Impact of College Pen Pal Program on Fourth Grade Writing Attitudes and Skills

Gretchen Lorena Roberts  
*University of Tennessee, Knoxville, grober18@vols.utk.edu*

Merilee McCurdy  
*University of Tennessee, Knoxville, mccurdy2@utk.edu*

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Impact of College Pen Pal Program on Fourth Grade Writing Attitudes and Skills

Gretchen L. Roberts

The University of Tennessee, Knoxville

Faculty Mentors: Dr. Merilee McCurdy and Dr. Jennifer Bolden
Abstract

Attitudes towards writing in early elementary school students fluctuate as students advance through the writing curriculum from year to year (Chohan, 2010). Research suggests pen pal writing exercises provide a more authentic purpose for writing and may improve writing attitudes for students. We introduced a pen pal program between graduate students at the University of Tennessee and fourth graders at an East Tennessee elementary school to examine how attitudes towards writing and overall writing skills would change for participating students. The Writing Attitudes Survey was given before the pen pal program began and again at the conclusion of the three-month study period. Over these three months, fourth graders and graduate students corresponded on a weekly basis. We hypothesized that after writing to a pen pal for three months, students’ attitudes towards writing will improve, as will writing skills. Results from our study show our pen pal program significantly, negatively impacted overall attitudes towards writing and writing production (defined as total words written), but had no effect on the number of long words (eight letters or longer) used or spelling. The discussion focuses on implications and directions for future research.
Literature Review

Both literacy and writing are central parts of an elementary school curriculum; however, the area of early writing skills is far less researched than is reading (O’Leary, 2017).

Giving students a purpose to write and an audience for their writing is an excellent way to improve writing skills. Though pen pal programs have been used in previous research as a means to analyze cultural differences or give preservice teachers access to authentic writing samples of students, they have also improved students’ writing skills. Typically, improving these skills is an unintended result of pen pal programs that have been conducted, as researchers prioritize beneficial hypotheses in other areas.

Cultural pen pal programs have been created with the intention of bridging cultural and societal differences. The Shandomo (2009) study was conducted across cultures with the intention of expanding children’s views of the world and increasing motivation to learn overall. Second graders were partnered with students in Zambia, and one set of letters were exchanged. Through reflective journals, the classroom teacher observed the progression of students who previously struggled with writing becoming increasingly interested in and motivated to write. However, with no quantitative data regarding improvement in writing skills, the results of this study are unable to be generalized or widely accepted.

The McMillon (2009) study attempted to connect preservice teachers with inner-city fourth graders to bring light to the cultural differences that separated them. This study was conducted between predominately white, female preservice teachers in an elementary reading course and predominately black fourth grade students in an urban elementary school setting. The objective of this study was to provide the preservice teachers with the skills necessary to be flexible in teaching diverse student populations. The ten-week study, meant to benefit the
preservice teachers, impacted the fourth-grade students by giving them the opportunity to learn about collegiate opportunities. Some of the students even reported that they wanted to be teachers like their pen pals. More preservice teachers reported a desire to work in an inner-city setting following the ten-week pen pal program. However, it is unknown whether the writing skills of the fourth graders actually increased as a result of the pen pal program, as quantitative data was not collected.

Student-to-student writing often is researched to determine the social effects of building a writing relationship with another student. Chohan (2010) found that a school-wide pen pal program between students in kindergarten through fifth grade was socially beneficial. The boys involved in the study experienced an increase in self-confidence regarding their ability to write. However, the number of boys and girls who indicated they liked writing at school decreased by the end of the eight-month study. Generalizing the results of this study is difficult, as it lacks demographic information. Additionally, most of the students spoke English as a second language, lowering the reliability of this study’s results. These flaws limit interpretation of the results, making it difficult to generalize the results to a larger population of elementary school students.

Pen pal programs between elementary school students and university students are even more scarce. Ceprano and Garan (1998) conducted a 9-week pen pal program between 18 first grade students and 18 graduate students in education. The objective of the study was to give the graduate students exposure to actual writing samples of children while providing the first-grade students with meaningful writing experiences. The study found that first grade students doubled the number of words used and began modeling their letter writing after their graduate student pen pal. Among many limitations of this study are the lack of demographic information,
socioeconomic status, and quantitative data. Overall, this study seemed to focus on benefitting graduate students rather than measuring the impact on first grade students.

Similar to Ceprano and Garan (1998) study, Hedengren (1994) conducted a pen pal study between preservice teachers at Bringham Young University and elementary school classrooms as part of a partnership between the University and the public schools. The preservice teachers were given the opportunity to examine actual writing samples from elementary school-aged students, while the students were given the opportunity to build a relationship with an adult. Hedengren found that the students’ motivation did increase, as the students were excited to have pen pals who listened to them. Additionally, the elementary school students began modeling their letters after the format of their pen pals’ letter. The students became more comfortable with the format of letter writing over the one-year period. This study did not include information regarding the demographics of the students or the preservice teachers. The lack of knowledge regarding the identity of the subjects does not allow for large-scale generalization. The classrooms of elementary schoolers ranged from second to fifth grade, with roughly thirty students in each classroom. It is unknown how many pen pals each preservice teacher had and how they were matched. In addition, the authors did not report quantitative data regarding the improvement of the elementary schoolers’ writing skills.

**Background and Purpose of the Study**

In the state of Tennessee, beginning in second grade, students are tested on English Language Arts skills with a one paragraph writing test. By fourth grade, the test becomes more difficult, requiring students to write more than just one paragraph and is graded by a more developed and extensive rubric which examines the areas of focus and organization, development, language, and conventions (Tennessee Department of Education, 2017).
The purpose of this study was to determine a typical fourth grade student’s attitude towards writing and if that attitude would become more positive after a meaningful writing engagement (having a pen pal). We hypothesized that after a three-month pen pal program, fourth grade students would not only feel more positively about writing, but would increase word production (total words written), increase their use of long words (eight letters or longer), and improve overall spelling.

Methods

Participants

As per the request of the fourth-grade writing teacher, all 46 fourth grade students from an East Tennessee elementary school participated in the pen pal program. However, only 41 students completed the program in its entirety. A total of 12 graduate students from The University of Tennessee, Knoxville participated as pen pals for the fourth-grade students. All but two of the graduate students were School Psychology PhD program students. Participation of the graduate students was voluntary.

Materials

Parent consent and student assent forms were administered to ensure participation agreement. A pre/posttest design was used to measure participants’ attitudes towards writing with a Writing Attitude Survey (Kear, Coffman, McKenna, and Ambrosio, 2000). Letters were handwritten on regular notebook paper. Scoring rubrics were used to determine impact of the pen pal program on total words written, total long words used, and overall correct spelling.

Dependent Variables
Total words written (TWW), total long words (eight letters or longer) and overall correct spelling were measured throughout the duration of the study. Letters were scored by research team graduate students only following scoring training to ensure accurate conclusions.

**Procedures**

After receiving permission from the University Institutional Review Board, youth assent and parent consent were obtained. To establish a baseline for writing attitudes, participants responded to the survey prior to pen pal correspondence. Following parent consent and youth assent, students were randomly assigned one of twelve graduate students as pen pals. Correspondence between pen pals alternated on a weekly basis, with the fourth-grade students receiving letters one week and writing letters the next. Over the course of twelve weeks, the students wrote and received six letters each. Each letter was scored by a research team graduate student on the basis of format and content, including total words written, total long words, and percentage of words spelled correctly.

After being randomly assigned to a graduate student, the fourth-grade students received their first pen pal letters. They were given time in class to read their letters and to respond over the course of one week. The classroom teacher gave the students fifteen to twenty minutes to respond during one class period. Likewise, when graduate students received letters from their pen pals, they were given one week to respond. Letters from fourth grade students were scored by a research team member according to the scoring rubric and scoring training received.

Once the duration of the program was complete, graduate students from the University of Tennessee traveled to the elementary school to meet their pen pals in person. Fourth grade students and their pen pals enjoyed a pizza party together toward the end of the semester.

**Results & Discussion**
A total of 41 students completed the pen pal program over the course of three months. The Writing Attitudes Survey was administered pre-and post-Pen Pal program. Student scores declined following implementation of the pen pal program. A total score of 128 was the highest, most positive score possible on the survey. On average, participants self-reported a 79.62 (SD=14.6) prior to the pen pal program and a 70.65 (SD=12.26) after the pen pal program was completed. The results of the paired samples t-test suggest the pen pal program negatively, significantly impacted the students’ attitudes towards writing, $t(41) = 2.887, p = 0.006$.

Word production was measured in each student’s letter by counting total words written (TWW). Fourth grade students wrote an average of 77.95 words (SD= 45.73) in their first letters (T1). By their sixth letter, fourth grade students wrote an average of 61.51 words (SD=25.99). The results of this paired samples t-test suggests the pen pal program negatively, significantly affected the students word production overall, $t(41) = 2.523, p = .016$.

Total number of long words (eight letters or more) was measured to assess writing skill of each student. Fourth grade students wrote an average of 3.11 long words (SD= 2.76) in their first letters. By their sixth letter, students were writing an average of 2.43 long words (SD=2.63). The paired samples t-test suggests the pen pal program did not significantly impact students’ use of long words, $t(41) = 1.139, p = .262$.

Lastly, we measured overall percentage of words spelled correctly over the course of the pen pal program. In students’ first letters, they averaged 95.5% of words spelled correctly (SD = 3.97). By the end of the program, at time six, students averaged 93.96% of words spelled correctly (SD = 5.32). The paired samples t-test for spelling suggests that the pen pal program did not significantly affect students’ ability to spell correctly, $t(41) = 1.472, p = 0.149$. 
Our hypotheses that students would both feel more positively towards writing as well as have better writing skills is not supported by the data. In fact, the data suggests our pen pal program negatively impacted their overall attitudes towards writing and their overall word production. The rationale for these results could be a number of things. Primarily, our study took place during the second-half of the school year. Post surveys were administered just before the last day of school. The reason for significantly lower writing attitudes scores could be attributed to overall apathy towards writing regardless of whether the pen pal program had occurred or not.

Regarding overall word production, our study did not control for the number of questions our graduate student pen pals asked of the fourth-grade students in each letter. Responses from fourth graders ranged from elaborate discussions to simple “yes” or “no” answers. If our study would have required graduate students to provoke a lengthy response from students, results for overall production could have suggested different conclusions. Because there was no structure for written responses back to the students, each data set from each student was completely random, depending on a number of different things.

Long words and percentage of words spelled correctly were additional variables for measuring writing skills. Our study lacked controls for these areas as well. For spelling, because we did not require graduate students to solicit “another try” at a misspelled word, students often misspelled words only once, with no opportunity to correct it. Long words were used at the students’ leisure. There was no requirement for number of long words per letter, so students only used long words when it pertained to the nature of their letter and their general vocabulary.

**Limitations and Ideas for Future Research**
This pen pal program took place in one East Tennessee elementary school with students in fourth grade. The data cannot be generalized to pen pal programs that could be conducted in different parts of the country or with different ages. In addition, this study did not include instruction on grammar. If the pen pal program had targeted word production, spelling, and long words, the results could have been more positive. This program did not include specific requirements in order to directly impact things like total long words written or overall spelling.

Pen pal programs are a good way to incorporate real-life experiences with writing into a writing curricula. Beyond that, pen pal programs could encourage much more than an improvement of skills or attitudes. From our study, we found that the relationships between college students and fourth grade students may have been most important. In some of the students’ letters, they discussed their curiosity about college and about having a relationship with someone who was currently in college. Some students inquired as to whether or not they could use their opportunity to write a letter as a way to express anger or sadness. We found that overall, most fourth grade students viewed their pen pal as a mentor or a friend. Future research could explore the benefits of pairing pen pals composed of college students and low socioeconomic elementary school students in a social aspect. Instead of measuring a change in their attitudes towards writing overall, a pen pal program could be used to encourage young students to begin thinking about their options post-high school.

In addition to providing fourth grade students with pen pal mentor, our study also explored the development of students’ understanding of writing letters in general. In an age where new technology is being developed quickly, letter-writing is becoming a lost art. While there were classroom discussions around how a letter is written, students seemed to grasp the concept better as time passed. Most of our graduate students found that their pen pals would
mimic the format in which their letters were written. For instance, one of our fourth-grade students always closed his letters with “respectfully” followed by his name simply because that is how his graduate pen pal closed his letters. A pen pal program could focus on teaching students how to write letters to begin with and measure how their mastery of letter-writing skills increases over time.

Early writing skills is an under researched area. While our pen pal program did not produce results that suggest this is an answer to developing those skills, it certainly did not hinder the students’ writing abilities. Giving these fourth-grade students an opportunity to have a real-world experience with writing allows them to view writing in a different light. While they may not view writing more positively overall, it is an experience they may not have had without our study taking place.
Table 1

*Pre and Post Survey Means for Fourth Grade Writing Attitudes*

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<td>14.597</td>
<td>2.887**</td>
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<td>Post-Survey</td>
<td>70.659</td>
<td>12.261</td>
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** p < 0.01
Table 2

Means for Total Words Written (TWW), Total Long Words (TLW), and Spelling at Time 1 and Time 6

<table>
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<th>T1</th>
<th>T6</th>
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<td>61.51</td>
<td>2.523*</td>
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<td>TLW</td>
<td>3.11</td>
<td>2.43</td>
<td>1.139</td>
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<td>Spelling</td>
<td>95.50</td>
<td>93.96</td>
<td>1.472</td>
</tr>
</tbody>
</table>

* p < .05
References


https://www.tn.gov/education/topic/tcap-writing-rubrics