

INTRODUCTION

Research studies showed students who received scaffolded instructions had a more positive attitude towards learning from their teachers after collaboration (Molenaar et al., 2011, 521). Students valued their teachers and peers more after collaboration. While Vygotsky does not provide explicit details on how to scaffold instruction in writing, the ideas and theory became the basis of my intervention, data collection, and research. The research aims to provide children who are better-experienced writers and leaders to influence other children to think critically, write creatively, increase vocabulary and thus learn and build relationships while producing meaningful and age-appropriate written work. Providing children such a platform will allow remote children to connect socially, academically with in-person students and demand problem-solving skills to work together and produce written work actively.

LITERATURE REVIEW

Involved Collaboration Creating Social Structures and Coexistence

- Min (2017) defined writing as a complex skill that develops over time.
- "Constructive feedback will include modeling, directed practice, guided practice, and independent practice" (Silver, Perini & Strong, 2007, p. 35).

Reading's Impact on Writing and the Thought Process

- Montessori (1967) clearly explained writing as a result of vocabulary expressed and the children's understanding of the world around them.

Successful Collaboration

- According to Benz & Miller (2008), successful peer collaboration is an academic task requiring diverse perspectives and advanced problem-solving techniques leading to increased academic performance. Piaget (1997) emphasized that children would be motivated to resolve matters and attain a new level of equilibrium or experience when they worked in groups; thus, their minds becoming coextensive.

Engaged Discussions

- Collaboration is purposeful when there is a transparent exchange of ideas with interactive constructive feedback challenging each other's conclusions and reasoning and, most importantly, teaching and encouraging one another (Johnson & Johnson, 1990).

Concrete to Abstract Thinking

- Shute (2008) argued that young learners rely heavily on social feedback to transition from oral language expression to written language expression. Similarly, the studies conducted by Niesyn (2011) explained that collaborative planning during the writing process allows the novice writer to orally discuss, plan, conceptualize, and revise a piece of writing before applying pencil to paper, providing multiple opportunities for giving and receiving formative feedback.

Virtual Peer Collaboration

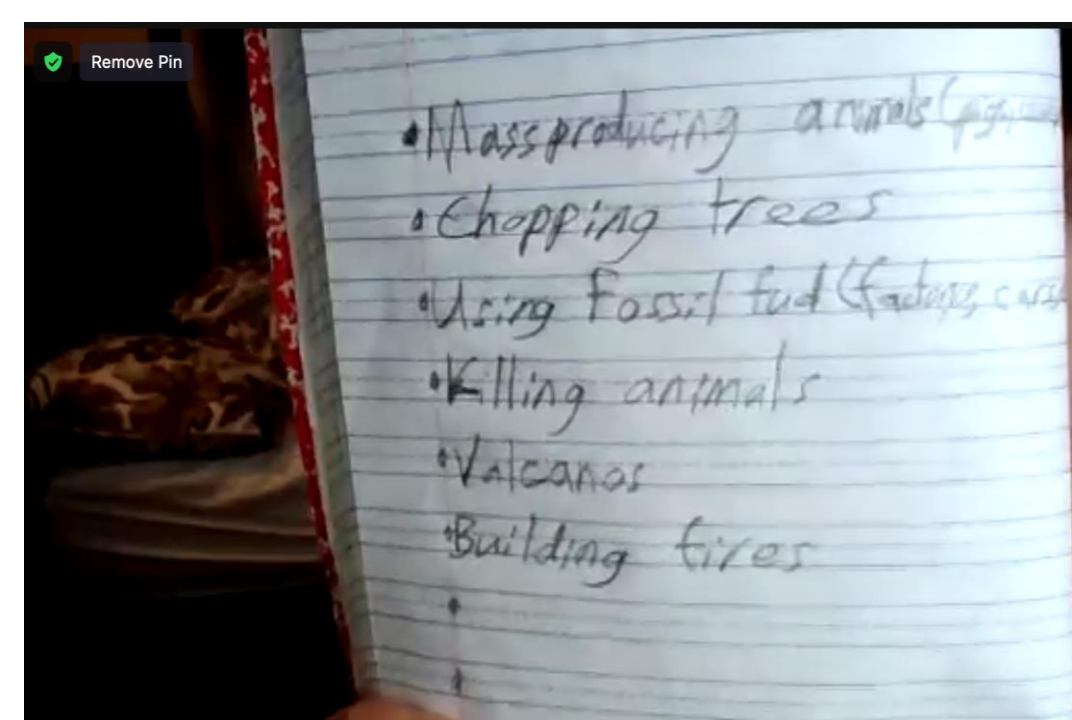
- Oliver et al. (2010) conducted a study on elementary and middle schoolers in a North Carolina Virtual Public School (NCVPS) that investigated integrating technology courses to provide blended and fully online and virtual instruction courses.

RESEARCH QUESTIONS

- What impact did peer-collaboration sessions have on student's writing skills?
- What impact did collaborative writing, peer review and editing process in groups have on student's writing skills ?
- What impact did collaborative writing, peer review and editing process in groups have on student's attitude as a writer?
- What impacted the student's attitude towards writing the most – Self-perception or better exposure to different strategies to writing from their peers?
- Did peer-collaboration and problem solving sessions impact student's writing skills?
- Did technology play a role?

METHODS

- 2nd and 3rd grade students in a hybrid Montessori Setting in a New England Area School.
- Sample size : 18 students consisting of nine-second grade and nine-third grade student divided into three member groups. The groups were named A, B, C, D, E, F. At least one member of the group was learning remotely. The groups remained the same throughout the five week intervention period.
- Study of Climate Change: Over 5 week period on Zoom each participant group met in 6 breakout rooms for 45 and 30 minutes sessions on different days of the week to read articles, collaborate and worked on three writing prompts.
- Each group worked on a single shared Google Docs to type edit and review their writing during sessions. One student typed while another student screen shared the article to read and a third student suggested how to form sentences. Students modified the sentences to fit the understanding of all their peers.
- On the third writing prompt, a student led the classroom on Zoom to form sentences and build a paragraph as a class.

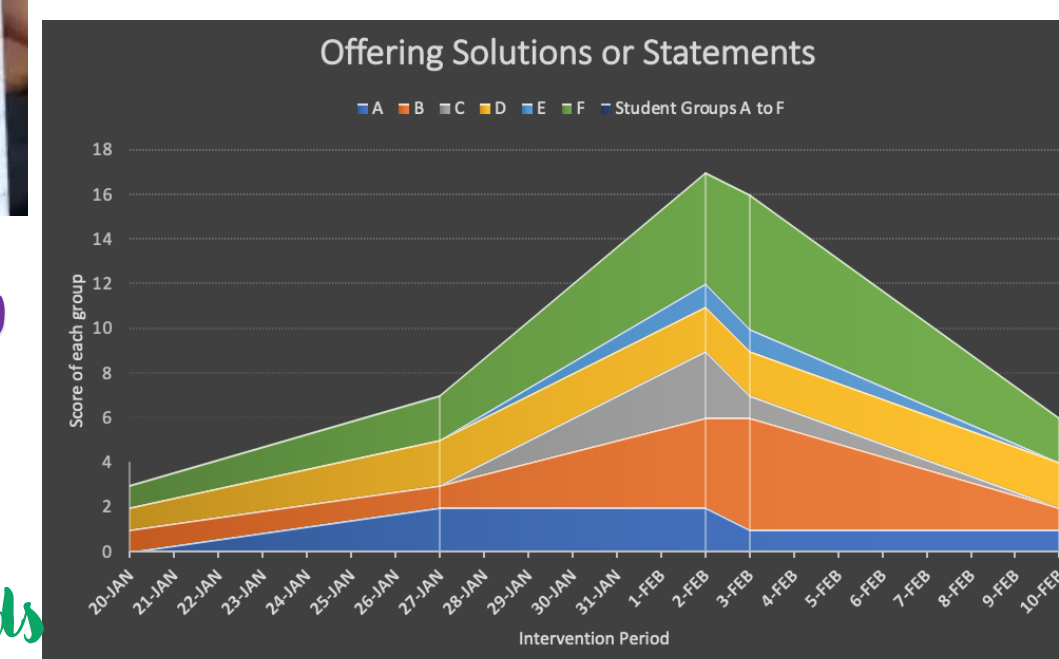


Peer-Collaborated Problem Solving

On Google Education Suite

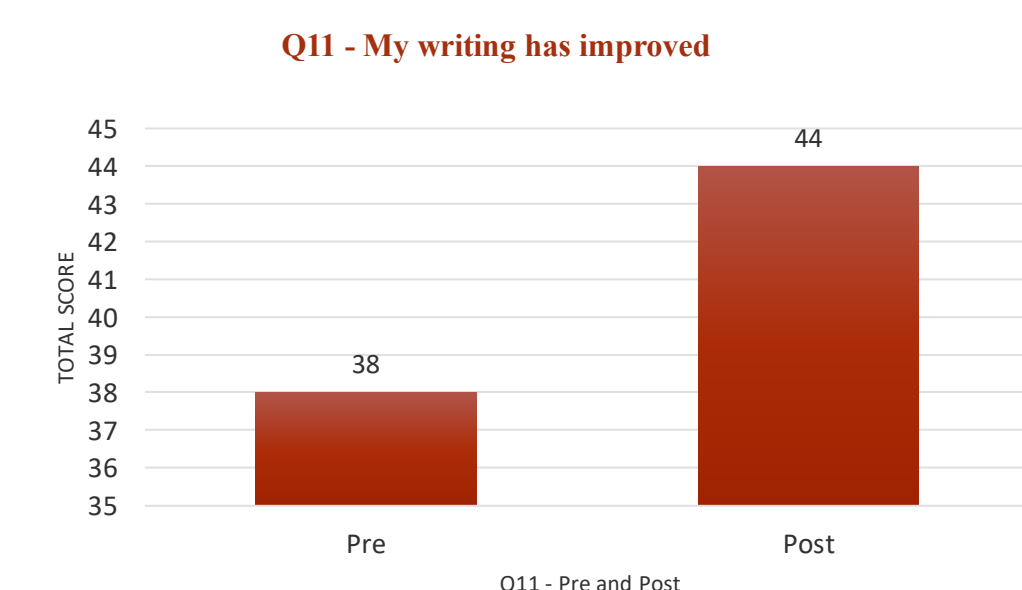
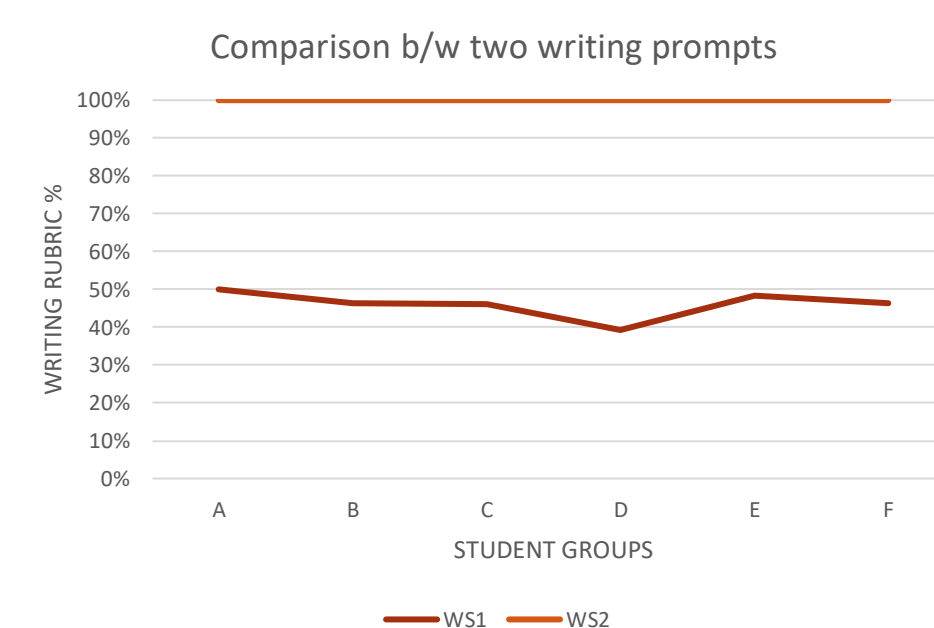
Impact on Attitude Towards Writing

Group C
Points jotted down during collaboration session "Why they think climate change may be real?"

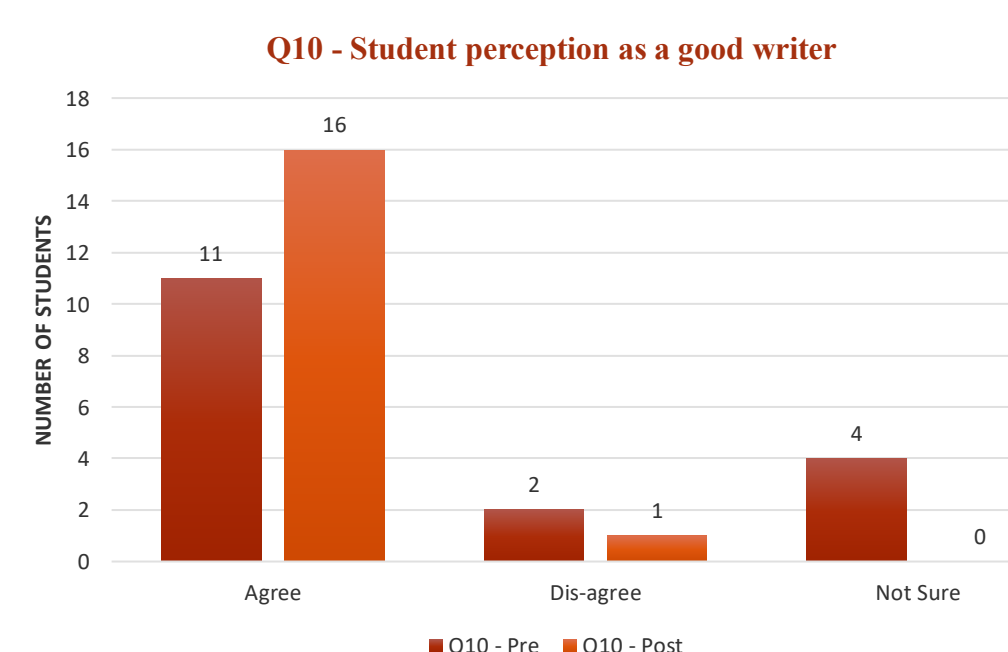
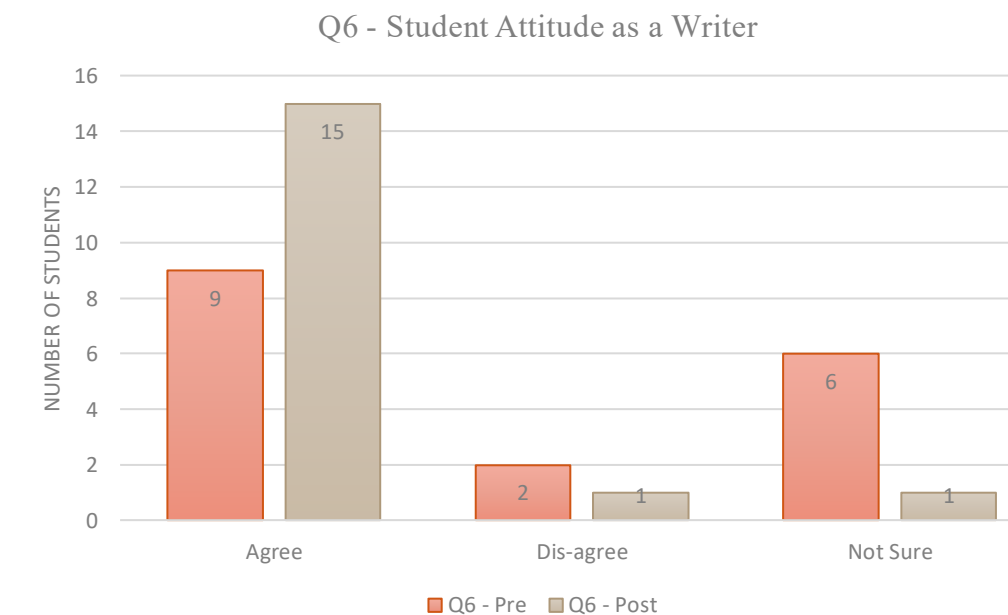


RESULTS

Comparison of writing and paragraph scores.



Attitude and Writing Skills Pre and Post Intervention



FINDINGS & CONCLUSIONS

- Data analysed showed 98% of the sample progressed in "Students' attitudes towards writing, and their perspective as a writer."
- The Writer Self-Perception Scale showed an overall increase in general writing areas, peer feedback, student's perception as a writer, and peer-problem solving areas. The data collected showed 98% of students believed they were good writers.
- Overall, the data collected in Table 1, Figure 10, and Figure 12 determined there was substantial increase in student peer-collaboration among the student groups. The alternate hypothesis derived from Figure 6 and Figure 13 indicates peer-collaboration significantly impacted majority of student attitudes and self-perceptions.
- Data recorded from Figure 7 concludes that students rely primarily on peers to better understand their environment and their materials. Finally, the analyzed data in Figure 2 and Figure 3 strongly suggests majority of students looked forward to group work thus concluding that the intervention positively impacted their writing skills. The result of intervention further indicates that peer-collaboration strongly impacted student's writing skills and their general attitude as a writer. As a result of this determination, the following section contributes application suggestions, as well as recommendations for future action research. This suggests that peer-collaborative writing session is an effective supplement to Montessori language arts curriculum.

LIMITATIONS & FUTURE RESEARCH

Although, under the current circumstance technology acts as an expanding bridge to provide education, it is clear that technology cannot replace or take the place of a teacher nor take the place of a classroom. Thus, effective student engagement involving reading people's body language, making eye contact for increase self-confidence, understanding each other's thought process and creating long-lasting bonding between peers can only be created in traditional Montessori classrooms. Further research is necessary on larger wider participant groups to better understand the scope of what students think about the mechanics of writing? Do students consider these mechanics or writing rubric measurements as an important or necessary tool for positively impacting their writing skills?

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CONTACT

- pkingsview185@stcate.edu or preethuskv@yahoo.com
- Scan QR Code to read complete research.

