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Mobile Phones and Learning:

Understanding the Disruption

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MOBILE PHONES AND LEARNING: UNDERSTANDING THE DISRUPTION

By InnerDrive

In this digital age, mobile phones have become ubiquitous companions, accompanying students from their bedrooms to their classrooms. While these devices offer unprecedented access to information, they also introduce distractions that can significantly compromise learning outcomes.

A growing body of research paints a consistent picture: excessive use of mobile phones can reduce attention, impair memory, disturb sleep and negatively affect emotional wellbeing. This summary synthesises key findings on the educational consequences of mobile phone use, particularly within the classroom context.

MOBILE PHONES AND SCHOOL GRADES

While much of the research focuses on negative outcomes, some studies point to effective interventions. Beland and Murphy (2016) compared test scores in England before and after mobile phone bans were introduced in some schools. They found that test scores improved significantly after the ban, with previously underperforming students making the largest gains. The authors argued that removing phones from learning environments helps close achievement gaps and provides a low-cost method for boosting academic outcomes.

This chimes with other research from around the world, with studies in America, Brazil, China, Australia and Malaysia all finding that mobile phone use in class was significantly associated with lower grades (Bjornsen and Archer, 2015; Felisoni and Godoi, 2017; Liu et al., 2020; Winskel et al., 2019).

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Why might this be the case? Rubinstein et al. (2001) found that when students switch between tasks, such as listening to a lecture and checking notifications, they experience "switching costs" – a measurable delay in performance and increased error rates. Even short interruptions can derail learning: Altmann et al. (2014) found that interruptions as brief as 2.8 seconds resulted in more than double the number of task errors. In classroom terms, even a quick glance at a buzzing phone can severely hinder cognitive performance.

Evidence suggests that even when phones aren't being used, they can be a source of distraction (Thornton et al., 2014). It appears that out of sight really is out of mind. Tanil and Yong (2020) demonstrated that students who had their phones nearby recalled less information after a learning activity and reported higher rates of intrusive thoughts related to their phone. These findings support the idea that phones are cognitively demanding even in airplane mode.

Glass and Kang (2018) offered further experimental evidence from classroom settings, finding that students allowed to use devices during lectures performed 5% worse on final exams than those without device access. Crucially, this occurred regardless of whether the devices were actively used during the lesson, highlighting that even passive access can impair long-term retention. The authors attributed this to divided attention, which hampers the encoding and consolidation of new knowledge.

MOBILE PHONES AND WELLBEING

Several studies explore the psychological effects of mobile phones. Lee et al. (2014) described how compulsive smartphone use is associated with increased anxiety, depression and technostress. Similarly, Roberts et al. (2014) found that many students experience withdrawal-like symptoms when separated from their phones, indicating addictive tendencies. This emotional reliance on mobile phones can heighten stress levels and reduce students' capacity to engage fully with learning tasks.

The psychological pull of devices is also reinforced by social anxieties. Przybylski et al. (2013) demonstrated that students with high FOMO (Fear of Missing Out) are more likely to check their phones compulsively and experience greater emotional distress. This feedback loop – where the anxiety of missing social updates drives constant phone checking – further diminishes focus and rest.

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MOBILE PHONES AND BULLYING

Evidence also suggests a relationship between mobile phones in schools and bullying rates. A fascinating study tracked what happened when two regions in Spain banned mobile phones in schools (Pérez-Arnal et al., 2021). They found bullying rates dropped in these areas, with the researchers suggesting that without phones, it became harder for students to send hurtful messages, spread rumours or exclude others online during school hours. Likewise, a master's thesis study in Norway also found that schools that supported banning mobile phones reported significantly fewer incidents of bullying amongst their students (Guldvik and Kvinnsland, 2018).

FINAL THOUGHTS

Taken together, the evidence presents a consistent message: mobile phones are associated with lower grades, reduced well-being and higher levels of bullying. These effects are especially damaging for students who have historically struggled. For students, parents and teachers alike, acknowledging the negative role of mobile phones in learning environments is a crucial first step towards reclaiming attention, deepening engagement and supporting wellbeing.

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ADDITIONAL RESOURCES

A Guide to Mobile Phone Management
www.innerdrive.co.uk/guides/mobile-phone-management/

Are mobile phones harming your students' concentration?
www.innerdrive.co.uk/blog/mobile-phones-concentration/

6 reasons for students to put their phone away
www.innerdrive.co.uk/blog/reasons-to-put-your-phone-away/

Are students suffering from mobile phone addiction?
www.innerdrive.co.uk/blog/student-mobile-phone-addiction/

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