

Hattie's Six Factors of Student Achievement and Technology

In Hattie's third chapter "The Argument" from the text *Visible Learning*, Hattie discusses six factors of that influence student achievement. These factors are: the child, the home, the school, the curricula, the teacher, and the approaches to teaching. This text not only discusses how these factors can affect student learning and achievement, but it also brings to light the relationship these factors have with technology. Certain factors are affected greatly by technology, while technology has less influence on other factors. Also, two of Hattie's factors show the most promise with technology and the most problematic relationship with technology.

The child can be greatly influenced by technology. Students do not enter the classroom as blank slates. Hattie states, "The child brings prior knowledge of learning to their classroom – from preschool, from their culture, from television, from home, and from the previous year." (Hattie 31) Students enter the classroom not only with prior experiences with technology, but with a positive attitude toward them. They experience television at home and students see this as a great tool to have in the classroom. Student gain prior knowledge through many experiences that they have been exposed and open to. If students are

presented with a new type of technology, they have a more positive attitude toward trying and experiencing new things. “These positive attitudes of openness to experience, willingness to invest in learning, and intellectual engagement can be fostered in preschool...” (Hattie 32) If students are exposed to technology from an early age, they are willing to continue fostering that relationship for years to come. It is a way to create an engagement with learning that can stay with a student throughout the educational career.

The home as a factor affecting student achievement is least affected by technology, because it is more valuable that parents understand the “language of the learning” so that the parent can “provide every possible assistance to their children in terms of developing the child’s learning and love of learning...” (Hattie 33) It is not that the home environment is not influenced by technology at all, but rather it is a valuable resource to encourage the student to be open and create learning expectations that challenge the student. The home is a resource to encourage the influence of technology in the child and the school environment.

The school is an ever-changing environment, and the climate in a school, and specifically, a classroom, encourage growth and student achievement. “...the most powerful effects of the school relate to features within the schools, such as climate of the classroom, peer influences, and the lack of disruptive students in the classroom...” (Hattie 33) If

technology is seen in the classroom as a beneficial learning tool and welcoming, it can be believed that students will feel extremely comfortable using it as a resource for achieving goals. Disruptive students will be able to set learning goals together with their teacher that are challenging, yet achievable and include technology. Students do not all learn the same way, and as a way of creating a welcoming environment where learning is a combined goal of student and teacher is a promise technology offers.

The teacher and approaches to teaching result in the most problematic relationship with technology. Students come into the classroom with prior knowledge about technology and openness to new experiences, but if the teacher does not provide those students experience with technology, then students are at the disadvantage. By allowing students to create their own challenging learning goals, the teacher is encouraging them to be actively involved in their learning. “Students must be actively involved in their own learning...” (Hattie 35) If a teacher is not open to new teaching styles and techniques, including those involving technology, then the student might not feel like they can create a learning goal that they are completely committed to reaching.

Hattie’s six categories influencing student achievement allow for a variety of levels of influence with technology. The range from a level of most influenced to least influenced by technology, to factors with high promise or most problematic with technology.

Part II:

Factor influencing student achievement	Common Technologies	Opportunities	Challenges
The Child	Television, Computer, Internet	Technology the child encounters everyday allows the child to get excited and open to new technologies they are introduced to.	Sometimes, children are so connected with television shows and computer games, that it can be a challenge for the teacher to make sure the child's interaction with technology is fully engaging.
The Home	Television, Computer, Internet, Radio,	The home allows students to interact with technology in a different location than school. They have the freedom to interact and really gain an understanding of the endless possibilities of technology.	I believe that a challenge is that the parents at home need to have an expectation for the technology their child is interacting with. I believe that if the parents in the home are not taking an active role with their children's interaction with technology, this can be detrimental to the child.
The School	Television, Projectors, Smart Boards, Radio, Internet, Document Reader	The school generally has more funds to gain technology than the teacher or the home. This allows the opportunities for technology to be endless.	A challenge that the school faces with technology is that there might be a limited amount of new technologies for school faculty to share. This might prevent some teachers from fully using the new technologies to the fullest.
The Curricula	No Technology Built In Directly	Since there is no technology built into the curricula, the possibilities are endless for the	If a teacher does not want technology to be in their daily curricula, they will not be willing to use the technology

		teachers to really make the curricula their own. They can really engage the students with interaction with technology.	that is available in the school.
The Teacher	Computer, Television, Internet	Teachers have the opportunity to learn and understand the technology that is available to them in their classroom, such as the computer and possibly a projector.	The teacher has to be fully invested in using the technology they have available. If their resources are limited, the teacher might not be willing to learn how to incorporate technology into their daily teaching.
The approaches to Teaching	Computer, Television, Radio, Internet	The approaches to teaching have the opportunity to really utilize the technology that is available. The teacher has to be willing to investigate the technology that is available at their school.	If the teacher does not learn about the technology or is unwilling to use it, then this is obviously a challenge. It would be beneficial for a technology leader to encourage other teachers to use technology in their teaching.