Factors Influencing Student Achievement

We all know teachers must be passionate and engaged in their teaching. Teachers must be leaders in a way that should initiate staff discussions, provide opportunities and alternatives for developing learning strategies, create testing and feedback for students, and constantly adapt to what is taking place around them. One thing that is always changing is the technology in the classroom, and the six factors influencing student achievement are greatly influenced by these changes in technology and we as teachers must adapt to the changes in technology.

I believe that the approaches to teaching are most influenced by technology. If teachers cannot change the way they teach and use the new technology given to them, how can they be effective or have any effect on their students? Teachers must plan and talk about teaching and change their methods to ensure the success of their teaching methods on their students. If the new technology is not working, then through feedback and data, the technology needs to be changed or adapted so it is of benefit. Teachers can greatly vary the way they present material to their students based on technology, whether it is verbal notes, notes on an overhead, or a PowerPoint presentation; these are all different technologies that change the approach to teaching. The important thing is to make sure that appropriate learning strategies are used and teachers are having success teaching the students.

The curriculum is easily the least influenced category. The curriculum, which is normally set by the state or district, attempts to focus on developing learning strategies to construct meaning. Curriculum does not normally address technology and the use of it in the classroom; this is generally left up to each teacher or principal to decide how to connect the students to the curriculum, whether it is with technology or not. Though technology may lead to further engagement for the student, curriculum cannot be changed by the teacher, so this category is not generally influenced by technology.

I also feel curriculum offers the most promise for technology in the near future. Curriculum, if changed, can address the new technologies we see coming to the classroom each and every year. These changes in curriculum with technology can definitely help teach specific skills and create deeper understanding in the subject areas. Also, new technology such as iPads, SmartBoards, online games, and other new software/hardware generally lead to further engagement in the curriculum and an interest in the area of study. If students are interested in the subject area, they are generally motivated to work hard in that class. With changes in the curriculum, including more technology requirements, I feel that there is a great promise for student inquiry.

The most problematic category would have to be the home. If there is no parental knowledge of the language of schooling, which in our terms means the new technology, it is incredibly difficult for the student to be successful. If students do not understand or even possess the technologies at home, it will be nearly impossible for parents to uphold their positive expectations for their students because they lack the knowledge or possibly do not have the capabilities with technology.

We know that technology is ever-evolving and changing on a daily basis, so we must learn to incorporate it into our classrooms to help with student achievement. We strive for active participation, engagement, passion, and learning from our students and our teachers. With new technologies and some changes to the classroom as we know it today, student engagement will increase and this will hopefully lead to better achievement in our classes.

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| **Factor influencing student achievement** | **Common Technologies** | **Opportunities** | **Challenges** |
| Child | iPad | The ability for the child to discover on their own and experiment with a new “gadget” in many different educational ways. | IPads are very expensive, can be high maintenance, and are a huge responsibility for any student. Also, every staff member and student would have to be trained in the technology. |
| Home | Home Computer | Papers can be typed and research can be completed at home as homework instead of during valuable class time. | Not every student owns a home computer or has the capabilities on their computer to do any typing or research. |
| School | SmartBoard | More interaction in the class for students on a daily basis. This interaction leads to more engagement and higher student motivation. | Only one per room and can be costly if more are ordered for the entire school/district. Training is needed for those who use them in each school. |
| Curricula | Stellarium (Astronomy Program) | Allows students to explore on their own through using the program. Tasks can be given and students can learn vocabulary/knowledge of Astronomy independently. | Students cannot put their own input and ideas into the program, making it very objective. They can only see what is on the screen and cannot do a lot experimenting on their own to go beyond what is assigned. |
| Teacher | PowerSchool (Online Gradebook) | Grades can be done anytime, anywhere for staff. Programs do all of the math and calculations to assist teachers. Students can access their grades at any time. | Grades must be kept up to date because it is up to the minute and parents want to see how their students are doing in their classes. |
| Approaches to Teaching | Google Earth | Students can see different locations around the world and how they actually look. Not just using a map they get an idea of the climate, culture, landforms, and other features of an area by truly seeing locations and what things look like. | Not always working at the time when it is needed. Students can easily get off task and use other features of the program that are not a part of the curriculum. |