Cloudlearn: smart phones in schools: sample uses

Our Cloudlearn research project was funded by the Nominet Trust, 2011 - 2012.
This document added 2025

The catalyst for the overall Cloudlearn research focussed on social media and portable devices. For both there was a growing deep divide developing between those schools who were embracing social media in all its forms, or embracing portable devices (specifically mobile & smart phones), and those schools maintaining a policy of banning, locking and blocking either. The same thing had happened previously of course with TV, ballpoint pens, calculators, sliderules, etc. Our research sought to identify effective and proven practice, to help all schools going forwards, with embracing both.

This document adds to the initial summary document by simply listing more examples, from classroom practice, of the various ways that smart phones have enhanced the learning experience. In the initial research we noted that "the devil makes work for idle thumbs" . If you don't offer appropriate tasks to use those phones, then the children will think of their own activities which will not always be appropriate (!). Here are a few suggestions, used already by others. We have tried to stress activities that only need free apps.

- Optimising the classroom by measuring light levels (seeking 500 lux or higher), measuring decibel levels to help students monitor their noise levels, barometers;
- Personal health awareness - heart rate, blood oxygen levels;
- Cameras to record science experiments alongside written description;
- Using sensors to measure acceleration and rotation, allowing students to explore motion, inertia, and forces;
- Using slow motion video to observe experimental outcomes;
- Using a camera to record running speeds as children run across the field of vision;
- Using phone as a magnetometer to detect magnetic field strengths;

- Using phone as a compass;
- Using phone as a spirit level;
- Scanning snack barcodes to understand what they offer;
- Scanning food items to learn about healthy eating;;
- Text to speech to enhance inclusion especially for ESL students;
- "Reading" audiobooks in a library setting - again, inclusion gains;
- Offering translated subtitles from the presenter's voice during a slide based lecture;
- Measuring and categorising angles around the school;
- Using the phone to translate an entire slide in real time;
- Using AI to place photos of the children's World Book Day characters onto appropriate or inappropriate backgrounds (eg Fleur Delacour into Hogwarts dinning room) to begin a conversation about image veracity;
- "Drawing" huge scale virtual images (eg a on the school playing field) using route tracing (much planning and maths involved);
- Using AI to create and exchange quiz questions on curriculum topics;
- In conversation with children in other schools in other contexts (what's your lunch like?";
- Creating short "influencing" videos - for example this Brainfood project;
- Using a phone to control STEM items in use away from desk / bench - for example robotic toys;
- With much user interface in tech moving to voice input, the phone becomes a key to widespread class participation;
- STEM programming activity - eg Scratch Jr;

There are many other activities - this list is indicative not prescriptive; these also help your children to understand the potential for mobile devices. It is good area to explore student agency too - having a student advisory committee to filter good use ideas to staff was suggested by many of the school students in the original research.