

Books by kids for kids: the impact of a collaborative project-based learning international book exchange on pre-service teachers

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Abstract

Purpose – The purpose of this article is to discuss the impact of an international book exchange project done with elementary students from a professional development school partnership on the understanding of project-based learning by pre-service teachers.

Design/methodology/approach – A collaborative project between a school in Uganda, a university teacher education preparation program in the United States and an elementary school resulted in a book exchange between the schools. The pre-service teachers worked to develop lesson plans related to social studies and language arts for students with and without special education needs. These lessons were then taught to students at an elementary school who are part of the university's school partnership program. Upon completion of the book exchange, pre-service and in-service teachers reflected on their experiences.

Findings – Pre-service teachers reported that the project provided them a better understanding of collaborative work and project-based learning during their reflections and said they were more willing to take on large projects after seeing the buy-in and value for students.

Originality/value – While pen pal and similar writing exchange programs are not novel, this project sought to explore the impact of having one embedded into a teacher training program on pre-service teacher perceptions of project-based learning and the potential impact to their future teaching practices.

Keywords Collaboration, Project-based learning, Teacher education, Global awareness, Preservice teachers

Paper type Conceptual paper

The purpose of this project was to embed project-based learning into a teacher education program by developing an international book exchange project during multiple courses. This project was then implemented in a professional development school so the pre-service teachers could see the mechanics and impacts of such a project in the classroom.

Project-based learning

In traditional college classrooms, university professors teach the subject matter and students are receivers of information (Alorda, Suenaga, & Pons, 2011, as cited in Guo, Saab, Post, & Admiraal, 2020). Student engagement is limited with interactions and sharing of work mainly between the professor and the individual student (HQPBL, 2016). This can cause a gap in what students are learning at the university and how they will apply this information in a work setting (Guo et al., 2020). As these gaps become more apparent and widen, some college



faculty are implementing more meaningful learning opportunities for their students through project-based learning (PBL) experiences.

The PBL approach is “a learning process in which students are engaged in working on authentic projects and the development of products” (Guo *et al.*, 2020, para. 1). In the Framework for [High Quality Project Based Learning \(2016\)](#), six criteria have been identified as crucial components of PBL: thinking critically about a complex problem; working on projects that are real and make a positive impact on others; collaborating with others; sharing the work with others beyond the classroom; implementing a process that guides the successful completion of the project and self-reflecting on the work and the learning process. Developing these skills can lead to improved learning and higher levels of motivation for students (Guo *et al.*, 2020).

In a study by [Almulla \(2020\)](#), 124 college instructors were asked about their experiences using the PBL approach with their students. Those surveyed indicated that PBL had positive effects on the college students’ collaborative learning, knowledge of subject matter, authentic learning experiences and engagement (Almulla, 2020). Similar results have been found when pre-service teachers participated in PBL experiences during their teacher preparation programs. Student teachers were better problem solvers (Mettas & Constantinou, 2008) and became more aware of their own learning goals, which led to increased learning among young children (Ljung-Djärf, Magnusson, & Peterson, 2014, as cited in Kokotsaki, Menzies, & Wiggins, 2016).

Lenz and Larmer (2020) describe PBL experiences as being transforming and empowering for students. As a part of literacy instruction, authentic learning tasks can motivate students to want to engage in reading and writing as well as provide culturally relevant, meaningful opportunities for learning (Behizadeh, 2015). If students feel personally connected to these literacy tasks, then cultural competence, authenticity and motivation for writing can occur. Behizadeh (2014) found that when 8th-grade students were given a choice of topics to write about and understood the potential impact of their writing on others, they were more driven and inspired in their writing. Engaging pre-service teachers in PBL activities can lead to a deeper understanding of content and a realization of the positive impact of student engagement on learning, both for themselves and K-12 students.

Professional Development Schools and collaborative projects

Establishing Professional Development Schools (PDS) is an effective way to build and strengthen K-12 school and university partnerships. In its mission statement, the National Association of Professional Development Schools (NAPDS, n.d.) describes PDSs as “learning communities that improve student learning, prepare educators through clinical practice, provide reciprocal development, and conduct shared inquiry.” Principles that are the foundation of PDSs include “. . . community, innovative practice, professional learning for all, respectful relationships and collaboration . . .” (NAPDS, 2021, p. 10). The benefits of a PDS are far-reaching and widespread. “The result of working and learning together in a PDS should be better teachers and better schools, which means better learning for children and youth, thus leading to a better society” (NAPDS, 2021, p. 14).

Dresden, Blankenship, Capuozzo, Nealy, and Tavernier (2016) describe PDSs as relationships that are enriching, community-building experiences. The structures of a PDS facilitate innovative, collaborative projects between schools and universities (Pellegrino, Zenkov, Sell, & Calamito, 2014). In a study by Levin and Rock (2003), pre-service teachers and in-service teachers were paired to conduct action-research projects together. In the majority of the pairings, the pre-service teacher and the in-service teacher both found that the collaborative action-research project helped them to develop more meaningful teaching relationships and strengthen their commitment to engaging in conversations about teaching (Levin & Rock, 2003).

Alliances between schools and universities can positively impact K-12 student learning. Stakeholders with a shared vision can improve teaching practices as well as create lifelong learners (Stork *et al.*, 2022). In a collaborative PDS tutoring program implemented by a university and a public charter school, 5th-8th grade students made greater gains in math achievement scores than expected (Cave & Brown, 2010). Collaborative efforts between schools and universities through PDS partnerships can result in improved learning for all of those involved – K-12 students, pre-service teachers and in-service teachers.

Purpose

The purpose of this project was to explore the use of an embedded PBL activity within a pre-service teacher program that was implemented at a PDS school to determine the impact on pre-service teacher perceptions of project-based learning. The pre-service teachers were given the common problem of student motivation or lack thereof for writing. The authors were interested in exploring how embedded PBL in an undergraduate special education teacher education program would impact pre-service teacher perceptions' of PBL, including how it relates to student motivation for writing.

Method

This book exchange project was a collaborative effort between a teacher education program, a professional development school and a partner school in Uganda. University professors co-taught a class session to pre-service teachers related to implementing PBL through a motivational writing experience for elementary students. The pre-service teachers then spent several days at the elementary professional development school leading fourth graders in writing and illustrating stories for a book exchange project with children from a Ugandan primary school. Once the project was completed, the pre-service teachers were asked to reflect on their experiences by responding to open-ended questions pertaining to what they learned from participating in the book exchange activity as well as their thoughts about what the elementary students had learned. Qualitative measures were employed to review the pre-service teachers' responses, and several themes emerged from their reflections.

Teacher education program and PDS school

The teacher education program is a face-to-face program with approximately ten students graduating from the program each year at a teaching university. The university has a partnership with a school district that involves professional development schools, a partner school network and a job guarantee. For this project, an elementary professional development school that had a strong history of working with the special education program was chosen. This school is a Title I school that is eligible for the Community Eligibility Provision (CEP). Pre-service teachers were familiar with the school as they had completed a prior field experience at the PDS. The school in Uganda was a primary school for orphaned children.

International book exchange project

This project incorporated a PBL approach designed to engage pre-service teachers and elementary students in meaningful learning opportunities. The pre-service teachers received classroom instruction prior to entering the elementary school. Once in the elementary school, the pre-service teachers conducted four lessons, and some of the pre-service teachers returned for an additional day to finish up projects with those students who needed additional time.

University instruction. The course that was connected with this project was a communicative arts and language development course. During this course, the primary

instructor invited a guest instructor to model co-teaching to the pre-service teachers. During this three-hour lesson at the university, the pre-service teachers were asked to think critically about student motivation with writing and brainstorm ways to encourage their students to write. The use of pen pals and exchanging of writing was brought up as a means of giving student writing meaning. This idea of an exchange led to discussions on the potential positive impact not only on their students' writing but also on those who were participating in the exchange and broadening all participants' cultural and global competence. From there, the co-instructors modeled how to organize project-based learning, conduct authentic assessments and build student rapport and buy-in. The pre-service teachers then worked together to develop three lessons and an assessment to utilize when they visited the PDS, where they worked with a fourth-grade inclusion class and a self-contained mild/moderate intellectual disability class.

PDS school. As a combined class, the pre-service teachers, the university instructors, classroom teachers and an invited children's author and illustrator co-taught the lessons over the course of four days. Each day started with a whole group lesson followed by a small group breakout session where each pre-service teacher worked with a duo or trio of students on conceptualizing, authoring and illustrating a book that could be exchanged with children at a school in Uganda.

These lessons focused on the history and culture of Uganda via a book study, the writing process and the considerations the author must make when considering the reader. After the books were finalized, the pre-service teachers had to assess the books using the skills they learned during the authentic assessment portion of the co-taught lessons in their course. These assessments were then used to make recommendations for future instruction.

Day 1. On this day, the students were read a story about Uganda and introduced to the book exchange project. Students were told they would work in small groups to write a storybook that would be sent to children their age at a school there. Students were then asked to reflect on topics that might be of interest to those students. The pre-service teachers guided the small group discussions, referencing the book about Uganda to point out information that may help them understand similarities and differences between the cultures. By the end of this 90-min session, students had picked their topic for their storybook. Topics chosen by students included places they liked to visit, their day at school, holidays and sports.

Day 2. On the second day, the pre-service teachers met with their small groups and introduced the graphic organizer that they would use to write their story. The pre-service teachers provided a mini-lesson to refresh students' memories on the writing process before having students work through expanding their topic to include main points and supporting details. At this time, students also started to discuss what types of visual components may be appropriate to support their writing. At the end of this 90-min session, students were expected to have completed the graphic organizer.

Day 3. On the third day, the pre-service teachers provided feedback on the graphic organizer and reviewed the drafting and editing process with the students. The students then worked on writing their rough drafts in their small groups. At the end of the lesson, the pre-service teachers guided the students through the peer editing process to check for grammar and spelling errors.

Day 4. On the last planned day, the pre-service teachers gave each group the formal book that they would write in and send to Uganda. The students took their time writing and illustrating their final drafts, and upon completion, the class celebrated everyone's writing with a small party where they each read their books to the class. Some groups were not able to complete their illustrations during this day and were provided additional time to complete their final draft before the books were sent.

In the end, these books were shipped to the school in Uganda, and the books from Uganda were shipped to us. These books were then delivered to the classes at the PDS school. Sadly,

due to the COVID-19 shutdown, student reflections and a deeper dive into the books from Uganda were not able to be completed as part of the structured portion of this project. However, the books were read in the class and then added to the school library for all students to have access to.

Reflections

After the lessons, the 11 pre-service teachers reflected on the experience and their opinions on PBL by responding to open-ended questions related to the book exchange project. Their responses were measured qualitatively, and the themes we saw in their reflections included improved student learning, increased buy-in, appropriate accommodations/modifications (i.e. all students can participate in their own way) and creativity. These themes emerged based on the pre-service teachers' perceptions and our analysis of their responses.

Several of the pre-service teachers commented that the elementary students were able to learn about the Ugandan culture, and in doing so, they observed how the students became more culturally responsive and aware. "I like that the students learned about being culturally sensitive. The students constantly corrected ideas they thought would make the other students sad," commented one pre-service teacher. Another stated, "The students learned to collaborate well and to think from another cultural perspective." Even the pre-service teachers felt the global impact of this project. "We touch more lives than expected each day. This project is something that others will get to enjoy across the world. That itself is very fulfilling," a pre-service teacher reflected.

Pre-service teachers expressed that students were actively engaged in learning and bought-in to the writing experience through the PBL activity. One pre-service teacher observed, "I liked that the students were so excited to share their ideas with each other. For them, it did not just feel like a writing assignment but more of a fun activity." Another pre-service teacher said, "I liked that it gave the students a purpose and they felt like they were doing something important."

Pre-service teachers also realized the positive impact of PBL and authentic experiences on their own teaching and learning. "It was such a fun and different way to gain hands-on learning experience," exclaimed a pre-service teacher. Other pre-service teachers also discussed the importance of engaging directly with the students. "I absolutely loved working with a group of students and getting to know them and their interests. I learned how to fully stay patient with them and allow them to share their thoughts," indicated a pre-service teacher. Another pre-service teacher stated, "I enjoyed seeing how excited the students were to write. I learned how to use prompting to keep students on task. I enjoyed watching the students interact and combine their ideas for one story."

Moreover, implementing the book exchange project in an inclusive classroom allowed pre-service teachers an opportunity to work with diverse learners and ensure that all students could participate with appropriate modifications and accommodations. As one pre-service teacher noted, "I learned that students have different levels of abilities and that you might have to think on your feet to support their learning." Another noted that "every child in the classroom could take part in the project. Every student no matter the level can take part."

Another theme that emerged from the pre-service teachers' reflections was related to students being able to express their creativity and "own their work, to work with a partner, and to create." Similar thoughts were expressed by another pre-service teacher when they stated, "I liked how the Book Exchange Project allowed students to be so creative and think outside the box. They also took ownership over it in a way that was fun to see!" Additionally, a pre-service teacher remarked, "I think the students learned that they can be creative. I think it gave them a boost of confidence, especially when it came to their writing skills."

The in-service teachers of the involved classes reported that their students enjoyed the project and learning about the students from Uganda, inquired about working on their books during downtime that there were fewer negative behaviors during the associated activities, higher achievement levels for struggling students and even used the fact that they authored and illustrated a book that was sent to Uganda in subsequent icebreaker activities. As an in-service teacher expressed, "Having this book exchange project allowed my students to dive into not only the similarities between children their age but also the differences between the cultures and expand their horizon of knowledge. It gave my students first-hand insight into the children in Uganda's life on a day-to-day basis." Improving students' writing skills was also an important outcome of the project. "I believe that the project benefited my students because it helped my students practice their writing skills and go through the different steps of writing such as brainstorming, drafting, editing, and finalizing. This was writing that was meaningful to my students," explained an in-service teacher. One in-service teacher commented, "This truly was an amazing experience for my students with differences to participate in because it gave my students a sense of inclusion. Doing this gave my students something meaningful to do so that they could teach students in another country about their day-to-day life."

Discussion

While pen pal activities are not novel, this project looked to expand the traditional pen pal activities by going beyond the cultural experience and incorporating 21st century education, including knowledge, skills and character (Ngadiyono, Sukardi, Wijanarka, & Rahdiyanta, 2020). Knowledge education focuses on academic standards such as geography, politics, wants and needs, reading comprehension, the writing process and graphic art. For this PBL activity, pre-service teachers and in-service teachers commented on how it increased students' knowledge of another country's culture and way of life while at the same time improving students' writing skills. 21st-century skills also include creativity, critical thinking, collaboration and communication (Ngadiyono *et al.*, 2020). Elementary students had to work together to create a book that they believed would be enjoyed by the children from Uganda who participated in the book exchange project. Expanding students' creativity was observed by pre-service and in-service teachers. As an in-service teacher commented, "My students were given the freedom during this to write about a location of their choosing and also illustrate that location." Lastly, character education such as mindfulness, compassion, ethics and leadership was addressed. This was observed by pre-service and in-service teachers as both groups commented on how after the elementary students learned about the Ugandan children's culture and lifestyles, they showed empathy by carefully selecting what they wrote about and how they worded their stories. Developing compassion toward others was an unexpected outcome of this project and relates to the significant impact that PBL experiences can have on students.

While this project only shows a snapshot of the potential impacts of PBL in the context of school-university partnerships, the promising alignment to 21st-century skills and the positive feedback from all stakeholders suggest additional research and projects should be developed. Specifically, research should look at the students' perceptions of the projects, their motivation and the actual impact on student performance with both writing and connected skills such as social studies. In addition, a component analysis should be completed to help provide additional information on the best method for developing and conducting such a project. From a logistical standpoint, there may be limitations in the ability of classroom teachers to connect internationally, which could impact the sustainability of projects such as these. This collaborative project stemmed from an introduction at an international educational conference, but these are rarely attended by

in-service teachers. While some websites assist with the connection for pen pal activities, teachers may not know these resources exist. Lastly, due to the COVID-19 pandemic, schools were closed and communication with the teachers was difficult, so no information or follow-up information could be collected from the students or participants in Uganda. In the future, to address these limitations and also continue this type of PBL experience globally, further research could explore extending the book exchange project to other countries to further strengthen students' cultural competence. Zoom sessions between students from the countries involved could also be incorporated into the project as well as additional student writing tasks related to real-world topics and issues. These would allow for increased learning opportunities about other cultures and facilitate making literacy connections across the world.

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