

NP³ Exploratory Study 5

Twining with Hempel-Jorgensen, Henry, Murphy, Harrison, Gillen, Passey, Kucirkova, Dawadi, De Geest, & Fletcher-Cambell (2017) NP3 Exploratory Study 5. Milton Keynes: The Open University.

What is NP³

New Purposes – New Practices – New Pedagogy (NP³) is a collaboration between The Open University, Lancaster University and Manchester Metropolitan University, led by Professor Peter Twining.

NP³ is finding out about how children's digital practices influence teaching and learning. NP³ 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 NP³ go to <http://www.np3.org.uk>.

Exploratory Study Overview

Exploratory Study 5 is a state funded junior school in central England. There are around 390 pupils aged between 7 and 11 (i.e. Years 3 to 6) on roll. The Exploratory Study focussed on Year 6.

Emerging findings

- All the children from whom we collected data had access to a wide range of mobile devices outside school
- There were substantial differences in the limits set on ICT use outside school (by parents)
- The children seemed to spend more time using mobile devices than watching TV – this included watching YouTube videos, playing games, communicating with people they knew in the physical world, doing homework, and finding information and resources
- Much of the out of school ICT use was social, and the digital and physical were often intertwined (e.g. finding recipes and then trying them out; filming themselves then uploading to YouTube; playing games such as Lego Dimensions)
- Staff resource was focussed on dealing with staffing changes, the new National Curriculum and the new assessment requirements (with the removal of levels) – this reduced support for ICT use
 - Accountability issues (e.g. Inspectors' expectations) reduced ICT use

Playing Lego Dimensions



Pupils' digital practices outside school

Twelve Year 6 pupils (6 boys and 6 girls) each took part in one of two focus group interviews. Four of these children (3 boys and 1 girl) and their mums each kept photographic records of the child's ICT use outside school over a two-day period. All four 'Log' children and their mums were interviewed individually.

All 12 children had access to a tablet at home (11 iPads, one Android), four of them owned their own tablet whilst the other eight shared one with siblings. All the children who were asked said that they had access to a Smart TV. All but one of those asked had access to a laptop and a games console. Only two children mentioned their family having a desktop computer. Three of the 12 children reported having their own mobile phone, and one other sometimes used his mum's.

The amount of time children spent using ICT varied considerably, reflecting differences in the number of other out of school activities they were involved in and rules (normally set by parents, but at least in one case by a sibling who owned the games/consoles) – several of the children reported parents introducing time limits because they had been spending too much time using their devices. Time spent using ICT ranged from one boy (B4-Log who used his iPod for about 30 minutes per day and spent an hour per week playing on his Xbox through to another boy (B2-Log) whose mother estimated that he spent 60% of his free time out of school using ICT and commented that whilst she wouldn't say he was addicted, ICT was his passion and he wouldn't know what to do with himself if he couldn't use ICT. B2-Log confirmed his mother's view that he spent at least two hours per day after school playing on his games consoles.

Whilst most of the children said that they didn't watch much TV; one boy (A2-Log) commenting that he preferred his Xbox to the TV because there were no adverts. The vast majority of the children did seem to spend a large proportion of their 'screen time' watching YouTube videos. There seemed to be a gender divide with girls more often reporting watching 'routines', and boys noting watching Minecraft and Nerf gun modding videos¹. Both genders mentioned watching funny videos. B4-Log was the only child who didn't appear to watch any YouTube videos, and was also the most tightly constrained in terms of access to the Internet and social media.

All the Log children reported playing Minecraft and a range of other games. Game playing was often social, either co-located or over the Internet.

There appeared to be gender differences in social media use. Whilst only one girl (B5) had tried Facebook (she gave it up because it was boring) all six girls had Instagram accounts, compared with only two of the boys (one of whom seemed embarrassed to admit that he used it). B5, who was the only one of the 12 children who was on pupil premium, seemed the most active in terms of using ICT to communicate with others: she had set up an iMessenger group for all the children in Year 6 (which all the girls in Focus Group B said they used and one boy in Focus Group B (B2-Log) lurked in). B5 also had a YouTube Channel where she posted videos of her 'routines'. B2-Log also had a YouTube Channel where he posted videos he had made, for example of him making lego models, opening his Match Attack cards, and of a tour around his house (which his father subsequently removed because it included footage of his parents doing exercises).

All the Log children mentioned using ICT for homework, specifically MyMaths and finding information on the Internet. B2-Log was happy if he didn't have to write anything (cut, paste, and correct in Word). Several of the children also searched for information and resources as part of their leisure time. B1-Log, for example, looked for funny quotes, colouring pages (which she printed out and coloured in), recipes (which she tried out), instructions for making Christmas decorations (which she then made), and instructions for making soap (which she attempted to make).

In School

Context

This is a state funded Junior School, within a local authority in central England, close to a large city. The school is located adjacent to its sister Infants School and serves a mainly prosperous catchment area. The school has around 390 pupils and has three classes in each year group. The school has below average numbers of pupils eligible for free school means and the proportion of children deemed to have special educational needs is average. There are 22 teachers (including the Head and cover staff), 10 learning support assistants, an IT technician, librarian (who is also responsible for display) and five admin staff. The Head had been in post for over 15 years and had built up a strong team. However, the school had experienced a large turnover of staff at the end of the last academic year. In their last Ofsted inspection (2011) the school was deemed Outstanding.

Vision and digital spaces

The Head said her vision was that “we all learn with and from each other, I want everyone to be respectful with and from each other, I want them to hold views, with and from each other”. This was reflected in expectations that things such as dress code should apply to teachers, not just to pupils because the Head felt it was important that all the adults in the school modeled and preached what they believe and want the children to do.

The head was clear that ICT could help you break down barriers between the school and the outside world, bringing people and ideas in and allowing you to communicate with real audiences. However, she was also clear that you should only use it where it added value.

The school had a music room, nurture room and a large flexible space (‘the Zone’) with walls you could write on, a green screen area², games consoles, a tiered bench seating area, moveable tables, stand up computers, 3D printers, and a large touch screen computer that could be turned into a table. There was also a radio station, which was used before school and during lunch every day by ‘Digital Leaders’, as well as for class radio shows (which replaced assemblies for parents).

Each classroom had an interactive whiteboard (IWB) and desktop computer. Every member of staff was provided with an iPad (including the caretaker) and teachers also had a laptop. Most classes were organised with clusters of desks. There were clusters of desktop PCs in shared areas (roughly four PCs between two classes), two sets of 16 laptops for use across the school, and each year group (3 classes) shared a set of 35 iPads in a trolley.

The school had been running a bring your own iPad scheme for three years (parents could buy devices through the school or pupils could use an iPad they already had) and provided individual secure lockers for them in each class.

Roughly a third of the children brought in their own iPad. Any content or apps on these devices had to be age appropriate.

BYO iPad Lockers



²: Green screens are used to create a video which can then be superimposed on a different background image

Example 1: Writing to people in the local care home

This Year 6 literacy lesson started with the teacher showing a video of a police officer visiting an old couple. The teacher led a lively discussion about what it might be interesting for them to talk about.

She then explained that the children were going to write to the old people in the local care home. She asked if anyone had experience of penpals outside school – several of the children communicated via email, messenger or Facetime with friends and relations – then the teacher explained that they were going to use pen and paper.

The teacher then asked the children to think about a day in their life and make a bullet list of at least seven things that they did as part of their day. As the children worked in their exercise books, the teacher modelled doing the task on the IWB. Occasionally a child would use an iPad to look up a word.

After the lesson the Year 6 team leader explained that they didn't write on their iPads because the local authority inspector, who had visited two weeks previously, had said that each child should do two pages of writing in their exercise book every day.

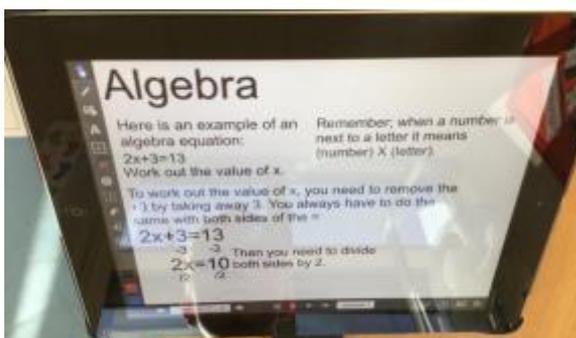
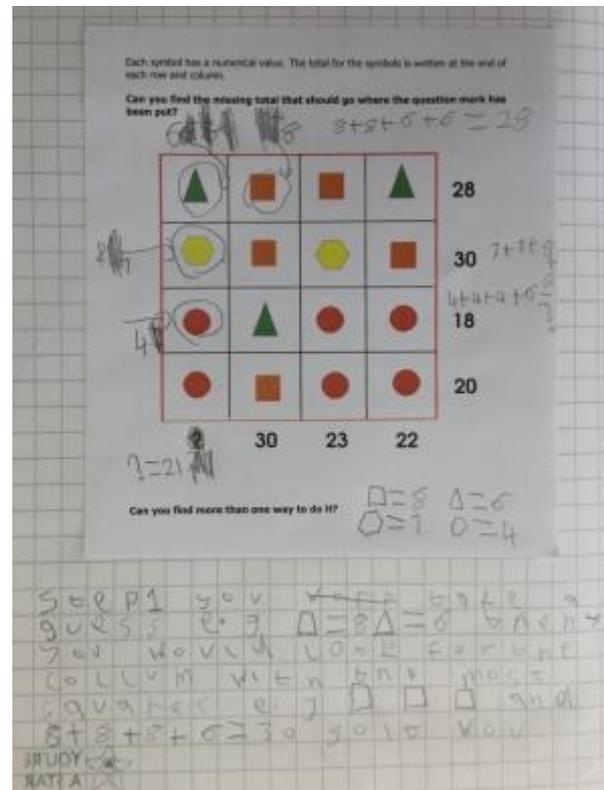
iPad used as a dictionary/thesaurus



Example 2: Algebra in 'ability' groups

In another Year 6 class the children were divided into four groups to work on differentiated algebra tasks. The 'lowers' were in the shared area outside the classroom with the learning support assistant. The 'middles' were working with the class teacher on an algebra investigation, and two groups of 'highers' were explaining how to solve algebra problems (one group writing instructions in Explain Everything on their iPads and the other writing instructions for an alien in their exercise books). All the children were working in pairs. The teacher used the IWB to explain a problem to her 'middles' and then circulated around the two 'higher' groups. After a few minutes the teacher refocused on the 'middles' and asked children to talk her through how they were tackling the investigation. She got individual children to come up to the IWB and show their working so far, which she used to support the rest of the children's thinking.

Algebra investigation ('Middles')



Algebra in Explain Everything ('Highers')