

## RESEARCH ARTICLE

# Using digital stories during COVID-19 to enhance early-grade learners' language skills

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**Abstract:** Language is something that a child learns from their environment. English, a global language, has become a popular demand in many countries, including Nepal. With a strong belief that children learn when actively engaged in the learning process, this study aims to enable early-grade learners to develop their language skills by emphasizing English speaking and listening skills. The question guides this research- how can digital storytelling pedagogy help to enhance early-grade learners' English language skills? Using action research, this study includes fifteen upper kindergarten learners and three parents as participants in two weeks' virtual classroom settings. Data were collected through observation, field notes, interviews, and questionnaires. Significant findings show that digital storytelling pedagogy is effective in developing the language skills of early learners as it creates an environment where they can watch, listen, interact and communicate more. With exposure to new vocabularies through storytelling and in the meaning-making of the same, they became more acquainted with English and Nepali languages. Gestures and non-verbal communication were added advantages of digital stories.

**Keywords:** digital storytelling, early learners, action research, COVID-19, Nepal

## 1 Introduction

Language is something that a child learns and imitates through interaction with the people in their surroundings, initially from their family members, friends, teachers, and community. According to [Sari and Suryana \(2019\)](#), "Language is an important key to learning that allows children to understand the world around them" (p. 46). They also mentioned that early childhood education lays a strong foundation for the growth of physical, cognitive, socio-emotional, language and communication development. Lev Vygotsky, the father of social constructivism, believed that social interaction is essential to learning and language development ([Kalina & Powell, 2009](#)). [Brown \(2014\)](#) states, "All children can develop a strong foundation for literacy and reading development when they are given opportunities to engage in purposeful, meaningful language and early print activities" (p. 35).

Likewise, language is one of the most critical skills needed for communication that early-grade learners develop in preschool. This study focuses more on developing English language speaking skills among early learners as English has gained fame as a global language due to its geographical-historical, sociocultural, political, and economic power ([Crystal, 1997](#); [Khadka et al., 2022](#)). It has also owned famous as a common language 'lingua Franca' for being widely used in global business, diplomacy, mass entertainment, global telecommunications, and scientific publications, as well as publishing newspapers and other books around the world ([Rao, 2019](#)). English in Nepal was first recorded in the seventeenth century ([Shrestha, 2017](#)). As English became a global language, Nepal could not remain secluded. However, Nepali (Khas Bhasa) has been regarded as the National/Official language, and the present constitution of Nepal refers that all languages will be given equal importance. On the practical front, English has become the functional language in almost every sector and has gained popularity and acceptance among the country's population. Thus, English as a literature subject has become compulsory in most countries, including Nepal. Since the teaching-learning resources are available in English, the medium of instruction is mainly in English.

Parents also opt for Private institutions for their children's education in Nepal despite its high fees as they adopt English as a language of instruction ([Bhandari, 2017](#)). He also mentions that parents see English as a crucial factor in competing in a globalized era, so they prefer children to learn English from the early years of education. The demand for the English language has become popular even in the local job market due to lucrative job offers by the INGOs, NGOs, Tourism sectors, banking sectors, and multinational companies that have invested in

the Nepalese Business sector. So, English as a literature subject is introduced in preschools in Nepal to give a strong foundation of the global language. Moreover, formal schooling demands children to have good language skills in English. So, in early childhood development centres run by private institutions in Nepal, the medium of instruction and learning resources are all in English. However, the translation is done in the learner's mother language, Nepali. The regular conversation in the classroom between peer learners, teachers, and caretakers is made in Nepali and English. Teaching a foreign language to young children is difficult (Abdul-Ameer, 2014). We, preschool educators, sing rhymes, tell stories, do picture talk, and do circle time to engage early graders more in interactions and sharing experiences. A preschool is where they develop their speaking skills and learn new vocabulary in English and Nepali literature. Nevertheless, since our mother tongue is Nepali, they conversation mostly in Nepali at home and in their surroundings.

Nevertheless, as they get promoted to junior and senior kindergarten, they also use more English vocabulary and interact in English to prepare them for formal education. Moreover, due to the pandemic, the children were locked at home. They could not interact much with their peers and teachers as they did in school, so their chances of learning and speaking English got minimum, and they became less outspoken while responding to queries in English. The home environment does matter in the development of language skills among early learners, and our children are more exposed to the Hindi language through movies, cartoons, serials, etc., than English. So, what was lacking in our pedagogical practices that could not create an environment where young children could be encouraged to speak in English? This also made us reflect, why do we make them read and write if they could connect it to their real life? How could we help them to be able to communicate in English?

Storytelling expresses experiences, imagination, and stories through words and voices (Barianos, Papadakis & Vidakis, 2022). According to Sharma (2018), storytelling is a basic instruction likely to develop emotional intelligence and help learners understand human behaviour. Storytelling pedagogy has been a potent tool in English literature as it helps instil vocabulary, speaking, listening, creativity, and critical thinking. Storytelling stimulates learners' language development (Speaker, 2000; Wallin, 2015; Sari & Suryana, 2019). Storytelling also enhances language skills as they listen/use vocabulary and sentences to listen/tell their stories. Coding and decoding vocabulary to make meaning also helps them develop language skills. Many activities like read-aloud sessions, picture reading, and storytelling have been found to help develop language in children (Sari & Suryana, 2019).

However, as the global world is changing daily, so are people's lifestyles, needs and demands. Traditional storytelling does not help to attract the child anymore as their attention span is less than adults, and they get bored very soon. So, what is new? How can we engage the children in learning without getting bored? Children today are born in an environment surrounded by technology.

Furthermore, as so, has the global world been dominated by technology, and education is not exceptional either (Kalogiannakis & Papadakis, 2017; 2020). Girmen and Kaya (2019) also mentioned that the development and use of digital technologies in the educational process rapidly grow in the 21<sup>st</sup> century. Technology integration in education has become a part of making pedagogical practices more relevant, convenient, appropriate, practical, globalized, etc. Digital Storytelling can be seen as merging the art of telling stories with various digital multimedia, such as images, audio, and video (Robin, 2006, p. 2016). Integrating technology through audiovisual tools like sound, pictures, digital characters, and emotions has made storytelling more interesting, attractive, practical, and accessible. It helps to develop curiosity and excitement in the learners (Papadakis & Orfanakis, 2018). We call digital storytelling today. Learning can also be made more exciting and applicable through digital storytelling. Robin (2016) also mentioned that digital storytelling makes learning more relevant for learners. Digital storytelling has replaced traditional ways of telling stories with added multimedia features that infuse creativity into their imagination and expression (Smeda et al., 2014). Digital storytelling motivates learners to develop their English language and critical thinking skills (Yang & Wu, 2012; Niemi et al., 2018). Leoste et al. (2021) also mentioned that children develop their language, cognitive and social skills through digital storytelling and playing games, which I am trying to embed in this study. Literature supports that digital storytelling is a practical pedagogical approach to enhancing language skills among learners (Papadakis, 2018; 2021).

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countries, including Nepal. Since the teaching-learning resources are available, the medium of instruction is English. So, in early childhood development centres run by private institutions in Nepal, the medium of instruction and learning resources are all in English. However, the translation is done in the learner's mother language, Nepali. The regular conversation in the classroom between peer learners, teachers, and caretakers is made in Nepali and English. Teaching a foreign language to young children is difficult (Abdul-Ameer, 2014). We, preschool educators, sing rhymes, tell stories, do picture talk, and do circle time to engage early graders more in interactions and sharing experiences. A preschool is where they develop their speaking skills and learn new vocabulary in English and Nepali literature. However, since our mother tongue is Nepali, they conversation mostly in Nepali at home and in their surroundings.

However, as they get promoted to junior and senior kindergarten, they also use more English vocabulary and interact in English to prepare them for formal education. Parents also opt for private institutions that have become a popular choice for their children's education in Nepal despite its high fees as they adopt English as a language of instruction (Bhandari, 2017). Also, English language skill helps learners to compete in the global market and be global citizen. Bhandari (2017) also mentions that parents see English as a crucial factor in competing in a globalized era, so they prefer children to learn English from the early years of education. The demand for the English language has become popular even in the local job market due to lucrative job offers by the INGOs, NGOs, Tourism sectors, banking sectors, and multinational companies that have invested in the Nepalese Business sector. So, English as a literature subject is introduced in preschools in Nepal to give a strong foundation of the global language. Moreover, formal schooling demands children to have good language skills in English.

Henceforth, more focus is given to English language development in junior and senior ECD classes. Even though English has been a medium of instruction in schools in Nepal from the fundamental level, young children in preschool are hesitant to speak in English. One of the significant issues is the practice of wrong patterns by teachers to teach literacy. The essential skill for learning any language is listening, speaking, reading, and writing skills in a pattern (Gomathi, 2014). However, due to conventional pedagogical practices that focus more on content and paper-based assessment, learners often knew how to write first and then read but needed help communicating in English. Interaction among peers and teachers, which helps improve speaking skills, has declined due to pandemics forcing the schools to close physically. The home environment does matter in the development of language skills among early learners, and our children are more exposed to the Hindi language through movies, cartoons, serials, etc., than English. So, what was lacking in our pedagogical practices that could not create an environment where young children could be encouraged to speak in English? This also made us reflect, why do we make them read and write if they could connect it in real life? How could we help them to be able to communicate in English?

Nevertheless, all schools were closed due to the pandemic, and interaction in English among peers and teachers has declined (Mohammed, 2022). Even senior kindergarteners could not answer a few sentences when asked, 'How are you doing?' This was a significant concern of all the parents, teachers, and us during the pandemic.

As we made inquiries through their parents, we learned that children watch more Hindi cartoons and films. That could be because we do not have sufficient digital resources in our language, which is Nepali and Hindi vocabularies are similar to Nepali and are easy to understand. This also attracted our attention to the power of ICT (Information and communication technology); children are attracted more to audiovisual stories with animations than verbal stories. From various expositors from formal and informal learning, we learned the importance of the integrated approach in pedagogical approaches and how it makes a difference in their learning. So, we decided to integrate technology into helping young children develop their listening and speaking skills in English through digital storytelling.

English, a global language, has also become a popular demand for parents. However, parents enrol their children in private institutions paying higher amounts to get a better education and prepare them for the competitive global world. Even though English has been a medium of instruction in schools in Nepal from the fundamental level, young children in preschool are hesitant to speak in English. The essential skill for learning any language is listening, speaking, reading, and writing skills in a pattern (Gomathi, 2014). Nevertheless, due to conventional pedagogical practices, which are more focused on content and paper-based assessment, learners often needed to learn how to write and read but could not communicate in English. Interaction among peers and teachers, which helps improve speaking skills, has declined due to pandemics forcing the schools to close physically. The home environment does matter in the development of language skills among early learners, and our children are more exposed to the Hindi language through movies, cartoons, serials, etc., than English. So, what was lacking in our pedagogical practices that could not create an environment where young children could be encouraged to

speak in English? This also made us reflect, why do we make them read and write if they could connect it in real life?

Guided by the research question—how can digital storytelling as a pedagogy enhance the language skills in English during the pandemic of COVID-19 (Karakose, Yirci, & Papadakis, 2022; Karakose et al., 2022) of first-author preschool's upper kindergarten learners? The primary purpose of this study is to explore how digital storytelling helps improve language skills in English among upper kindergarten ECD learners. On the contrary, this study is based on participatory action research carried out in first author preschool to improve English language skills more focused on speaking skills in Upper kindergarten learners through ICT integration in pedagogical practices. Likewise, digital storytelling has gained popularity within a short period. It has been used in pedagogical practices at all levels of education, especially in ECD centres, to make learning more fun for early learners. This study aimed to enhance language skills in English by using digital stories as a teaching strategy in upper kindergarten. The findings of this research will also support educators in the practice of digital stories through which the speaking abilities of early learners at preschools may add value in terms of vocabulary, pronunciation, comprehension, and fluency. This study has helped early-grade learners overcome their hesitation to speak in English. Furthermore, teachers could explore and use different techniques and ICT tools to design lessons more effectively and interestingly (Dahal et al., 2020; Dahal et al., 2022a; Dahal et al., 2022b) to foster English language skills among the early grade learners of the school. It has also helped to test if integrating ICT tools could make a difference in learning English literature speaking skills and how young children react to digital storytelling.

## 2 Literature review

### 2.1 English language curriculum in Nepali preschools

English in Nepal was first recorded in the seventeenth century (Shrestha, 2017). As English became a global language, Nepal could not remain secluded. However, Nepali (Khas Bhasa) has been regarded as the National/Official language, and the present constitution of Nepal refers that all languages will be given equal importance. Nevertheless, on the practical front, English has become the functional language in almost every sector and has gained popularity and acceptance among the country's population. Thus, English as a literature subject has become compulsory in most countries, including Nepal. There needs to be a specific guideline regarding English literature in the ECD curriculum developed by the curriculum development centre (CDC). However, due to the popularity of English as a global language and the parents' demand, all the ECD centres in Nepal have English literature from the foundation level itself. Moreover, the learning resources and materials are primarily available in English, and the medium of instruction is also done in English. However, the translation of the same is done to give clear concepts to the learners.

### 2.2 Digital storytelling

Digital storytelling has become prevalent in education, social media, and government offices. Digital storytelling is all about adding creativity using different tools of ICT like pictures, videos, audio, animation, graphics, and text to present a story. Digital storytelling combines stories using digital multimedia tools (Robin, 2006). Smeda et al. (2014) mentioned that using digital storytelling as a pedagogy can create a constructivist learning environment for deep and meaningful engagement of the students. They have also added that digital storytelling is used for the incarnation of the conventional art of oral storytelling and has become an essential part of pedagogical practices. Traditional storytelling is mainly limited to reading a story from books with/without a picture and sharing experiences through verbal speech. Storytelling is an art, but adding digital features makes it more creative, relevant, attractive, comprehensible, and clear as it is presented in audiovisual forms. Digital storytelling can be an influential pedagogical tool for learners of all ages and grade levels to help them create their own stories (Robin, 2016).

Further, Robin (2016) mentions that apart from watching digital stories, learners can also be engaged in creating digital storytelling to empower them with technological and creative skills and demonstrate their understanding of specific themes. Young children are more inclined towards stories with pictures, cartoons, animations, and visual art than audio sound. However, it also depends on how the storytellers present the story that adds value to the listener. Digital storytelling motivates learners to develop their English language and critical thinking skills (Yang & Wu, 2012; Niemi et al., 2018). Leoste et al. (2021) also mentioned that children develop their language, cognitive and social skills through digital storytelling and playing games, which I am trying to embed in this study. Literature supports that digital storytelling is a practical pedagogical approach to enhancing language skills among learners.

### 2.3 Development of language in early childhood

Early childhood development has many stages of learning as they grow up from infancy. A child initially learns from his/her environment that he/she is brought up in and the family members who interact with them, then they learn from interaction with their peers, teachers, and caretakers in their school. Children in early childhood learn languages that they get to hear (Sari & Suryana, 2019). So, interaction and environment play a vital role in developing a child's basic skills like listening and speaking skills. Brown (2014) states, "All children can develop a strong foundation for literacy and reading development when they are given opportunities to engage in purposeful, meaningful language and early print activities" (p. 35). Many activities like read-aloud sessions, picture reading, and storytelling help to develop language in children (Sari & Suryana, 2019). The more we create a topic for discussion and interaction, the more the children learn to speak new words and sentences. Learning becomes more meaningful for children when they are actively engaged in the learning process and provided the opportunities to interact, express their feelings, share their experiences, and do hands-on activities.

## 3 Theoretical framework

This study revolves around Vygotsky's Social Constructivism Theory (SCT), as we believe learning should be child-centred, active, significant, discovery-oriented, and knowledge-improving. Likewise, learning becomes meaningful for early learners when they are engaged in the learning process through social interactions and sharing experiences. Likewise, Kalina and Powell (2009) state that social constructivism is an effective pedagogical practice for every learner, incorporating social interaction and collaboration. They also added that social constructivism is grounded on a learner's social interactions with peers and teachers and a personal critical thinking process in the classroom. Digital storytelling is one such pedagogy that involves lots of interaction, sharing, queries etc., which stimulates language development. We have subscribed to Vygotsky's Social Constructivism by involving children in interaction through digital storytelling sessions in English to improve their speaking and listening skills.

## 4 Research methodology

For this study, we have used the multi-paradigm, a combination of interpretive and critical paradigms. According to Taylor and Medina (2011), educational researchers can majorly contribute to aligning curricula, teacher education, and classroom teaching and learning practices with the complex and challenging needs of the 21st century by drawing on multiple paradigms. We have interpreted the experiences of participants' interaction in English before and after applying action plans (action plans can be seen in Table 1). We also critically examine our school's pedagogical practices. Likewise, we have accepted the voices of our participants without being judgmental and critically reflecting on the study. Research design includes an overall plan for the activities to be undertaken in the study. The key to understanding qualitative research is that 'meaning is socially constructed by individuals interacting with the world' (Merriam, 2002, p. 3). In this research, we have applied the qualitative method McNiff and Whitehead's (2010) action research to implement our plan to improve the language skills of early-grade learners. These include sharing digital stories and engaging them in interaction, analyzing their participation and communication skills and reflecting on the whole process. Action research is done to improve practices through planned action and reflection. McNiff and Whitehead (2010) state that action research is used to refine our practices through better knowledge and express possible implications of the study with a motive of helping all to discover improved ways of surviving together productively. It includes identifying a problem or issue, planning a program to bring possible positive changes, putting the program into action, analyzing the findings, and reflecting on the whole process. Clark et al. (2020) define it as:

*Action research is an approach to educational research commonly used by educational practitioners and professionals to examine and improve their pedagogy and practice. In this way, action research represents an extension of the reflection and critical self-reflection an educator employs daily in their classroom.* (p. 8)

Action research improves practices through cooperative learning. Action research is adopted by an individual with a common purpose and is participative and collaborative (Clark et al., 2020). Likewise, to improve the English language skills of early learners, we decided to collaborate with the parents and implement the action plan in upper kindergarten to see if the desired changes may occur after implementing the action plan. This also helped the first author, as a researcher, explore the possible solutions to the issues the school community is facing collaboratively. For this study, a consent letter was sent to the parents stating the purpose of the study and asking for a child's purposive participation. A virtual meeting was also held to



**Table 1** Action plan for conducting action research

Days	Activities
Day 1	Rapport building with my participants, orienting my research issues, develop different strategies for the implementation of digital storytelling pedagogy to enhance students' listening and speaking skills in pre-school.
Day 2	Developed action plans for implementing in the classroom. Break it down in small steps to make it more convenient for early learners. (1) Everyday start the class with normal conversation; (2) Show video of DS; (3) Ask queries to children shown in the video; (4) Talk about the title and content of the video and ask them what they liked about the story/video. Which words were known to them? Which word did they find new and difficult to connect? (5) Ask them to re-watch the video at home and pick up any 10 vocabularies shown in the video and make new sentences with those vocabularies as an assignment. # Parents can help them to understand the meaning of the vocabularies only); (6) After 4 days of implementation of plan do conversation with children using the same vocabularies and record their conversation. Also ask them to make a short video/ Digital story in any topic of their choice.
Day 3,4,5, 6,7, Cycle one	The developed strategies will be implemented in the class and observation of the implementation of new strategies without interfering feeling and responses to what is happening, describe the virtual setting, record the activities and events and document the conversation of children by taking the descriptive field notes.
Day 8	I will write a reflective journal by analyzing descriptive notes and make a critical reflection of the whole observation by listening to the recordings.
Day 9	I will have informal conversation with the participant regarding the implementation of the strategies and get the critical feedback of the participant and record this informal conversation. I will transcribe and analyze this recorded informal conversation. As per the reflective journal and transcribed informal conversation with the participant, I will further critically analyze the plan and make modification on the strategies.
Day 10,11,12,13	I will observe the next strategies, second cycle, being implemented in the class and take descriptive notes of the virtual classroom activities, and learners' active participation in interaction and discussion.
Day 13	I will again write a reflective journal by analyzing descriptive notes and make a critical reflection of the whole observation and find the differences in first and second cycle of plans.
Day 14	I will interact with the participant regarding the second cycle of implementation of the plans, get the critical feedback of the participant and have communication about the differences between two cycles. This interaction communication will be recorded. Then, I will transcribe and analyze this recorded informal conversation. Finally, I will compile all the data for interpretation and meaning making.

orient the parents regarding the research project, and after they agreed on the consent letter, we formally started the research study.

The research site of the study is the virtual classroom in both synchronous and non-synchronous modes, as the early learners will be doing both online and offline activities based on the study. Moreover, the research participants are fifteen learners of upper kindergarten and three parents. The upper kindergarten learners are participants as they are the senior-most kids in the preschool, and their needs are being addressed through this study, so their performance has helped to support our research findings. Likewise, three parents who have been directly observing the virtual classes and their ward is the one who hesitated to speak English mostly. So, their reflection would also make our findings more authentic. All the digital stories shared with the learners were kept in their google classroom, and it was possible only with the help, cooperation, and support that this research was possible virtually as well. Parents also helped the learners re-watch the shared digital stories at home and guided them to do their home assignment, which was to write ten new vocabularies from the story. They also help learners with the read-aloud sessions at the home of the shared stories.

For the research study, we collected data using a semi-structured questionnaire, interview, observation tools, and field notes; for this purpose, we developed a semi-structured questionnaire in google forms and sent it to the parent participant. We also took virtual interviews with them and observed the impact of digital storytelling on the upper kindergarten learners during virtual classes. We have also used field notes of class observation, reflective journals, presentation slides, and recorded participant videos as data for this research study.

We developed semi-structured questions for the parent participants to answer our queries regarding their experience of the digital storytelling activity. These parents were present in all the classes during the research period and had directly observed the class activity and children's learning experiences. We have used interviews for collecting data as interviews are beneficial for getting the story behind a participant's experiences. The collected data from the interview was transcribed, and the interviewer could pursue in-depth information about the topic. Observation is another tool we have used for collecting the data for the study. We observed the virtual class activities and recorded them for evidence. While observing the sites and participants, we took some notes on the field of the virtual classroom activities and participants' involvement in the learning process. It helped us record the virtual classroom settings, participants' attitudes towards the lesson, and how they adapted the digital storytelling pedagogy.

Along with this, we could note the facial expression and feelings of the participants while

expressing their learning experiences in the class. The collected data from the interview were then transcribed. After analyzing all the collected data, we coded and categorized it into suitable themes to generate meaning from the data.

## 5 Data analysis and interpretation

Data analysis refers to analyzing the collected evidence throughout the study to support the research findings. Interpretation and meaning-making of data are crucial processes of any research. We have also interpreted the collected data and presented it into suitable themes to make meaning out of it to support our findings.

### 5.1 Effects of digital features on language development

Digital stories are a great source of attraction for early learners as it has many features like colourful pictures, animations, background, voice, actions, music, text, etc. It also is an excellent source for learning language skills, including the four competencies of listening, speaking, reading, and writing. Digital Storytelling has proved to be an excellent resource for learning verbal and nonverbal communication through digital features. Digital storytelling grabbed the attention of Early learners with its different innovative features, and they learn more quickly from pictures and actions than words. This also helped them to be active listeners. According to Singh (2019), "A child gradually speaks a language through thorough listening by observing every word keenly" (p. 297). He also mentioned listening as a significant element of language teaching, mainly for comprehension and perception. Listening is one of the basic skills for learning to speak (Gomathi, 2015). Early learners are excellent at imitating what they observe and hear. By watching digital stories, they hear the words and dialogue and see the pictures and animations, which ultimately contribute to developing both verbal and non-verbal language.

*After showing them a digital story on an emotional theme, the first author often asked them what they liked most about the shared story, to which Sneha (one of the students) said I liked the voice, ma'am. Ananya added, 'I liked the picture, ma'am'. Yugisa also said excitedly, 'I liked music, ma'am'. Almond said in Nepali, 'Ma'am malai video ma smiley maan paryo' (Trans: I liked the smiley emoji in the video). When further asked how to show they were happy, they showed their twinkling tooth with a big smile.*

*Meanwhile, Almond said clap garera ma'am (Trans: My clapping ma'am). Likewise, while showing another story of The Ant and The dove' Saurya pointed out that the video shows drinking water from a mug, and he questions, 'Ant le pani mug bata pani khancha ta?'. The first author corrected him, not khancha babu piuncha, and then he asked me again, 'Ant le pani mug bata pani piuncha ta?' (Trans: Does an ant drink water from a mug?).*

The curiosity with which they watch digital stories can be assessed by the queries and comments they make after watching them. They are also speedy in responding when asked questions from the shared story.

### 5.2 Vocabulary skills development

During interaction after sharing digital stories, early graders used standard English vocabulary like an ant, dove, lion, and hunter even while speaking in Nepali because they are more familiar with it. Even adults nowadays are more used to English vocabulary, so we often switch the code from Nepali to English while speaking our mother tongue. Sharing the same version of digital stories in Nepali and English helped learners make meaning of the vocabulary. According to Kurnia (2017), vocabulary is essential for learning English. The more, the better. Young learners can master English language skills by getting exposed to more vocabulary and using them for meaning-making. After showing each digital story, the first author often asked them the meaning of the vocabulary heard in the story, and it amazed me to see their enthusiasm in responding. They did not shy away from trying what they understood without being bothered about right or wrong. Also, the first author assigned them to write any ten new words they heard to make them more familiar with those vocabularies. The first author engaged them in an activity after showing them the digital story of 'The Very Hungry Caterpillar' in which they had to make a new sentence with the vocabulary they heard in the story and was amazed to see the children coming up with beautiful sentences like:

*Ananya said, 'I am hungry'.*

*Sneha said, 'I saw a caterpillar'.*

*Sanji said, 'Butterflies are beautiful'.*

*Saurya said, 'I like apple'.*

*Almond said, 'I like to eat cake'.*

*Yugisa said, 'I like to eat strawberries'.*

*Pranshu said, 'Birds lay an egg'.*

*Jas said, 'I like to eat sausages'.*

*Esha said, 'I ate cheese pizza on Sunday'.*

*Romi said, 'I like lollipops'.*

These vocabularies are from the story 'The Very Hungry Caterpillar'. This gave us the feeling that children are very creative, and when they are given the opportunity, they perform wonderfully. They watched the digital stories and used the vocabulary to form a new sentence, showing that they could make the meaning of those words and create new sentences out of it. Digital stories also helped learners to make meaning of the vocabulary by connecting them to the story and thus reconnecting it to a new situation.

### 5.3 Digital storytelling motivates interaction

On the first day of the virtual class, we interacted with the learners in English to test them, but we are still waiting for their responses. Even a simple conversation like 'How are you?' were not responded to, and only a few could respond. It made us consider whether they were comfortable speaking English or did not know it. According to Vygotsky, social interaction helps in language development, and meaning-making is an integral part of it (Kalina & Powell, 2009). It also creates a social constructivist classroom. So, Digital storytelling created an opportunity for interaction related to the shared stories to engage them.

We posted all the digital stories in google classroom so that they could watch the story even at home when they felt like it and for doing their assignment. We made edpuzzle videos on the same story and asked them questions between and after it was over. When the children could not answer those questions, the first author replayed the stories. Children are brilliant. They make meaning by listening and watching the pictures, visuals, actions, etc. Apart from the shared stories, we made everyday English conversations more familiar and comfortable. The first few days, we watched digital stories about emotion and started conversations and discussions on emotion. We made them share their moods and emotions throughout the day and told them mine too. We showed them a digital story, 'When I am Happy', and continued with a conversation on the same topic. The first author told them she was pleased that morning as she got to prepare a delicious breakfast for the family, which she hardly managed to do. They were very excited to hear about it and started sharing their stories.

*One of the children, Prayansh, said, "Ma'am, I am also thrilled because my cousin has come to meet me." Esha said, "I am happy because I got to play with my brother." Rehan added, "I am happy because I got my favourite toy." Aanaya added, "I am happy because my father brought me lots of chocolates." Saurya added, "I am happy because I went to my maternal uncle's house." Mallini also excitedly said, "Ma'am, I am happy because I got Mash mellow". Likewise, children kept adding their source of happiness like getting chocolates, and toys, riding bicycles, watching their favourite cartoon, visiting their maternal uncle's house, etc.*

These simple conversations also helped them to build their confidence in speaking English. These also supported Vygotsky's Social Constructivist Theory which points out that learning happens through social interaction and experiences in their environment. First, they watched stories about emotion and shared their emotional experience through stories. When we create a supportive environment, learning becomes more accessible and more fun. Similarly, we also showed them other stories on emotions like When I am sad and When I am angry, and they also shared their experiences of what makes them sad and sometimes angry.

In the second week, we showed them digital stories on moral values like 'The Ant and The Dove', The Lion and The Mouse, and The Thirsty Crows both in English and Nepali. By then, learners were already comfortable with this new way of learning. After this, we shared the story of The Very Hungry Caterpillar only in English; to our surprise, learners were comfortable with the language. After every story, we made them play a quiz, ask the meaning of the vocabulary in the Nepali language, and later asked them to form new sentences with that vocabulary.

*The first author was amazed when she asked them what help meant.*

*Help! This was shown in two of the stories she showed to them, and most of them answered Bachayo Bachayo ho ma'am! Moreover, again, she asked them when do you ask for help. Yugisa immediately said when we are in need, ma'am. Likewise, the learners were quick to answer when she asked them what the difference was between the English and Nepali versions of the digital story 'The Ant and The Dove'. Saurya said ma'am in the English version of the story. The hunter used an arrow to target the dove, whereas, in Nepali, he used a gun. Aarya said ma'am, in the English story, the ant bites the hunter in the foot. In contrast, in Nepali, Kamila le haat ma tokethiyo (Trans: In Nepali version, the ant bites the hunter on his hands) Sochu added ma'am in English story, haike ant pani khada river ma slip bhayo tara Nepali ma ta rukh bata khasethiyo (Trans: Sochu said in English story the ant slipped in the river while drinking water while in Nepali version the ant fell from the tree into the river).*



These conversations with students also made us realize that storytelling does not only help to improve English but also Nepali, which is their mother tongue, as the learners explore the meaning of the vocabulary as heard in the shared stories. This shows that sharing the same digital stories in English and Nepali helped the learners connect with vocabulary, meaning, and differences. This environment created more excitement in the learners as they understood the stories much easier and connected with English vocabulary.

#### 5.4 Digital storytelling as flipped classroom activity

Language is something that the child learns first at home from their parents and family members. As learners were early graders and the classes were run virtually, their parents became directly and indirectly involved. Learners can better command any language with continuous practice and exposure to the targeted language (Gomathi, 2014). Parents' involvement and cooperation in the language development of the early learners were much needed. Moreover, according to Vygotsky, cooperative learning is essential for constructing more profound knowledge (Kalina & Powell, 2009). Their timely motivation and interaction with the learners at home also helped build confidence in early learners. Though all the parents were involved yet, for this particular study, we selected three parents as participants whose children were hesitant to speak English in the class to help first with genuine feedback and suggestions in the implemented action plans. All the digital stories shared with the learners were kept in their google classroom, and it was possible only with the help, cooperation, and support that this research was possible virtually as well. Parents also helped the learners re-watch the shared digital stories at home and guided them to do their home assignment, which was to write ten new vocabularies from the story. They also help learners with the read-aloud sessions at the home of the shared stories. While doing so, While observing the virtual class daily, parents were also asked queries on the learners' development after implementing the action plan. We were overwhelmed to hear the positive responses from parents as they shared the observation of improvement in their children's language development, especially in English. When asked if digital storytelling pedagogy has helped early learners to improve their language skills, the responses from the three co-researcher/ parents were:

##### **The first parent:**

*Yes, my son has gradually improved his language skills both in English and Nepali. He has started using many new vocabularies and understands the meaning of those words, which is very impressive. Earlier, he was not willing to speak English at all, and he often used to mute the mike when he had to speak, but now he has become very confident, speaks up willingly, and responds well.*

##### **The second parent:**

*Yes, Storytelling pedagogy helped my son develop his language skills, including listening and speaking skills. He also has started sharing his ideas in English and speaks them more confidently now. I was happy to see him telling me about the vegetables in his garden to his teacher in English: He said, 'This is a cucumber. I love to eat cucumber, and it is delicious. Ma'am, come to my home to eat cucumber.' He also loves to watch digital stories and is very excited to answer the questions asked by the stories. When I am back from work, he shares the stories he watched in class and tells about everything that happened in the class. Also, he asked me to reshow him the stories posted in google class.*

##### **The third parent:**

*Yes, my daughter's language skill in English has improved. She now tries to spell new words independently and pronounce new words by herself. Earlier she used to be hesitant to speak up in English and Nepali, but now she has built up confidence and is not shy to speak. She eagerly waits for her turn to answer the queries from the shared story. She also tries to express herself openly now, making us very happy.*

From the above statements, it can be seen that even parents have observed and supported that digital storytelling pedagogy thus helps early learners to enhance their language skills in both English and Nepali. Similarly, parents were also asked how they think digital storytelling pedagogy has helped early learners to enhance their language skills, to which the responses were:

##### **The first parent:**

*Well, my child has learned many new words from the stories and used them to make new sentences. Improvement of vocabulary skills has also improved his language skills. Also, while watching digital stories, he asks many questions as he is very curious, which shows his listening skill is good. The gestures and actions in the digital stories have also helped them to express themselves non-verbally.*

### **The second Parent:**

*Digital Storytelling pedagogy has helped to improve the language skill of my child in many ways by listening to the story, asking queries, responding to the queries asked by the teacher, sharing the story at home, writing the new vocabulary from the story and forming sentences with the vocabularies in their own. He has become very interactive and more confident in expressing himself. Likewise, he also narrated a story of his title, 'I am happy'. A read-aloud session was also assigned to the children to develop reading skills under the guidance of their parents. It was very effective for my child as he has significantly improved in reading the text. The digital storytelling pedagogy created a platform where my child could actively engage himself and participate in the learning process.*

### **The third parent:**

*Somehow yes, through this digital storytelling pedagogy, not only the kinds but we are also learning the new pronunciation of old words which we thought we knew but could not know during our school time. We were not taught the correct phonic sound of the letters, so we most pronounced the letter l as yl rather than el. Likewise, silent letter words were most confusing as we were not taught about those things in school, so even our English language skills had pronunciation and spelling errors. Nevertheless, I am happy that my daughter is learning the correct sounds of letters. Her phonological awareness has improved dramatically, and so have her pronunciation and spelling power. This has also boosted her confidence in speaking English, and she has started to open up in class discussions.*

The above overview of the parents has given us insights into their experience as a parent and co-researcher. They have observed that digital storytelling pedagogy has helped early learners enhance their language skills and be more confident in expressing themselves. The digital storytelling pedagogy created an environment where they are exposed to more opportunities to listen and interact, which has helped them gain more confidence in speaking. We were also happy that even parents got aware of phonemes and enjoyed the progressive ways of learning, which are more focused on the active participation of the learners.

## **6 Discussion and finding**

This study shows the result of different ways adapted to engage the early learners in developing their language skills, mainly focused on speaking skills of the English Language. This study shows the result of different ways to engage early learners in developing their language skills, mainly focused on English. One of the significant findings of this study shows that "Working with Storytelling provides opportunities to speak with the students - something every teacher should take the opportunity of" (Walling, 2015, p. 10). Children learn from their surroundings, so digital storytelling as a pedagogy was adapted to engage the early learners actively in the learning process through interaction, cross-questioning, inquiries, sharing experiences, and learning new vocabulary simultaneously. This study also found that digital storytelling significantly impacts the learners' language development as they get the opportunity to interact more with their teachers, peers, and parents. Nishioka (2016) also argues that digital storytelling is more influential than traditional storytelling methods as it supports instant delivery of the storyline and online interaction with the audience. Also, they become more confident in expressing themselves as they engage in daily conversation and share their feelings. The practice of digital storytelling pedagogy boosts children's attention, and concentration on verbal input received (Abidin et al., 2011). As digital stories are a combination of visual, audio, text, and music, it attracts learners. It keeps them focused, which ultimately helps them develop their listening and communication skills in both verbal and non-verbal.

The development of vocabulary is crucial for language and literacy development; thus, it is essential to have vital preschool early literacy programs (Roskos & Burstein, 2011). A child's vocabulary skills initially start from home, but as for the English language, it is primarily introduced in schools. Early-grade learners were exposed to more vocabulary, and the meaning-making of that vocabulary also helped them form new sentences, which ultimately developed their language skills in English and Nepali. It was also found that digital storytelling helps early learners to be more creative in expressing themselves both verbally and non-verbally. Watching videos is popular and loved by both children and adults. Since video is a critical feature in digital storytelling, it also strikes children (Shelton, 2017, as cited in Moradi, 2019). Learners are more focused and curious while watching videos, so they quickly grab the content, words, and verbal and non-verbal actions. The environment created for this study was to encourage them to develop their English language speaking skills but not just be limited to it. A child cannot speak until and unless they get to listen, and digital storytelling pedagogy incorporates basic skills like listening and speaking through audiovisual features and creating an environment

for interaction. Early learners were free to express themselves in their native language, but they were guided to translate the same sentences into English, thus building more confidence and comfort. The more they listen and interact, the better they learn the language. Digital storytelling pedagogy contributes to learning since learners are actively engaged in decoding and meaning-making of the story (Donato, 1994, as cited in Abidin et al., 2011). Though the focus of the study was more on English language skills, it was found that early learners also developed their native language skills, Nepali, while making meaning of the vocabulary and learning gestures by watching the animation and actions in digital stories.

It was also found that digital storytelling pedagogy creates an environment for interaction and discussion, significantly influencing language skill development. Strategies like asking queries and allowing learners to share their experiences/ stories created an environment for social interaction and thus helped them to enhance their language skills. Digital storytelling also created a collaborative learning environment as all the participants came up in one virtual frame, and thus the session became more interactive (Nishioka, 2016). The repetitive nature of digital stories contributes to helping children gradually learn the second language (Abidin et al., 2011). Revision of their virtual class activity, like retelling the same stories to their parents and discussing the related topic at home, boosted the early learners' confidence. Early learners' read-aloud sessions of the same story with their parents at home effectively developed their pronunciation and vocabulary skills (Kastriti et al., 2022). It also helped build confidence in early learners to open up and share their feelings and experiences. They were more comfortable speaking the English language as well.

During this study, parents also closely observed their children's performance and knew their strengths and weaknesses. Their direct observation and reflection also helped create a supportive home environment for developing the children's language skills. Parents even shared the joy of learning with their kids, which they missed in their school days. They learned how to pronounce words correctly, which helped the early learners at home.

Last but not least, the primary outcome of this study demonstrates that the environment plays a significant role in the language development of early learners. "Learning awakens a variety of internal developmental processes that can operate only when the child is interacting – with people in his environment and cooperation with his peers." (Vygotsky, 1978, as cited in Bennet & Dunne, 1994, p. 5). Digital storytelling pedagogy has effectively created an environment where early learners actively develop their language skills through interaction and inquiries, including listening and speaking skills.

Digital storytelling also helped early-grade learners to boost their confidence in speaking the English language in a fun way. Moradi and Chen (2019) claim that using technology in pedagogical practices promotes a better learning experience compared to non-technological-based pedagogy (Kalogiannakis & Papadakis, 2017). It is also an integrated form of art that attracts its audience. And so early learners also enjoyed watching the stories with animations, visuals, audio, music, and text, which ultimately helped them become more familiar with new vocabulary. Questioning (Dahal et al., 2019) from the stories also helped enhance listening skills and answering helped enhance speaking skills. Making new sentences from the vocabulary heard in the digital stories also helped them make that vocabulary, adding to their English language skills. As the early learners shared their part of stories in English, their creativity, confidence, and communication skills developed.

## 7 Conclusions

Language is something that a child learns from their surroundings despite it being their native or foreign language, so when a supportive environment is created to help them develop their language skills, children learn faster and better. Storytelling is one powerful tool for enhancing language skills (Speaker, 2000; Wallin, 2015; Sharma, 2018; Sari & Suryana, 2019). Digital storytelling has replaced traditional ways of telling stories with added multimedia features and adds creativity to their imagination and expression (Papadakis et al., 2021; Smeda et al., 2014). Digital storytelling pedagogy is one such practice that creates an environment that has helped early-grade learners to bloom their language skills in English from a bud to a flower. At the same time, digital storytelling also helped them become more familiar with non-verbal communication skills like gestures and facial expressions to show their emotions. The early learners became more creative when they shared their stories using prompts and concrete objects (Drolia et al., 2020). Exposure to more vocabulary and meaning-making of the same helped in the development of both English and Nepali languages. It was also realized that the cooperation between parents and teachers plays a prominent role in the overall development of early learners. This virtual classroom has bonded teachers, early learners, and parents, which has ultimately helped the early learners to grow better. English as a global language is familiar to early-grade

learners as they are exposed to it often at home and school. Previous research shows that digital storytelling effectively improves speaking proficiency, listening, and reading skills (Nishioka, 2016). Early learners can learn to speak English with more opportunities to listen, decode, interact and communicate with people in their surroundings. Digital storytelling pedagogy helps in creating such an environment.

## 8 Implication of the study

The findings of this study show that digital storytelling pedagogy can be a very effective way to create an environment for interaction and discussion, which ultimately help the learners develop their language skills. This pedagogy requires well-planned activities to engage the learners in conversation to develop their listening and speaking skills in English. For example—after showing the digital stories, questioning the story matter, sharing learners' experiences, playing with the new words, assigning to share the story to their family members etc. Children should be encouraged to share their experiences. Also, for early graders, parental support and cooperation are highly recommended to create a comfortable learning environment, motivate them and build their confidence in speaking up in English.

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## Availability of data

Upon reasonable request, the corresponding author will provide the information supporting the study's conclusions.

## Conflicts of interest

The authors declare there are no conflicts of interest.

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