Language Acquisition: Effectiveness of Collaboration on Teacher Practices and Beliefs

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Language Acquisition: Effectiveness of Collaboration on Teacher Practices and Beliefs

An Action Research Report
By Kara-Lisa Mitchell
Language Acquisition: Effectiveness of Collaboration on Teacher Practices and Beliefs

By Kara-Lisa Mitchell

Submitted on December 2, 2013
In fulfillment of final requirements for the MAED degree
St. Catherine University
St. Paul, Minnesota
Abstract

The effectiveness and challenges of teacher collaboration as a tool to drive teaching outcomes has been observed in various educational settings. This research project was designed to answer the question, “Would collaboratively creating a Useful Words Handbook for teachers increase the number of language teaching opportunities that could occur during the day?” This action research project, conducted in a Montessori preschool setting, focused on two classroom teachers who educate children between the ages of two and three. Three intervals were identified for data collection. Four weeks of collaboration on the Useful Words Handbook began after two weeks of baseline data collection, during which the frequency of language teaching opportunities were recorded. A weekly topic was presented to the teachers, who provided feedback the following week, in addition to ideas for improving the topic for the handbook. Collaboration involved creating an introduction and four topics about teaching useful phrases to early language learners. The data showed a positive correlation between collaboration and an increase in the number of teaching language opportunities that occur during the day. The data also show that while it is possible to make short-term changes in the classroom through collaboration, changing teacher beliefs about teaching language and collaboration remain a challenge that is characteristic of the teacher collaboration process. Investigating strategies to increase awareness about teaching language should continue.
According to the National Institutes of Health, “The first 3 years of life, when the brain is developing and maturing, is the most intensive period for acquiring speech and language skills. These skills develop best in a world that is rich with sounds, sights, and consistent exposure to the speech and language of others” (NIH, 2010). The importance of exposure to language at the beginning of life is crucial. “There appears to be critical periods for speech and language development in infants and young children when the brain is best able to absorb language. If these critical periods are allowed to pass without exposure to language, it will be more difficult to learn” (NIH, 2010). In preschool, children learn a myriad of communication skills. Preschool allows children, surrounded by same-age peers, to participate in a variety of activities. These activities require children to listen, imitate and try new language skills in an environment that is different from home. According to the Connecticut State Department of Education, “Language development accelerates rapidly in the preschool years. The growing ability to use language to communicate is a landmark of development that distinguishes preschoolers from infants and toddlers” (Jackson Alleyne, n.d.).

Learning expressive language is critical at this stage of development. “Throughout the toddler years, children progress in their ability to communicate by babbling, saying important words and continuing to expand their vocabulary” (Jackson Alleyne, n.d.). Teachers create teaching opportunities that directly and indirectly teach important words and expand vocabulary.

The Montessori classroom is an environment that fosters expression in all activities. Maria Montessori wrote, “An Interpreter [communicative adult partner] is needed for the child in his language, and my own experience in this capacity is that children run eagerly
to their interpreter, realizing that here they can find help. Such eagerness is quite other than the casual affection...the interpreter is to the child a great hope, opening to him a door, which the world has closed. Such a helper is taken into the closest relationship, more than affection, because he gives help and not mere consultation” (Montessori, 1946). The Montessori teacher instills independence in the child. Teaching children how to use language fosters the journey to independent speech.

The Montessori classroom provides language-learning opportunities across the curriculum. In the book *Language Arts Manual Volume 1: Early Childhood*, it is explained “Although language is considered to be one of the four basic curriculum areas in a Montessori class, it spans every other area; it is an integral part of each curriculum area as well as a special area in and of itself” (Zell Rigg, 2013). The Montessori classroom can provide an enriching and individualized environment for children in various stages of language development. “Through careful observation, the Montessori teacher comes to know each student’s interests, learning style, and temperament. He understands the student’s developmental needs…” (American Montessori Society, 2013).

In Montessori education, the teacher is equal to the environment. “Blessed are the teachers who have brought their class to the stage where they can say, ‘Whether I am present or not, the class carries on…’ To arrive at this mark of success, there is a path to follow for the teacher’s development” (Montessori, 1946, p.67). This means that the children are still learning whether the teacher is directly instructing them, or they are interacting with the environment. The environment is also rich with works that stimulate language development, meaning that even if the teacher is not directly speaking to the
child, she has created many opportunities for the child to rehearse the previously taught language.

One powerful way to teach language is through imitation. “There is a golden age for the use of imitation. This golden age starts around 18 months and ends around 42 months. During this period, imitation serves two functions: learning (specially focused on motor strategies and language acquisition) and nonverbal communication. The extended use of imitation for communicative purpose was revealed in our setting” (Nadel, 2006, p.133). Keeping this golden age in mind is critical to developing good teaching practices. In the Montessori environment, imitation is the main teaching strategy. The children imitate the teacher by observing her presentations and listening to the language specific to the presentation. Children also imitate each other. Imitation is encouraged.

One method to change behavior in teaching practice is through collaboration. A study conducted at the University of Virginia found that, “Kindergarten teachers will change their practice when they believe the change will increase student achievement, when they are given opportunities to collaborate with their co-workers, and when the changes are supported by the administration” (Maschal, 2003). Collaboration not only empowers the teacher—it helps to gain perspective about the whole child. Research states, “Participants across educational teams suggested that the collaborative process allowed team members to share their expertise and perspectives in developing a holistic view of the child” (Hunt, Soto, Maier, Liboiron, & Soung, 2004). Another finding from the University of Virginia was “Teachers found effective staff development included some theory, demonstration, practice, and feedback” (Maschal, 2003).
Using imitation to teach language during the golden age is the focus of the study presented here. This study examines methods to increase teaching language through verbal modeling, narration and description. The design of this research includes teachers of a particular Montessori classroom—a transition class—a class comprised of children new to Montessori preschool. The children range from two to three years of age. The teachers in this classroom prepare the children for the traditional three- to six-year-old preschool classroom. The school provides this transition classroom to guide new children to develop skills across the Montessori curriculum. These skills include gross and fine motor lessons, grace and courtesy lessons, and the developmental milestone of the toileting routine. The teachers also teach both expressive and receptive language. The teachers at the Montessori school agreed to support writing a handbook for teachers and parents to add an enriching language component to the transition class. This paper examines the results of collaborating on the creation of a Useful Words Handbook as it relates to teacher practices and their views on teaching language throughout the day. Montessori theory and the option to provide critical feedback about the handbook were included in the process. Each week the researcher created a chapter of the handbook. Each chapter focuses on a different topic to teach the children through stories, songs, and daily routines. These topics include ideas to teach tone of voice, asking for help, expressing emotions and expressing refusals politely. The teachers then gave ideas and feedback.

The hypothesis in this study is that collaborating with the teachers to create a Useful Words Handbook will engender the teachers with knowledge of simple phrases and methods to teach the children. This collaboration will increase the number of language
teaching opportunities throughout the day. It will also increase teacher attitudes about collaborating with each other and teaching language throughout the day.

Description of the Research Process

Data Collection Methods

Data collection methods in this study are: (1) a pre- and a post-handbook collaboration survey, (2) an in-class frequency data collection during three specific intervals of teaching during the day, (3) a weekly written communication in the format of a letter and chapter of the handbook, and (4) a satisfaction interview. Frequency data forms are presented in Appendix A.

The teachers signed informed consent forms prior to data collection. A copy of the consent form was available in the classroom for teachers to reference at any time.

The pre- and a post-handbook collaboration surveys were created using the website Survey Monkey. The survey served as a pre- and post-handbook collaboration assessment on the teacher’s views about: (1) teaching language throughout the day in different settings and using different methods and (2) their views on collaboration. The survey included nine items pertaining to language and four questions pertaining to collaboration. The survey is included in Appendix B.

Although these surveys were designed for on-line use, to be in alignment with the school’s ethos and culture, print versions of the survey were left for the teachers to complete. Each teacher made a unique identifying mark on her survey in order to maintain survey blindness. The purpose of this mark is: (1) to provide the opportunity to compare teacher responses over time, and (2) to make anonymity an option.
A coding system was created to measure frequency data on teaching language opportunities. There are two possible codes for language interaction between the teacher and the child. The interaction codes are (1) language teaching opportunity (LTO) and (2) instruction only (IO).

A language teaching opportunity is defined as any teacher’s response to a child’s verbal or non-verbal communication that includes a description, a narration, and/or verbal model. These are defined as:

- **Description** - words describing the child’s emotional and or physical state (i.e., “you feel sad,” “looks like you need help” or “it feels hot”),
- **Narration** - describes what is happening in the moment (i.e., “everybody is crowding you” or “the lunchbox fell”),
- **Verbal model** - models correct language for the child to say (i.e., “I feel mad” or “I do not like that”).

A simple tally system coded language teaching opportunities (LTO) that occurred in response to a child’s behavior. This response can be with or without a connection to a direct instruction. This response must happen within five seconds of initiation. Instruction only (IO) was coded if a direct instruction was given in response to a child’s behavior, and the response happened within five seconds of initiation.

**Examples for the Coding System**

(1) Scenario 1: Child begins to cry at the snack table. Teacher responds: “Please use your calm voice.” Code this as an instruction only. Teacher responds: “I see you are sad. It is okay. Show me your calm voice.” In this case, code incident as a language teaching opportunity. The teacher described the situation in conjunction with the instruction.
(2) Scenario 2: Job time is over and the children are invited to put away their work. A child throws himself on the floor and ignores the group instruction. Teacher responds: “Please put your job back on the shelf.” Code this as an instruction only. Teacher Responds: “Please put your job back on the shelf because it is time for circle. You feel mad. It is okay to say, ‘I do not like clean up time’.” Code this as a language learning opportunity.

(3) Scenario 3: A teacher observes a child struggling to reach the water cups. Enough time goes by to foster independent thinking and the teacher offers guidance to the child. Teacher response: “Try the step stool over there.” Code this as an instruction only. Teacher responds: “Looks like you need help. You can ask a friend or try the step stool over there.” Code this as a language teaching opportunity.

Three Weeks of Pre-Data Observation at the School

The researcher was not a member of the regular staff at the school. Due to the volunteer status of the researcher, three weeks of careful observation took place prior to baseline data collection. This was designed to align the research with the values of the school and with the classroom dynamic. Three observations were conducted; one each on August 14, 2013, August 21, 2013, and August 28, 2013. The purpose of these observations were: (1) to build rapport with the teachers, (2) to learn the daily schedule and the general flow of classroom activities, (3) to allow the children to get used to a new adult in the room, and (4) to observe the culture of the classroom and the school.

Baseline Data

Two weeks of baseline data collection began after the pre-data collection period to assess the number of language teaching opportunities that occur in the classroom at
specific intervals in the day. These data collection intervals were three minutes long per teacher per interval. The data collection occurred during circle time, transition/playtime, and work time.

Codes for frequency were recorded on a data sheet. A data table was created for each teacher for each interval, and each minute of each interval was coded separately. See instructions for the data sheet and the data sheet in Appendix A.

**Description of the Handbook**

Teachers and the researcher collaboratively created a Useful Words Handbook for new teachers and parents. The goal of collaborating on the handbook was to increase awareness about teaching language and to change teaching practices. While working on the handbook, data was collected: (1) to measure whether teaching language opportunities increase or decrease while teaching, (2) to measure teacher perception on language teaching opportunities, and (3) to assess teacher participation in the collaboration by collecting feedback forms as research artifacts.

In the Useful Words Handbook, each chapter includes Montessori theory, circle time activities, song suggestions and a children’s book created for the weekly topic. The plan was to create four chapters, working on one topic per week. Each week the researcher presented a sample of the chapter and topic. In order to make this a collaborative process the sample chapter included ideas from the researcher and left spaces for the teachers to fill in ideas or suggestions. The teachers were also encouraged to remove ideas they did not agree with or that did not fit their school. The collaboration phase took four weeks. In addition, the teachers participated in a post-collaborative editing phase.
Baseline data collection began on September 18, 2013, and was complete on September 25, 2013. The collaboration phase began on October 2, 2013, and was complete on October 23, 2013. The post-collaboration editing phase began October 30, 2013, and was complete on November 6, 2013. See Table 1 below:

Table 1

*Phases and Dates of Data Collection*

<table>
<thead>
<tr>
<th>Phase</th>
<th>Date</th>
<th>Collected</th>
</tr>
</thead>
<tbody>
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<td>Baseline</td>
<td>9/18/13</td>
<td>✓</td>
</tr>
<tr>
<td>Baseline</td>
<td>9/25/13</td>
<td>✓</td>
</tr>
<tr>
<td>Collaboration</td>
<td>10/2/13</td>
<td>✓</td>
</tr>
<tr>
<td>Collaboration</td>
<td>10/9/13</td>
<td>Skipped (teacher vacation day)</td>
</tr>
<tr>
<td>Collaboration</td>
<td>10/16/13</td>
<td>✓</td>
</tr>
<tr>
<td>Collaboration</td>
<td>10/19/13</td>
<td>✓ Make up for 10/9/13</td>
</tr>
<tr>
<td>Collaboration</td>
<td>10/23/13</td>
<td>✓</td>
</tr>
<tr>
<td>Editing</td>
<td>10/30/13</td>
<td>✓</td>
</tr>
</tbody>
</table>

The weekly email for feedback about the handbook began on September 27, 2013. The purpose of this email was (1) to collect direct information and feedback about the creation of the handbook and (2) to collect information on teacher involvement. The teachers had the option of making hard copy edits on the forms provided or by email. A collection of the responses occurred the week after delivering the forms. The weekly email stopped when the teachers informed the researcher that only one teacher had time...
to return email. All communication occurred by either direct conversation, written journal entries or printed documents.

Data Analysis

**Frequency Data**

Frequency data from the baseline and collaboration phases representing change in teacher behavior during circle time, transitions or playtime, and work time are presented in Figures 1–3. The x-axis in Figures 1-3 represent the weekly visits, beginning from the first week of baseline data collection through week 4 of the collaboration phase. The y-axis represents the frequency of teacher behavior during the designated times of the day per weekly visit. Figures 4 and 5 represent the frequency of language teaching opportunities, and instruction-only phrases across all phases. The trend line in the frequency data represented by Figures 1–3 shows a generally stronger tendency of increasing the total number of language teaching opportunities relative to instruction-only teaching phrases. The downward slope in the trend line for the total number of instruction-only occurrences during collaboration observed for Teacher 1 during circle time, and during work time for both Teacher 1 and 2 lends further support to these findings. Figure 4 also shows a general, but relatively consistent, increase in the average number of language teaching opportunities during collaboration across each of the three measurement periods for each teacher, which is most often maintained in the post-collaboration period. On the other hand, Figure 5 shows that the average number of instruction-only incidents generally decreases during collaboration across each measurement period, although this effect does not persist in a consistent manner in the post-collaboration (editing) period.
Figure 1. Teaching Language Opportunities Compared to Instruction-Only Statements - Circle Time.
Figure 2. Teaching Language Opportunities Compared to Instruction-Only Statements - Transition/Playtime
Figure 3. Teaching Language Opportunities Compared to Instruction-Only Statements – Work Time
Figure 4. Frequency of Language Teaching Opportunities (LTO) Across Phases.
Figure 5. Frequency of Instruction Only (IO) Across Phases.
Pre- and Post-Implementation Survey

Delivery of the first survey occurred on September 18, 2013. Delivery of the second survey occurred on October 30, 2013. Displayed below is an analysis of the data to compare change in teachers’ views and beliefs about teaching language in the classroom and their views on collaboration in Table 2 and Table 3. Table 2 indicates that teacher 1’s views and beliefs about teaching language were not influenced by the collaboration, as was her feeling about collaboration. On the other hand, Table 3 indicates teacher 2 had a slight reduction in her views and beliefs about teaching language, whereas her views and beliefs about collaboration increased by 17%.

Table 2

*Teacher 1 Percent Change in Opinion about Teaching Language and Collaboration*

<table>
<thead>
<tr>
<th>Survey</th>
<th>Average Language Teaching Opinion score</th>
<th>Average Collaboration Opinion Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>% change in score</td>
<td>0% change</td>
<td>0% change</td>
</tr>
</tbody>
</table>

Table 3

*Teacher 2 Percent Change in Opinion about Teaching Language and Collaboration*

<table>
<thead>
<tr>
<th>Survey</th>
<th>Average Language Teaching Opinion score</th>
<th>Average Collaboration Opinion Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>40</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>38</td>
<td>14</td>
</tr>
<tr>
<td>% change in score</td>
<td>-5% change</td>
<td>17% change</td>
</tr>
</tbody>
</table>
Participation Artifacts

Table 4 represents the data collected and the percentage of weekly participation. These data show that teacher 1 was engaged in written communication efforts, whereas teacher 2 was minimally engaged in all written communication. A copy of all documents provided included the teacher’s names to encourage each teacher to write on their personal copy.

Table 4

Weekly Results from Participation Artifacts

<table>
<thead>
<tr>
<th>Date</th>
<th>Response Teacher 1</th>
<th>Response Teacher 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/23/2013</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>10/2/2013</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>10/9/2013</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>10/16/2013</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>10/23/2013</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>10/30/2013</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>11/6/2013</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

sum of written/electronic responses: 7  2

Percentage of written participation: 100%  29%
Satisfaction Interview

The teachers agreed to meet off-site for a satisfaction interview. The researcher created an interview form to guide the interview. This form is in Appendix C. The researcher recorded the answers on the form and made an audio recording. This audio recording was included as a tool to support active listening by removing the need to write every detail in the moment. See Appendix D for the general answers given by the teachers.

Analysis of the teacher responses during the interview revealed trends about the collaborative process. In general, the interview revealed a need for more communication during the collaboration and the teachers indicated that their comfort level with the collaboration increased over time. The interview further revealed areas of confusion that occurred during the process. Overall, lack of time and communication was identified as the overarching cause for most of the negative opinions expressed during the satisfaction interview. The teachers also gave helpful ideas on how to improve the collaborative process.

The teachers reported positive feelings about teaching language and about learning classic Montessori presentations that teach early language phrases. Teacher 2 reported that she learned the most about the importance of giving children a voice. This result is opposite of her decreased opinion score in her post collaboration survey. When asked if the study was applicable, both teachers agreed this study was applicable to a two-year-old classroom setting.
Action Plan

In terms of teaching language, the data support the idea that collaboration is an effective technique to increase language teaching opportunities in the classroom. The data also suggest that when teachers add these phrases to their teaching repertoire, the number of instruction-only phrases decreases. Utilizing the collaborative process to change teaching practices is useful for further projects. Teachers should continue to teach early-learning phrases in the classroom throughout the day. Teaching language opportunities can be learned and, in some cases, maintained. To have a lasting and consistent impact, however, the collaborative process must be strengthened. The results of the teacher satisfaction survey are congruent with findings that teachers can find the collaborative process ambiguous and challenging (Dooner, Mandzuk, & Clifton, 2008). Furthermore, a standardized survey may have yielded more reliable results as the researcher created the survey specifically for this study.

How Will the Results of the Research Change Your Practice?

The results of the research suggest a number of adjustments should be included in the practice of collaboration.

(1) Additional pre-implementation conversations are necessary to clarify the collaboration process with the participants. Given the teachers’ busy schedules, making time for these conversations was difficult. However, after conducting this research, it appears that a structured preliminary meeting is necessary. If this research were repeated, a meeting should be planned before the baseline data collection to answer any preliminary questions, clarify dates and solidify data collection methods with the
participants, in addition to obtaining the informed consent. This meeting should take place when the teacher is not physically teaching in the classroom.

(2) Another change to the design would be to reduce the number of questions on the pre-implementation survey. Handing a long survey to the teachers as a first step did not increase motivation to collaborate. However, gathering this information was important; and reducing the number of questions in the survey would accommodate teachers’ busy schedules.

(3) More preliminary visits to the school would have made this project stronger.

(4) Weekly meetings would have clarified confusion and proactively prepared the teachers for the weekly topic. This meeting would have enhanced the weekly communication, the chapter and the class-time visits. This meeting could also strengthen learning and increase teacher awareness about the importance of teaching useful phrases.

One interesting observation was the lack of interest in communicating via email. Awareness of this sentiment would have clarified a number of questions. The teachers reported that this was related to their busy schedules; however, it would be interesting to study whether comfort level was also a factor in their general refusal to communicate via email.

Overall, the project has brought awareness to teaching language in conjunction with verbal instructions. It has also revealed a great deal about the collaborative process.

Potential Future Action Research Investigation

This study focused on the teachers in relation to a collaborative process designed to increase awareness about teaching language in the classroom. The data indicate that collaboration to create the Useful Words Handbook for families and teachers improves
teaching methods and increases awareness. Teaching language throughout the day is important for all children. In the future, it would be interesting to conduct a study with family involvement. In addition, collaboration with a teacher of a child identified with a language delay could result in interesting outcomes. Research directly related to child language behavior in the classroom is another area for further investigation. Future research could answer the following questions.

(1) Would collaborating with teachers to create a weekly Useful Words Newsletter for families increase awareness around teaching language, in addition to increasing the school/home connection?

One potential way to include the families is to create a weekly newsletter about the topics that teachers are writing about that week. Families could give feedback as to whether this communication increased their awareness about teaching language in the home. They could also answer whether or not they felt an increased home/school connection through the weekly communications.

(2) Would a Useful Words Storybook series for children increase the number of particular target phrases produced by children in a class of two-year-olds during certain times of day?

This research focused on teacher behavior and awareness. Further studies could focus on the results of a Useful Words storybook created for children. These stories could focus on target phrases that the children can use throughout the day. Measurements of the effects of these stories on child behavior might be of interest. Data collection using direct observation of the children, as well as parent and teacher feedback, might reveal positive
results. Research in the area of teaching language to early language learners is relevant and should continue in the future.

Acknowledgments

It is with gratitude that I thank the teachers for sharing their time to collaborate on this project. I am also humbled and filled with gratitude for the love and support of my friends and family that gave so very much of themselves to support my educational journey.
References


NIH. (2010, September). *Speech and Language Developmental Milestones.*
Retrieved from National Institute on Deafness and Other Communication Disorders:

Leandro: Montessori Research and Development.
Appendix A - Data collection instructions and data sheet

Data Sheet Instructions

Teaching language opportunities can be defined as any teacher response to child’s verbal or non-verbal communication that includes a description (“you feel sad” or “looks like you need help”), narration (“I see you do not like being crowded” or “I see friends are so close together”) or verbal model (“I feel mad” or “I do not like that”). Code these responses if delivered within 5 sec. of child communication. Language teaching opportunities are valid with or without a connection to direct instruction in response to child behavior.

Scenario 1: Child begins to cry at the snack table.

Teacher responds: “It is o.k. Please have calm voice so I can help”. Code this as an instruction only.

Teacher responds: “I see you are sad. It is o.k. Show me your calm voice calm voice so I can help”. Code this as a language teaching opportunity.

Scenario 2: Job time is over and the children are invited to put their work away. A child throws himself on the floor and ignores the group instruction.

Teacher responds: “Please put your job back on the shelf”. Code this as an instruction only.

Teacher responds: “Please put your job back on the shelf because it is time for circle. You feel mad. It is o.k. to say, ‘I do not like clean up time’”. Code this as a language learning opportunity.

Scenario 3: A child is struggling to reach the water cups while the teacher is observing. Enough time goes by to foster for independent thinking, and the teacher offers guidance to the child.

Teacher responds: “Try the stool over there”. Code this as an instruction only.

Teacher responds: “Looks like you need help. You can ask a friend or try the stool over there”. Code this as a language teaching opportunity.

<table>
<thead>
<tr>
<th>Minute</th>
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<th>2</th>
<th>3</th>
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<tbody>
<tr>
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<tr>
<td>Instruction only</td>
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</tbody>
</table>
Data Sheet

Date:______________

Initials:______________

Condition: circle one: Baseline   Collaboration   Post-Collaboration (Editing)

Circle time

Teacher 1

<table>
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<th>Minute</th>
<th>1</th>
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<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Learning Opportunity</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Instruction Only</td>
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<td></td>
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Teacher 2

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</table>

Transition to play time

Teacher 1

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<th>3</th>
</tr>
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<tbody>
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<td>Language Learning Opportunity</td>
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Teacher 2

<table>
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<th>2</th>
<th>3</th>
</tr>
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<tbody>
<tr>
<td>Language Learning Opportunity</td>
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<tr>
<td>Instruction Only</td>
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<td></td>
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</tbody>
</table>
Data Sheet

Date:_______________

Initials: ________________

Condition: circle one: Baseline  Collaboration  Post-Collaboration (Editing)

Work Time

Teacher 1

<table>
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<th>Minute</th>
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<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
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<td>Language Learning opportunity</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Instruction Only</td>
<td></td>
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<td></td>
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</tbody>
</table>

Teacher 2

<table>
<thead>
<tr>
<th>Minute</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Learning Opportunity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instruction Only</td>
<td></td>
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</tbody>
</table>

Notes

- Description- words describing the child’s emotional and or physical state (i.e., “you feel sad” or “looks like you need help”),
- Narration- describes what is happening in the moment (i.e., “everybody is crowding you” or “the lunchbox fell”), or
- Verbal model- models correct language for the child to say (i.e., “I feel mad” or “I do not like that”).
Appendix B. Pre/Post Collaboration Survey

Thank you for taking the time to take this survey. This survey will be given to you before the creation of the "Useful Words Handbook". You will also be asked to fill out this same survey when we are done collaborating on the handbook. Answers are anonymous - please do not include your name. The data from these surveys will not include any identifying information about the respondent. Thank you for your time.

1. In your opinion, how important is modeling age-appropriate language in the classroom?
   - Very important
   - Important
   - Necessary at times
   - I don't have an opinion
   - Unimportant

2. How comfortable are you with modeling age-appropriate coping strategies and self-awareness language for children?
   - Very comfortable
   - Comfortable
   - I would be interested in learning more
   - It is a new strategy for me
   - Uncomfortable

3. It is more effective to redirect (tell the child directly what to do) a child rather than assist with coping strategies (deep breaths, counting) when a child is upset.
   - Strongly agree
   - Agree
   - This works some of the time
   - Both strategies are effective
   - Disagree

4. It is more effective to assist with coping strategies (deep breaths, counting) when a child is upset rather than redirect (tell them directly what to do).
   - Strongly agree
   - Agree
   - This works some of the time
   - Both strategies are effective
   - Disagree
5. Do you think teacher collaboration is an effective tool?
   ○ Yes
   ○ No

6. Please give a brief explanation of your answer to the previous question?

7. Do you think story books are an effective proactive strategy to provide children with language samples they can use when they struggle for the right words?
   ○ Yes
   ○ Maybe
   ○ No
   ○ Have not tried to target specific skills with story books.

8. Do you think that songs are an effective proactive strategy to provide children with language samples that they can use when they might struggle for the right words to say?
   ○ Yes
   ○ Maybe
   ○ No
   ○ I have not tried to target specific skills with songs
   ○ The children might be too young to make the connection from the song to practical application.

9. I think that teaching early language coping strategies and self awareness phrases is more effective in circle time.
   ○ Strongly Agree
   ○ Agree
   ○ Not sure
   ○ Disagree
   ○ Strongly disagree
10. I think teaching early language coping strategies and self awareness phrases is more effective in a one-on-one situation.
   - Strongly agree
   - Agree
   - Not sure
   - Disagree
   - Strongly Disagree

11. I think teaching early language coping strategies and self awareness phrases is more effective across all activities throughout the day.
   - Strongly agree
   - Agree
   - Not Sure
   - Disagree
   - Strongly disagree

12. I think creating a handbook for parents and new teachers would be useful for our school.
   - Strongly agree
   - Agree
   - Not sure
   - It may be too much for a new teacher or family
   - Agree
   - Strongly disagree

13. Given that a Montessori classroom is individualized for each child, do you think that certain families/teachers might find an early language handbook helpful, while others might not?
   - Yes
   - Any information provided for education is useful to share.
   - All families/teachers could find this handbook useful at some point.
   - No

14. Please give a brief reason for your answer to the previous question.

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15. Please provide the date this survey was completed.
Appendix C: Satisfaction Interview Form

What are the strengths of this process?

What are the weaknesses or growth areas of this process?

What was your level of comfort with this process?

How would you improve this process?

What did you learn the most?

On a scale of 1-10 how would you rate the overall feeling of the process.

1  2  3  4  5  6  7  8  9  10

overall negative  overall positive,

On a scale of 1-10 how applicable is this project for teachers that teach the same age group

1  2  3  4  5  6  7  8  9  10

not applicable  very applicable
### Appendix D: Satisfaction Interview Form Answers

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer: Teacher 1</th>
<th>Answer: Teacher 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the strengths of this process?</td>
<td>Enjoyed the Montessori suggestions in the handbook.</td>
<td>Same as teacher 1</td>
</tr>
<tr>
<td></td>
<td>Found week 1-2 of collaboration most helpful</td>
<td></td>
</tr>
<tr>
<td>What are the weaknesses or growth areas of this process?</td>
<td>Needed more suggestions on curriculum additions.</td>
<td>Lack of understanding about the process itself.</td>
</tr>
<tr>
<td></td>
<td>Felt week 3-4 of collaboration were not as strong.</td>
<td>Needed more communication.</td>
</tr>
<tr>
<td></td>
<td>Needed more communication.</td>
<td></td>
</tr>
<tr>
<td>What was your level of comfort with this process?</td>
<td>In the beginning 40% comfortable.</td>
<td>In the beginning 40% comfortable.</td>
</tr>
<tr>
<td></td>
<td>During the middle 60% comfortable.</td>
<td>During the middle 60% comfortable.</td>
</tr>
<tr>
<td></td>
<td>In the last few weeks 100% comfortable.</td>
<td>In the last few weeks 80% comfortable.</td>
</tr>
<tr>
<td>How would you improve this process?</td>
<td>More time to meet and discuss the week proactively.</td>
<td>Same as Teacher 1.</td>
</tr>
<tr>
<td>What did you learn the most?</td>
<td>That sharing professional expertise is enjoyable.</td>
<td>It is important to give the children a voice.</td>
</tr>
<tr>
<td></td>
<td>Collaboration takes time.</td>
<td>Collaboration takes time.</td>
</tr>
<tr>
<td>On a scale of 1-10 how would you rate the overall feeling of the process?</td>
<td>6.5</td>
<td>7</td>
</tr>
<tr>
<td>1: overall negative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10: overall positive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On a scale of 1-10 how applicable is this project for teachers that teach the same age group?</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>1: applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10: not applicable</td>
<td></td>
<td></td>
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