

Contents For Digital Media Portfolio

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Part 1: Evaluating Children's Use Of Digital Media

It has become increasingly common to see children using handheld devices and having continuous access to various forms of digital media. This is a fact supported by both Ofcom (2018) and UNICEF (2017). However, there are many advantages and disadvantages to children being subjected to such technology. Kidron and Rudkin (2017) talk about how mirroring behaviour is a common part of early childhood development; this would mean that young children would naturally copy any behaviour or language that they come across while accessing media. While children may come across material that is beneficial to copy and therefore learn from, Kidron and Rudkin (2017) state that one disadvantage is that the content that they come across may not always be age appropriate and beneficial to copy. Where the age level and suitability of toys and other activities can be easily monitored, this is not the case with digital media. It can often be difficult for adults to avoid unwanted content when using their media devices, so it is even easier for children to come across unsuitable content.

Another point discussed by Kidron and Rudkin (2017) is that technology can be seductive, meaning that it can be difficult to encourage children to step aside from their favourite games or television programmes in order to go to bed at a reasonable hour, or to complete their homework. Furthermore, both Sathyanarayana et al. (2012) and Sharma et al. (2017) support the idea of how addictive media can be, particularly to the influential minds of children. Jenkins (2018) further supports this argument by talking about the fact that young children are spending twice as much time in front of some form of electronic screen than they are outdoors. He also explains that this screen time is affecting children's ability to think creatively and solve problems and that lack of outdoor time is detrimental to children's well-being. As Wilson (2012) explains, children learn through scientific exploration during outdoor play. The idea of outdoor play and how important it is to a child's learning and discovery is also supported by Water and Rekers (2019), Bruce (2011) and Colliver and Veraska (2019). Therefore, spending too much time on addictive media devices can cause children to miss out on the many benefits provided by the outdoors. Furthermore, Gilder (2009) and Noddings (2017) talk about the Montessori learning approach, which promotes children spending time outdoors. They talk about how the outdoors develops a sense of belonging and culture as well as develops sensory skills. Jones (2014)

agrees with this by talking about the Reggio Emilia learning approach, which also has a high focus on the outdoors and how it has beneficial effects to children's over all well-being and sense of belonging. This further shows how many benefits children are missing out on if the amount of time they spend on digital media has a negative effect on the amount of time they spend outdoors.

Moreover, one concern in regards to young children having access to digital media is their online safety. Kidron and Rudkin (2017) mention the fact that children may not be capable of setting high privacy settings or blocking inappropriate adverts and this leads to compromising their overall safety. Children may not be aware of the dangers of unwanted people seeing their pictures or how a seemingly innocent online conversation with a stranger could have ulterior motives. Whitaker and Bushman [2009] discuss how anyone can have access to any data children put online about themselves if privacy settings aren't in place, and that some of this data can potentially be used to locate the children without the children even being aware of it. Gov.uk (2016) also notes the jeopardy to their safety that children face when allowed access to media; discussing dangers such as inappropriate and harmful content, bullying and over-sharing personal information to unwanted strangers. Keeping children safe is a priority and allowing children free access to media can often be putting them in harm's way. This is why on-line safety needs to be discussed with children so that they can develop their understanding of it. Legislation (2004) shows the Children Act 2004, which stresses a child's right to be safe and secure. Also, UNCEF (no date) shows the UNCRC, which states children's right to be safe from exploitation and that the government should assist in protecting children from information that may harm them. Therefore careful supervision is always necessary when children are using media and teaching children about online safety is vital in order to ensure their safety.

An additional disadvantage to children accessing media is the effect on their communication skills. This is discussed by Sathyanarayana et al. (2012) who states that technology is causing alterations to the way in which we all live and is also causing changes to the brain. They talk about how using technology as a main tool for communication means that essential communication tools are lost. For example, learning how to read facial expressions and body language or how to interpret the meaning of words through tone of speech is something that is lost if you only choose

to communicate through technology and media. Sathyanarayana et al. (2012) explains that this loss of valuable face to face communication time is a cause of day to day social interactions then becoming awkward, due to not knowing how to interact with one another without some form of media present. This is because valuable social skills are not being learnt through technology. Human interaction and communication skills which may have been learnt previously are being replaced by the type of non-personal communication that is available within the media world, which does not translate well into closer, face-to-face interactions. Jenkins (2018) explains that the main cause of this is the fact that children are spending too much time on technology doing solitary activities, as technology is fast becoming a tool for easily keeping children occupied. This shows that digital media can be detrimental to the development of a child's social skills.

However, in contrast to this idea; technological advances and media have provided advantages to communication. Anonymous (2012) looks at how iPads have been used to assist children with additional learning needs to communicate with others. In these scenarios media assists in building and strengthening relationships and human interaction skills. Having technology to assist children to communicate with others, when they would otherwise not have been able to do so; opens up a whole new world for any child with additional needs of that nature. It creates a possibility of learning and exploring which would otherwise have been denied to them. This is an opinion that is echoed by Boyd et al. (2015) who specifically looks at children on the autism spectrum. They discuss how using tablets or similar technology can help children with autism communicate in a way that is suitable for them, as their methods of communication are quite often atypical. Furthermore, Fernández-López et al. (2013) discuss how media devices help capture the attention of children with additional learning needs and gets them to focus on the task they have been given. Getting some children with additional needs to focus on tasks can be a challenging part of their education, so the idea of media grabbing their attention and aiding them to focus is beneficial in those scenarios.

There are many other advantages to children having access to media. As Arnott et al. (2018) and Brito et al. (2018) both explain; the idea of children's learning is changing and including various forms of media. This is because society in general has become

more dependent on technology. If children are deprived of an ability to learn about media and technology, then as they reach adulthood they would not be able to thrive in the ever changing, technologically-advancing society that they live in. This proves that using media becomes a beneficial tool in order to function in modern society. Gov.uk (2017) shows in the foundation phase framework that children need to be taught an understanding of the world around them and that they should be allowed to explore and play with a range of media. This shows that the government are in agreement to the fact that children need to be up to date with the world around them and need to learn about media and technological devices. In support of this, Article 17 of UNCRC, as shown by UNCEF (no date), states a child's right to have access to media.

Additionally, Donohue (2014) discusses how media can be an essential learning tool. Children learn through media by watching educational television programmes and playing educational games, which aid in expanding their knowledge on various different topics that are set out by the curriculum. There is a vast amount of information available for children to access via media which can be beneficial to expanding their knowledge. Cicconi (2014) talks about the theory that was put forward by Lev Vygotsky, where children learn through a more knowledgeable other. Cicconi states that media itself provides a more knowledgeable other and that children can learn from all the information that it provides. Additionally, media provides greater access to other people, via emails, web chats and various forms of social media. Having easier and greater access to others creates a plethora of more knowledgeable others that children can communicate with and can learn from. This idea of children learning through media as a more knowledgeable other is also supported by Churcher et al. (2014).

However, one disadvantage is discussed by Heintz and Wartella (2012). They talk about the fact that even though children can learn through media, that they can often have difficulty translating what they have learnt into the real world and real life scenarios. Therefore, using media alone is not a useful educational tool as it causes too much separation from reality and children cannot make the link from virtual to reality with ease.

Another advantage that media does provide, is its ability to supply tools for learning away from a digital screen. Whereas a classroom may potentially be limited in learning

aids, the online world and potential for learning is limitless. For instance, if children do not have access to physical plastic 2D shapes which are a common learning aid within classrooms; with access to the internet and a printer they can print out the shapes to use in the same way. Media can also provide children with educational worksheets and many other physical tools which are beneficial to learning.

The idea of children learning through play and discovery is discussed by Broadhead (2004), Weisberg et al. (2016) and Theobald et al. (2015). They state that play is a crucial part of children's development. It is also a part of children's access to media as media provides access to games and provides opportunity for exploration and discovery. Bird and Edwards (2015) explain how children first learn how to use media devices through a form of play and exploration. Additionally, playing online games can be a learning tool in itself. Danby et al. (2018) discuss how children can learn valuable skills through online gaming; like collaboration and team work, and even social skills. Danby explains how playing online with others can teach these form of skills in the same way working together within a classroom would teach them.

Another advantage that can be provided by media devices is their ability to enhance literacy skills. Dunn and Sweeney (2018) talk about using iPads within classrooms to help teach literacy. They state that when using a device to learn how to write, children enjoy the activity more than with a pen or pencil. They also discuss how digital devices are more durable than some pens and pencils. Another factor that is beneficial in learning to write via an electronic device is having access to a spellchecker while writing. Dunn and Sweeney (2018) state that children find spellcheck very beneficial to learning how to spell. Denn (2019) also states that media is advancing in ways that help children learn how to spell. Authors no longer use paper to write their novels, and there has long been the ability to type out and print rather than handwrite anything. So having children follow this example and learn to write in an easier and more exiting fashion is an advantage to their literacy skills. Just like media has advanced in order to assist children to learn how to write, it has advanced to teach children a significant amount of other essential skills. Digital media will also continue to advance along with society and teach children so much more than they can learn from a chalkboard and pen.

Part 2: Parental Guidance Leaflet

Supporting Children And Their Use Of Digital Media



(source: Clipart, no date)

What Are The Dangers Of Children Using Digital Media?

The British government website, Gov.uk (2016), states that while using digital devices children are susceptible to many dangers.

Some of these dangers are as follows:

- Cyberbullying.
- Privacy invasion.
- Encountering strangers.
- Seeing offensive and/or harmful material.
- Identity theft.

A government website in Northern Ireland known as NI Direct (no date), also discuss these dangers. Furthermore, the children's protection charity NSPCC (2020) share similar concerns about children's involvement in the digital world.

When children have access to the internet, they have access to an unlimited amount of resources and information and are able to contact anyone from anywhere in the world. Not all the information available, or all the people that they are able to communicate with are age appropriate or beneficial to the child. This is why a child's access to media needs to be monitored at all times.

What Are The Benefits Of Children Using Digital Media?

According to research undertaken by an author named Chadron (2015) children enjoy using educational apps on digital devices. These apps can teach children a vast range of information, such as maths, spelling and other curriculum subjects. Usually children are still considering themselves playing and having fun when using these apps. Chadron (2015) focuses on how adults have a tendency to get engaged and socialise with young children as they are using digital media. This means that adults are able to assist and teach children while they are using their digital devices. This enhances the learning possibilities that arise from the children using the devices alone. There are also a vast amount of educational videos and information available online for children to use and benefit from. This shows that if a child uses a digital device while under careful supervision it can become a very useful and modern learning tool that helps children become engaged in their learning. Published authors Clark and Tucker (2010) agree in their book that a moderate use of digital technology has beneficial and educational results. They also state that in a modern, technologically based society, children need to learn digital skills in order to thrive.

Media Devices and Sleep Deprivation

Spending time viewing a digital screen affects the ability to fall asleep and the quality of sleep. This is something discovered by research undertaken for a journal article written by Fuller et al. (2017). Further research undertaken by authors Hale et al. (2019) for their journal article support this. There is a link between spending time on a digital screen before bedtime and poor quality of sleep; and poor sleep quality becomes detrimental to a child's concentration skills and ability to learn.

The British health service, NHS. (2017) have a guide on their website about how much sleep children require in relation to their age. The website is as follows:

<https://www.nhs.uk/live-well/sleep-and-tiredness/how-much-sleep-do-kids-need/>

Ensuring children get the recommended amount of sleep helps promote good health and well-being, and ensures that they are alert and ready to learn. If their use of digital screens are affecting this, then the use needs to be limited, particularly toward bed-time.

Children's Rights

The UNCRC is a convention of child rights that must be provided to every child and is discussed by the charity UNICEF (no date). These rights shows that children have the right to access reliable information from the media. However, it does also state that children need to be protected from harmful material and that they have the right to privacy.

Additionally, the government website shows a form of Legislation (2004) known as the Children Act 2004. This act talks about a child's right to be safe and secure.

This shows that a child's right to overall safety and well-being is the biggest concern in regards to them having access to digital media.

How To Minimise Risks

Some helpful advice to follow in order to help keep children safe while using digital media is provided by the UK Council For Child Internet Safety (no date); which is a group of organisations from across the government that are working in partnership to keep children safe online.

They suggest taking actions such as:

- Getting involved with a child's online use. Discuss with them what apps and websites they use and why they use them.
- Placing parental controls and/or passwords on digital devices wherever necessary.
- Explain privacy settings to children. Ensure they understand and know who can potentially see what they put online.
- Ensure children are comfortable talking to a reliable adult about anything online that may concern or upset them.
- Ensure any apps on their devices aren't unknowingly sharing their location.
- Encourage children to question the true identity of anyone they may communicate with online.

What Digital Media Do Children Use?

Children have greater access to different kinds of digital media than ever before. A government approved regulator of communication services known as Ofcom (2018), state that children's greatest use of digital media is via the television and different forms of tablet devices. They state that a significant proportion of children's media use is spent viewing tv shows and videos. However they do state that the use of 'television' has now broadened to the use of online streaming services. Ofcom (2020) discuss concerns about children using on-demand viewing and how on-demand services need parental controls and should contain facilities that can be used to prevent children from viewing inappropriate content. An author named Livingstone (2019) wrote a blog which also expresses concern about the vast amount of viewing content that is now available to children. It states that children's viewing habits need to be monitored and guided toward more educational and suitable content.

Also, tablet devices are very appealing to children. An article for the Independent newspaper written by Solon (2016) explains that this is because of their portability and versatility; and that they are very stimulating and entertaining. However, a NBC News article written by Chuck et al. (2020) explains that their appeal causes a real risk of children becoming addicted to using them. New York Times writer, Klass (2019) explains that digital screens should be used in moderation due to their addictive properties. Klass further explains that whereas technology can be beneficial, it can only be beneficial when used in moderation. There are a vast amount of non-media based activities that are beneficial to a child's education and well-being that are not being utilized if a child spends too much of their time in front of a digital screen.

Links To Further Help And Support

NSPCC: <https://www.nspcc.org.uk/keeping-children-safe/online-safety>

Internet Matters: <https://www.internetmatters.org>

Parentzone: <https://parentzone.org.uk>

Part 3: Activity Plan

Activity Plan		
Activity: Exploring and recording the different types of plants, trees and flowers on the school grounds with the use of digital media.		
Number of children: 10	Age of children: 5 years old	Number of adults: 2
Location: School field	Preparation time: 10 minutes	Activity time: 1 hour
Resources: Five iPads. One between two children.		
Aim/s of activity: To teach children about various types of plant life. To encourage the use of digital media to research and record information that has been found. To promote physical development through spending time in an outdoor grassy environment.		
Links to outcomes: It is stated by The Welsh Government (2015) within their Foundation Phase Framework that children learn through first hand experiences and exploration, this is something encouraged by this activity. The development of language is another aspect discussed by the Welsh Government (2015) and the Foundation Phase Framework, this activity promotes the learning of the names of various different plants and nature as well as learning words associated with their use of digital media that the children would not have heard before. Additionally Kidron and Rudkin (2017) talk about the milestones of digital development that children need to reach at different ages within their digital childhood report. This activity promoting the use of digital media will aid in ensuring that children reach the appropriate level of digital competency.		
Differentiation: As the activity mainly takes place on a grassy terrain, it is necessary to take into consideration any children with physical difficulties that may be unable to navigate that terrain. They may require further assistance or need to stick to the pathways in order to ensure their involvement in the activity.		

Health and safety:

The dangers of the environment need to be considered, therefore a full risk assessment needs to be undertaken before the activity takes place. This will aid in ensuring that the risks of injury to children due to aspects such as poisonous plants or sharp objects on the grounds are eliminated.

Digital safety is also a concern. Therefore the iPads used will have no internet access. Any pictures the children take of themselves or others will not be posted online or become available for anyone else to see.

Role of adult/adults:

To talk about the activity and what is expected of the children. To aid the children with their use of the iPads as and when required; teaching them how to take pictures of flowers, plants and trees, create digital drawings, type about them or any other way that the child wishes to record their findings. To discuss the different plants and nature that the children come across. To encourage children to work together in their teams of two and learn from each other.

The activity:

To let the children explore the school field in teams of two, with the aim of them exploring and learning about the plants, flowers and trees on the grounds. The use of an iPad between them is to be encouraged so that the children can take pictures, create digital drawings or type about their findings. Emphasis needs to be placed on the use of the iPads in order to encourage the development of their digital competency skills. Talking to the children about their findings is essential in order to teach them about what they have found. Children are to be encouraged to work closely in their teams of two so that they can learn from each other.

Part 4: Evaluating Activity Plan

The activity plan shows an activity that is very loosely guided and intended to be child led. The children are given a iPad and told to record any plant, trees and flowers that they may find. This gives them a very broad range as to what form of nature they choose to investigate and how they record their findings. Mitchell (2015) talks about how giving children too much structure and not allowing children the freedom to express themselves can cause cognitive delay and induce stress. Barker et al. (2014) supports the idea of lack of structure being beneficial to children, stating that it promotes the development of a child's executive functions. Furthermore, Mourão (2014) talks about the balance of child initiated and adult-led activities. Mourão states that adults can plan for a play based activity but that the concept of what is classed as play is individual to each child and affected by their current mindset during the time of the activity. It is not always possible to get a child engaged in an overly structured activity as it may not be what they are interested in at the time. However, one positive aspect of this activity is that it is aimed to not be heavily structured so the child is able to follow their own interests and therefore become more engaged.

However, there is room for expansion in this area. The children are still limited to one area to explore and one concept as to what to explore. If the children were allowed to choose the area that they would like to explore, or the area provided to them become expanded; it would have the potential to strike their interest further. Also, they are limited to exploring just the trees, plants and flowers. If the children were allowed to investigate the animals on the grounds, such as birds or insects; that again would have the potential to peak interests further. Brandt et al. (2015) explain that providing children with choices and options has a positive effect on their attitudes and behaviour. Parker et al. (2017) support the idea of providing children with choices, stating that options can boost a child's motivation and level of participation within a classroom. This shows that limiting the options available to children during the activity has negative consequences. Therefore, expanding and providing further areas of choice for the children is one aspect of improvement that could be made to this activity.

Additionally, the Welsh Government (2015) show in their foundation phase framework that children should be provided with plenty of opportunities to make choices and

decisions for themselves in order to develop skills in all areas. Also, Donaldson (2015) talks about how providing choices to children is a part of his new curriculum. This is because he sees providing choices as being essential to ensuring that children are engaged in their learning. This further shows that even though the activity does provide freedom and choices, providing the children with more options than was previously intended and expanding the activity further is an area for improvement.

The Welsh Government (2020) talk about the digital competence framework. This framework shows what level of digital ability children should aim for. It shows that children in year one, which is the age group of the children in the activity; should be able to use digital devices within a controlled environment to achieve a specific outcome and that they should be able to add their name to their work in order to mark it as their own. This activity provides the children with the ability to use the iPads to record their findings, therefore promotes the development of their digital competency and allows them to achieve these goals set out by the framework.

However, due to the fact that the iPads are not connected to the internet the children are not being subjected to the benefits of online use that are stated for their age group by the digital competence framework. The framework states that it is recommended for year one children to begin to establish the difference between online and offline communication. However, the activity is purely based offline and does not give children the chance to learn the difference. However, in contrast to the digital competence framework's idea of children being aware of the online world at age five or six; both Peyovich (2019) and Microsoft (2013) state the recommended age for a child to have access to the internet is eight. In spite of this, Ofcom (2018) state that fifty-two percent of children between the ages of 3-5 use the internet for roughly nine hours a week. This shows that children under eight do use the internet despite the recommendations. However, online security becomes an issue when working with a large group of children who have access to the internet; this is why the activity only stresses the importance using digital media offline. Therefore, one improvement that could be made to this activity is ensuring that the children are aware that this activity is offline and discussing with them the difference between being offline and online. This would then aid in ensuring that the children begin to learn the difference between offline and online communication that the framework suggests.

The Welsh Government (2020) discuss within their digital competence framework that children in year one should have the ability to work together with a partner to create a digital piece of work. This is why the activity was designed to provide one iPad between two pupils. This would enable them to work together just like the digital competence framework suggests. Furthermore, both the foundation phase framework shown by the Welsh Government (2015) and the successful futures curriculum put forward by Donaldson (2015) stress the importance of developing communication skills. Szumski et al. (2016) and Broadhead (2004) both discuss how children can learn social skills when playing together. Szumski et al. (2016) place particular emphasis on how children with social delays and disabilities benefit from playing with others and how it promotes the development of their social skills. This shows that having the children work together is another positive aspect of this activity.

a further benefit of this activity is the ability to allocate the pairs effectively so that the children can learn from each other. Huong (2007) talks about Lev Vygotsky's theory where children learn from a more knowledgeable other, explaining how children can be the more knowledgeable other and that they can learn from each other. The idea of children learning from each other is also supported by Dogero (2015). This means that this activity gives the adults the benefit of pairing the children in a way where they believe they would most benefit from each other's knowledge. This would be most beneficial in classroom scenarios where the teachers have got to know their pupils and their abilities on a personal level.

A further positive aspect of this activity is its ability to expand in relation to a child's ability. Some children could never have used an iPad before and need very basic assistance; others could be familiar with how to use an iPad and could be helped to find challenging ways to record their findings. This is a particular benefit to this activity when children with additional learning needs are involved, as they are often at different levels to their peers. UNICEF (2017) explains how it is important for education to be inclusive of all pupils. Having activity plans that children can undertake at different levels of competency, in the same way that this plan can; ensures that every pupil can be included.

However, the activity could become even more beneficial to those with additional needs if it were more accommodating to those who have forms of physical disabilities. The grassy outdoor terrain that the activity takes place on would not be very wheelchair friendly. If it were to take place in an area surrounded by plants and wildlife that includes a wheelchair friendly path then it would become even more inclusive. UNICEF (no date) shows the UNCRC, which states that every child has the right to be free from discrimination and has the right to education. Allowing the activity to be even more accessible to those with disabilities would ensure that these rights are met.

A further room for improvement for this activity could be providing other tablets other than iPads. There is also the possibility of using smartphones, laptops or other forms of digital devices. This would then allow for more choices to be available, which as discussed previously is beneficial to ensuring children are engaged in the activity. It also would allow children to expand their digital knowledge. If they are already familiar with the way an iPad works, using a different form of digital tablet would show them how different types of media work in slightly different ways. Different devices also have different applications available to download onto them, so there is the possibility that a child finds a digital drawing app on one device more appealing than another and therefore that would assist in them becoming engaged in the intended task. Having a range of digital devices would also aid in achieving the goals set out by the Welsh Government (2020) digital competency framework. It gives the children a wider range of opportunities and more possibilities to be able to use a digital media platform to complete a specific task just like the framework suggests.

In summary, the activity plan could be improved by expanding the area and content that the children are required to explore and providing a wider range of digital equipment to explore with. However it is beneficial in that it provides opportunity for all children to work on their digital competency skills despite their current level and allows them to learn from each other while working together.

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