NP^3 Exploratory Study 9

Gillen with Twining, Hempel-Jorgensen, Henry, Murphy, Harrison, Passey, Kucirkova, Dawadi, De Geest, and Fletcher-Campbell (2016) NP3 Exploratory Study 9. Milton Keynes: The Open University.

What is NP^3

New Purposes – New Practices – New Pedagogy (NP^3) is a collaboration between The Open University, Lancaster University and Manchester Metropolitan University, led by Professor Peter Twining.

NP^3 is finding out about how children's digital practices influence teaching and learning. NP^3 aims to find out about how children use digital devices outside school and what influence (if any) these practices have on what pupils and teachers do inside primary schools. The focus is on pedagogy across the curriculum (rather than the teaching of computing).

Our Research Questions (RQs) for these exploratory studies are:

RQ1 What are the digital practices that pupils bring to their learning in school?

RQ2 Across subject domains what do teachers' intended and enacted pedagogic practices indicate about their awareness of and the value accorded to pupils' digital competencies, and how do pupils' experience these pedagogic practices?

RQ3 What institutional circumstances and practices enable or undermine how pupils' digital competencies and practices are recognised (RQ1) and integrated into teachers' practice (RQ2)?

This brief report provides **a snapshot** of the digital practices evident in one of the 10 Exploratory Studies that we conducted between October 2015 and March 2016, with a summary of emerging findings from this Exploratory Study.

For further details about NP^3 go to **http://www.np3.org.uk**.

Exploratory Study Overview

This is a small Community school catering for children from nursery (2 years old) to Year 6, who come primarily from a surrounding public housing estate on the edge of a town in North East England. The school has a far higher than average number of children on Free School Meals and with Special Educational Needs, and a far lower than average proportion of children with English as a Second Language. The study took place across the whole school; detailed observations focussed particularly on Years 4 and 5.

Emerging findings

Students have diverse levels of access to digital technologies at home, which is well understood by the school. Practices that involve digital technologies cross boundaries between school, home and back again include: working with digital resources to explore individuals' special interests; accessing students' work online by family members and musical activities. The school works very hard to communicate with parents across a range of modes: face-to-face (with near 100% attendance at parents' meetings) and online, including through the school app, which acts as an umbrella for various kinds of communications and sharing school work. Another example of this fluid thinking is work around wellbeing, which encompasses friendship, anti-bullying, mentoring and esafety initiatives. Emerging evidence suggests that the school is succeeding in enriching digital practices of the children as members of their community and having impacts on their families more widely. Whole school projects are designed with different curricular goals appropriate to learners' competences, while engendering shared experiences. A range of digital technologies are used to underpin pedagogy and often imaginatively expand the children's worlds and sense of current and future possibilities.

NP^3 is funded by the Society for Educational Studies

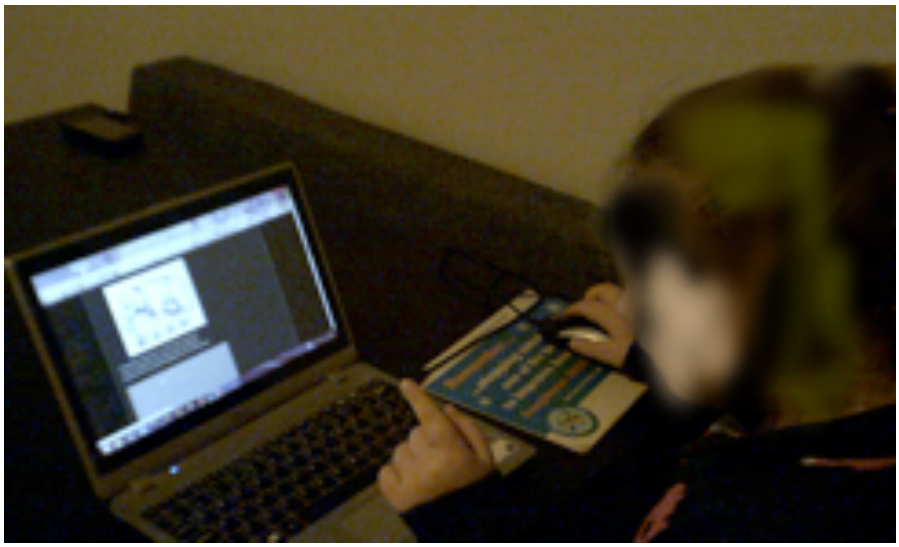
Pupils' digital practices outside school

Evidence as to the pupils' digital practices outside school emerged from diverse sources.

A Year 4 mixed ability focus group discussed their out of school activities as often entwined with their learning interests, e.g.

> "At home I like getting facts off my phone or computer or iPad I write them down and bring them to school."
> "I like playing with my PlayStation and then playing with the compass and making lots of patterns with them."
> "I like playing football in the garden and playing with my XBox."
> "I go on Microsoft Office and do loads of typing."
> "I like playing on my computer, Xbox, I like being brainy, I like being computerish."

On a Saturday, this Year 5 student spontaneously decided to use her Windows 8 laptop to search YouTube for a tutorial to draw an anime character. She paused the video often to allow for each step to be sketched. Later she played "Minecraft", her favourite game, again on her laptop, spending an hour building a complex castle to add to her expanding world.



Pupils engaged with the school app outside school. They, their parents and teachers gave many examples of this, such as: using the school app to practice Christmas songs for an event; or accessing radio podcasts that pupils had created (independently) during break time at school. Examples were given of engaging with other educational apps at home in leisure time (e.g. Educational City, Mathletics). Year 5 focus group pupils asked what they did at home described a number of school–related practices, for exampled one mentioned being interested in the school's history and another in the school's choir and its travels. Others used the Internet to pursue hobbies and find out about pets, or occasionally connected with their future aspirations. Some children reported a lack of access to ICT at home and other issues such as caring responsibilities, yet still reported using digital technology to pursue interests supported by family members.

From the "digital log" exercise a few children reported engaging with digital technologies in their leisure time "almost constantly" switching between devices, sometimes playing with others, but also often alone. One pupil and father play around creatively with his (professional level) photography equipment, with the daughter initiating her own digital designs, with support.

Parents/guardians agreed that their children brought home extensive knowledge of digital practices from school, which they were keen to share, develop and learn from. For example, Parent of a Year 5 child: "[Pupil] has got the school app on her phone and she's always like showing me what she's doing at school and she'll be like 'Mum we've done this' in say IT or… just something, like they were doing French week the other week and she came in as a mimer. I said to her if you want to be a famous mimer, why don't you have a look at what miming's about. She'll go off on the Internet and go and Google it now, you know and try and learn from school and she'll say 'I've learnt this at school' and I'll say, 'Well I don't really know much about that'; 'Oh well I can teach you now' and then she'll start you know relating everything what she's done at school and she's teaching me at the same time really."

In School

School Context

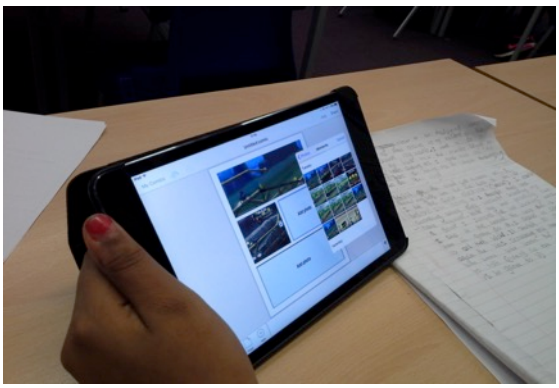
The school has a strategy of selecting a certain, restricted, number of apps and programs and then rolling them out across the school, including all adults and children. So this software is used by groups from the Early Years to Year 6, in different ways appropriate to the planned learning outcomes. Examples include Story Sacks, QR codes, Myst (see Example 2 below) and Strip Design, which is also known as 'Pow!' (see Example 1 below).

This philosophy of whole school thinking extends fluidly between digital and physical spaces such as work relating to their visits to the beach. The image to the left shows Year 1 children with a teacher preparing to work with iPads to produce pictures of jellyfish following a whole school beach visit (an example of which is shown above right).

Vision and digital spaces

The senior leadership team aspire to support every child to succeed to the best of their abilities, and see this as underpinned by a focus on their wellbeing. This includes offering each child a variety of experiences and opportunities to engage their imagination and expand their aspirations. Exploring digital practices is key to this, yet the rationale for introducing innovations is always carefully thought through.

A walk through video demonstration offered by a Year 5 pupil connected to her literacy lesson (Example 2 below) encapsulated some features of the school's vision and digital spaces. She showed detailed understanding of the complex multimodal task at hand and demonstrated resilience in the face of obstacles encountered. She linked this carefully to the demands of the extended writing task. Her output was competently placed on the school album, which she navigated around, making links to other pupils' work including that of a younger sibling.



In this Year 3 class the students are producing Christmas decorations in an arts and crafts activity. An IWB [inset] quietly plays appropriate music and images at the side of the classroom. This contributes to the atmosphere: the children are absorbed in the task and the dialogues between the teacher, other adults and the children are focussed on salient quality issues.

Example 1

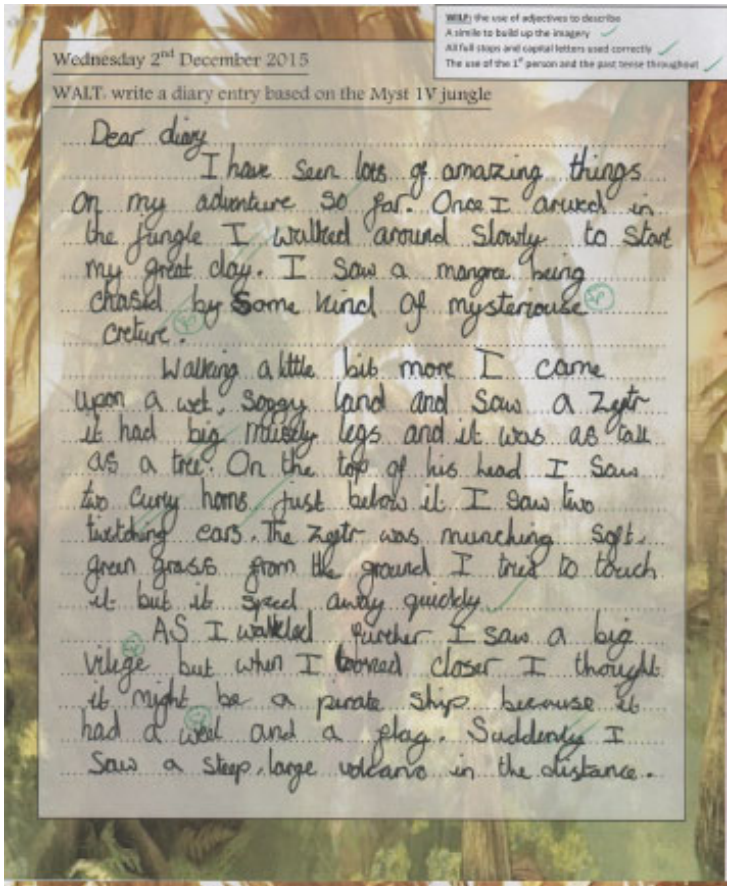
In a Year 5 literacy class children were taking part in a well-structured series of lessons based around work centred on the 'Biker Baron' app. In the lesson observed they were working towards two outputs. One of these, produced in the lesson, was a graphic comic style multimodal narrative produced with Strip Designer and shared in the school's online space. The children were also working towards handwritten pieces of extended writing that would be handwritten up into their literacy books or typed up in the ICT suite. The children demonstrate finessed understandings of the differences between these very different genres, through their productions and dialogues.

Example 2

In a Year 4 literacy class a teacher used Myst to stimulate descriptive writing. The teacher structured discussions and activities in stages of the activity. The children were at various times watching the contributing to whole class or small group discussions, and engaged in individual writing. Although the children had worked with Myst before, it was notable that they found this task exciting and engaging.

Towards the end of the session, the teacher said, "Read out your best sentence." This required a particularly demanding kind of turn taking in that the pupils had to talk one after the other without the teacher being the person to select the next speaker. The children accomplish this well, initiating when they wished, in turn, while staying quiet while others spoke. The teacher picked out some particularly appropriate words and phrases and stimulated the posing of questions to be asked before returning to the Myst environment. The session combined individual writing exercises and collaborative discussions, sharing of unfamiliar vocabulary and so on, all centred on Myst.

In a mixed ability focus group discussion afterwards pupils talked enthusiastically about Myst and also about themselves as writers.



Wednesday 2nd December 2015

WALT: write a diary entry based on the Myst IV jungle

Dear diary

I have seen lots of amazing things on my adventure so far. Once I arrived in the jungle I walked around slowly to start my great day. I saw a mangra being chased by some kind of mysterious creture.

Walking a little bit more I came upon a wet, soggy land and saw a Zgtr it had big muddy legs and it was as tall as a tree. On the top of his head I saw two curly horns just below it I saw two twitching ears. The Zgtr was munching soft green grass from the ground I tried to touch it but it speed away quickly.

AS I walked further I saw a big vilage but when I leaned closer I thought it might be a pirate ship because it had a wael and a plag. Suddenly I saw a steep large volcano in the distance.

It was hot red and as rocky as a mountain. The misty fog was covering up my path so I got a bit lost but I found my way out. I started to feel scared as I was walking along the sandy path.

My adventure is really exciting so far I love it. I can't wait for tommorows adventure. I might see a few more exciting animals. I said night to everything and looked forward to another day.

A lovely personal tone established - I want to read more!
Past tense is kept all the way through - well done
Could you start some of your sentences with 'ly' words? Eg 'Quickly, nervously...