

Action Research Brief
Collaborative Learning in Transitional Kindergarten

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Instruction

INTRODUCTION:

Research Focus

This study seeks to understand what ways students benefit from collaborative learning and how it might look like amongst the interactions between students and their peers to support academic advancement. The study will be conducted in a transitional kindergarten classroom with twenty students from January 2, 2023, throughout June 24, 2024. Methods will include observations, small group instructions developed specifically around collaborative learning methods, discussion recordings, and data packets. In the study, Social Effects of Collaborative Learning in Primary Schools, collaborative group work is looked at whether it can lead to improved classroom relations. In the end the study concludes with findings supporting the notion that, “cooperation consistently led to higher achievement and motivation to learn across a range of subjects than either competition or individual studies” (K. Tolmie, 2010). Findings from my study will provide insight on how students can learn to express thoughts, feelings, and ideas more freely, while improving their conversational skills amongst interactions that take place in the classroom. Providing teachers a better understanding of what learning opportunities need to be provided to children to build a foundation of academic success.

- In what ways do students benefit from collaborative learning and what does it look like amongst the interactions between the students and their peers?
- What happens to students’ conversations and the classroom environment through the implementation of a learning environment that is intentional and engaging?

Context/Setting

The study will be conducted in a transitional kindergarten classroom with twenty students from January 2, 2023, throughout June 24, 2024. I teach transitional kindergarten in a dual language

immersion academy, in which we provide students the opportunity to acquire a second language, Spanish in this instance. We strive to enhance the first language of students all while adding that of a second language. The school follows the 50-50 model where students learn 50% of the day in English and 50% of the day in Spanish My site is located within a largely suburban school district in southern California, operating schools in four cities. The campus serves approximately 450 students, preschool through sixth grade.

RESEARCH DESIGN

Round 1

Innovations/Interventions:

In round one, I began by identifying each student's expressive ability and their academic performance. The students were measured in different DRDP domains; language and literacy: communication and use of language (expressive), reciprocal communication and conversation, (California Department of Education, 2021) and assessed on their Kindergarten readiness. Kindergarten readiness included: alphabet knowledge, number recognition, writing skills, shapes, and social skills. The DRDP domains are based on the common core standards, which have a goal of ensuring "that all students are college and career-ready by the end of high school these standards call for increased rigor and higher expectations at all grade levels" (Heskial, 2013). I observed the students for two weeks, throughout different times of the day and various situations. Attempting to gain an understanding of how competent and cooperative the students were with one another, their expressive language, communication, and their overall academic ability.

After getting a basic understanding of where the children were developmentally and academically, I began to implement specific lessons pertaining to certain domains. The lessons

required the children to cooperate with one another and work on their team building skills. I focused on domains specifically pertaining to interactions and social skills so that I can gain an understanding of which might have the biggest impact on the children's overall academic success.

After each whole group lesson, students were given directions on what the small group activity entailed for each day. All the small group activities required the children to work together and use language. While the students worked together, I was able to observe and take notes. At the end of each day, children were asked to review and share what they learned for the day. Giving me a better understanding of what lessons they were interested in, what information they were retaining, how much language they were acquiring, and to what extent the children were collaborating on their own.

Data:

Data collected included anecdotes, photographs, videos, drawings, writing samples, and checklist pertaining to verbal expressions and reciprocal conversations. I collected data on twenty students, these students were all in transitional kindergarten who a majority of were four years old; some who had recently turned five.

Data Analysis Methods:

I used a Kindergarten readiness checklist to measure and analyze each student's knowledge pertaining to alphabet knowledge, number recognition, color recognition, writing skills, and shapes. The children are tested on upper case and lower-case letters and their sounds, their ability to count and identify numbers 0-10, eight different shapes, and ability to write their name. Receiving an overall score because of eight sub scores.

I used tally charts to check how often the students expressed themselves or participated in a back-and-forth conversation. I used a tally to represent each time a child shared information and an asterisk every time they engaged in back-and-forth conversation. The tally chart was used during different times of the day; whole group, small group, and free-choice time.

Round 1 Findings:

From my findings I can see that the children who score higher in their relationships and social interactions with peers also had more academic success. The students who didn't share their general ideas throughout the day and solely engaged in parallel play didn't have much knowledge regarding the alphabet, numbers, and other kindergarten readiness skills. I can see that it is evident that the children who are having a hard time understanding or expressing what they know and understand are also having a hard time interacting and cooperating with other children in the classroom.

Many of these children were born during the pandemic which could be a factor in their interaction and social skills leading to their academic success. I learned that it is not easy for many of my students to share what they know and that many of them prefer to play alone. If they do play alongside children they do not interact with one another.

Connections:

My analysis of this data has helped me see how important it was to focus on one domain and only implement lesson plans related to them. Rather than implementing a lesson plan that was based on multiple domains. I think that there might be a greater impact when I begin to add lessons that require the children to communicate. Hopefully making the children more comfortable and acquiring that ability to express what their wants and needs so that I can better

plan for what they really need rather than me guessing. I was able to see that the children who have higher cooperation skills also have more academic knowledge.

Round 2

Innovations/Interventions:

In round two, I developed lesson plans that required the students to express themselves by using complex words and phrases during small group settings and whole group. I developed a variety of lessons in which students had to share their thoughts, to encourage their speech and expand on their conversations with others. For several days I implemented lessons for the whole group that included: reading books mainly with no pictures, flannel stories, singing nursery rhymes, and naming activities.

From the moment the children sat for whole group, my aide and I used self-talk and parallel talk with the children. We described all of what we were doing and what the children were doing to provide them with a new language. During each literacy activity, the children were asked open ended questions to encourage their own thinking, share their ideas, and succeed on their own. To ensure that all the children had the opportunity to share and elaborate on their thoughts they were all given a “talking turn” by using popsicle sticks with their names on them, which were chosen at random. The children’s responses not only gave me an idea of their verbal abilities, but also their class performance. Students were given many opportunities to verbally express themselves and given the time to collaborate with one another.

Data:

Data collected included anecdotes, photographs, videos, drawings, writing samples, and checklist pertaining to verbal expressions and reciprocal conversations.

Data Analysis Methods:

I reviewed the anecdotes that my aide and I documented and divided them into three different times of day; whole group, small group, and free choice time. While reviewing our notes I underlined back and forth conversations that were occurring between the students and the students and adults in the classroom. I also used an orange highlighter to highlight and document how much each student was verbally sharing their ideas. I looked over any videos taken to listen and look for students who didn't share their ideas often and get an understanding as to why the children didn't engage in verbal interactions or team building. The data collected was separated by the domain they were specific too (LLD 3: expressive language or LLD 4: reciprocal communication and conversation).

Round 2 Findings:

The qualitative data showed that over half of the children are where they should be when it comes to expressive language. 63% of the children are scoring at a level on the DRDP scale that they are meeting the developmental milestone for *communication and use of language (expressive)*. However, 37% of the children are not meeting this milestone, which is still a large number especially at this point of the year. Children are showing the ability to communicate but aren't using as much language as I would like to see. When looking at children who show poor expressive ability, it is more than likely they will have trouble academically as well because of the difficulties they display in spoken and written language.

When I looked at the domain *reciprocal communication and conversation*, 56% of the children scored at age-appropriate level and 44% did not. This tells me that the children who may have the ability to communicate effectively using complex words or phrases aren't engaging with other peers or adults in the classroom. They can but aren't. This is important because it is evident that expressive language plays a role in social and verbal interactions which then affect a

student's academic foundation. The children that are not interacting with one another and not showing their ability to use complex words and phrases are the same children who academically a bit behind, "during classroom visits, children's performance on relevant academic task can be compared to that of their true peers".

Connections:

My analysis of this data has helped me see how important it was to focus on one domain and only implement lesson plans related to them. Rather than implementing a lesson plan that was based on multiple domains there was better data and results than if I would have focus on a variety of areas. This should also help their academic achievement become higher as well, creating a stronger learning foundation. I will continue to look at how implementation of lessons bases on cooperative learning can add to a student's academic success. I was able to look at the class as a unit but have decided to target specific children instead. Looking at the students who are falling a bit behind academically and socially and checking what success they would have through curriculum that is based on cooperative learning and play.

Round 3

Innovations/Interventions:

In the last round, I began my developing lessons that were based on both communication and use of language and social interactions. I decided to also focus my attention on the nine students who were not at developmental level for both SED 4 *Relationships and Social Interactions with Peers* and LLD 3 *Communication and Use of Language (Expressive)*. This same group of children also were following behind academically, scoring lower in letter and word knowledge, comprehension of age-appropriate text, number of math quantity, and shapes.

I used the DRDP to determine which students were achieving desired results and which students weren't. Those that weren't were the children I put a greater emphasis on. According to the Desired Results for Children and Families, "teachers may differentiate their instruction and target individuals or groups of students to improve results in particular domains". Doing this while also using the desired results to identify strengths and areas of improvement. Attempting to help the children reach the expectations described in the California Preschool Learning Foundations' which the DRDP measures and domains are based on.

I developed lessons surrounding social interactions that required the students to use complex language. I provided the children with a rich environment full of language and rich interactions. I collected anecdotes each day with the help of my instructional assistant. Again, each whole group lesson was surrounded by a certain domain which then continued into the small group for the day. I provided the children with materials to extend their learning into free choice time. During this time, I was able to observe the children in an environment initiated by them to observe if the information I had provided them was being retained.

The large groups consisted of singing songs and literacy activities that required turn taking, partnerships, and back and forth communication. The nine children I was focusing on had more of my attention during certain times of the day and were chosen regularly to share thoughts and ideas on the activities.

Data:

Data collected included anecdotes, videos, drawings/writing samples, and checklist pertaining to verbal expressions and social interactions. I collected data on nine students, these students were all in transitional kindergarten and were all four years old. All these students were

scoring lower in both relationships and social interactions with peers and communication and use of language.

Data Analysis Methods:

I started off primarily observing the children and reviewing the data that was collected in round 1 and 2. I took anecdotes on the conversations and interactions that the children were having, specifically the nine children I was trying to have reach the next level in each domain. I asked questions regarding activities that were specific to collaboration. I also recorded conversations that the children were having amongst one another. I looked over any videos for missed information. The anecdotes were all separated by the domain they were specific to. I collected the initial scores that the children received in Fall and compared them to the scores that they received in the Winter after the implementation of lessons and difference of environment focusing on rich interactions. In a few weeks I will be able to analyze and score all the new data and check to see if the children are growing developmentally.

Round 3 Findings:

Looking over the qualitative data I can see that children are beginning to use more language with increasingly complex words and sentences. The children went from only using two words together to communicate to now using short phrases, some using short sentences to communicate. I was able to see the difference between the interactions as well. In round one the children were primarily only playing side by side, not cooperating or speaking to one another. Now they are participating in brief episodes of cooperation with one or two other children. There is a great association between expressive language and academic achievement, “heightened risk appears to be tied specifically to global.

language skills, rather than the ability to perform discrete linguistic tasks,” (Del Tufo, 2019) children who have a hard time communicating are more likely to have issues later with listening and reading comprehension.

When looking at the children’s academics I can see that the children now are demonstrating awareness of a few letters by name, they are still struggling with letter recognition, but I am hoping to see improvement. The same for number sense these group of children are only recite numbers to ten. However, they are having trouble counting one to one correspondence up to ten.

SYNTHESIS OF RESULTS

The interventions supporting my students to engage in interactions amongst themselves and the implementation of a learning environment that is intentional and engaging interventions have helped with the student’s expressive language and social interactions with their peers. Ultimately leading to academic achievement and advancing their knowledge in letter recognition, shape recognition, and number sense of quality and quantity.

In the beginning of the study the children were displaying a challenging time displaying any knowledge that they had previously obtained. For whatever reason the children did not interact with one another like previous classes that I have had. Not only were they having a difficult time learning how to interact with their peers, but their expressive language was also much lower than the classes from previous years.

I developed lessons surrounding social interactions that required the students to use complex language. I provided the children with a rich environment full of language and rich interactions. I collected anecdotes each day with the help of my instructional assistant. The lessons surrounded certain domains which then continued into the small groups for that day. I

provided the children with materials to extend their learning into free choice time. During these moments, I was able to observe the children in an environment initiated by them to observe if the information I had provided them was being retained.

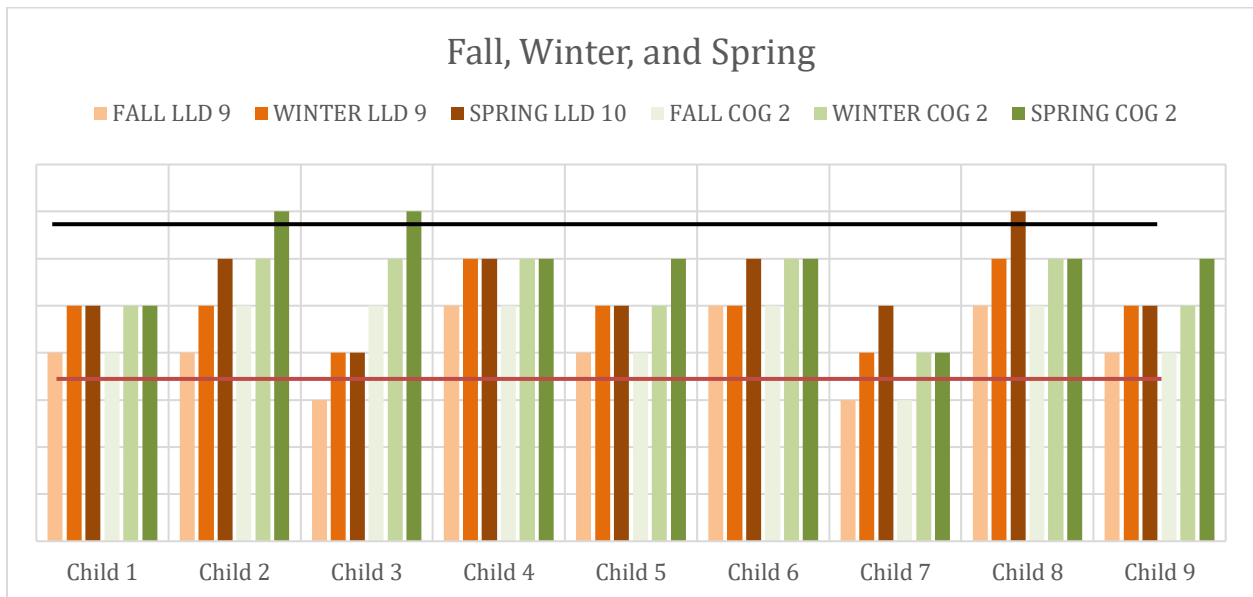
The reasoning behind academic success after the implementation of lesson surrounding interactions and expression language is that it allowed the student's to not only communicate and engage with one another, but to feel comfortable expressing their thoughts, wants, and needs. This made it so much easier to understand what the children were lacking in and what interactions I needed to make in order to support them. What would happen to students' use of language (expressive), reciprocal communication and conversation, when engaged in learning experiences that are cooperative and require team building? Success is what would happen. Children learned to collaborate and cooperate with one another, they learned to learn from each other and gain the knowledge needed to achieve goals in alphabetic knowledge, number sense in quantity and quality, and number recognition.

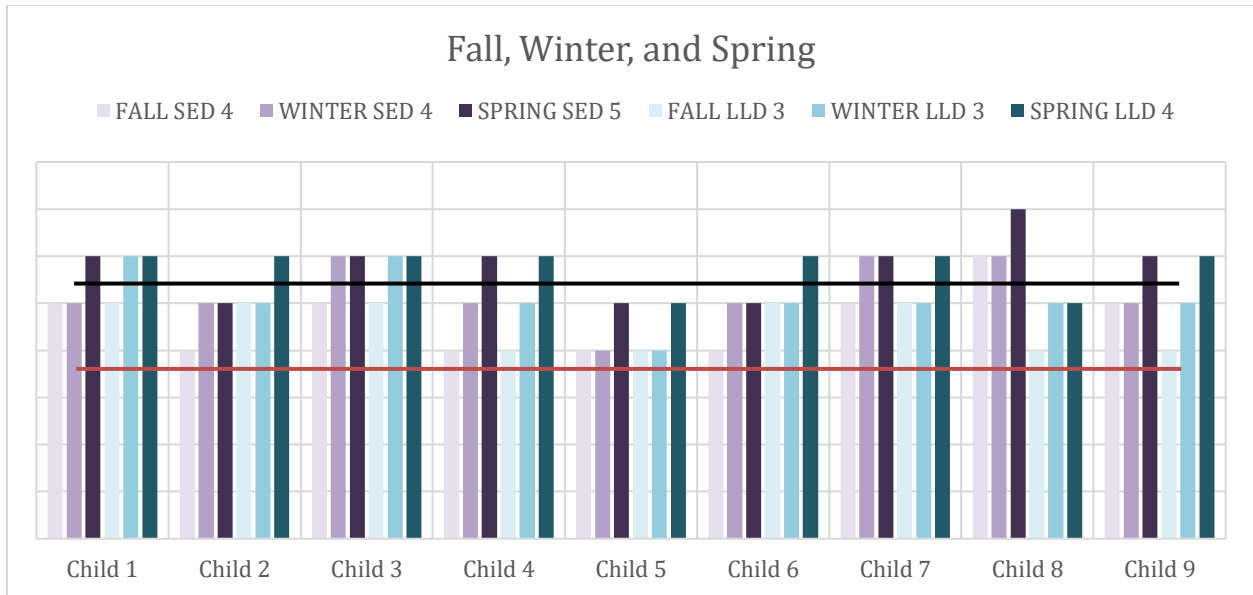
Synthesis of Findings:

What I learned from all three rounds is that if children are where they should be when it comes to meeting the developmental milestone for communication and use of language (expressive) they have stronger academic achievement because of the ability that they display in spoken and written language. Looking over the qualitative data I can see that children are beginning to use more language with increasingly complex words and sentences. The children went from only using two words together to communicate to now using short phrases, some using short sentences to communicate. I was able to see the difference between the interactions as well. In round one the children were primarily only playing side by side, not cooperating or speaking to one another. Now they are participating in brief episodes of cooperation with one or

two other children. There is a great association between expressive language and academic achievement, children who have a hard time communicating are more likely to have issues later with listening and reading comprehension.

When looking at the children’s academics I can see that the children now are demonstrating awareness of a few letters by name, they are still struggling with letter recognition, but I am hoping to see improvement. The same for number sense these group of children are only recite numbers to ten. I can see the improvement that the students have had in various domains from Fall to Spring. Displayed in the graphs below, the students have increased their expressive language ability, number sense in quantity, social interactions with peers, and their letter and word knowledge. This was achieved through the implementation learning experiences that are cooperative and require team building.





DISCUSSION AND CONCLUSIONS

My analysis of this data has helped me see how important it is for positive social interactions and the ability to communicate in school. Hopefully making the Children become more comfortable and can share their wants and needs, which then make it easier so that I can better plan for what they really need rather than me guessing. I was able to see that the children who have higher cooperation skills also have more academic knowledge.

There was a greater impact when I began to add lessons that required the children to communicate and interact with one another. The implementation of lessons based on cooperative learning added to student's academic success. Children began to use more language with increasingly complex words and sentences. The children went from only using two words together to communicate to now using short phrases, some using short sentences to communicate. I was able to see the difference between the interactions as well. Overall I learned a lot from this study, but it was quite evident that if I focus on certain aspects of a child's development I will achieve success much quicker than if I put emphasis on multiple goals. It's

more beneficial to focus on one or two goals to achieve a final result much faster than have multiple goals and trying to achieve the same result.

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