READING CREATES DIGITAL BRIDGES: INTERACTIVE ONLINE READING WITH STUDENTS OF INFORMATION SCIENCES AND ELEMENTARY SCHOOL PUPILS IN CROATIA

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Abstract

Many studies (e.g. Bus, van IJzendoorn, & Pellegrini (1995), Meyer et al. (1994), McGee & Schickedanz (2007), van der Wilt, Femke et al. (2019) and DeBruin-Parecki (2009)) showed the importance and lasting benefits of interactive reading aloud from an early age. This paper is exploring possibilities of improving reading comprehension among 4th grade elementary school pupils using interactive online reading. This paper shows successful collaboration between students and teachers of information sciences and an elementary school teacher and her 4th grade pupils. The aim of this paper is to explore how regular interactive online reading sessions can help pupils to further develop their literacy skills: reading comprehension, storytelling, etc. Furthermore, activities included in this project ended with creation of a collaborative digital story/picture book, which helped all participants to better understand the process of online communication between different parts of Croatia. Since the student involved in the process is from a different region and speaks a different dialect than the pupils, storytelling included learning about different dialects. Most activities were carried out using tales that are part of a well-known Croatian book titled Tales of Long Ago (Priče iz davnine) written by Nobel Prize nominee, Ivana Brlić Mažuranić, often dubbed "the Croatian Andersen". The project was done in five steps: 1. One student retold one tale, Stribor's Forest (Šuma Striborova), in chakavian dialect and made an audio for pupils. 2. Teacher sent the audio to pupils to listen to the tale and discuss unknown dialect-specific words with their parents. 3. Three consecutive online read-aloud sessions followed, with all project participants and with two tales. 4. Pupils retold the tale in their own words, in shtokavian dialect, and made an audio for the students to listen. 5. During the last week, pupils read aloud the original tale to students and teachers in an online session and afterwards retold it in the form of a picture book created collaboratively: each pupil drew one scene from the tale Stribor's Forest. Picture book was digitized and shared online between the participants. Each step of the project was evaluated by pupils and other participants using Padlet.

At the end of the project, pupils gained new knowledge, improved their literacy skills and online communication, enjoyed reading aloud – whether it was their obligatory reading or other stories chosen by them and their teacher. They also learned about Croatian dialects, learned how to collaborate and communicate online and build a collaborative picture book. Students involved in the project had an opportunity to participate in an online collaborative project, create appropriate online learning and teaching materials, and participate in creation and documentation of collaborative online projects. Authors requested and got signed permission from parents for online communication with the pupils and for use of their photos and work for promoting and presenting this project at the BOBCATSSS conference.

Keywords: Interactive online reading, information & communication technology, digital storytelling, reading comprehension research, digital picture book

INTRODUCTION

Many studies (e.g. Bus, van IJzendoorn, & Pellegrini (1995), Meyer et al. (1994), McGee & Schickedanz (2007), van der Wilt, Femke et al. (2019) and DeBruin-Parecki (2009)) showed the importance and lasting benefits of interactive reading aloud from an early age. This paper explores the possibilities of improving reading comprehension and pupils' competencies in modern teaching practice (Tot, 2010) among 4th grade elementary school pupils using interactive online reading. It is designed as a collaborative project, based on correlation (Vrkić Dimić & Vidić, 2015) among school subjects (Croatian Language, Computer Science (ICT), Visual Arts, Homeroom Class) and it was done in an online environment. It also included an extracurricular activity – project-based learning (Mesić, 2007; Visković, 2016). This paper shows successful collaboration between students and teachers of information sciences and an elementary school teacher and her 4th grade pupils. The aim of this paper is to explore how regular interactive online reading sessions can help pupils to further develop their skills and competencies: literacy skills and competencies (reading comprehension, text analysis, storytelling, retelling stories, communication in one's mother tongue and dialects); digital competencies (using ICT to support learning, exchanging information through online video communication, usage of web 2.0 tools in order to present results and final product, and to evaluate a project), learning competencies (ability of collaborative learning, working in small groups, working in pairs and individual learning). Furthermore, activities included in this project ended with creation of a collaborative digital story/picture book, which helped all participants to better understand the process of online communication between different parts of Croatia and to gain new skills. Since the student of information sciences involved in the process is from a different Croatian region and speaks a different dialect (chakavian) than the pupils (shtokavian), storytelling focused on retelling known stories in chakavian dialect. Croatian language has three dialects: shtokavian (which is the base for the standard language), kajkavian and chakavian. This project was focused on learning the chakavian dialect and comparing it to shtokavian. Stories acted as bridges between new meanings of words. By knowing the content and context of a familiar storyline, pupils were able to connect proper meanings of words they knew in shtokavian with the same words used in the chakavian version of the story. It was expected that overall experience and context will help in better understanding of new words.

METHODOLOGY

This project was done in correlation between several school subjects. Correlations were made and implemented into school curriculum for Croatian Language, Computer Science (ICT), Visual Arts, and Homeroom Class. All communication was done in an online environment (Skype, Microsoft Teams and Viber). It was based on an extracurricular activity – project-based learning. The project took six weeks and was done in several steps. Each step required one or more online session(s). It was mostly developed in the framework of project-based learning. Since the main focus was on interactive reading and developing language skills and competencies, during the whole project, participants were reading, retelling, writing, listening, communicating, and learning to recognize, translate, understand and reuse new words and new meanings in different dialects of the Croatian language. The project was done in five steps. 1. The tale, Stribor's Forest (Šuma Striborova), was retold in chakavian dialect and an audio was made for pupils. 2. Teacher sent the audio to pupils to listen to the tale and discuss unknown dialect-specific words with their parents. 3. Several consecutive online read-aloud sessions followed, with all project participants and with two tales. 4. Pupils retold the tale in their own words, now in shtokavian dialect, and made an audio for the students to listen. 5. During the last week, pupils read aloud the original tale to students and teachers in an online session and afterwards retold it in the form of a picture book created collaboratively: each pupil drew one scene from the tale Stribor's Forest. The picture book was digitized and shared online between the

participants. Each step of the project was evaluated by pupils and other participants using Web 2.0 tools, such as Padlet and Lino.it. This project involved the participation of one graduate student of information sciences from Zadar who is a chakavian dialect speaker, one university teacher, one elementary school teacher, and eight pupils from the fourth grade who are shtokavian dialect speakers. All online communication went via Skype, Microsoft Teams Platform and a Viber group titled Distance Learning, which had previously been created for the purpose of communication between the elementary school teacher and the parents of her pupils during the pandemic. Authors requested and got signed permission from parents for online communication with the pupils and for use of their photos and work for promoting and presenting this project at the BOBCATSSS conference.

RESULTS

The whole project was created with the main purpose of giving pupils online support in learning Croatian dialects and creating an opportunity for students to share their knowledge and dialect, along with their storytelling skills, with pupils in the elementary school across the country. The project developed much further than originally anticipated, as participants were driven by the positive energy created within the project between pupils and other project participants. All online communication went through Skype, Microsoft Teams and Viber. Teacher used the class Viber group for disseminating audio files and instructions for pupils, which was also uploaded into the Team set for Croatian language. The Viber group was set during the first Croatian lockdown period, in March 2020, to enable and support communication between teacher, pupils and parents, and it continued to be used during the whole year. Beside online collaboration and interactive reading skills, all participants benefited much more than anyone expected. Participation in the project created an unbreakable bond between the participants. The project was planned and executed in a six-week period, during October and November 2020. In order for all the tasks and goals within each step of the project to be successfully achieved, one or more online sessions were organized weekly. Each week involved one or more assignments following the project plan and steps. Most activities were carried out using tales that are part of a well-known Croatian book titled Tales of Long Ago (Priče iz davnine), written by Nobel Prize nominee, Ivana Brlić Mažuranić, often dubbed "the Croatian Andersen". After a detailed analysis of the first tale, Stribor's Forest, another tale, the one titled Regoč, was added – this one did not end up in the picture book, but it was retold in chakavian, read and listened to, and discussed in several online sessions. Prior to the first online meeting, pupils read the assigned tale as a part of their compulsory reading list and the student also read the same tale. The project steps are presented in details in following pages.

First step: project introduction, aims and planned activities (1 week)

In the first online meeting, all participants introduced themselves. Project leaders presented the main idea, aims of the project and planned activities as well as a duration of each step of the project. All participants were introduced to their tasks and obligations in the project. Pupils gave their own ideas about how to be included in the project and had the opportunity to be important, i.e. equal partners in the project planning team. After the introductory part, the student retold one tale, Stribor's Forest (Šuma Striborova), in chakavian dialect and made an audio for the pupils. Because pupils had had to read the same tale as a part of their compulsory reading list prior to the first online meeting, they were already familiar with the content of the tale.

Second step: presenting the audio story retold in a dialect (1 week)

During the second step and week of the project, several online sessions were organized. During

that week pupils first heard the story in chakavian read by the student and afterward the teacher presented the audio to pupils. Since the pupils speak a different dialect, the new, retold version of the tale was full of new and unusual words used on purpose to expose pupils to as many chakavian words as possible. By the next meeting, pupils needed to listen to the audio, write down any unknown words and discover their meaning. Considering that Croatia is currently in the middle of fully online or hybrid version of teaching, the teacher sent the audio via the Viber group to all pupils, so that they may access it from their computers and mobile phones at home. The same content was uploaded in the Team for Croatian Language. Teacher recommended listening to the tale and discussing any unknown dialect-specific words with their parents and then suggesting the meaning of each unknown word.

Third step: read-aloud sessions and active discussion (2 weeks)

During the next two weeks, within the third step of the project, several online meetings were held. Assignments were organized in a few smaller parts and versions, pupils worked in groups, individually and in pairs, each person, pair or group working on different parts. The work included: discussion about chakavian words, usage of chakavian words in new sentences, translation of those sentences in shtokavian dialect/standard language and discussion about correct usage of cases. Croatian language has seven cases so young pupils can have difficulties using unknown word from a different dialect when they want to use the word in singular or plural form or in a sentence which requires the word in another one of the seven cases. There were several funny usages of the word in wrong contexts and participants had lots of fun during this step. Each online session included read-alouds of the tales followed by discussion.

Fourth step: pupils' assignment and instructions for digital picture book creation (1 week)

In the fourth step, pupils retold the tale in their own words, in shtokavian dialect, and made an audio for the student to listen. Although shtokavian is the basis of the standard language which is taught in school, even the student had some difficulties deciphering the correct meaning due to different accents pupils had while retelling the story. It was also decided that the student would split the shtokavian version of the tale in eight parts to give each pupil a part of the text to read aloud and record their voice while reading. The same text was used as the basis for the scene they needed to draw for the final part of this project – an interactive digital picture book.

Fifth step: Choosing appropriate Web 2.0 tool for creation of the picture book (1 week)

During the last step and final week of the project, pupils read aloud parts assigned to each of them, made audio files and drew the scenes assigned to them. The teacher collected the audio files and drawings, digitized each drawing and sent them to the other project participants. The student and teachers had a brainstorming session and did some research in order to find the best collaborative Web 2.0 tool for the creation of a digital picture book. Those Web 2.0 tools included: Anyflip – which did not support audio files, Story Jumper – which did not support scanned documents and was not free to use when all content was uploaded. It was agreed that BookCreator (Fig. 1) was the best solution for the final task. Some of the requirements with respect to the tool were: free license, scanned drawings and audio integration, flipping of pages etc.

Figure 1. *Book Creator Logo*

After finalization of the picture book, a promotion of the final online picture book was organized to celebrate collaboration, friendship and the bond that the participants of the project developed during the time they spent in online collaboration. Each step of the project was evaluated by all participants and evaluation was recorded on Web 2.0 tools Padlet and Lino.it.

CONCLUSIONS

This project was created in order to implement the method of interactive online reading into the Croatian reading curriculum. It was set in an online environment not only due to the global COVID-19 pandemic but also to bring very distant parts part of Croatia closer. The student was in Zadar (on the coast), the university teacher was in Zagreb (capital of Croatia in the middle of the country) and the teacher and pupils were in Budimci (a small village in Eastern Croatia). Distance between Zadar and Budimci is more than 520 km. In order to gain new knowledge, the pupils and student involved in the project improved their literacy skills, online communication and improved the usage of unavoidable technology in an online environment – Web 2.0 tools. They all enjoyed reading aloud – whether it was performed by the student, pupils or teachers. Active participation in the project helped all participants to acknowledge the importance of team work, the importance of individual tasks which needed to be finished before the bigger tasks, and the importance of following rules and deadlines set at the beginning of the project. This project proved that interactive reading in an online environment, supported by the appropriate technology and guidance, can have a positive impact on pupils' and students' knowledge. Putting the pupils in the center of learning makes the learning process more effective and brings more benefits to the pupils and everyone involved in the process. Pupils experienced a positive change and interest towards reading. Some of them asked for recommendation of books and stories for leisure reading, and asked for the next obligatory read with anticipation. Pupils transferred their knowledge gained through this project and applied it in another subject. For example, they wrote messages aimed at saving our planet (part of an assignment in Science and Social Studies class) without the teacher's input. Implementing project-based activities in Croatian language teaching (and other correlated subjects) resulted in a better understanding of Croatian dialects and their purposeful usage in everyday life. Project-based teaching emphasized the importance of collaborative activities. Overall value gained from the project was also recorded in the pupils' personal portfolios. The digital picture book was presented to the class and shared with the pupils' families to enjoy it together.

In conclusion, all project participants finished the project with great satisfaction and all aims and goals have been fulfilled.

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