 2003). Three particular projects in the UK are illustrative of the kinds of initiatives that have been piloted with primary school aged children: an invitation to parents to attend primary school to hear children making presentations about what they had learnt as part of the ‘Staying Well’ project (Abbott and Farrell, 1989): an

opportunity for pupils to access local authority leisure facilities as part of the 'Fit to Succeed' scheme (Balding, 2000); and environmental modification of school playgrounds to include painted shapes on the ground to encourage physical play (Stratton, 2000).

In support of this political and economic imperative and practitioner focused research, the Welsh Government commissioned Sport Wales to produce resources and training to support practitioners in nursery settings and schools in delivering an agenda of physical development for children. Following extensive consultation (Meadows, 2009), *Play to Learn* was introduced to increase practitioners' confidence, knowledge, skills and understanding to enhance children's physical and creative movement skills (SCW, 2009). At a very early stage there were reports that children's physical abilities had accelerated in comparison with previous years (Meadows, 2011). Key to the success of the *Play to Learn* initiative was the idea of cultivating and enhancing positive linkages between the home and the school (SCW, 2008); these are the two most influential settings for developing the young child (Edwards, 2002). The importance of purposeful partnerships between the home and school is well established and supported by the UK Government at Westminster (Whalley *et al.*, 2007). Too often, however, teachers view willing parents as 'helpers' rather than 'partners', and there exists a lack of operational clarity about what parents actually do to 'help' (Crozier, 2000).

The Foundation Phase reiterates the importance of home-school links and that children need opportunities to apply and practise what they have learnt at school in different situations (DCELLS, 2008). Parents / carers often support children's learning in numeracy and, especially, literacy. However, physical development rarely features as 'homework' (Whitehead, 2001). Building on the key socializing role of parents in

cultivating amongst their children positive attitudes towards engagement in physical activity (NICE, 2007), an important consideration is the competence and confidence of parents in supporting their children's learning in physical development, and paradoxically it is often physical skills that require most practice (Gortmaker et al., 1999).

Parents as partners

Whilst it is true that there is a need for partnership between the school and the home (Livingstone, 2008), it is also true that there are different kinds of partnership (Crozier, 2000). Parents' views of their involvement in school life do not always match the expectations of the teacher, and a failure to clarify roles can result in ambiguity or worse (Fitzgerald, 2004). The partnership between school and home through the 'agents' of the teachers and parents / carers is likely to be influenced by factors including social class, culture and family traditions (Vincent, 2000), and roles are often perceived differently by parents / carers and teachers (Crozier, 2000).

Some schools actively seek out and encourage parental involvement in school life (Vincent, 2000), either following traditional approaches (e.g., homework programmes, parent open days and trips) or by experimenting with more participative innovations (e.g., parent volunteer programmes, workshops or community activities on site and family events). Other schools view parents as problematic and prefer to keep them at arm's length (Fitzgerald, 2004). Indeed there are instances of parents actually hindering developments or initiatives by interfering or by being 'difficult' (Edwards, 2002).

For parents, the benefits of positive partnerships with schools have much to offer including increased self-confidence and a wider understanding of educational aims (Fitzgerald, 2004). Many opportunities exist to strengthen home-school links within the

Foundation Phase, and purposeful interaction between children and parents at this age is crucial for children's development (NICE, 2007). It is no coincidence that schools seeking proactively to break down barriers and create effective partnerships with the home are, in many cases, rated by inspectors as good or outstanding at involving parents (Feiler, 2010).

A decade ago the UK government released *Every Child Matters* (Department for Education and Skills, 2003). It identified the role of parents / carers in facilitating child development and was echoed by the Welsh Government's policy priorities for 2001-2010 set out in *The Learning Country* (National Assembly for Wales, 2001). Over the last decade there has been an increasing focus in the long-term well-being of children, and tackling childhood obesity has emerged as a major public health imperative (Department of Health, 2012; Welsh Government, 2012). The aetiology of many diseases linked to morbidity originates in early childhood (Riddoch *et al.*, 2005), and low levels of physical activity are associated with the development of a greater number of risk factors (Rees *et al.*, 2009; Brophy *et al.*, 2012). In July 2011 the Chief Medical Officers of the four home countries published a report outlining recommendations for improving the health of the nations (CMO, 2011). For the first time the report included specific guidelines for children aged under five and reiterated the benefits that accrue from being physically active from an early age (i.e., developing their fundamental movement skills, competence within physical environments and psychological wellbeing). It also made a very specific recommendation that as soon as children under five are able to walk they need to be active for three hours per day.

From early movements and gestures as a baby, parents / carers play a vital role in supporting physical development. This is a journey in physicality and continues

through childhood where every child is entitled to acquire the fundamental movement skills such as running, jumping, throwing and catching (Scott Porter Research, 2002). Mere entitlement does not mean, of course, that all children will develop in this way – there are sometimes barriers and impediments to overcome. One of these is about parents / carers having the ‘know how’ to support children’s learning (Burnett and Jarvis, 2004). One important contribution that they can make, though, can involve cross-curricular activities based on a theme or story. For example, after an initial story is shared between parent / carer and child, there are possibilities to develop physical challenges or art and craft activities based on the theme. This approach is consistent with the ‘can-do’ attitude that many children have towards physical tasks (Whitehead, 2001), but often requires the stimulus to initiate the imaginative physical play. It is this that the *Play to Learn* resource was intended to provide.

A note on method

The research to examine the effectiveness of the *Play to Learn* website was initially designed as a series of focus groups to explore the uses and effectiveness of the website. In the end, however, the design had to be modified and exposed some of the operational difficulties of conducting research of this kind. This section of the paper provides a short explanation of the data collection process.

An examination of the engagement by parents / carers with the *Play to Learn* website was predicated on questions around its perceived usage and usefulness, the ways in which parents / carers engaged, those aspects of the website that were preferred, and whether it elicited behavioural change in the ways that were envisaged. In each case an important supplementary theme was to establish the reasons. A focus group method was therefore chosen (Cohen *et al.*, 2011). The strengths of focus groups for exploratory

research are well established (Kitzinger and Barbour, 1999), especially to inform practice (Denscombe, 2010), and they have been used effectively in other educational research (e.g., Hopkins, 2002, Koshy, 2010) as well as in health studies (Hotham *et al.*, 2002, Barbour, 2007). For the present study in particular, focus groups provided the opportunity for a discussion amongst parents / carers, eased potential anxieties about being interviewed individually, and created logistical economies of scale.

Data were conducted in a case-study primary school in the South Wales Valleys, and it is similar in its characteristics to many others – a typical case sample (Gray, 2009). Estyn, Her Majesty's Inspectorate for Education and Training in Wales, last inspected the school in the Spring of 2011 and reported the school's performance as 'good'. The 2011 Census data for the postcode neighbourhood⁴ in which the school is located indicate that it is densely populated and almost one fifth of residents are aged 0-15 years. The local area (of which the neighbourhood comprises approximately one third of the total population) has one third of all households with dependent children, the overall accommodation profile shows that almost half is terraced housing. The average value of property sales in 2009 was lower than for comparable properties across Wales, but higher than elsewhere within the unitary authority. Occupational demographics show that the neighbourhood is broadly typical of Wales as a whole, but with proportionally more professional, technical and administrative occupations than the rest of the local area. Life expectancy for men and women in the unitary authority is shorter than for Wales, and the proportion of low birthweight and infant mortality higher than the national average.

⁴ Precise details of the Census data and Estyn report identify the school. In order to protect the anonymity the data are therefore intended to provide only a general description of the context.

More specifically, the school is situated in a socio-economically challenged area with almost one pupil in six is in receipt of free school meals. Importantly, nearly all the pupils were from English speaking backgrounds, and over a quarter of children were identified as having additional learning needs. The school was also identified as having shown a keen interest and proactive approach to delivering *Play to Learn*. The Headteacher evidently understood the value of *Play to Learn* and commissioned a series of twilight staff development sessions, supported by an external tutor. In the first instance, *Play to Learn* had been emphasised within curriculum time and as a result the website had not been marketed vigorously.

Following ethical approval from [removed for blind review], the first stage of participant recruitment involved letters of invitation being sent to all parents / carers of Foundation Phase children. Fifteen positive expressions of interest were received. Each of these parents / carers was then provided with an information sheet and later supplied voluntary informed consent. An initial briefing meeting was then convened with the participants – all of whom were female. The school's ICT suite was used to provide individual access to computers to navigate through the website sections. A five week 'window' (including half-term week) was given to test the website at home with children. After this, the participants were invited back to take part in a series of four follow-up focus group sessions – but several did not attend. For some, the lead-up to Christmas presented demands on their time that meant that they were not able to participate. To alleviate this difficulty, reminder letters were sent after the Christmas break supported by text messages (the communication arrangement used by the school). This approach yielded pledges of commitment from some. However on the agreed day of the data collection, although a number of 'apologies for absence' were received

owing to work commitments and other last minute domestic issues, the majority failed to attend without explanation.

In total, the data set includes comments from four participants who took part in what became, *de facto*, a group interview in three parts. There were additional written responses from two participants who were unable to attend but were still keen to share their thoughts on *Play to Learn*. The interview data were transcribed, and then (like the written data) anonymised, coded and thematically analysed.

The key findings

There were three main themes that emerged from the data about the *Play to Learn* website: '(non-)engagement', 'impact' and 'behaviour change'. These are dealt with in turn with illustrative (anonymised) quotations to illuminate the substantive points.

(Non-)engagement with the Play to Learn website

The overall idea of the *Play to Learn* website was received positively by the participants, and there was some evidence that it had fulfilled its intended function enabling parents / carers to create opportunities for their children to become more physically active. Avril summarised succinctly, 'The site has encouraged me that I can do more with my daughter and more regularly'; but it was Belinda who also noted the wider benefits of the *Play to Learn* experience beyond mere physical activity: 'It is a very useful site and very beneficial for me and my family. We have chance to get together to play and to share and to listen to speaking and expressions. It helps a lot.'

Yet in spite of being positively disposed to the idea of *Play to Learn* and being somewhat engaged by the website's content, closer examination revealed only limited active involvement with it, and even then on a relatively superficial basis – for example, not all sections of the website had been visited. Some participants had encountered

practical problems with hardware difficulties with the computer at home as well as unreliable internet access. For Denise the issue of engaging with an online resource was even more acute: 'I haven't got the internet at home so I could only do it at a relative's house and I had a bit of a problem getting the children to have a look at it.'

A survey of the impact of e-technology reported that 68 per cent of households in Wales had a fixed broadband connection in 2011; 32 per cent therefore did not (Ofcom, 2012). There were also demographic differences linked to socio-economic variables, with broadband use being lower in areas of social deprivation – in the South Wales Valleys only 63 per cent had access to this facility (op cit.) Electronic media are an expanding segment of the information provision sector, but they are not, as Denise highlighted, uniformly accessible.

For those who did have access to the internet, respondents used the *Play to Learn* website only infrequently – two or three occasions during the five week period. Some consulted it during the half-term holiday, others during the evenings or at the weekend. For Fran, part of the explanation for the low level of usage was a preference for hard copy materials instead of the internet: 'I would have used it more if I had been given a pack rather than using a laptop as I feel that when you have a spare 10 or 15 minutes it would be quicker rather than logging onto the laptop.' Fran's personal preference, shaped by her circumstances, is important. There is clearly some demand for alternatives to the electronic media, the scale of that demand is yet to be ascertained.

Impact

The usefulness or impact of key sections of the website was examined and responses were a mixture of positive, neutral and negative. As expected, the use of 3D animation to bring the characters to life within the 'Meet the gang' section was received positively

(see Figure 3), with some impact being reported such as the children's ability to relate to the characters. Carol explained how her son had responded: '...he liked listening to the characters in the 'Meet the Gang' section. He liked listening to what they liked and find out if they were the same age as him. Things like that.'

[Figure 3 about here]

However the 'Learn skills' section received mixed reviews. There were some suggestions that the children already possessed the skills, but it was not until this perception was interrogated more carefully that it became clear that there may have been lack of precision and / or technical accuracy in the way some of the skills were executed. Avril admitted: 'I don't think we've spent enough time looking at whether she's doing the skills properly. If we spent more time on the learning skills we may be able to check she's doing them right.'

The use of narratives to inspire the children was the basis for the 'Story time' section, and there was support for the principle. As Whitehead (2001) discovered, engagement in physical activity can be stimulated in different ways and a storybook is often an effective start for many parents and their children. There was less of a consensus over the nature of the stories with some parents / carers keen to develop their own stories rather than work with those included in the website. Ella elaborated: 'I didn't really find the books interested the children but the concept used on their favourite books was very useful.' Some also indicated a preference for 'hard copy' of books rather than the electronic medium. Fran was one:

I felt that when it's read out loud it takes too long to read the next page, there is a long gap. It would have been more beneficial if we were given hard copies of the storybooks so that you could read them elsewhere.

The 'Play games' section served the intended purpose for some of the children. The games were easy to set up and play and in one instance there had been some self-initiated play among siblings. Denise explained:

They are doing what I showed them but by themselves and with each other ... they don't need me to instigate it they'll carry on and do it. We played the 'Me to You to Me' on the kitchen floor with the ball and we did it between the three of us but I never thought to do that with them before. I did some things when they were babies but nothing like it since. But now that I've given it a go with them they love it and I suppose it made them realise when it was the three of us about skills like turn taking.

There was also some difficulty encountered, yet other respondents felt they needed more guidance and step-by-step advice on how to set up the games and play them effectively. Avril made the knowledge-gap explicit:

On the website it just gives you a short introduction to the games so I think it needs more information so you know how to play it when you go outside. Maybe if they could play an interactive version of the game on the website too they would be more interested.

Perhaps surprisingly only one respondent accessed the 'For Grown Ups' section. Ella was positive about it: 'It give me more ideas about turning other well-loved story books into an activity such as 'We're going on a Bear Hunt'; 'Not Now Bernard'; 'The Gruffalo' and many more.'

Behaviour Change

The data offered a combination of unchanged motivation to engage, and some cases of a raised willingness or desire to engage in physical activity. As Edwards (2002) and

Santer *et al.* (2007) suggested, this change in behaviour by the parent is very influential on the way physical activity is perceived as a way of life by the child. Some respondents felt that their children were already engaging in a high level of physical activity and could not do any more. However, the parents who felt their children were at capacity in terms of their level of engagement were also those who chose to take their children elsewhere to take part in activities outside the school day, as opposed to engaging in physical activity with them.

The intention of the website is to equip parents / carers with the knowledge and ideas to engage and interact in physical activity with their children as a family. However, when questioned in terms of their engagement with their children, they stated they had insufficient time – often a reality for busy lives in today’s society. Carol was typical:

No, not to be honest. I’m always busy-busy and I never get much time to do anything else. We’re out most evenings with my daughters dancing and they do a lot of activities and I don’t get chance to really fit anything else in.

A number of respondents revealed a positive impact in terms of behaviour change in both them as parents and their children. It was felt that the website enabled more interaction to take place between parent and child, and siblings were playing and learning together much more. In Fran’s case, her son’s attention had now transferred from regularly playing computer games to physically playing games as a family much more:

My son is always active and since using this website he enjoys learning the different skills and games. His lifestyle has changed as he doesn’t ask to play on his XBOX, he now asks to play on this website... I find that this helps me

as my lifestyle has also changed in that I am doing more physical activities and both my son and I have a laugh whilst doing them.

Denise explained that she now looks at children's storybooks in a new way, seeking out opportunities for physical activities – a key aim of *Play to Learn*:

Now that I've given it a go with them they love it...I'm looking at stories I've got at home now and seeing lots of actions we could be doing from them. It has made me think and like I said with the games, it has changed my way of thinking and they've really enjoyed it.

Summary

This study has been concerned with experiences of using a particular educational resource developed to make a positive difference to the end-users' experiences of service 'delivery'. The *Play to Learn* website was developed to extend the 'reach' of the physical activity and health imperative by supporting parents / carers in developing children's physical skills. The findings revealed modest and variable levels of engagement by parents / carers with the online resource, and contradicted initial pilot work about the policy initiative more generally. Unsurprisingly, adult end-users did not all engage with it in the same ways, hence the need for some flexibility to satisfy diverse needs – even within this small sample of participants. 'Hard copy' resource materials do now exist but there is obviously a cost implication attached to their production and distribution that has to be borne by the purchaser. With 'joined-up' thinking, however, some progress should be possible through the extension of home-lending service arrangements as well as workshops and short-courses on information and communication technology skills. In turn, this may have 'spin-off' benefits for strengthening partnerships between the home and school (Feiler, 2010).

There is also a methodological observation about conducting research with the parents / carers of young children. In spite of careful research design and thorough preparation, the adults who it had been hoped would be involved in this study became challenging to access. In many cases their busy lives make them 'hard to reach' in spite of their willingness to be involved. That is to say, whatever the specific reasons for unavailability, the methodological point is that planning for projects of this kind might embrace contingency arrangements when there is a risk that the organisational complexity of day-to-day living for potential participants may stifle effective recruitment.

Postscript

Since the completion of this work in April 2012, the findings and recommendations were presented to Sport Wales for consideration. As a result there have been some developments in terms of website improvements and marketing strategies. A project support officer has been assigned to further develop the website and make any wider improvements. Website links are now being set up between the *Play to Learn* website and the Sport Wales online shop where hard copy resources can be purchased. This was also supported by a marketing campaign at the start of the new academic year in September 2012, and following the success of part of the Community Strategy launch, 'flip book' brochures were sent out to partners including schools and parents.

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Figures

Figure 1 – The Play to Learn homepage



Figure 2 – Engaging parents with the Play to Learn website



Figure 3 – 'Meet the gang' on the Play to Learn website



Play to Learn
Chwarae i Ddysgu

Learn skills
Play areas
Story time
Meet the gang

For grown ups

Back home

Amir
Gethin
Jack
Megan
Tom
Sioned
Imron
Whittle

Megan

0:00

YouTube

Hello my name's Megan.
I'm three but I'll soon be four.
I like jumping and pushing my doll's pram.
I also like playing in my garden with Dragon.
When it is too cold and wet to play outside, Mum helps Dragon hide and I have to crawl under everything playing 'Hide and Seek'.
My favourite toy is my hobbyhorse because I love galloping.
My favourite game is playing 'Tip and Run' in the park with Grandad, my brother Tom and his friends.
I also like dancing with Dragon, it is great fun.