The Effects of Technology on Children's Learning and Wellbeing

Dear Parents/Carers,

This year, more than any other, we have experienced a significant number of issues concerning children's use of technology. Problems caused by the children's activities on social media in particular, have spilled over into school on regular occasions. We have noticed that more children are tired at school and we are having to provide increased support for children who are suffering from mental health issues.

Whilst we are not suggesting that technology is solely to blame for these issues, we do have concerns that a growing number of our children are using social media inappropriately and have regular, unsupervised access to the internet. So far this year, we have had to involve the police on two occasions, when parents and/or children have reported incidents to us. In addition, many other issues have been dealt with where children have been upset by what they have seen or read on their devices.

Our concerns prompted us to look further into the children's use of technology. Miss Coppell (ICT Lead) and I asked staff to carry out an anonymous survey with the children and to lead some discussions about sleep. The following information is a summary of our findings:

- 79% of the children say that they use some kind of electronic device at or around bedtime (Year 3 – 73%, Year 4 – 83%, Year 5 – 79%. Year 6 – 81%).
- 70% tell us they use a device before school (Year 3 – 65%, Year 4 – 75%, Year 5 – 65%, Year 6 – 76%).
- Between 50 and 70% of children have difficulties getting to sleep.
- Approximately 50% of the children say they wake up during the night.
- Older children (Year 5 and 6) say that when they use their 'screens' before bed, they can't get to sleep, they don't like going to bed and are tired in the morning.
- Some children in Year 5 have trialled not using their screens before bedtime and have enjoyed better sleep as a result.
- Those who sleep well, and find it easy to get to sleep, have a bath and then read at bedtime.

What some of the research says:

- In 2013, Public Health England announced that too much time in front of TV and computer screens is causing increasing psychological problems, such as depression and anxiety, in children. The report suggests that the amount of time spent playing computer games was negatively associated with wellbeing in children – in other words, their general mental and physical health, resilience and the extent to which they are happy or worry about different aspects of their lives. The effects, particularly on mental health, were most pronounced for those children who spent more than four hours a day using some sort of screen-based technology.
- Because light from screen devices mimics daytime, it suppresses melatonin, a sleep signal released by darkness. Just minutes of screen stimulation can delay melatonin

release by several hours and desynchronize the body clock. Once the body clock is disrupted, all sorts of other unhealthy reactions occur, such as hormone imbalance and brain inflammation. Furthermore, high brain stimulus doesn't permit deep sleep, and deep sleep is how we heal (Victoria Dunckley, MD).

- Watching TV or playing computer games for more than two hours a day is related to greater psychological difficulties irrespective of how active children are (Bristol University Study – 2010).

- When very small children get hooked on tablets and smartphones these can unintentionally cause permanent damage to their still-developing brains. Too much screen time too soon "is the very thing *impeding* the development of the abilities that parents are so eager to foster through the tablets. The ability to focus, to concentrate, to lend attention, to sense other people's attitudes and communicate with them, to build a large vocabulary—all those abilities are harmed." (Research by British Psychological Society and Britain's Royal Society of Medicine).

- A study of over 1000 Australian high school students aged between 13 and 16 found poor-quality sleep associated with late-night texting or calling was linked to a decline in mental health, such as depressed moods and declines in self-esteem and coping ability.

- A survey of 1,479 youngsters aged between 14 and 24, found Instagram and Snapchat to have the most negative impact on people's body image, sleep and fear of missing out (The #StatusofMind Survey, 2017).

We appreciate how difficult it is for parents to monitor their children's activity on the internet and social media and we know that the children (particularly the older ones) feel great pressure to be part of social media groups. However, there is increasing evidence to suggest that children's mental health and learning is suffering as a result.

I hope you find this information useful and would be very interested in your views. In the meantime, we will continue to provide internet safety lessons at school for the children and to support them when issues arise.

A S MARTIN   A COPPELL

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