

Part I:

In “The Argument”, Hattie presents a variety of factors influencing student achievement, all of which are undoubtedly affected by technology. Of all of the factors presented, however, the factor most greatly influenced by technology is the child. From before a child is born, they are influenced by the advances made in technology, whether it is being monitored via ultrasound or their mother listening to a heartbeat using a Doppler tool, a child comes into the world having already been influenced by technology. In terms of learning, students are increasingly inundated with information from television and computers, smart phones and video games. These influences can positively impact a child by providing rich and varied opportunities to learn about the world in which they live, but it can also be a source that hinders learning by removing the necessity of internalizing and retaining certain information. Why remember facts when you can just search Google for the answer? As educators, we must, as Hattie states, “ mould dispositions that aid rather than hinder learning”. We need to inspire students to use technology as a tool that serves to engage them in learning and provide challenging tasks to keep students invested intellectually.

Hattie’s factor least influenced by technology is curriculum. The influences of curriculum on student learning listed by Hattie focus more on the depth to which information is understood rather than the means by which it is learned. In fact, the influences listed affect the child regardless of whether technology is involved or not. This, in my opinion, is important when considering technology integration into a child’s learning. The outcome (or curriculum) should be considered first, then the means by which the outcome is reached. As educators, the learning is more important than the technology, therefore the technology chosen should have a deliberate purpose in supporting the curriculum.

Technology integration in schools has the most promise in terms of influencing student achievement. Schools have the opportunity to influence millions of children each day, providing opportunities for interactions with technology that are possibly beyond the means of the child’s family. In regards to schools, Hattie emphasizes that for schools to positively affect student learning, they must “allow students and teachers to make errors and develop reputations as learners”. Wisely chosen technology in a school can aid in attaining this standard by engaging students in their own learning, leading to few disruptions and a culture of learning within the school. In my own experience as an educator, I know that engaged students are far less likely to be disruptive, especially when paired with a culture that values learning. While offering the most promise, the school is also the most problematic factor. Technology is very expensive, making integration difficult for many schools and districts. This often means that schools use outdated resources for as long as possible. In addition, schools that do have access to updated technology often underutilize their resources due to lack of teacher training. Teachers need to be trained in not only how to navigate and use new programs and hardware, but also how to integrate these tools into their lessons.

Part II:

Factor	Common technologies	Opportunities	Challenges
Child	Video games, tablets (ipads, Kindles, etc...), cell phones, mp3 players, laptops/computers	Students have easy access to information & educational games. For older students, there is an easy opportunity for communication between the student and teacher outside of school (in older students).	Students don't value learning – they can Google answers rather than thinking. They are distracted and also have easier access to negative influences.
Home	Smart phones, video games, tablets, social media (Twitter, Facebook, Instagram), computers	Parents can use the internet to access student grades, communicate with teachers, view school calendars on school websites, etc. Technology in the home also provides the opportunity for students to access information that may have been previously available only in school or at a library.	Students are not always monitored when online, so they risk exposure to online predators or identity thieves.
School	Online gradebooks, office productivity software (Microsoft Office)	Organization software saves time for administrative staff and teachers and allows for easy access to records.	Online gradebooks provide more transparency than some teachers are used to, allowing parents to critique the choices made by educators.
Curricula	Educational software and programs, such as Accelerated Reader, First in Math, Discovery Education	Technology can aid in improving student engagement in the curriculum. Interactive elements found in online textbooks help students become more invested in their learning. These tools also help differentiate instruction for students who have different learning needs (i.e. Spanish language options, text to speech, etc.)	Not all students have access to the internet at home, making the use of resources such as an online textbook troublesome.

Teacher	Computers, social media, presentation hardware (SmartBoard, LCD projector, Elmo, etc.)	Through the use of social media, teachers can keep this new generation of tech savvy parents up to date about what is going on in their classes. It makes communication easy and time efficient. Presentation hardware makes lectures more engaging.	Technology is not always reliable which can disrupt lessons. Social media usage also encourages “helicopter” parents.
Approaches to teaching	Online Professional Learning Networks (PLNs) such as Discovery Educator Network,	Educators can connect with other educators, allowing for professional growth and a community of learners outside of their school	It can be difficult to maintain a commitment to an online learning community on top of all of the other responsibilities of a teacher.