

Part 1

According to UNICEF (2019), their research suggests that children of this generation are growing up into a world surrounded by digital media. Children access digital media for their entertainment, through a mobile phone or tablet, as they are smaller and easier to use day to day. In comparison to a decade ago, where children accessed the media via desktop computer, which was time consuming and had limited resources. Arnott et al. (2018) support this by stating that, since the launch of the iPad in 2010, there has been an increase of young children accessing digital devices. This is due to the introduction of touch screen which is much more accessible for children and enhances their fine motor skills. Arnott et al. (2018) also believe that children are very competent with digital media as children are aware of how to touch an icon and swipe across on the screen to access different streaming apps. Today devices are portable and instantaneous, and children are knowledgeable and aware of how to use them. Saunders and Vallance (2017) support this as children are able to operate multiple devices simultaneously. Experiencing time on different devices which are new to them, will encourage children to gain a deeper level of understanding. As they are applying their prior knowledge into a different situation in order to come to equilibration. Kidron and Rudkin (2017) are also in agreement, as they believe that children need access to media to gain an agency within the digital world around them. They believe this because, not only does it support their digital literacy, but it also enhances their critical thinking, communication and imaginative skills. Children are actively learning whilst using digital media, as it is constantly changing, and they are able to use their past experiences to keep updated. This supports Piaget (1953) as he believes children learn best in an environment which encourages them to experiment. Digital media allows children to research online, which is an advantage to their learning as it provides a deeper level of understanding to promote their independence. As they can save their work online, this allows children to revisit their work which consolidates their learning. Chassiakos et al. (2016) support this as they believe children are absorbed into digital media which has provided them with increased opportunities and experiences which enhance their holistic development. Arnott et al. (2018) supports this by stating that, children express themselves through digital media as it provides endless opportunities to become creative.

Chassiakos et al. (2016) state that mobile phones and tablets have replaced traditional media, such as television, which was initially designed for adults. Kidron and Rudkin (2017) agree and state that the inventors of the internet had no idea that children would be accessing the media, therefore when they were accessing it, the content has not been filtered according to their age. According to Kidron and Rudkin (2017), digital media is still failing to change according to the needs of children. They believe that all children have the right to access digital media without having to be fearful of approaching inappropriate content. By denying children access, their digital competence skills are being neglected, therefore they are at a disadvantage. This supports Donaldson (2015) as he believes children need access to digital media to support their individual autonomy to become competent digital citizens within this generation. Kidron and Rudkin (2017), state that the new digital media used today, allows children access at all times, wherever they are. Accessing social media can be exciting for children as it constantly persuading them to download the newest game or purchase the most recent device. However, according to Lissak (2018) this can become pressurising for children as they may become trapped in the world of digital media. Children may feel they need to change who they are, or behave differently, in order to be accepted within society. Internet Matters (2020) have stated that it is acceptable for children to take risks when online, however they need to understand their boundaries, and when it is unsafe for them. Internet Matters (2020) suggest all parents and practitioners should speak clearly to children about the risks of digital media and the consequences this could have. However, according to UNICEF (2019), children lack the understanding and the risks of the internet due to lack of support. To support this, Global Kids Online (UNICEF, 2017) have teamed up with UNICEF (2017) to improve the support network available for children by raising their awareness about the risks of digital media. They completed surveys and spoke directly to the children to incorporate their voices and experiences to ensure the policy is child centred. Global Kids Online (UNICEF, 2017) respect the voice of the child by listening to them ensuring their concerns about digital media are answered.

According to Kumpulainen et al. (2020) digital media is becoming the normality for children, which is disregarding hands on experiential play. It is having a negative influence on their relationship with others as many children are not exploring to make sense of the people and world around them. Kumpulainen et al (2020), argue that there are many risks online which children are unaware of. Internet Matters (2021) agrees by stating that, children have become too focused on their screens rather than engaging in play and collaborating with others. This can become isolating for children as they are accessing the internet alone with nobody directly there to support and extend their learning. Holloway et al. (2013) state that this is causing concern as research suggests that most children have no boundaries set by parents, therefore are accessing all content that the media has to offer. Grubner and Groff (1976) believe that children gain so much information from digital media, which can be difficult to filter due to being uncertain whether what they are reading is all true. Grubner and Groff (1976) believe that when children access inappropriate content, they will become scared and fearful that the world is dangerous. This in both short and long term will affect a child's wellbeing as they will be scared to leave their house. Therefore, they will become isolated and have no social interaction which will impact their oracy skills. Grubner and Groff's (1976) research in comparison to Holloway et al. (2013) is much older, however the authors share the same interests, therefore have a similar understanding and are in agreement.

To ensure children do not lose their play, Internet Matters (2021) have suggested that children need a balance between screen time and play. Parents or carers should provide them with clear boundaries and understanding of the internet, and they will become competent with digital media. A recent Ofcom (2019) report has stated that 54% of three to four-year-olds have their own digital device, and the time spent on these devices is increasing. According to Holloway et al. (2013) most children have access to a device to stream videos, play games and to interact with their peers, which can have negative impacts on their physical health. The Royal College of Paediatrics and Child Health (2019) support this and are aware of the increase in children having access to a digital device, and believes that this can contribute to poor physical health in children. They have stated that spending long periods of time sedentary on a digital device, is the main cause for obesity in young children. This is because they have unhealthy diets and limited involvement in physical activities. Furthermore, Robinson

et al. (2017) supports this as they believe advertisements on digital media is pressurising children to eat calorie dense food with lower nutrient content, as they are influencing them to purchase and try new foods and beverages. Their research also suggested that being exposed to hours of screen time can impact the cardiovascular system, and can increase the chances of hypertension, inflammation and diabetes. According to research by Saunders and Vallance (2017), they support this, as the increase in children accessing digital media is increasing dramatically and most children are exceeding the guidelines of two hours of screen time a day. To gain deeper insight, Saunders and Vallance (2017) conducted a survey with children and the results were alarming. It revealed that on average most children spend 5.3 hours a day on digital media. Prolonged sitting increases a child's body mass index due to a lack of energy to engage in physical activity (NHS, 2018). The research between the authors is consistent with other findings due to the authors having similar interests and understanding about children's screen time.

The NHS (2018) have recommended '5 Steps for Success' to support children's physical health. One of the steps involves less screen time as child is sitting down, therefore they are inactive. The NHS (2018) has advised no more than two hours a day either watching television or accessing a digital device. Limiting screen time has said to improve children's sleep as being sleep deprived is another factor contributing to obesity, as they become too tired to engage in physical activity. Kidron and Rudkin (2017) support this stance as they believe children should have regular breaks from their screens and should be switched off an hour before bedtime. This is the responsibility of parent and practitioner to positively role model good behaviour when accessing digital media. This is because children are not mature enough to access the media without support, they need to be given boundaries and responsibilities that must be followed in order for them to navigate media knowledgeably and fearlessly. However, Donaldson (2015) believes that children need balance with screen time and play, as digital literacy is an important life skill. Digital media is an intrinsic and instinctive way to communicate, therefore a skill needed to become independent and competent in life (Donaldson, 2015). The New Digital Competence Framework (Welsh Government, 2018) supports Donaldson's (2015) research by stating that children require access to the media to allow collaboration between peers. Thus, supporting the constructivist theory by Vygotsky in (1978) as he believed children learn through

self-direct play and communication with a More Knowledgeable Other (MKO), such as practitioner. When children access media and are alone, the device can take role of MKO to support their learning as they are interacting other the internet which widens their social interactions. Saunders and Wallace (2017) state that increased screen time could be the reasoning behind poor quality of life and contributes to the increase in child obesity and high screen usage.

Hopkins et al. (2013) have stated that, children have become too reliant with digital media and do not use their imagination when playing, due to lacking creativity. Hopkins et al. (2013) research states that young children understand how to use a device before picking up and looking at a book. Similarly, Snyder (2019) supports this as, digital literacy and technological devices should not be the main focus within settings, as it lacks hands on learning. Snyder (2019) suggests that children should engage in role play with old devices such as telephones and computers to enhance their imagination and creativity skills, as these skills are being neglected. However, Donaldson (2015) disagrees as digital literacy should be cross curricula as it promotes children to become digitally literate. Donaldson (2015) argues that this discourages creativity, as using old and broken devices do not allow children to experience media, therefore does not support their digital competence. Arnott et al. (2018) support this as they believe digital media should be introduced in early childhood and play an important part of the curriculums pedagogy. Arnott et al. (2018) state that by providing children with digital and non-digital resources can enhance their self-directed play opportunities. This is evident within the New Curriculum for Wales (Welsh Government, 2020) and the Digital Competence Framework (Welsh Government, 2018) as their ethos is to support children's digital literacy by embedding it across the whole curriculum. Practitioners will need to undertake new responsibilities of the framework to ensure it is a cross curricula approach to learning. The New Curriculum for Wales (Welsh Government, 2020) will ensure that practitioners attend mandatory training to support their knowledge about digital literacy. This is supported by Kidron and Rudkin (2017) as they believe it is important for practitioners to receive training to support their continued professional development around digital literacy and how to safeguard children online. According to Arnott et al (2018), practitioners have become anxious as they believe they lack the competence to teach children digital literacy. There is a paradox between the practitioners awareness of how to use digital media I

their personal lives, compared to using them as an educational tool for children in settings. Therefore, Kidron and Rudkin (2017) believe that practitioners should be provided with high quality digital devices which can tailor the children's needs, and can be adapted for different ages and stages of development

A Parent's Guide to Support and Safeguard their Children Online

Introduction

This guide is to address any parents who are worried or anxious about their children accessing digital media. Parents should feel confident that their children can be competent with digital media because it can support their holistic development (Donaldson, 2015). Chassiakos et al. (2016) also supports the many benefits of digital media as it provides children with the opportunity to research and interact with their peers. Therefore, supporting their social skills. Parents need to be aware and alert as media is now accessible 24/7 and children are able to access everything that the media has to offer. This guide will help parents to understand the positives of digital media and to understand some of the risks and how to manage them.

What can you do?

As a parent all you want is for your children to be safe, especially online. Kirkorian et al. (2016) suggest that, to help children understand internet safety, parents should sit down with their child and have a conversation about digital media as this will help their understanding. The NSPCC (2021) support this and recommend that parents need to set clear boundaries and rules to keep them safe. Parents should reassure them that they can come to you for help and advice. Talking and listening to your child is the best way to gain their trust as they will respect you. However, according to Kidron and Rudkin (2017) children also need to experience risk, and consequence of action, in order to learn. Therefore, children need a balance between being online and offline to support this. Furthermore, Wiseman and Taylor (2015) argue that children have high screen time due to being provided devices by their parents. Children then become confused by unclear and inconsistent rules set by parents. As you continue to read through this leaflet, there are helpful tips to ensure your child has a healthy balance with their digital devices.

**BE SAFE
ONLINE!**



Source: Lets Connect (2021)

Positive role model

According to Bleeker (2020) parents are digital role models to their children. Therefore, as parents, to prevent children becoming confused, you need to set a good example. For example, if you are telling your child not to use their device at the table, then as a parent you should not either. This supports Bandura's (1971) theory as he believed that children learn by imitating behaviours shown. Parents need to be aware of their behaviour and how it can impact their children. Children need consistency in order to learn, therefore will need the same rules from parents and extended family and friends.



Source: Mail Online (2013)

The Advantages

When parents think of their children accessing digital media, the majority of them lack the understanding of the benefits and how it supports a child's learning. Children under the age of seven access a digital device for homework, to stream videos or to communicate with friends whilst gaming (Open Access Government, 2019). According to the Digital Competence Framework (Welsh Government, 2018), children need access to a digital device to support their holistic development. It supports their social interaction as they are talking with their friends. It also supports their resilience as they have an understanding of what content is accessible to their age and stage of development. Bleek (2020) supports this by stating that digital media enhances their skills such as creativity and problem solving, however should be balanced with play and outdoor activities. According to Snyder (2019) digital media supports parents as it can be used in settings to share information and communicate with practitioners. This supports Donaldson (2015) and the New Curriculum for Wales by (Welsh Government, 2020), as it supports cross curricula by making accessible links between home and school life.

How to support children

Children of this generation have been surrounded by media from a very young age, as it has just become the way of life (Donaldson, 2015). Internet Matters (2020) have acknowledged this and want to encourage children to use digital media, in order to become digitally competent. Parental controls and privacy settings can safeguard children from inappropriate content online. Internet matters (2020) have set up a simple step-by-step guide how to set up parental controls on devices. It simply asks for the name of the device you want to set up the controls on, and then they email you the guide. However, according to a recent Ofcom (2020) report that parental controls and passwords ignores the type of viewer and the age and stage of the child. Parental controls will not block access to all inappropriate content. The NSPCC (2021) encourage all parents to talk to their children about what they are accessing online, to educate them and prevent them accessing inappropriate content. For more information, please follow this link: NSPCC

(2021)<https://www.nspcc.org.uk/keeping-children-safe/online-safety/>

If after reading this leaflet you still are still worried about your children using digital media. There are a number of websites available which provide helpful tips to ensure children are safe online. Here are a couple of examples:

1. The Lamp
<http://thelamp.org/portfolio/guide-to-developing-healthy-digital-relationships/>
2. NSPCC
<https://www.nspcc.org.uk/keeping-children-safe/online-safety/talking-child-online-safety/>

Internet Safety

The Byron Review (Department for Children Schools and Families, 2008) although it was written thirteen years ago, the research is still effective today. The Byron Review (Department for Children Schools and Families, 2008) focusses on child internet safety and how to provide families with support and reassurance about their child accessing the media. However, the author was aware that this could be challenging, therefore a list of 38 recommendations were created to help parents feel confident about the media. The key recommendations included:

- **Implement precautions to protect children online**
- **Educate children about internet safety**

However, in contrast The NSPCC (2017) states that only 13 of these recommendations have been addressed. Fast forward ten years and The NSPCC (2017) reviewed the progress of the Byron Review (Department for Children Schools and Families, 2008) and the results are unsatisfactory, resulting in 25 recommendations not being implemented. This has resulted in, The NSPCC (2017) creating an action plan to ensure children are safe online:

- **Implement safeguarding measures to protect children from accessing inappropriate content**
- **Provide children with clear and consistent boundaries**
- **Ensure children's access to digital media is monitored and protected with passwords**

Coyne et al. (2016) support this as they believe more support is needed for children and their families regarding digital media. Coyne et al. (2016) also believes that parents need a strong relationship with their child to gain an understanding of what they are accessing online. Coyne et al. (2016) believes that this tends to impacts children from low socioeconomic backgrounds families. This is because parents lack the understanding of how media can be used positively, instead of being used as a way to keep children quiet. Livingston et al. (2015) supports this by stating that digital media is being used to benefit parents needs and the devices have become the 'surrogate parent'. Digital devices have become a reward for children while parents complete their jobs around the house. Therefore, resulting in children spending long periods of time behind a screen.

Digital 5 a Day



Balance

Livingstone et al. (2015) states that digital media is a part of everyday life for most children now and believes that it 'shapes' children's well-being and development. Lupton et al. (2016) agree by stating that children require a balance, however parents lack the understanding of digital media, therefore are unaware how much time their children should spend online.

This is why in 2017 the **Digital 5 a Day** (Children's Commissioner, 2017) was designed due to parents concerns regarding their children accessing digital media. It is a framework which is clear and simple to follow to gain a healthy and balanced lifestyle with digital devices. These are the 5 steps to follow:

1. **Connect**
2. **Be Active**
3. **Get Creative**
4. **Give to others**
5. **Be Mindful**

Bleeker (2020) believes this is an effective method in preparing your child for the world of digital media.

Activity Plan for Digital Literacy Skills – Nature hunt		
Number of children: 8	Age of children: 6	Number of adults: 2
Location: Primary school - Outdoors on field - Indoors in classroom	Preparation time: 20 minuets	Activity time: Whole afternoon (2 hours)
Resources: • Weather appropriate clothing - wellington boots, waterproof coat, sun hat • Natural features from the environment – flowers, wildlife, stones • Snacks and water for children • x8 buckets (1 for each child) • x2 iPad • Notebook and pen (1 for each child) • First aid kit		
Links to digital literacy/competence outcomes: This experience will support children’s digital literacy skills according to the National Digital Competence Framework (Welsh Government, 2018), The New Curriculum for Wales (Welsh Government, 2020) and the National Literacy and Numeracy Framework (Welsh Government, 2008). Digital Competence Framework • Interacting and collaborating • Data storing and computational thinking • Citizenship New Curriculum for Wales – Areas of Learning and Experience and National Literacy and Numeracy Framework • Language, Literacy and Communication • Mathematics and Numeracy • Science and Technology • Health and Wellbeing		
Details of the activity: The activity will include adventuring outdoors onto the playing field to explore nature. There is no fixed outcome for this activity, as it encourages children to direct their		

learning based on their choices and interests. It is a nature-based activity, which is enhanced by digital literacy. The children should be provided with endless opportunities by the practitioner and then be able to make their own decisions. Some children may decide to go on a bug hunt and others may look for a variety of flowers. The children should be put into two groups due to only having two iPads. The children can take pictures of what they find, if they are not able to take in back in their bucket. During this part of the activity the practitioner should observe the children, and only intervene when asked by a child.

Once the children return back to class, they can share what they found by uploading them onto the computer, so they can be seen on the interactive whiteboard. The children may want to research online about what they found to extend their learning further. The children should then save their work onto their individual USB's, ensuring that they use correct headings, and it is located into the correct folder. This will provide children with the opportunity to revisit their work at a later time. During the second part of the activity the practitioner may need to support some children when accessing the digital devices as their digital literacy skills will be different.

The activity can be adapted for children with Additional Learning Needs to ensure their needs are being met. Children with ALN may require extra support from a practitioner to help them achieve their potential from the activity.

Part 4

This evaluation will focus on specific strands according to the Digital Competence Framework (Welsh Government, 2018). A Framework which focuses on what children can do instead of what they cannot. Thus, supporting the Reggio approach (Malaguzzi, 1993) as it enhances their accumulation of knowledge which is relevant to their experiences. Donaldson (2015) also supports this as he believes children need digital literacy skills and should be incorporated into all experiences as it encourages children to problem solve. Donaldson (2015) believes digital literacy should be taught cross curricula. As this provides a greater emphasis on digital literacy and supports children's existing knowledge, to become active participants in the digital world. The activity contained elements of literacy, numeracy and digital literacy. Digital literacy should not be at the centre; however, parts of the child's experience should support their digital competency (Snyder, 2019). During the activity, the children were required to use two digital devices, an iPad and a desktop computer, which require different set of skills. This supports the New Curriculum for Wales (Welsh Government, 2020) as children are learning the basic skills for digital literacy, also by accessing two different devices this is enhancing their digital competency as they are able to use them confidently. According to Berson and Berson (2010) digital media is an intrinsic part of most children's life, prior to attended an Early Years setting. They believe digital media does support their development when used appropriately. It provides them with opportunities to engage in social interaction where they can express their ideas and thoughts and feel a sense of belonging. A more recent article by Barr (2019) supports this stating that digital media is an important part of child development as is providing a disposition to learn by acquiring new skills. Barr (2019) believes that touch screen digital devices promote transfer of learning from the screen into the 'real world'. Despite the age gap between both authors, their research demonstrates that they have similar understandings of digital media and their research is still effective today.

Firstly, the activity supported data and computational thinking, according to the Digital Competence Framework (Welsh Government, 2018), as they will have access to an iPad and a computer. This encourages children to explore and problem solve to gain a deeper understanding, particularly in part two of the activity where children had to upload and save their work on a device. This supports Piaget's (1953) theory as he believed children are active learners and thrive in an environment where they can

engage in experiential play. The activity was child-led, and play based to enhance their own learning ensuring the children were able to follow their interests. However, the support of a practitioner was required during different aspects of the activity. The role of the practitioner was to engage the children by providing clear boundaries that must be followed during the activity. The practitioner also facilitated their learning to increase their awareness of digital literacy and provide a good understanding to confidently move forward (McInnes et al. 2011 and Wasik and Jacoobi-Vessls, 2017). The practitioner needs to gain understanding of the child's current knowledge and what they can do already. This supports Vygotsky (1978), Zone of Proximal Development by observing the children's play, the practitioner was able to plan ahead for the next step. All children access digital media differently, depending on their individual needs. This was recognised within the activity to ensure it was inclusive and tailored to their specific needs.

According to Donaldson (2015), practitioners require training with regard to the new Digital Competency Framework (Welsh Government, 2018) and the New Curriculum for Wales (Welsh Government, 2020) to gain a deeper level of understanding. According to Waters (2016), this did not happen during the implementation of the Foundation Phase (Welsh Government, 2015), therefore practitioners were unable to deliver the curriculum to the correct standard. Therefore Donaldson (2015) has ensured that practitioners have an understanding of how to embed The New Curriculum for Wales (Welsh Government, 2020) as it requires a change in mindsets by ensuring a whole setting approach to suit the needs of all children. The training will provide practitioners with the knowledge about the new strands and purposes, and how to incorporate them into experiences to deliver a cross-curricula. Practitioners require support on how to provide children with opportunities to do engage in new experiences that support their digital literacy and competency. However, according to Snyder (2019) this can be challenging for both practitioners and children due to an imbalance with home and school life. The setting may have different resources to what the child is used to, therefore they are outdated and much slower. Bordialba and Bochaca (2019) support this by stating that, this can be frustrating for them as they may be unsure of how to use it. Children require the confidence to overcome these challenges. The practitioner should scaffold their learning on the digital device to understand how it works, until they can confidently move forward with their learning.

This supports Vygotsky (1978) as he believed a More Knowledgeable Other should scaffold a child's learning until they are confident to move forward independently.

Secondly, this activity will support a child's interaction and collaborating strand (Digital Competency Framework, Welsh Government 2018) as children are required to work together in both parts of the activity. The Digital Competency Framework (Welsh Government, 2018) states that digital literacy promotes children's interaction and extends learning by providing them with new opportunities. This supports Vygotsky (1978) as he believed that children learn through peer social interaction. According to Donaldson (2015) this enhances a child's creativity and imagination skills as have the opportunity to take photographs of what they find, which are then shared online to promote their work. However, according to Lee (2019) digital media can stifle creativity due to children being engrossed in noneducational video games and social media applications. Aubrey and Dahl (2013) support this by stating that children can become absorbed by digital media as they are spending the majority of their time on a device. However, Aubrey and Dahl (2013) also believe that when children access educational content, it can positively impact their writing, reading and listening skills. This part of the activity could be adapted for children with Additional Learning Needs, as they could have a one to one to speak to them using Makaton to ensure they understand and are able to engage within digital literacy during the activity. This will ensure that they are meeting the requirements of the Digital Competency Framework (Welsh Government, 2018) to support their interaction and collaboration.

The activity will support children's holistic development by allowing them freedom of choice to explore freely to enhance their curiosity. Thus, supporting the ethos of the Foundation Phase (Welsh Government, 2015) and The New Curriculum for Wales (Welsh Government, 2020) as the activity had incorporated digital literacy into a play-based pedagogy. The children will be exploring the outside environment with the addition of an iPad to take photographs of what they discover. This will stimulate their digital literacy skills as they have the opportunity to use a device during their play. This activity will support also support literacy and numeracy skills as according to the Curriculum for Wales (Welsh Government, 2020) Areas of Learning and Experience as it is cross-curricular and will develop all aspects of children's learning.

The use of the digital device supports children's digital literacy and holistic development within the outdoor environment. According to Hougham et al. (2018) this allows children to make deeper connections whilst exploring, which promotes children to become active and ethical citizens, according to the Digital and Competency Framework (Welsh Government, 2018). Using digital devices outdoors enhances a child's engagement as their confidence grows. Children were given the choice to take photographs using the iPad and to take notes using pen and paper. This allowed the children to observe the world around them in detail. They closely observed colour, textures and different shapes, which enhances their awareness and creativity skills (Donaldson, 2015). Once they returned to the classroom, they had detailed photographs and descriptions of what they saw. According to Forest School (Learning Through Landscapes, 2021), the outdoor environment promotes children to become emotionally resilient and learn from their mistakes when using a device. This supports Piaget's (1953) theory, as he believed children are 'little scientists' who learn through trial and error. According to, The London School of Economics and Political Science (LSE) (2019), this can also happen online as it provides children with opportunities to learn new skills. Actively engaging in digital media can contribute to their digital competence and resilience. Donaldson's (2015) research suggests that children who use digital media more are more skilled later in life when accessing the internet. Livingstone et al. (2019) supports this and states that children require time online and should be exposed to some risk in order to learn. However, Livingstone et al. (2019) state that, parents or practitioners should observe children when online, as children may come across inappropriate content. Adults should provide children with the responsibility to access the internet safely. Global Kids Online (The LSE, 2021) research also supports this as they believe parents and practitioners should access digital media with children in order for them to gain resilience and to confidently progress.

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