



Together for inclusive future

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“Digital inclusion in preschool education”

Why Digital Inclusion is Important?

Among all the technologies that help prepare students for the future, access to the Internet is probably the most important. It's obviously become the backbone for how individuals, companies, communities, and even the economy function optimally on a day-to-day basis. Students need to develop skills to maximize their efficiency by drawing on the power of the Internet. They also need to be assured that they'll be able to have access to this tool, which isn't always a given.

Efforts to improve digital inclusion have been in the works for a while now. Most aim to address both digital literacy issues as well as a lack of access to ICT tools. Digital inclusion is meant to address the learning needs of individuals and the problem-solving abilities of communities as a whole. Its implementation should be practical and policy-driven. This helps ensure better access to hardware, software, digital content, and other resources that can contribute to more effective learning experiences for students of all ages. students can develop the digital literacy skills for effectively analyzing and acting on discoveries made with various technologies.

Digital inclusion should contain affordable and strong Internet service, Internet-connected devices, and access to digital literacy training. Other elements that help ensure true digital inclusion are quality technical support and online content that helps encourage self-sufficiency.

Digital technologies are an integral part of children's lives in the 21st century. Children spend more time in the digital environment than ever before and at younger ages. These technologies are having such a profound effect on all aspects of people's lives that they are now becoming taken-for-granted.

Strategies for Digital Inclusion

One of the reasons true digital inclusion across the board is so difficult is because each student is so diverse. This means that the pedagogical methods teachers use are often intended to embrace this diversity, which is tricky to accomplish. In order for educators to understand how each student will move through the learning process and arrive at the desired learning outcomes, they need to first understand their learning characteristics.

Teachers can start levelling the field by easing into more technology use with a model like blended learning. Blended learning includes traditional and digital instruction, combining elements of both pedagogies. For students who don't have much experience with digital learning, this can help them get their feet wet. Educators would need to keep in mind, however, that because of the diversity in any given classroom, they're probably each starting with different proficiency and experience levels. This diversity also means that, as students get older, they're probably going to take a wide variety of paths. Studies have shown that certain factors contribute to students being equipped with lower amounts of digital literacy than their peers. These are generally made up of things they can't control, like gender and geographical location. We don't want to stereotype, but it's logical that students who live in more densely populated rural areas won't have as much exposure to technology outside of school. This can lead to them coming to school with lower levels of technology fluency while peers are at higher levels. Different groups of students will always interact differently with technology -- something that's important for teachers to know. The right pedagogical approaches and an up-to-date understanding of each students' comfort levels allows educators to use where students are as a starting point. From there, they can build on their proficiencies until their classroom reaches true digital inclusion.

That is why as much as it is the right of young children to become literate, they should also become proficient users of ICT through the effective development of ICT capability in preschool activities. Digital technologies are already part of children's lives. A growing role of the education system is to support children to understand and make the most of the technologies they encounter.

Young children engage with a broad array of technology including, but not limited to, television, film, internet accessed on any device, video games, tablet or smartphone apps and games and associated artefacts (e.g., books, toys or physical games relating to characters or brands). Play is complex to define and is discussed in diverse ways in different contexts. Many agree that play is distinguished by being fun, freely-chosen, serving its own purpose and being subject to (internal) rules. From birth, children have increasing access to a range of digital technologies. This inevitably impacts the landscapes of their play. Since play is universally acknowledged as being important for

children, it is necessary to understand the nature of children's play in relation to technology. Families need support for parenting in the digital age and early childhood educators must know how to embed digital technologies in their own professional practice.



More recently, the benefits of children's engagements with technology have been recognized, although not always their playful potential. Research has highlighted how specific characteristics of play contribute to children's development and learning and how digital play may serve educative purposes if it is designed with specific learning outcomes in mind. There is a risk that tying digital play's value too closely to a narrow definition of learning might risk ignoring the other crucial functions play fulfils. However, highlighting specific formally educative impacts of digital play might be essential to reversing the trend towards reduced opportunities for play in many education systems.

Many young children are growing up in media-rich homes, frequently accessing moving image media and using a range of digital technologies. Use continues to diversify: young children spend increasing time using smartphones and tablets, while smart speakers have recently emerged as important. Diversification inevitably invites previously undocumented examples of play, such as children asking smart speakers to count to 10 while they play hide-and-seek. Such examples show that digital contexts do not limit the types of play that are possible; rather, the precise nature of play changes. Many studies have focused on 'screen time' as a displacement of time that might be better spent on 'real world' activities including non-digital play. However, play is one of the primary ways that children use their digital devices.

Technology cannot and should not replace human interaction or relationships or take the place of activities such as reading stories together or sharing conversations with children. Properly used, however, computers and software can serve as catalysts for social interaction and conversations related to children's work. The precise nature of that play is complex and contested, having sometimes been criticized as 'less than' traditional play, constraining creativity or limiting social interaction.

Strategies to build socialization into computer use include placing two seats in front of the computer to encourage children to work together, placing computers close to each other to facilitate sharing ideas, and locating computers in a central spot to invite other children to participate in the activity. Certain digital contexts are viewed as less playful, such as television watching, when compared to applications on tablets, smartphones and consoles. Scholarly observations counter these commonly held perceptions. For example, children carry the narrative themes of television into their imaginative play. Empirical work has highlighted children's highly creative play with computer games, apps, digital cameras, coding toys and more. Meanwhile, numerous sources document the social nature of young children's play with technologies. The social contexts of children's digital engagement also play an important role. Parents and carers have been shown to support the development of particular skills by engaging with their children's digital play, although children's free-play with technology also holds important benefits. Analyses of children's play with technologies suggest that all of the play types typical in non-digital play can also be found in their digital play.

Pros of digital devices in the classroom

Peace of mind: Cellphones and smartphones can offer parents a little more peace of mind when their children are at school. Parents know that in an emergency the student can contact them, or vice versa. In addition, more and more cellphones and smartphones contain GPS devices that can be tracked if necessary.

Instant answers: Access to the internet provides instant answers for the curious. This is the search-and-learn environment kids are involved in today. Now, when they want to know "Why do leaves change color," they are only a search away from an answer. This also gives students the ability to get an answer to a question they may feel uncomfortable asking in class. If a teacher uses a term they don't understand, they can find the answer discretely, and without interrupting the class.

Wider access to information: With internet access, children can be exposed to a world of creative ideas outside of their bubble. They can learn other languages, teach themselves how to draw, knit, or play chess. They have access to an endless array of options available to help them learn, and gain skills they might not otherwise be exposed to. All of this can be accomplished through a smartphone, which can be a valuable learning tool, if used correctly.

Access to video: Electronic devices in the classroom can enhance the learning experience by providing instant video access. Martin Luther King's "I Have a Dream" speech is not just something to read about. Man's first step on the moon, early flight,

presidential speeches, bridges being built—they all are made more real and easier to digest in the form of instant video availability.

Social learning: Social media can have a negative connotation when you link it to kids. However, there can be an educational aspect. Social learning is a great way for students to share information, thoughts, and ideas on a subject. Properly focused, quieter, and shyer students may blossom in a social learning situation made possible by digital devices.

Teacher advancement: Finding ways to effectively utilize digital devices in the classroom provides teachers with an opportunity to advance their skillset and grow with their students. Many teachers are taking their digital literacy to the next level by earning an master's degree in education technology.

Using Technology Can Excite Young Students: Today, it is not uncommon for many school age children to have first encountered technological devices as toddlers. As such, students tend to associate laptops, tablets and other similar devices with fun and excitement

Prepares Students for the Future: It is never too early for young children to begin building skills and knowledge that they can carry through their educational and professional careers. In this sense, exposure to technology in early education is a great way to begin building a foundation for success.

Technology Encourages Spontaneous Learning: When used appropriately and monitored, technology can supplement learning in or outside the classroom by providing the outlet for children to research the topics in which they are interested.

Cons of digital devices in the classroom

Harmful effects of digital devices: There are concerns from the EPA about long-term exposure to wireless devices and computer screens. While there is no direct evidence of harmful effects, the EPA discourages too much exposure for students who have video screens in front of their faces or computers in their laps. If students frequently use these devices at home, additional exposure at school could be viewed as harmful.

Inappropriate materials: While schools can limit the availability of websites that can be viewed on their network, students may find links that slipped through the system. There will also be times that students will not be accessing the internet through a monitored network.

Distraction from schoolwork: With the temptation of social media and texting in their hands, students may focus solely on their social life instead of the lesson plan.

Child predators: Child predators are a problem everywhere. Using digital devices at school creates just that much more exposure and potential danger for students.

Cyberbullying: This is an increasing issue that's grown exponentially in recent years. Permitting use of digital devices in the classroom could potentially lead to more of it.

Provide a disconnect: While some believe digital devices make for greater connections for students, there are also those who believe too much time with digital devices disconnects students from face-to-face social activities, family communications, and nature. Digital devices in the classroom could lead to an even greater disconnect.

Could widen the gap: Technology spending varies greatly across the nation. Some schools have the means to address the digital divide so that all of their students have access to technology and can improve their technological skills. Meanwhile, other schools still struggle with their computer-to-student ratio and/or lack the means to provide economically disadvantaged students with loaner iPads and other devices so that they can have access to the same tools and resources that their classmates have at school and at home.

Use of Technology Can Distract Students: Computers can provide young children with access to inappropriate content or information if the proper security measures are not put in place.

Removes Children from Opportunities for Socialization: Young children who spend more time engaging with devices may not spend as much time interacting with their peers—which can affect those children's social and emotional growth. In mitigating this risk, it is important to temper "technology time" as to allow children to interact socially with family and friends.

Technology Can Discourage Creativity: Many technology-based games and activities are "pre-made," allowing children to complete activities without having to problem solve in creative and imaginative ways.

Technology in early childhood education

When it comes to the role of technology in the early childhood education years, it can be a bit of a controversial topic. While some people may think that young children don't need technology, it can actually play a positive role in a child's learning and development. Plus, in today's technology heavy world, learning how to use it is a

necessary life skill. It's not only the students who benefit with the use of technology though. It also provides early childhood educators with unlimited access to newer, more innovative teaching methods that allow them to facilitate an active learning environment for their young students.



Education is changing. For many of us, where our children learn, what they learn and how they learn is very different from what we experienced at school.

As our world keeps changing we need our young people to be confident, creative, connected and actively involved life-long learners. We need an education system that supports the development of values, knowledge and competencies, and sets them up to do well in the world.

Digital technologies are an important part of your child's world. Child uses them to connect with each other, to learn new skills and pursue their interests further than has ever been possible.

1.Supports Social and Emotional Development

Using touchscreen devices are the easiest for preschool age children, as their fine motor skills are still developing. When touchscreen devices are used in the correct way, they can actually encourage children to work together and improve their social skills by taking turns and sharing ideas as they complete online activities side by side and view educational content.

2.Encourages Students to Follow Multi-Step Directions

It's not always an easy task to teach young children to listen and recall when it comes to following directions, but using digital devices in the classroom, such as tablets, computers, and smart boards, all require children to follow multi-step directions. Examples of this are turning the device on, swiping to the left or right, and selecting items on a screen.

3.Helps Teach Basic Academic Skills

One of the main uses for technology in the classroom is teaching and reinforcing core academic skills. One simple learning activity designed for a tablet or computer can help children learn counting, numbers, letters, colors, sounds, matching shapes, etc. Activities can be adapted to fit the individual needs of the student much easier than traditional printed worksheets and packets. For example, students who breeze through an online activity could be switched to a more advanced level, whereas students who are struggling to answer questions correctly can review the material they answered incorrectly or be redirected to another activity that's more on their level.

4.Makes Learning an Enjoyable Process

Not all students naturally love school and learning, but most students do enjoy using technology. This is something that early childhood educators can use to their advantage when it comes to getting all children to enjoy the learning process. Technology offers lots of fun and innovative activities that appeal to children of all ages.

How to use technology to your advantage as an early childhood educator:

- Early childhood educators can use technology in a purposeful way, much like they do with other learning materials, such as art supplies, blocks, books, toys, etc.
- Technology allows teachers the ability to record, save, and share what they learned in class that day, or more specifically during a particular lesson.
- Assistive technology can also be a helpful tool in communicating with or promoting the development of children with special needs or disabilities.

There are numerous benefits associated with introducing technology to young students. Early childhood educators should embrace the use of technology in the classroom as it helps children build up their academic and social skills as well as teaching them how to navigate digital devices which will serve them well for many years to come in this rapidly changing, tech-savvy world.



Digital technologies can enable:

- learning to happen anywhere and any at any time, not just in the classroom
- your child to connect and collaborate with other students and teachers outside their school and even across the world
- your child to understand challenging concepts in virtual worlds that would not otherwise be possible
- easy access to the huge range of resources available on the internet to support learning (websites, apps and more)
- your child to follow personal interests and talents and access experts not available to them locally.

Technology in the Home

Televisions, computers, tablets, and smartphones are familiar fixtures in today's home environments. Regardless of a child's age, parents have a significant role in modeling healthy behaviors and habits of use, but with younger children especially, parents have more influence over how technology is introduced and used in the home. When parents use and experience technology with their young children, it can promote learning, build important relationships, and help model healthy habits and positive ways to interact with others, play, and learn. When parents and young children view screens together, it is also a way to monitor use and guide children toward more meaningful content through interactive exploration or activities that encourage creativity and discovery.

As a parent, you need to be involved - you need to know what your child is doing online, both at school and at home, and you need to actively support them to be safe online.

Netsafe is an organisation that, in their own words "promotes confident, safe and responsible use of online technologies". They are a good first stop to learn more about how your child might be using technology and how to support them. Check out the Netsafe website for information, blog posts, to report incidents and for free resources to help you.

Make sure you have good security and firewalls on your home devices and keep them up to date.

Keep the lines of communication open with your child. Talk to them about how to keep safe online. Use the Netsafe resources together.

You can also talk to your school to understand more about how they are using digital technologies for learning, what their internet safety and security policies are and how they are being implemented.

Tips for Helping Your Parents with Technology



The world is more technologically advanced than ever, and it promises to continue advancing. While technology offers definite benefits – and younger generations certainly see the value – it can be harder for older adults to adapt; after all, until recently, it wasn't a part of their everyday lives.

Keep Your Cool

When your mom is nagging you to get off the iPad or to put down your phone, try to keep your calm. Remember, as we pointed out above, she didn't grow up with it like you are; when she was younger, she communicated with landline phones and the internet was dial-up. Keep your cool and try to keep in mind that you come from two very different generations; try to appreciate where she is coming from and you might actually see that she has a point...

Explain the Benefits

Mom and dad might not have a real appreciation for technology because they simply don't understand the benefits that it offers. All they say is you spending all of your time on your phone send Snaps and posting on Instagram; but in reality, you're doing a lot more with technology.

Teach your parents about the value that technology offers. Explain to them how it can help you connect with people around the globe; relatives that live thousands of miles away, for example. Show them how they can use the internet to gain easy access to limitless information. Show them what you're doing with your technology so that they can gain a better understanding as to why you – and the rest of your generation – have become so technology-savvy.

Communicate

If you're trying to teach your parents how to use technology, take it slow and communicate with them. Don't just throw a smartphone at them and expect them to understand how to use it; walk them through the different features and show them what to do. Use language they can understand and relate to. Eventually, they'll get the hang of it!

Empower Them

After you've taught your mom or dad something new about technology, give them the chance to try using it on their own. Doing so will empower them and make them more confident in their abilities. For example, after going through a session on how to post on Facebook, encourage them to give it a try. Let them do it on their own, but stand by so that you can offer help if they need it.

Summing It Up

Technology can offer numerous benefits for people of all ages. Getting your parents on-board with technology doesn't have to be a daunting experience. By following these tips, you can teach them how to appreciate it and use it, and everyone will be able to coexist in a technologically-friendly environment.

Try the Thrive for Chrome extension today! Each time you open a new tab in Chrome, you'll see inspirational quotes and serene images to help you recharge and reset.

The Digital education in North Macedonia

With schools temporarily closed, digital distance learning, where technology is available, can help children continue learning at home. Education experts have provided a list of free and open digital platforms, apps and content that can be useful.

When it comes to children learning online, parents and caregivers should remember to always:

- Engage actively in children's learning. Use technology as one ingredient of a learning experience that includes human interaction, recognizing that technology alone cannot replace teachers or parental presence and guidance. This is especially true for younger children.

- Protect children's data. Parents and caregivers should check the digital resources children are accessing and avoid those that do not seem safe or that require detailed personal information. Children's identity, location, ethnic or religious affiliations should not be required information to access learning resources.

Digital materials

- With the help of the national television MRTV, Ministry of Labor and Social Politics and Ministry of Education and Science, every morning between 9-11 am the program for pre-school and primary school children is broadcast.



- E-classroom-The video activities prepared by educators from all over the country and offer the opportunity for fun, play, teaching and a new experience for the children

<https://www.youtube.com/watch?v=dG7BWknr6es>

<https://www.youtube.com/watch?v=BrT3DNvUUX4>

<https://www.youtube.com/watch?v=dN7sqVe9f2A>



-EDUINO Early Childhood Development is an educational platform for educators, teachers and parents. The platform contains quality and verified educational materials, games and activities for children of preschool age and grade school, ie from 3 to 10 years, in order to encourage socio-emotional development and learning based on play.

EDUINO РАНДЕТСКИ
РАЗВОЈ



-Bibi's world-the educational platform of through which the children are able to reward their knowledge through an interactive approach and a program prepared by leading educational specialists from the country.



-"Think Equal": Online picture books being introduced in kindergartens through the UNICEF supported and UK Government funded programme which is helping to build social-emotional skills in pre-school aged children: empathy, kindness, self-esteem, perseverance, critical thinking, conflict resolution, self-esteem, communication, self-awareness and more. <https://issuu.com/unicef.mk>



Outcomes:

For Teachers

- ✓ Exchange of experiences between educators
- ✓ The educators develop their digital skills
- ✓ Develop new method of working with the children
- ✓ Professionally develop and upgrade their knowledge and skills

For children:

- ✓ Encouraging socio-emotional skills in children.
- ✓ Developed cognitive skills through the use of digital tools
- ✓ They use technology for educational purposes

For parents:

- ✓ Quality time spent with their children
- ✓ Getting acquainted of our work
- ✓ The parent-child-educator relationship is strengthened

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