

Adequate Use of Technology and Effects on Young Children

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Abstract

Review of literature about technology use in young children and the positive effects it may have along with consequences and recommendations. Young children are able to access technology easily and use it for many reasons. Using technology responsibly and for educational purposes will help maintain young children's health and safety. Supervision and interactions is key when young children use technology. Young children spend a lot of time on technology which can have adverse effects such as physical health issues, mental health issues and social interaction problems. When children use it for educational purposes the work should be monitored and the programs adequately researched. Young children can improve literacy skills, mathematics skills, writing skills and also social interaction skills. Students in special education have also benefited from advancements in technology. Spending too much time using technology and using it for inappropriate reasons can harm young children. Adults are responsible for teaching young children appropriate uses of technology and monitoring use to make sure the children become responsible technology users.

Introduction

Technology use in the classroom is becoming more of a requirement now instead of an option. Technology is part of the Common Core Standards and helps children stay engaged in lessons and may also help children improve skills where there is a deficit.

Technology is in young children's everyday life. Technology is considered items like iPads or tablets, television, video games, computers, smartphones, etc. The Academy of Pediatrics and White House Task Force on Childhood Obesity recommend no technology use for children under the age of two (Technology and Interactive Media, 2012). Other recommendations by the two groups, are that children two years of age and older, are only allowed one to two hours of screen time (Technology and Interactive Media, 2012).

The type of technology is not as important as how it is being used. When using in a classroom, teachers need to make sure the programs are research based and children are making gains when using the technology. Using technology in the classroom may have valuable benefits. Using it for the wrong reasons in the classroom can have adverse effects on young children.

No matter where technology is being used,, adults need to monitor young children. Adults in both school and at home need to be aware of what the children are doing with the technology. Teachers and parents should work together to make sure young children are not spending too much time on technology. Communication between school and home can help young children be responsible technology users.

Use of technology can have important benefits, but at the same time could have negative impact. This may seem like it is impossible to figure out what to do with the technology and should young children use it. There may not be a definite answer to all of this but research has been conducted and may help when making a decision about technology use. Monitoring the time children spend on technology, the programs being used and the results of the use of technology should always be considered.

Research

Emergent Literacy

There are many programs and applications available to support or improve literacy in early childhood. Children that are behind might benefit from intervention of programs used with technology, but also improve general reading skills. One advancement in technology for reading includes e-books. Children are able to listen to the book, look up words they do not know, magnify the book if needed, and also use interactive features such as questions about the text and so on (Neuman & Neuman, 2014).

Writing

Supporting writing, or using technology as an alternate form of writing is a benefit of technology use. There are programs to support writing in young children, but simply doing searches helps children learn to spell. The children were able to get the spelling close enough using their own knowledge and then having the computer assist them, with teacher guidance (Spink et al., 2010). Journaling using technology can also help children practice writing, but also teach them by making corrections.

Math and Technology

Math is becoming more important in the early childhood classroom. Using technology to teach it may help the students understand better. Young children need visuals for do some of their work. The technological advancements can help with this without having a pile of manipulatives around. A study showed the manipulatives online were just as effective as other manipulatives that might be used in the classroom (Lentz et al., 2014). Not only can technology help children learn math, but children that may be behind or even more advanced children can use it to work on skills at their level.

Skills Building with Technology

Using other forms of technology such as video games allows children to engage in fantasy or socio-dramatic play. Children could also possibly build social skills using technology. Seeing interactions between people on television may allow children to imitate that in real life. It may also allow children to learn how to take turns if they are playing a video game. Classrooms with computers could be setup so children are allowed to problem solve together while using them. Using other forms such as tablets, but allowing children to communicate and work together while using them may increase socialization.

Advancements in Technology

Technology has come a long way since things like radio and television. These advancements allow more engagement and access to all students. Teachers are able to share videos on content they are learning, children are able to independently use most technology and special education students can participate in more activities. These advancements also allow teachers use multiple platforms of teaching in one lesson.

Downfalls with Technology

Overuse of technology, especially in early childhood, can lead to multiple problems. Some of these problems involving physical health, mental health and safety of the children. Other issues with technology could be the cost and access to them for both school districts and low-income families. Training on how to use the technology is vital for teachers.

Adult Involvement

Children need to be guided and taught the correct way to use technology for it to be beneficial for them to use. Recommendations for technology use include the time spent for children using technology, but also the way the technology is being used. Both parents and teachers are responsible for making sure children get the most out of technology, but also so they are not exposed to the potential dangers.

Research continued...

Teacher Views

Teachers have different views of how and if technology should be used in the early childhood classroom. When teachers decided to use technology there has to be a valid reason and data should be kept. Teachers should not only use the program data, but also use notes from their observations while the children are using technology. Some teachers feel they do not have enough training or knowledge of the technology to use it efficiently in the classroom.

Recommendations

Teachers should use technology in the classroom that is researched based and for intentional and appropriate classroom use (Donohue & Schomburg, 2017). Time spent on technology should be limited and children still need to have active play time in their day (Donohue & Schomburg, 2017). Adults need to be interacting with the children using the technology (Donohue & Schomburg, 2012). Young children, birth to age two, still need to be given great consideration on if technology is appropriate or not for their age (Donohue & Schomburg, 2017).

Conclusion

Using technology in the classroom can cause some concern for some teachers. Students always seem to have access to technology, but using it in a productive way can allow students make bigger gains in the classroom. Teachers need to make educated decisions on which technology to use and how to use it.

Teachers and parents also need to work together when children and technology are involved. Communication between both parties is important so children stay safe and learn appropriate ways to use technology. Monitoring children both at home and at school can keep them safe and allow observation of academic skills.

Using the right amount of technology is the key to making it useful for children, but also allow them to learn other skills. Children need to have technology free time and active time in their day. There may not be an exact time recommendation for every age, but there is one key component that is the same with all technology. Making sure technology is used in an appropriate way is what benefits children. Technology is all around us and there will probably never be a shortage of technology. Using the technology wisely is the most important concept to remember.

Sources

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