

DIGITAL STORYTELLING

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INTRODUCTION

Storytelling is an important aspect of our lives; historically it has been a tool for sharing knowledge and values, for transmitting history and heritage, and for coming together to celebrate. Stories can bring a sense of coherence to our experiences, whether informally amongst family and friends or more formally within our school curriculum and working lives. The digital context adds an extra dimension to how narratives are communicated and shared, expanding ways in which children's creativity can be developed through a range of media. Rodríguez *et al.*, (2021, p.21) identify digital storytelling as a means by which both language and digital literacy can be improved. They highlight that digital storytelling allows children to become protagonists in their own learning, empowering their voices and engaging them in their learning journeys (Rodríguez *et al.*, 2021).

Nair *et al.*, (2020) further propose that digital storytelling can provide children with the opportunity to develop 21st century skills to be lifelong learners, suggesting that well-constructed creative opportunities support children to develop problem-solving, negotiation and decision-making, and to work as part of a team or independently. In addition to this, digital storytelling can foster an appreciation of the world around us and provide opportunities related to the green curriculum, sustainability and the Sustainable Development Goals (SDGs) set by the United Nations in 2015 (See Case study 1).

This chapter focuses on digital storytelling through the lens of empowering children to develop cultural and digital capital. It uses a series of case study vignettes to exemplify tools and pedagogical approaches that will help you embed digital storytelling in your primary classroom. Five key themes are introduced through the examples from practice:

- Working with media
- Supporting language development
- Using shared online spaces
- Extended reality environments
- Drama and game-based learning

We also suggest a number of tasks to help you plan to use digital storytelling.

OBJECTIVES

At the end of this chapter, you will be able to:

- define what digital storytelling means in the primary classroom
- plan for digital storytelling in your classroom drawing on appropriate pedagogy
- consider how you might assess and share digital storytelling
- explore a range of technologies associated with digital storytelling

DEFINING DIGITAL STORYTELLING IN THE PRIMARY CLASSROOM

Storytelling is a helpful educational tool, whether it be for reading or creating stories. It can support the development of literacy skills, including reading, writing and speaking.

Narratives can contextualise learning and enable children to visualise, imagine and empathise with characters and contexts. Immersion in stories provokes emotion and connection, helping children to see the world from different perspectives.

Digital storytelling adds another dimension by providing an environment for capturing and sharing stories in a variety of media. Wu and Chen (2020) suggest that the production of a short digital story in an educational setting typically contains some mixture of images, text, narration or music and film. The process of applying cognitive and practical skills in this way can build what is often termed digital literacy. A digitally literate person, Prensky suggests, will be able to: ‘bend digital technology to one’s needs, purposes...just as in the present we bend words and images.’ (Prensky, 2008, p.1). If they are to become digitally literate, children need to learn to manipulate the material they find or generate using technology, whether it is computer code, words, numbers, images, sound or video, and to remix and recombine it in meaningful ways. A goal is to be able to do this across a range of devices and tools, so that they are equally at home making an eBook on a tablet as they are collaborating remotely to program an animation on a laptop. Making digital stories provides learners with the chance to be creative and productive with technologies, to make decisions on how best to

use them and to make connections between them. Through the process they gain what Prensky terms 'digital wisdom' (Prensky, 2012).

Smeda et al., (2014, p.2) also draw attention to the advantages of the digital environment by defining digital storytelling as an 'effective pedagogical tool that enhances learners' motivation and provides learners with an environment conducive for story construction through collaboration, reflection and interpersonal communication'. Niemi and Multisilta (2016, p.586) propose that when children are creating their own stories they are 'not passive receivers yet active creators in the learning environment'. Furthermore, Nair et al., (2021) suggest that digital storytelling improves children's speaking skills by offering increased agency and independence in retelling their own stories. Digital storytelling can thus be a multimodal way of developing reading, writing and speaking skills alongside technical capabilities through the use of media. As Smeda *et al.* note, it can be 'a vehicle for combining digital media with innovative teaching and learning practices' (2014, p.6). Digital storytelling therefore enables children to develop higher order and creative thinking, and to experience tangible connections between their own experiences and the real world. The emphasis is on active engagement in digital storymaking, developing solution-focused thinking skills and understanding the real-world relevance of their digital skills.

Digital storytelling and digital literacy

Digital storytelling aligns with a social constructivist approach to learning by providing a context for co-constructing knowledge. This theory is founded on the work of Dewey, Piaget and Vygotsky, and values the pedagogical approaches of collaborative learning, experiential learning, reflective thinking and child centeredness. It suggests an environment that is rich in interaction, where children learn with and from each other through an active learning process that emphasises conversation and reflection.

These ideas also sit well with Luckin *et al.*'s learner-centric framework of Learner Generated Contexts (Luckin et al. 2010), which sees learners gaining control through interacting around a common learning goal. This model highlights that technology changes the boundaries 'between learners and teachers, formal and informal education and the producers and consumers of knowledge' (2010, p.72). Seen in this way, the learning context is less a physical location, and more the combination of interactions a learner experiences across multiple physical and digital spaces and times. Luckin *et al.* describe the learning context as 'a constant, dynamic interaction between internal and external sources' (2010, p.74). They

suggest that technologies can provide a platform for an ‘architecture of participation’ (2010, p.80). An aim of combining digital technology with storytelling might therefore be to create more open, creative and participatory learning experiences.

Taking these ideas into account, a digitally literate storyteller will need a stock of skills to draw upon that includes competence with a range of digital tools, but also comprises familiarity with strategies for learning in today’s socio-technical learning landscape. This includes the ability to navigate a shifting network of resources, social connections and learning habitats across times and spaces. In this context, it is important to understand how interaction between people, digital and physical spaces, and technologies can influence the creative process.

PLANNING TO PUT DIGITAL STORYTELLING INTO PRACTICE

The emphasis on learner-generated content and self-directed learning outlined above may call for a change in the role of the teacher (Bates, 2015), and you will need to give careful thought as to how to create the conditions for your pupils to collaborate to generate digital stories.

When planning a digital storytelling project, then, consider your pupils and how they learn. They may benefit from training in collaborative learning and teamwork skills, or opportunities to exercise agency in choosing themes and tools, as suggested by Wu and Chen, (2020). Think about how you organise your classroom space, groups and children, as well as the technologies you choose to use. Digital stories can be made in groups or individually. Working as a group can enhance pupils’ experience of creative writing and can help to develop literacy skills and digital skills to a higher level. This aligns with the constructivist pedagogical approach by enabling children to learn with and from each other.

A constructivist learning approach uses prior knowledge as building blocks for developing new knowledge. You will need to set clear goals and identify the learning outcomes for your project that include the elements of literacy that you plan to develop alongside the development of digital skills. It may be useful to link aims to timings to ensure the project has an appropriate scale. Also think about linking outcomes with assessment criteria and remember to build in formative assessment. If this is going to be a project over several lessons, it may be useful to devise a checklist to help your pupils see how they are moving forward and ensure deadlines are met.

Consider the variety of ways you might introduce digital storytelling into the classroom and the types of stories you plan to create. In their systematic review of digital storytelling, Wu and Chen (2020) highlight various educational uses of stories, such as to develop understanding or reconstruct meanings of concepts, to develop autonomy by choosing themes of interest, to reflect on new learning experiences, or to create identity stories that develop pupils' understanding of themselves and their relationships with others. How you create your context for digital storytelling will depend on how much storytelling your class has undertaken, the learning themes they are currently exploring and their ability to use the digital tools you have in mind.

Digital stories are usually 3-10 minutes in length (Nair et al., 2021) and typically draw from a range of multimedia components including images, audio and text. Storyboards can be a useful supportive tool for children to plan their work. A storyboard might consist of a piece of paper or a digital document split into boxes. Pupils organise ideas into a coherent story by drawing or writing into each box to show the structure of the story. With digital storytelling you might also ask pupils to include information on which technologies or media they will be using. You may need to explain how to use relevant digital tools, although most pupils will already have developed knowledge of a range of these. As your pupils create their digital story, they will need to solve many problems including those experienced when using technologies. This will develop your pupils' computational thinking and digital literacy.

Regardless of what digital tool you choose to use, it is important that you check that it is working and plan for charging your devices. Remember to build in sufficient time for the end phase of the digital story creation; adding titles, music, and transitions develops creativity in the classroom but needs careful time-management and scaffolding. In line with the constructivist teaching approach, you also need to allow time for reflection and discussion.

Table 1 summarises some of the pedagogical considerations when designing the learning process and choosing digital tools.

Pedagogical approach	Considerations	Recommendations
Experiential learning (Learning by doing)	Does the tool offer a range of ways that children can engage with it and make	Multimodal representations that include media, film,

	choices about how their story is represented?	image, text and the spoken word.
Metacognition (Talking/ thinking about the process and decisions made)	Does the tool allow children to verbalise and reflect on their own learning and be independent in decision making?	Tools that allow children to make edits, remake, duplicate and reorder.
Collaborative learning (Working together to achieve a common goal)	Does the tool allow children to collaborate synchronously or asynchronously?	Tools that can be used on multiple platforms with multiple users.
Learner autonomy (Taking charge of your own learning)	Does the tool allow the children to be able to modify, edit, manipulate and reorder content?	Tools that allow children to make editing decisions, create nonlinear stories and choose how they display their story.

Table 1: Pedagogical considerations in planning for digital storytelling

Task: Introducing digital storytelling

Having had an introduction to digital storytelling, list the things you would need to do to plan a digital storytelling project for your class.

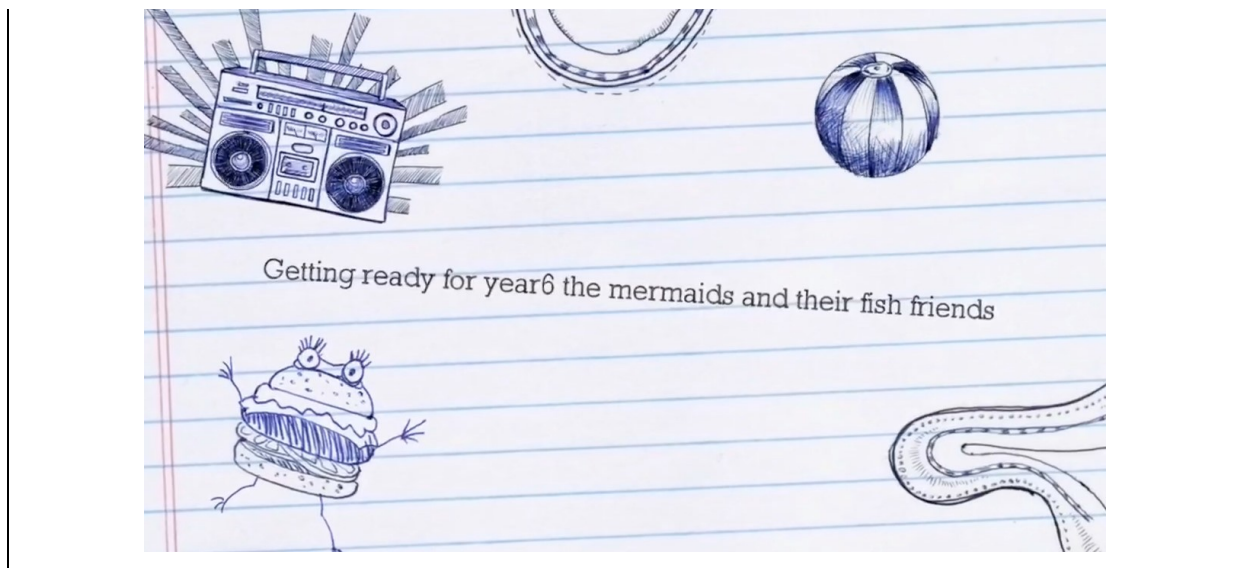
Identify a space in your curriculum for digital storytelling, giving consideration to children's prior learning in terms of literacy and language as well as experience of technologies.

Consider your access to technologies. Are there technologies your class know how to use or could learn to use through their digital stories?

An authentic audience is an important motivation for storytelling. Think about how you will share children's work.

Plan any changes you need to make to the arrangement of your classroom and take health and safety into account.

Keep your plan in front of you while you read the rest of this chapter and add your reflections as you develop your knowledge of how you could use digital storytelling.



Additional planning considerations for digital storytelling

At this point review your plans and think about what additional preparation is needed such as storing data and ensuring internet connections and licences. Evaluate the range of technologies your pupils have access to; they may need help sheets or video clips on how to use them. Plan to create or source media assets for your pupils to use in their digital stories. These might be images, sounds or videos that they create themselves, perhaps as part of drama or outdoor activities, or as part of a curriculum activity such as a science experiment.

You should also consider online safety. The Department for Education (2019, p.6) suggest that rather than focussing upon trying to keep up to date with the latest app or platform, teachers should convey the ‘underpinning knowledge and behaviours that can help pupils to navigate the online world safely and confidently regardless of the device, platform or app’. This should be embedded as a wider school approach wherein online safety is everybody's responsibility. Take some time to familiarise yourself with your school's approach and decide the prior learning necessary for children to safely access the planned tools. Find out whether you will need to communicate your sharing intentions to parents, and if so, how early you will need to do this in relation to the start of the digital storytelling activity.

ASSESSING AND SHARING DIGITAL STORYTELLING

A further aspect of the preparation needs to focus on how pupils will demonstrate their knowledge and understanding. As with any task that is going to be assessed you need to have criteria to share with your pupils. You may want to assess a range of aspects, such as elements of literacy skills, their planning, the artefacts created such as the storyboard, uses of technology, and the overall presentation of content. Literacy skills may include written, oral, cultural, information, and visual. You will also want to make clear links to the school curriculum plans and identify which aspects will be assessed. If the story has been developed by a group, you may choose to assess how each pupil worked within their team. There is an opportunity to build in some peer and self-assessment formative feedback, in line with the constructivist approach to learning and the value of metacognition. This will help individuals or groups to assess their progress at planned times during the project, such as during the development of the storyboard.

Table 2 summarises some of the outcomes you may choose to measure. They are drawn from Wu and Chen’s systematic review of digital storytelling (2020, p.6) and exemplify assessment opportunities that may be appropriate to your learners.

Type of outcome	Description	What to look for
Affective Learning	Attitudes and emotional engagement	Positive attitudes, empathy, motivation, sense of accomplishment
Cognitive Learning	Critical and creative thinking	Interpreting and evaluating arguments, sequencing, prediction and concluding
Conceptual Understanding	Understanding of concepts and reconceptualization	Identifying themes, characters, roles, motives and mission
Academic Skills	Research, enquiry and academic performance	Self-directed learning, positive choices and application of research
Technological Skills	Use of media, platforms and tools	Skills such as editing, uploading, cropping, recording and sharing
Language Skills	Reading, writing, expression and genre	Multimodal means of expression, use of sequencing and story structure
Social Skills	Collaboration, teamwork and communication	Working well with others, helping others, explaining and communicating their ideas, negotiation and consideration

Ontological Learning	Self-awareness and awareness of others	Understanding of others, their situation, their needs and their role
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Table 2: Outcomes of digital storytelling

Finally, consider how pupils will share their final digital stories and with whom. Sharing stories and gaining feedback from a wider audience will provide a sense of achievement and celebration. Using online platforms allows the children's work to be shared with parents, carers and other children in the school. They also facilitate sharing more widely via the school website or through sites such as eTwinning which enables classes to connect across countries. The case study below illustrates the process of collaborating and sharing.

Case Study: Connecting classrooms and sharing learning

Digital Learning Across Boundaries (DLAB) project

DLAB was an international partnership across classrooms in five European countries. Each classroom was paired with a class in another country. Pairs of classes collaborated closely around designated international days to create shareable digital artefacts that had built-in interdependence. Collaboration was intrinsic to these outcomes so that there was a planned flow of ideas as each country worked with another to make the digital product that represented their work. Scrolling Twitter walls and Skype sessions were built into the international collaboration days so that there was continuous interaction and a sense of purpose as each class could see images of the progress being made elsewhere. The posted images made the twitterwall a powerful window into the other classrooms during the international days.

There was a strong emphasis on pursuing STEM themes through storytelling to develop shared understanding of concepts across the paired classrooms. To give some examples:

- Inspired by the trigger question ‘what if our senses changed?’, four classes worked on different aspects of the theme of the super senses of the animal world, swapping their research on mammals, fish, birds and reptiles, and creating a combined media presentation.

- Exploring the theme of Wild Writing, classes used an interactive image of a set of ‘in’ and ‘out’ drawers using the tool Thinglink to post media inspirations and responses for each other.

Remix of 'Remix of 'What's in the drawers?''



- Investigating environmental issues in their countries through ‘Science Outdoors’, the partner classes used infographic tools to post information and then swapped them to suggest solutions for each other, combining their results into an eBook.
- Thinking about the theme of ‘Art in the Environment’, virtual sculptures were exchanged and green screened into each other’s environments. The results of the exchanges were captured as tags on a digital art map and used to inspire writing.



Virtual sculptures on the fourth plinth in Trafalgar Square

These examples highlight ways in which technology can impact language and literacy practices, and the rich choice of authoring technologies children can now choose from in their production of multimodal texts. In this way of working, physical and digital ways of exploring and representing experience seem inseparable, as is the use of technology for collaboration and connectivity. One digital artefact inspires the creation of another, and through swapping and responding to artefacts, learners are corresponding through visual media as well as words.

This process can be likened to multimodal literacy approaches that recognise how shared meanings can develop across time, space and modalities. A key idea is that the multimodality of the exchanges facilitated joint meaning making for connected classrooms across geographical divides. In the context of the DLAB international project work, digital storytelling using a range of media acted as a communication tool that bypassed language barriers and built intercultural understandings.

EXPLORING A RANGE OF TECHNOLOGIES

The following sections of this chapter exemplify a range of tools that you can use to implement digital storytelling into your classroom. It is helpful to become familiar with a handful of open-ended digital tools that you can return to. These might include a tool for creating flip books such as Book Creator, an online whiteboard such as Padlet or Jamboard, a film editing tool such as iMovie, a collaborative writing environment such as GoogleDocs or Microsoft 365, and an augmented/virtual reality environment such as CoSpaces.

Our examples from practice explore five key themes.

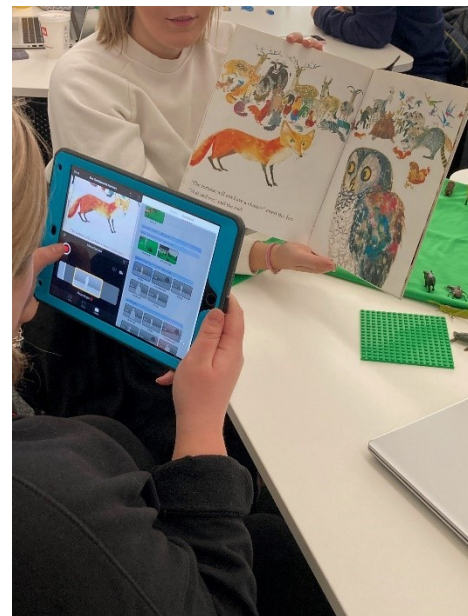
1. Working with Media

Digital storytelling allows children to build narratives that include music, sounds, media and images. Multimedia tools can stimulate their imagination and increase their interaction and engagement with the story. A constructivist pedagogy encourages scaffolding, therefore they will benefit from modelled examples and stimuli.

Case study: Using iMovie to retell stories

The use of apps within teaching and learning can enhance experiences, increase engagement and offer new ways to learn (Gómez & Garganté, 2016). Many apps can be used in a cross curricular manner for numerous purposes, including retelling stories digitally. One such app is iMovie, a video editing software tool. iMovie allows users to create short videos by inserting different media, including images, video and audio files, into free projects or pre-created trailer templates. Recent studies have shown iMovie to be in the top 10 apps used within Primary settings (Hepburn, 2021).

The example below is taken from a module on a BA Primary Education course where students explored how digital technologies, including robots, apps as well as Virtual Reality (VR) and Augmented Reality (AR), can enhance teaching and learning within the classroom environment. This example shows how two students, Bella and Sophie, used iMovie to re-tell the fable The Tortoise and the Hare.



To create the files they required to retell the story, Bella and Sophie recreated the location from the fable using miniature animal figures and then took photos and recorded small videos of different stages of the story using the iPad camera. Whilst doing so, the students noted how they could have enhanced the quality of their videos further by combining this with a green screen app we had previously explored. Additionally, Bella and Sophie used a physical copy of the book to directly link back to the story itself. Then the students chose a pre-created trailer template and were able to drop in each of the media files they had created to sequence their retelling of the story. They were then able to edit any accompanying text to videos and images. In total, their iMovie clip took around 45 minutes

to create before these were shared with colleagues whose stories included Dear Zoo, The Gruffalo and The Great Fire of London.

Follow up discussion focused on how digital storytelling could be used in a number of ways, including as a stimulus or hook for a new class story, to allow children to sequence a story in the correct order or to encourage them to communicate their understanding of a story in another format. This supports the view of Smeda *et al.*, (2014) that digital storytelling can enhance engagement, foster collaboration, personalise learning and develop digital literacy.

Task: Identifying prompts

Review your class curriculum and identify a story book, project, event or opportunity where you could use digital storytelling. Decide which prompt you might use, the technology tools you have available and how you might structure your activity over a set of lessons.



2. Supporting language development

As a collaborative activity, digital storytelling can provide a context for engaging with others through creating and editing media content. This process can benefit language learners and support aspects of language development, including reading, writing and speaking (Yilmaz and Goktas, 2017). The potential to orchestrate meaning through a balance of media aligns well with Universal Design for Learning (UDL) principles that seek to establish inclusive learning environments by offering multiple means of representation, of engagement, and of action and expression. [See: <https://udlguidelines.cast.org>] (CAST, 2018). A digital storytelling approach that enables learners to have choices in how they express their ideas through various media advocates for a diversity of learners, some of whom might be more comfortable with the spoken word and others with the use of images. The end products can be equally powerful. A choice of visual and auditory modes of access and expression alongside text can enrich learning and help to meet learner needs, making the storytelling experience personally meaningful and inclusive (Rose, 2002).

Case Study: Digital storytelling supporting language development

I explored the impact reading for pleasure has on reading attitudes, attainment and practices for pupils using English as an Additional Language (EAL) in a Southeast London primary school. During this research, digital texts played a significant role in increasing pupils' engagement in reading for pleasure, supporting their English language proficiency and developing an active reading community. The research project consisted of five reading sessions where pupils using EAL were invited to participate with their parents/guardians and siblings to gain a holistic view of the pupils' reading identities and experiences. Below are two examples of the applications used.

BookCreator

BookCreator is a popular application amongst schools and contains interactive elements that support teachers and pupils in creating their own digital stories (for example; the ability to upload photos and videos, insert text and record audio clips). I used BookCreator in the research project to record the progress of the reading sessions as the features of the app helped to overcome the language barrier. The participants were able to upload emojis and record their voices to share their opinions in the eBook we created.

Furthermore, BookCreator provided an accessible medium for participants to share their experiences of reading for pleasure and their reading identities in their own voice. Some chose to create their own versions of wordless picture books using photos whilst others

recorded audio as narration in their home language. Being able to upload the finished digital books as a video file to the school system meant that others could also access the books and share the experience, resulting in a growing, multilingual reading for pleasure community. Below is an example of one of the digital stories that was made using BookCreator.



Digital Storytelling with pupils using EAL

eBooks

eBooks are an increasingly popular medium of storytelling for pupils. Many schools, including mine, turned to eBooks available online as a source of reading materials during the recent COVID-19 pandemic because schools and libraries were closed. For EAL students, this had a particularly damaging impact as they did not have access to quality examples of written English. They could not practice their language skills with their peers and many also did not use English at home due to the proficiency of their family members. The features of eBooks and their availability provided the participants of my research project opportunities to be more independent in reading outside of the classroom.

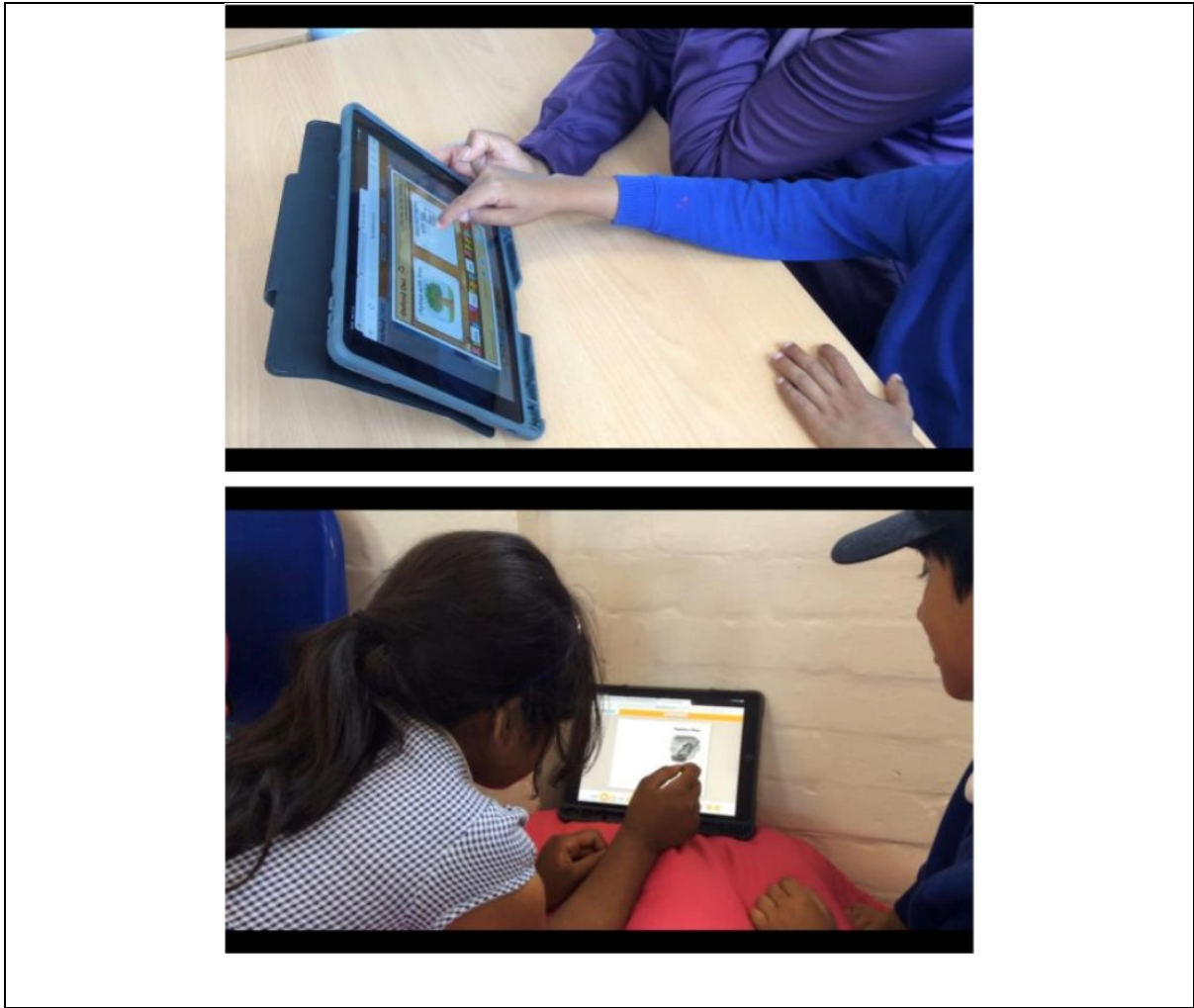
Oxford Owl and Bug Club were two examples of eBook websites I used with the participants. Both contained useful features. These included read aloud options that supported phonics and pronunciation and interactive games that supported comprehension and understanding. Moreover, the participants were able to increase their English vocabulary because they could easily translate words or phrases using platforms such as Google Translate and Say Hi. The results from the research project indicated a positive correlation between the frequency of pupils engaging in reading for pleasure at home independently and with other family members, and their engagement with eBooks as a reading medium.



<https://home.oxfordowl.co.uk/>

Task: Using eBooks

Meet with your school librarian or English coordinator to discuss what eBooks are available for the children to access. Think about which of these might appeal to your children. Identify the needs of any children who are reluctant readers, need further support or who are learning English. Plan where in your curriculum you could use eBooks to support learning and achievement.

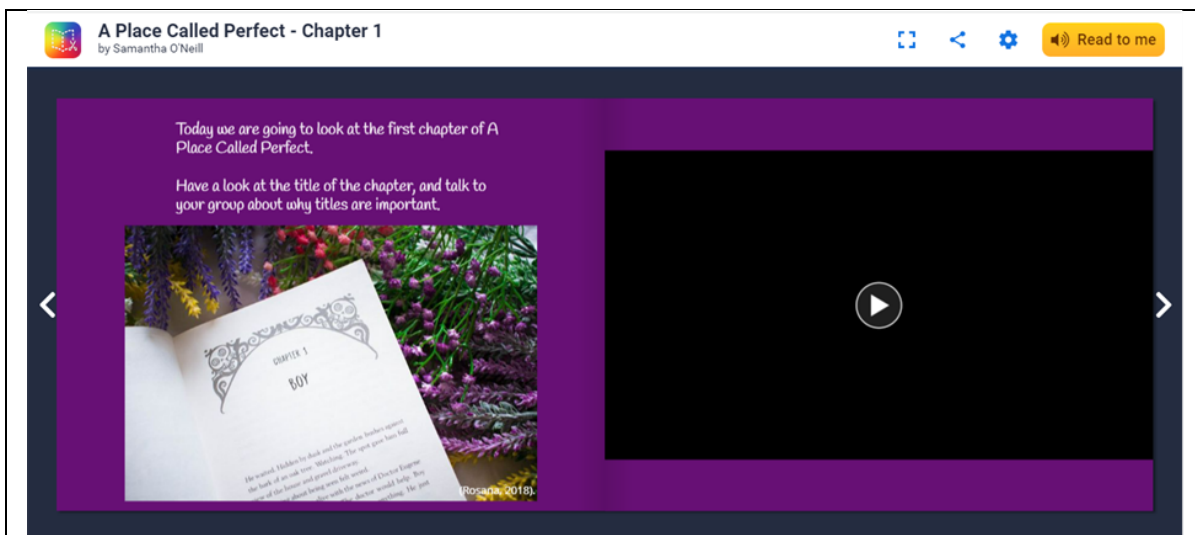


3. Using shared online spaces

Shared online spaces allow children to work synchronously and asynchronously across different timelines and in different spaces. Children can collaborate on their story building and co-create the content, timeline, media and images. Tools such as Google Docs, Book Creator, Padlet, Miro and Office 365 offer online spaces in which children can work together to create stories that include a range of media. They support a social constructivist pedagogy by promoting teamwork, negotiation, sharing, reflection and discussion.

Case Study: Using shared online spaces for co-creation

The example below comes from a university student undertaking her Foundation Degree in Learning and Teaching.

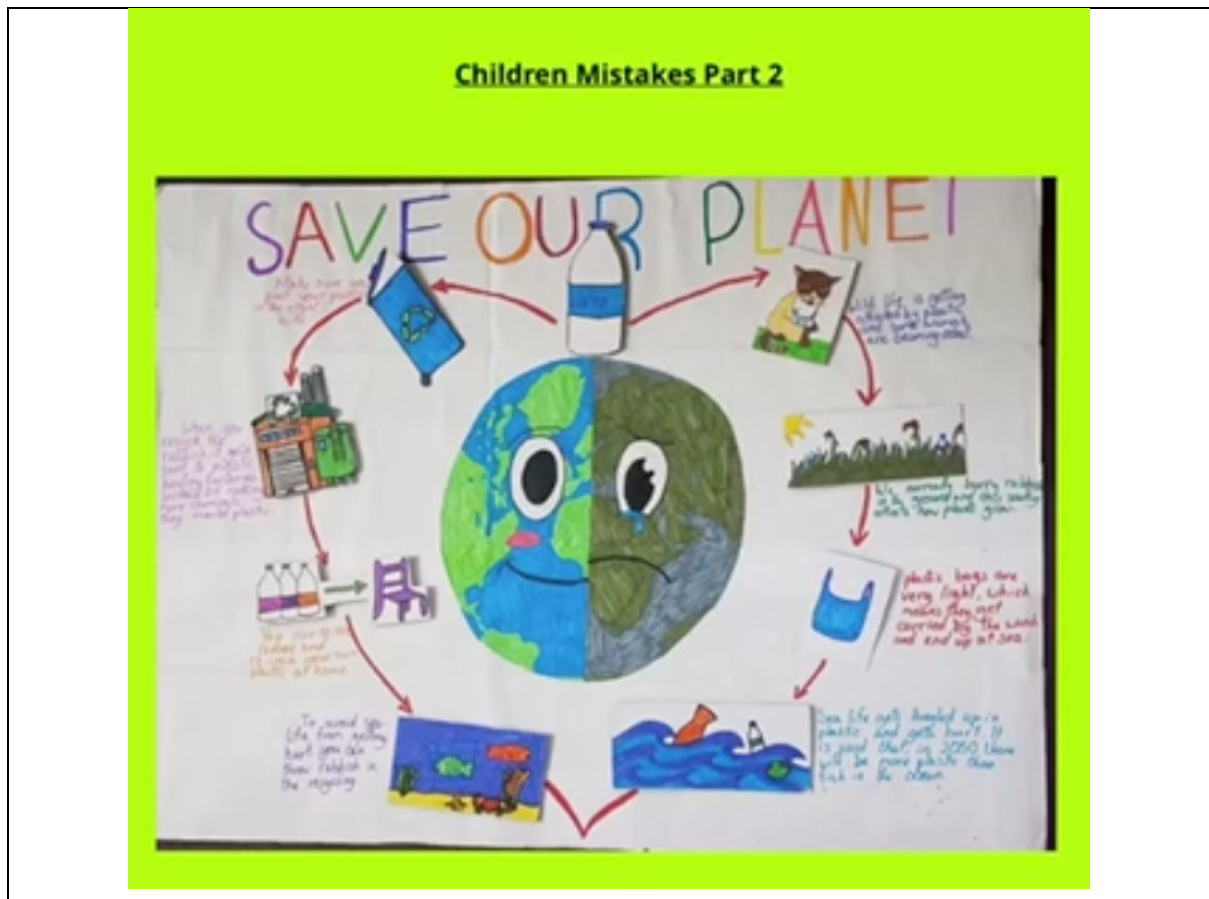


Sam has used a book that she created as a stimulus for teaching her students in a Primary School in the East of England. She has included a video of herself explaining the task, as well as asking some additional questions addressed to her class to extend their learning. This is considerate of a constructivist teaching approach where modelling good practice or offering stimuli can inspire and support children. Sam was able to explore the story *A Place Called Perfect*, by including sounds and images to exemplify what the story was about, creating stimulating discussions with children regarding metaphors and their place in fictional stories. Multimodal expression of content allows the book to appeal to a range of learners and offers them a range of suggestions for how they might construct their own stories.

Sam shared her Book with her colleagues so that they could use it within their teaching. She could ‘publish’ her book, meaning it will be added to a library of books that can be adopted by anyone with a BookCreator account. Children subsequently published their own books using a QR code in their school newsletter that allowed parents and carers to access their work and share in assembly with the school community.

Task: Identifying opportunities

Work with your team to identify opportunities in the school year, such as World Book Day, where you can share stories with other classes, schools and audiences. Investigate the potential to use Twitter accounts or eTwinning to collaborate with other classes.



4. Extended reality environments

Extended reality is an umbrella term for immersive computer-generated environments such as augmented and virtual reality. These can provide rich interactive environments for storytelling (Miller, 2019). Augmented reality (AR) allows interactions between digital and physical spaces by displaying virtual information in real world environments. Yilmaz and Goktas (2017, p.76) suggest that AR ‘transforms empty spaces into rich learning environments’ and can be highly motivating, offering different ways of interacting with characters, events and ‘a sense of magic’. Virtual reality (VR), on the other hand, offers a fully immersive experience via a headset and has the potential to transport the user to an entirely different world. In the context of storytelling, users can experience fictional environments set in different dimensions of time or space.

Both AR and VR put the user in control of exploring and interacting with the environment, increasing the feeling of being immersed in a story. There is also the potential for pupils to use a 360-degree camera to create story worlds for others to experience, either as 3D images or as VR films. Consider the multiple ways you could enhance descriptive language to

represent a ‘giant green tree’ or a ‘sly old fox’ through music, sound effects, images or 3D augmentation.

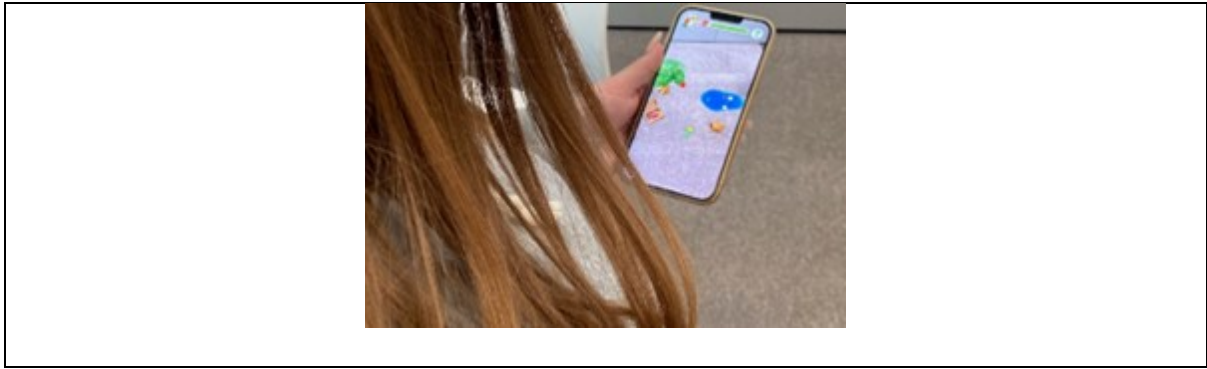
Case study: Extended reality environments

BA Primary Education students explored how VR and AR can enhance storytelling through immersion. The benefits of using VR and AR in teaching and learning are widespread including greater recall, promotion of active learning and increased motivation (Timovski *et al.*, 2020).

The first example is a VR retelling of Jack and the Beanstalk taken from Seymour and Lehrn online resources (<https://www.seymourlehrn.com/>). Within this re-telling, children can immerse themselves and explore the setting of the story whilst listening to an audio overlay of the story. This can be conducted by dragging the video itself using fingers or a mouse or by placing a tablet into a VR headset. Students explored a range of VR experiences using the YouTube VR Channel and the You Tube Channel for Seymour and Lehrn which has VR resources for a range of cross curricular topics taught in Primary schools including The Egyptians, The Victorians, and Dinosaurs.



The second image is an example of how AR apps are developing within storytelling. Here, Tabitha, another student on the course, has used the My Caterpillar app which allows children to explore and re-tell the story of The Very Hungry Caterpillar in their own environment. By scanning a clear space, using the camera, the caterpillar and the food it eats in the story appear in the room. By tapping the screen, the caterpillar moves to each new piece of fruit in the same order as it does in the story. This allows children to explore the story, make predictions about which fruit is next and sequence the story more clearly.



5. Drama and games-based learning

Creativity is characterised by problem solving, original thinking and creating new connections. In digital storytelling creativity takes place through the story content and its production. Many digital stories involve game-like elements (Miller, 2019) and these can facilitate problem solving, deduction and prediction. The role of a protagonist can develop, through embedding game-based decisions. Non-linear stories, where the reader makes choices about the direction of the story, are popular in gaming, and digital tools can allow for game-like elements such as multiple endings, missions and jeopardy.

Drama has the potential to offer a physical experience of acting out real and imagined events. It allows children to contemplate the feelings and thoughts of others, developing social and emotional understanding and empathy, as well as providing the opportunity to develop their own confidence and self-awareness. Use of freeze frames supports the building of storyboards and can help children to identify key moments in their narratives. Digital tools such as iMovie trailers can capture drama, role-play or dance scenes and turn them into shareable artifacts. This can enable a class to revisit their theme at the beginning of each lesson and build upon their drama ideas over a series of sessions.

It is also worth considering the use of a green screen to provide imaginative backdrops for filming drama or puppetry. In a similar way to extended reality, this can increase the sense of being immersed in a story. Experiment with homemade green screens; try using display board paper, green material or even a green PowerPoint slide. Being able to film and share stories can be a powerful incentive to write, and group media projects such as these provide opportunities for children to take a variety of roles.

There is potential to adopt different methods of story making; maybe the soundtrack or a set of images is the starting point rather than a written script, and choice is a feature of the process, increasing learner autonomy (Wu and Chen, 2020).

Case Study: Creating multisensory spaces for storytelling

An example of combining drama and technology is the creation of immersive multisensory spaces. Such spaces can combine tangible and digital objects by using devices such as projected images, sensory apps, torches in dark dens, robots, green screening or virtual reality combined with tangible materials. They particularly lend themselves to Early Years or SEND teaching. Building on the work of Preece (2015), students at the University of Northampton developed this idea as part of an assistive technology module and created sensory spaces for local children with special needs to explore the story ‘We’re Going on a Bear Hunt’ by Michael Rosen. One child described their immersive sensory story experience, ‘We’re not just reading it, we’re in it!’.



Task: Key takeaways

As a final task for this chapter sum up your three key takeaways for implementing digital storytelling in your classroom. Think about the benefits and challenges. Refine your ideas for implementing a project.



SUMMARY

In this chapter we have explored what digital storytelling means in the primary classroom and how you might use this in your professional practice. We have considered the ways in which you might approach digital storytelling, in terms of the tools you might use and the pedagogical approaches you might take within the themes of media, language development, online spaces, extended reality, drama and games-based learning.

We have looked at the range of skills and learning that children might demonstrate, spanning their personal and social development, their technological skills and their reading, writing and speaking skills. The potential to support a diverse range of learners to develop a love for language and literacy can be enhanced by the use of digital tools. The approach can offer learners a range of ways to demonstrate their learning and understanding, to access stories and to share their work with an authentic audience. Along the way, they will develop their digital literacy skills.

The digital aspect of storytelling will change as different technologies are introduced. The storytelling environment can be the main element through which you introduce your class to technologies, creative writing and literacy elements of the National Curriculum. Similarly, we

have considered through our case studies how a range of curriculum content can be taught and illustrated the potential to use digital storytelling to teach children about SDG goals.

However you decide to teach digital storytelling, remember to plan it carefully, consider the pedagogy, the development of creative and technological expertise, and then think about which tools will be the most appropriate, thus developing pupils' digital capital. Aim to embrace the approach as a way to engage pupils in sharing their lived experiences and to connect them with wider contemporary issues and potential global audiences.

FURTHER RESOURCES

Mesh guide on reluctant writers

[Writing: Reluctant Writers | MESHGuides](#)

<https://www.meshguides.org/guides/node/38>

A reluctant writer is one who experiences one or more barriers to the writing process on a regular basis. Barriers may be exhibited during the process of writing as well as, or instead of, the start of the process. In addition, a reluctant writer may be defined as one whose writing is habitually superficial, either because ideas are not expanded or because the writing is executed in haste. The evidence presented here is from a three year research project funded by the Bedford Charity (Harpur Trust) in the UK (2007-2010).

Into Film

[About Into Film - Into Film](#)

<https://www.intofilm.org/about>

Into Film supports teachers to use film and cinema to inspire children and connect with cinema. Their resources include the Into Film+ film streaming platform, a network of extra-curricular Into Film Clubs, resources for use in clubs or the classroom, face-to-face and online training opportunities, an annual cinema-based film festival and the prestigious Into Film Awards.

Research.com: Digital storytelling

[Digital Storytelling: Benefits, Examples, Tools & Tips | Research.com](#)

<https://research.com/education/digital-storytelling>

A useful guide to digital storytelling in education.

Seymour & Lerhn

<https://www.seymourlerhn.com/>

An educational virtual reality platform designed to work with a range of technologies.

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