

The Effectiveness of a Delayed Model-Lead-Test and a Break Card on the Rational Counting Ability for a Preschool Student with Developmental Delays

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Abstract: *The purpose of the study was to evaluate the effectiveness of a Model-Lead-Test (MLT) procedure and a break card intervention (BCI) on the ability to rationally count ten objects with 100% accuracy 90% of the time. The participant was a 3-year-old male preschool student. Multiple baseline design was used across three sets of numbers (two sets of three, one set of four) to evaluate the efficiency of the intervention. In addition to this procedure a break card procedure was used to improve the efficiency of the number acquisition. Far more work was completed as a result of the procedure than in other setting across the classroom. A multiple baseline procedure was implemented across three sets of numbers to allow the learner to acquire the skill of rationally counting in smaller chunks of information, which was developmentally appropriate for the learner's skill level. The participants ability to demonstrate the skill of rationally counting to ten was found and all three steps were mastered. The procedures used were easy to implement and employ in a classroom setting.*

Key Words: *developmental delays (DD), model-lead-test (MLT), rational counting, preschooler, multiple baseline design, break card, pre-math*

Introduction

The ability to rationally count to ten is the ability that most children develop by the age of three, if not by three within the next several months following the 36-month developmental milestone (Washington State Early Learning and Development Guidelines: Birth through 3rd grade). Counting beyond ten and the actual recognition of "how many" is learned in the next stage of development and even through preschool and kindergarten. For children with developmental delays this skill is often one that is difficult to acquire and must be more explicitly taught, even the acquisition of being able to focus is one that needs to be taught in some cases. Developmental delays refer to a child's delay in one or more developmental areas that are tested, or a deficit that child exhibits. Expecting a child to focus for up to 15 minutes at a time is one that is acquired with age but expected to be do able at 36-months of age (Washington State Early Learning and Development Guidelines: Birth through 3rd grade).

The ability of being able to rationally count ten objects is a seemingly simple skill. But for these students who are developmentally delayed these tasks require more explicit instruction

(Al-Dahri, Mustafa, McLaughlin, Derby, Belcher, & Weber, 2013; Bechtoldt, McLaughlin, Derby, & Blecher, 2014; Mortensen, McLaughlin, Neyman, Girshick, 2013). The direct instruction of Model-Lead-Test combines repetition, a model, immediate practice, and individualized practice. By using this to teach a child struggling with their skills, it leaves little room for mistakes and ensures immediate correction of an error (Marchand-Martella, Slocum, & Martella, 2004). The MLT model when employed reduces chances for the participant to continue to make mistakes while practicing the material. By using the MLT model the child hears the correct way while simultaneously watching how to do the material. The participant is led through the material and that way has tactile and/or verbal practice that is 100% correct (Marchand-Martella et al., 2004; Peterson, McLaughlin, Weber, & Anderson, 2007). The testing of the material ensures that the child is able to mimic the material that he or she has just been taught. MLT has been effective in teaching a wide range of skills across several different school populations such as preschool students (DeLong, McLaughlin Neyman, & Wolf, 2013; Dundon, McLaughlin, Neyman, & Clark, 2013; Shouse, Weber, McLaughlin, & Riley, 2012), elementary school students (Bulkley, McLaughlin, Derby, & Carosella, 2012; Wompschall, Weber, McLaughlin, Derby, & Waco, 2014), middle or high school students (Peterson et al., 2007). These outcomes have included both students with or without disabilities (Aldahri, Weber, & McLaughlin, 2013; Mann, McLaughlin, Williams, Derby, & Everson, 2012).

There have been several studies (DeLeon, Neidert, Anders, & Rodriguez-Catter, 2001; Horner & Day, 1991) that suggest that a break card procedure can be highly effective to assist children with their attending or focus. The idea of employing break card is that it permits the child to communicate his or her needs. By allowing the child a break when he or she feels that they can no longer participate in the work task, they are less likely to engage in inappropriate behaviors (Alberto & Troutman, 2013). In the case of children who have attention deficit issues allowing non-contingent escape for those individuals can be effective in increasing their ability to attend to a task (DeLeon et al., 2001). The idea surrounding break cards is that by taking the demand away for short periods of time, it allows for the child's stamina to reset. Even the idea of allowing for minimum requirements of work for a contingent break has been supported as part of a fading model, to fade out the break card. Both the MLT model and the break card system have been effective interventions to use in combination as both of them are easily and readily used with various interventions.

The purpose of the study was to evaluate the effectiveness of a Model-Lead-Test (MLT) procedure and a Break Card Intervention (BCI) on the ability to rationally count ten objects with 100% accuracy 90% of the time on a child with developmental delays. Developmental delays in this case refer to the child's developmental delay in cognitive, adaptive, and speech and language skills. This means that the child had not hit the developmental standards and was below one and a half standard deviations below the mean (Park, Weber, & McLaughlin, 2007). Thus the studies

purpose was to improve the child's rational counting skills and help him move toward being at a normal developmental level.

Methodology

Participant and Setting

The participant (referred to as “Marachi”) was 3-year-old boy in a developmental delays preschool. Due to the extremely young ages of the student he did not have an official diagnosis because with the aide of early intervention he may not need one. “Marachi attended a local public school, which housed the developmental delays preschools. The participant's areas of difficulty included pre-academic skills such as counting, shape identification, and color identification. The learner also had difficulty with impulse control; attending for more than a few second at a time, and when at home exhibits aggressive behaviors. The participant lived with both parents and had an older disabled brother who could not live with him because of the severity of his behaviors at home. His mother was very involved with him, looking for anyway to get him to a more appropriate developmental level both academically and socially. “Marachi” is on an IEP and the two focuses for this study, focusing for more than 20 seconds and rationally counting to ten. He has various other IEP goals which center around his developmental delay in both cognitive and adaptive skills.

The study took place in a self-contained special education preschool designed for children presenting with developmental delays. The child was in the class for the morning session of the class, which took place from 9:00 am to 12:00 pm. In the class there were a total of 8 students in the class with him. In the class next door was the other Developmental Delays preschool which had ten students in it. These two classes would come together for free play activities and gym/recess time. The schedule of the classroom varied slightly day-to-day depending on the kids attentiveness levels. But the overall structure of the preschool day remained the same, which was: Entrance task, Breakfast, Circle time, Center activity, Gym/Outdoor time, and Free Play with one-on-one time for instruction. The first author worked with the child the Free Play portion of the day while the other teacher worked with various other kids in a one-on-one setting. The first author and the focused learner would remain in the classroom in the circle time area to do the intervention in a familiar setting. The circle time area was easily secluded from the rest of the class even though at times the noise of the room was a distraction to the child. But for the vast majority of the sessions the noise was not an issue. The participant and the researcher would sit on the floor with the objects between them to count. This allowed the researcher to do hand-over-hand procedures with the child. Each session lasted anywhere from 6-15 minutes depending on the day and the amount of breaks the child needed. The study was completed to meet the requirements of a Precision Teaching class at a local university.

Materials

The materials used in this study included previously made data sheets and a simple pen to mark the data on the sheet. For intervention various objects in the classroom were used to aide his generalization of being able to rationally count objects across different settings and places. Some objects that were used were: monkey magnets, buttons, animal cards, and shamrocks; those were just a few of the objects that were used. In addition to this during intervention it was decided that a Break card intervention needed to be used. This meant that a Break and Work card needed to be created and prizes for break card would be used. The break card system that was used was implemented on recommendation from Tim McLaughlin (McLaughlin). See Appendices A:1-4 for a representation of the materials that were used.

Dependent Variable

The target behavior in this study was for the child to be able to rationally count ten objects with no verbal prompting and only hand over hand to get him to touch the objects that coincides with the numbers that he was saying. Correct answers were taken when the child counted completely correctly to his highest ability without making a mistake. For example, when the child was able to count to seven he counted that high and stopped because he did not know how to go any higher. With the implementation of the BCI a break would be given upon completion of a set of work (Model-Lead-Test) and touching the break card. Upon completion of the break (after 1-2 minutes depending on his ability to focus and attend to a task), the learner had to touch the work card and continue practicing the set he was currently working on.

For each session there was only the first author asking the participant to count the objects in front of him. The researcher would listen to the response by the child and record the data for each of the daily assessments. The researcher would mark the numbers that were said correctly and the numbers that were said incorrectly by putting them in their appropriate boxes. In the case of the break card intervention data was taken by tallying the number of times that the break card was used and tallying the number of times that each set of numbers being tested were gone over. In the case of the daily assessment for rationally counting the results were also recorded on three cycle graph paper showing the growth across the sets. In the case of the break card intervention the number of times the break card was used was recorded in red pen and the number of times sets were completed were recorded on the same graph in blue pen. For the first set of numbers the child could get up to 3 correct, on the second set of numbers the child could get up to 6 correct, and on the third set of numbers the child could get up to 10 correct.

Experimental Design and Conditions

A multiple baseline design (Kazdin, 2011; McLaughlin, 1983) across three sets of numbers was used to evaluate the effectiveness of a MLT system of correctly rationally counting ten objects laid out in front of a 3-year-old boy. Three days of baseline were taken for Set 1

numbers, eight days of baseline were taken for Set 2 numbers, and eleven days of baseline for Set 3 numbers. Only three days of baseline were used for the break card intervention before moving to intervention which was continued due to the effectiveness of it and the increased ability of the child to attend to a task. The use of Hand-Over-Hand guidance to touch each of the objects was used to keep the child on task while he was vocally counting the objects.

Baseline. During baseline, the researcher would lay out ten objects and ask the student to count them. The student would then count as high as he could and the data would be recorded for that day. In the case of the break card intervention during baseline the cards were out while instruction was being completed. However without prompting the young age of the child inhibited him from recognizing that he needed a break. The number of sessions of baseline ranged from 3 to 11.

Model-lead-test on rational counting skills. A MLT procedure was used in combination with the break card intervention as a reward system. Three numbers were tested both Sets 1 and 2, in Set 3 there were four numbers to round out a total of ten numbers counting. Physical prompts were given to touch each of the objects that the learner was rationally counting. The number of times that the learner was required to complete each given set was ultimately determined by the child's attentiveness level that day. The researcher began intervention of MLT with rationally counting the objects in the first set. The researcher would guide the child's hand to touch each of the objects while he was counting each of the objects. This set up was continued across all three sets. With the implementation of the Break card intervention while using MLT instruction attentiveness was increased and more sets were gone through in a 6-15 minute segment. The segment length was determined by the child's level of activity that day. On very busy days the child would be given a shorter learning segment to avoid aversion to the task. If a mistake were made while counting it would be immediately corrected with a modified MLT just leading the student through the incorrect portion and testing him on the corrected material. Once the child correctly completed a set one time at the beginning of the session (when the assessment was taken) then he would be moved on to the next set. This was repeated until the child completed Set 3, then data was taken over three days to confirm mastery of the final skill. To be considered mastered the child had to rationally count the objects for three consecutive sessions with 100% accuracy.

Reliability of Measurement and Independent Variable

Intro-observer reliability or agreement was taken once during baseline and nine out of 18 times during intervention. IOA was taken with a housemate of the researcher who would watch the video of the lesson and take data like the researcher did during the intervention. Scoring for the researcher occurred during the intervention by checking and writing down the results. The percent of inter-observer agreement was found by dividing the smaller number of correct responses from one observer by the larger number of correct responses from the second observer

and then multiplying by 100. The average IOA was found to be 93%, with the range being 88%-100%. The percentage of sessions that had IOA was 52% across the settings that IOA was testing.

Reliability as to the implementation of the MLT and break card procedure was carried out twice. The classroom teacher as well as the second author observed the implementation of the intervention and coded where or not MLT as well as a break card was being employed correctly. Reliability for implementing MLT as well as the break card was 100%. This also place for baseline and the first author was video taped via her cell phone. Reliability for remaining in baseline for those sets in baseline was 100%.

Table 1. Sample data collection form.

MLT Procedures (MLT)

Session #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Daily Assessment Results	-	-	-	0	2	2	3	3	4	5	6	6	7	8	9	9	10	10	10

* (-) is baseline data which yielded no results it is also highlighted in blue, the final assessment is highlighted in green.

Table 2. Sample data collection for employing the break card

Break Card Intervention

Session #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
# of times set completed	-	-	-	3	4	4	5	4	5	6	5	5	4	5	6	4	3	3	4
# of times break card hit	-	-	-	7	5	6	4	3	3	4	3	3	2	3	3	1	1	0	1

* (-) is baseline data which yielded no results it is also highlighted in blue, the final assessment is highlighted in green.

Dependent Variables and Measurement

One dependent variable was measured in the study. It was the number of correct multiplication facts. It was counted as correct if, during the 2-minute timing on the probe sheet the product was

written correctly for that given multiplication fact. These data were gathered through out the school day. A data collection sheet can be seen in Figure 4. Permanent product data collection was conducted at the beginning of each session. Prior to meeting with the participant each session, the first author would create a probe sheet including 10 multiplication facts from each set. The problems were chosen at random and presented randomly to the participants. The first author would give the participants the probe sheet and a pencil, set the timer for two minutes and instruct them to answer as quickly as possible, but to be as accurate as possible. The first author collected the probe sheets that were graded later in the school day. After the data were collected, the first author would transfer the scores to the data collection sheet indicating how many correct responses were given for each set and how many errors there were for each set. The data collection sheet can be seen in Table.1.

Experimental Design and Conditions

A multiple baseline design (Kazdin, 2011) across three sets of multiplication facts, as determined by the pre-test) was used to evaluate the combination of model-lead-test and See/Say/Write procedures on multiplication fact accuracy and fluency. Participant 1 and 2 received two days of baseline before beginning intervention. Each participant was introduced to Set 1 (4's and 6's) facts. Introduction of a new set of numbers was dependent on each participant's success.

Baseline. Prior to starting instruction, the first author presented the students with a probe sheet consisting of 30 basic multiplication facts. There were three sets of facts and ten facts were randomly picked from each set to be included on the probe sheet. The first author created the probe sheets prior to the data collection session and would randomly pick the facts to ensure unpredictability. The student was given two minutes to complete the probe sheet and was instructed to do as many as they could in the two minutes, to work carefully to get them right, and skip the ones they did not know and come back to them at the end. During baseline no praise was given and no instruction was used to improve the students' accuracy or fluency in basic multiplication facts. The number of sessions for baseline ranged from 2 to 21 sessions.

See/say/write procedure combined with DI flashcards. Each intervention session began after the data collection session was complete. For intervention, white boards were used. The first author gave students their own white board, white board marker, and cloth eraser. The first author would write a randomly chosen math fact, from the current set on the white board. The first author would write the whole statement including the answer and present it to the students. The participants would look at the statement, and then chorally, they would say the statement and its answer. The first author would flip the white board around and erase the answer and would present it to the participants again and prompt them to say the complete statement, including the answer. Again, the students would chorally respond to the prompt, saying the

complete statement and answer. The first author would then flip her white board over and have the students write the math fact and its product from memory. The first author presented the math fact to them and they compared what each had written. If an error was made, the model/lead/test correction procedure (Marchand-Martella, Slocum, & Martella, 2004; Shouse, Weber, & McLaughlin, 2012) was employed. The first author would model the correct response, the participants and the first author would say the correct response together, and then the first author would have the participants say the correct response independently.

When the first author noted that our participants were making sufficient progress toward mastery on the first set of fact, she added the DI flashcards for additional practice with the math facts. This change occurred after the 13th data collection session for Set 1. After the participants finished the See/Say/Write procedure the first author began instruction with the DI flashcards. The first author would alternate back and forth between the participants and have them say the complete fact on the flashcard. If they were correct, the flashcard was placed in a pile on the table (Brasch, Williams, & McLaughlin, 2007). If they made an error, the model/lead/test correct procedure was again implemented. Error cards was placed three cards back in the pile. This was done to allow additional practice on facts that the students had not mastered. For correct responses the first author gave the participants specific and general praise statements (e.g. "Great job," "Nice self-correction," "You said that math fact perfectly," "You're right"). Each session took between 30-45 minutes to complete.

Maintenance

Once the participants showed mastery (100% accuracy) with the set they were working for two consecutive data days, then the first author began instruction in the next set and the previous set was placed in maintenance. Maintenance took place after session 13 for both Participant's 1 and 2 with Set 1 facts.

Reliability of Measurement for the Dependent and Independent Variables

Inter-observer agreement was taken a total of 17 times. The research would make a copy of the probe sheets from each session and would meet with another teacher candidate from Gonzaga University every Sunday. When they would meet, the teacher candidate would take the copies of the probe sheets and grade them. The research would then take the copies of the probe sheets and compare them to the data from the original probe sheets. The first authors used event ratio to compute mean agreement scores and the mean agreement was 99.99% agreement for corrects.

Reliability as to the implementation of DI flashcards with the see/say/write format were gathered by observing the first author work with each participant. This was done three times over the duration of the study. The third or fourth authors gathered this information and made the determination as to whether it was baseline, the DI flashcard condition, or maintenance. Reliability of measurement for the independent variables was 100% each time it was gathered.

Student work was also assessed and it indicated that each participant was in the various conditions for the correct number of sessions for the various sets.

Results

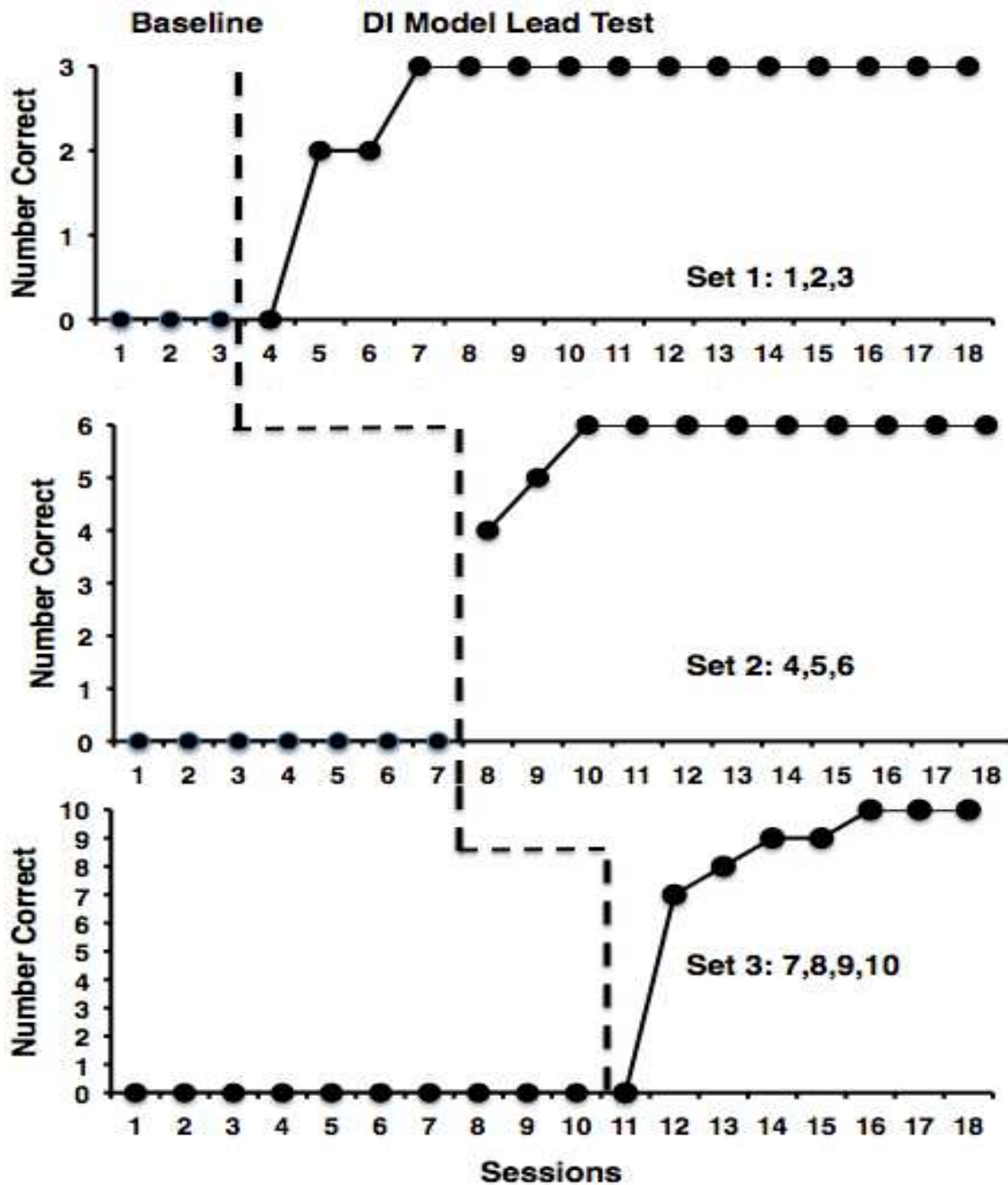


Figure 1. The number correct across three sets of numbers during baseline and model, lead, and test.

Figure 2. Total Growth by the Participant

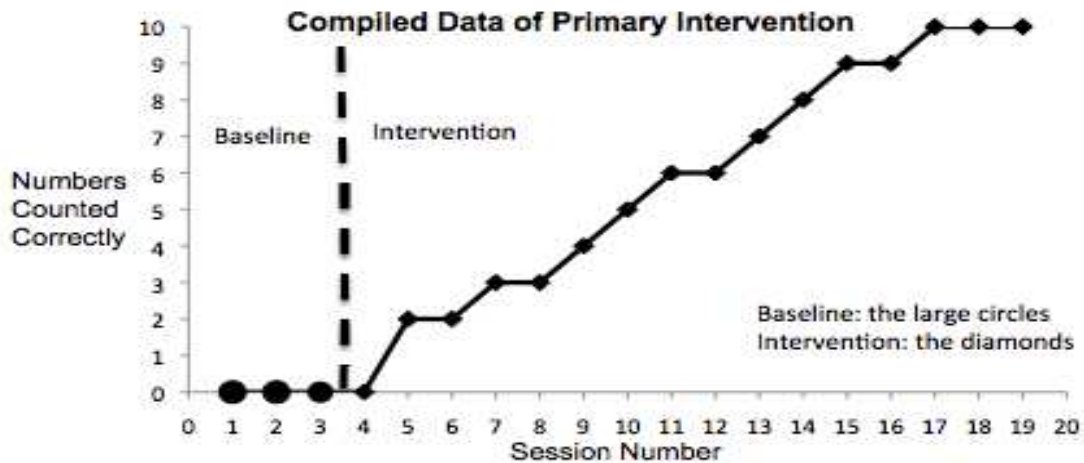
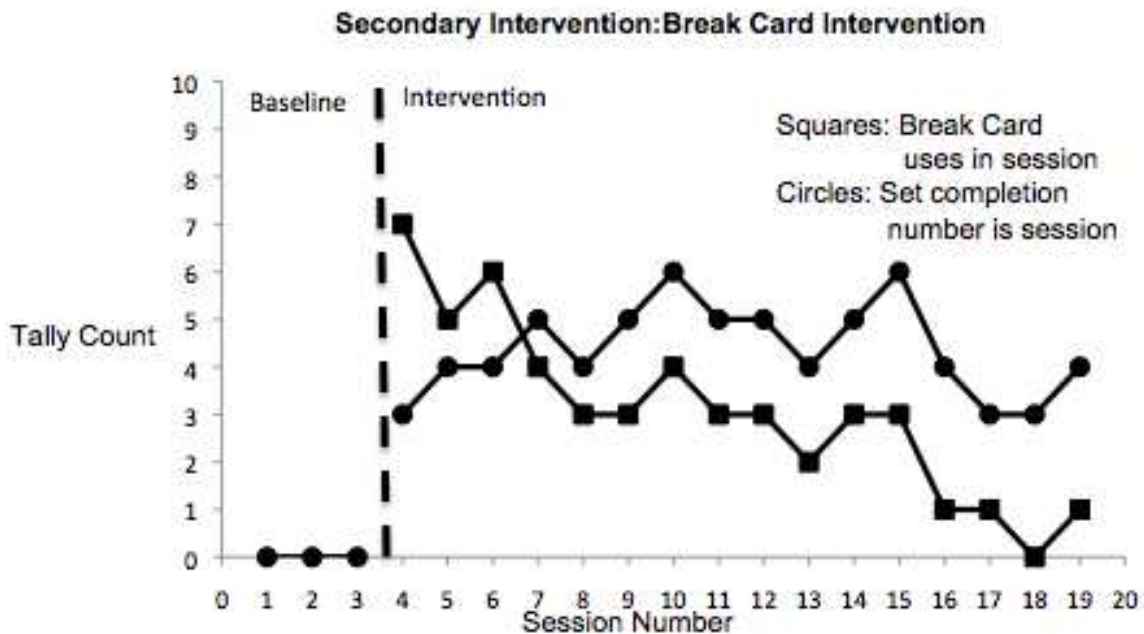


Figure 3: The frequency of employing the break card during or at the end of a session for our participant.



The results of the primary intervention of MLT are displayed in Figure 1. For Set 1 there was a large jump in the number of correct responses, which continued across all three sets. As is shown in the results during baseline the child did not know how to count any of his numbers rationally. In Set 1 the child had a range of correct responses from 0-3, in set 2 the child has a range of responses from 0-6, and in Set 3 he had a range of correct responses from 0-4. In Figure 2 it shows the changes child's ability to rationally count to ten without the use of sets. Figure 2 shows the overall trend of the acquisition of rational counting. Figure 3 presents shows the child's use of a break card and the changes in the number of sets completed. Our data and its slope revealed that as break card use decreased, as more sets were completed. Finally this trend in set completion was also found.

Discussion

The first author was able to intervene on all three sets, and as a result the child showed an increase in his ability to correctly rationally count ten objects. In addition to this his ability to attend to the tasks required also increased. Previous to the beginning of the study the first author observed the child in a normal classroom setting and noted that the child's ability to focus was pretty much non-existent. At circle or center times in the preschool the student was easily distracted often missed much of instruction and his ability to count ten objects was not there. Due to these two weaknesses the first author discussed intervention possibilities with the author authors on the sheet and proceeded to utilize the MLT procedure with break card intervention.

The first author began intervention with the MLT procedure with the break card intervention because the learner had not yet mastered, or even begun to master, the ability to rationally count ten objects. As it says in the Washington state early learning standards being able to count to ten and count ten objects is a necessary skill at age three. The use of the MLT procedure allowed the learner to practice with a model that was fresh in his mind. The repetition of the whole intervention worked well for a learner who was easily distracted. This was because the intervention was fast paced and focused specifically on the target goal for the learner. The target goal was for the learner to be able to rationally count ten objects with the demand was placed on the student. In addition the skill was to be generalized across different settings, times, and places. The generalization piece was done by using different objects and the continua work done on the target skill in preschool apart from the specific intervention.

In regards to the break card intervention, it allowed the learner to focus for short bursts. The allowing of focus kept the child practicing this skill, which the child did not have. The use of this in addition to the MLT intervention created a more focused learning environment and the shorter spurts of instruction within the whole instruction time better suited the developmental age of the learner. The use of break card intervention has been widely documented to increase attention spans in persons across ages, interventions, and disabilities (Cihak, & Gama, 2008).

The participant was more focused on Mondays, Tuesdays, and Wednesdays because these were the days that the class as a whole was less disrupted. Most of the therapies that the children received happen on Thursdays and as a result people are continually being pulled from the learning environment and result in a distracting learning environment. This was especially hard on the learner who was already highly distractible.

Contingent specific verbal praise was very effective in motivating the learner. The more enthusiastic the praise the better the learner responded. He was highly motivated when he could tell that the first researcher was excited. The young age of the learner made enthusiasm easy and fun to do as he responded with huge smiles and laughter. This environment created a light fun learning environment, which was specifically helpful for a young learner.

There were several strengths of the in the present report. The first of which was the continual evaluation of the effectiveness of the intervention. This was done with daily assessments that tested the learner's ability to retain the information across days and the informal assessments that tested the gain of knowledge during each day of intervention. Data was collected continually, which allowed the researcher to ensure that gains were being made through the whole intervention. The second strength was the use of two different interventions. This allowed the researcher to test the effectiveness of multiple interventions and their effects on each other. The use of the two interventions proved successful for the learner as huge gains were made in both areas (see Figures 1-3). The last strength of the intervention was the researcher's ability to interact with the learner across all settings in the classroom. As this study was completed while the researcher was student teaching the learner had continual interactions with the researcher. All of this built rapport with the child and allowed the researcher to more specifically attend to the specific needs of the learner.

There were limitations to the study which included the limited amount of time the learner was in the classroom and available to be worked with. This was due to the half-day preschool that the child attended. In addition to this the child would at times exhibit non-compliant behavior, which proved to be difficult to turn around when the child was feeling especially non-compliant. The young age of the learner was both strength and a weakness. It was strength because there was so much more room for growth but also a weakness because there was so more than just the task that had to be taught. Many simple skills were not in the child's repertoire, an example of this is much of the academic language that most older students have the learner in this case did not have and had to be taught.

To continue this study, the first author would like to recommend that both the procedures be implemented across different classroom settings. The simple MLT should be implemented across all academic areas and should last no more than 10 minutes for each session. This would specifically cater to the needs of the child.

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Acknowledgements

This research was completed in fulfillment of the requirements of Precision Teaching in the Department of Special Education at Gonzaga University. The first author would like to thank the participant for allowing this study in addition to the other authors for their support of the completion of this study. Ms. Christensen is now a resource room teacher in the East Valley Public Schools, Spokane, Valley, WA.

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Appendix A: Objects employed in Lessons 1-3):



*In the case of the spider picture ten of them where used.



*All of these instructional material where used in different lessons or in the same lesson.

Appendix 2.

“Break” Card:

Front View (Child doesn't see):



Back View (Child sees this view):



Appendix 3

“Work” Card:

Front View (Child doesn't see):



Back View (Child sees this side):



Appendix 4.

Break Time Items for play:

These are the items that the focused learner will play or read during his break and vary from day to day. At one point he used a simple drum, a music box, toy cars, monkey finger puppets and an alligator that were used during the circle lesson, and often times the focused learner would choose from the books in the class to read. The ones listed below are the ones that were used in the videos

Drum used in Lesson 1:



Music Box used in Lesson 1:



Alligator Puppet and monkey finger puppets used in lessons 2 and 3:

Puzzles available for break activity in lessons 1-3:



Books Available for break activity in lessons 1-3:



Appendix 5:

Completed Daily Assessments Records and Baseline Data:

MLT Daily Assessment Record:

Definitions:

Corrects:
 Accurately rote counting a set up objects in correct order within two seconds of being told "count the _____".
 Immediately self-corrects within 2 seconds of saying the incorrect number.

Errors:
 Does not count the correct number of objects correctly, in the correct order, and with proper verbalizations.

Primary Learning Target: Rote Counting

Session #:	Date:	Condition:	IOA (Y/N)	Set 1: (1,2,3)		Set 2: (4,5,6)		Set 3: (7,8,9,10)	
				C	I	C	I	C	I
1	2/3	B1, B2, B3 D1, D2, D3,	Y/N	∅	123	∅	456	∅	7,8,9,10
2	2/5	B1, B2, B3 D1, D2, D3,	Y/N	∅	111	∅	111	∅	111
3	2/10	B1, B2, B3 D1, D2, D3,	Y/N	∅	111	∅	111	∅	111
4	2/12	B1, B2, B3 D1, D2, D3,	Y/N	∅	1,2,3	∅	∅	∅	∅
5	2/17	B1, B2, B3 D1, D2, D3,	Y/N	1,2	3	∅	∅	∅	∅
6	2/19	B1, B2, B3 D1, D2, D3,	Y/N	1,2	3	∅	∅	∅	∅

19	3/27	B1, B2, B3 D1, D2, D3	Y/N	423	0	451 6	0	789 10	
20		B1, B2, B3 D1, D2, D3	Y/N						
21		B1, B2, B3 D1, D2, D3	Y/N						
22		B1, B2, B3 D1, D2, D3	Y/N						
23		B1, B2, B3 D1, D2, D3	Y/N						

*D= intervention, B=Baseline

*All the data within each session is the daily assessment, for example on day 14 the focused learner counted to 8.

Break Card Intervention Daily Assessment Record:

Definitions:

Break Card: To be utilized when the child feels that he can no longer focus on the lesson being presented.

Work Card: To be utilized when he feels that he can focus on the task at hand, in the case being tested, his counting lesson.

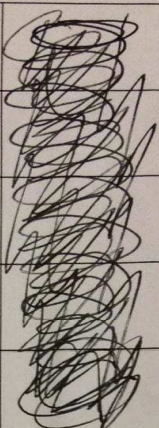
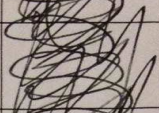
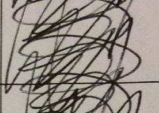
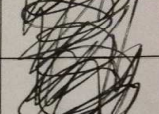
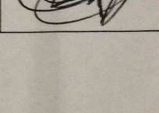
Other information: The data will be taken over ⁵⁻¹⁵ ten minute session, the number of times the break card is used within a ten minute period will be recorded in addition to the number of times the sets were gone through in the session.

*Percentage of work completed is a function of the amount of time the break card is used. As the break card usage increases so does work, until the break card can be faded out so that work is completed without it.

Secondary Learning Target: Break Card and Work Card Use

Session #:	Date:	Condition:	Set # Working on:	# of Times sets completed:	Break Card use (tally):	% of work completed*:
1	2/3	B1, B2, B3 D1, D2, D3	S1, S2, S3 n/a testing all	0	0	
2	2/5	B1, B2, B3 D1, D2, D3	S1, S2, S3 n/a	0	0	
3	2/10	B1, B2, B3 D1, D2, D3	S1, S2, S3 n/a	0	0	
4	2/12	B1, B2, B3 D1, D2, D3	S1, S2, S3	1 1 1	++++ 11	
5	2/17	B1, B2, B3 D1, D2, D3	S1, S2, S3	1 1 1 1	++++	
6	2/19	B1, B2, B3 D1, D2, D3	S1, S2, S3	1 1 1 1	++++1	

7	2/24	B1, B2, B3 D1, D2, D3	S1, S2, S3			
8	2/26	B1, B2, B3 D1, D2, D3	S1, S2, S3			
9	3/3	B1, B2, B3 D1, D2, D3	S1, S2, S3	 		
10	3/5	B1, B2, B3 D1, D2, D3	S1, S2, S3			
11	3/10	B1, B2, B3 D1, D2, D3	S1, S2, S3			
12	3/11	B1, B2, B3 D1, D2, D3	S1, S2, S3			
13	3/12	B1, B2, B3 D1, D2, D3	S1, S2, S3			
14	3/13	B1, B2, B3 D1, D2, D3	S1, S2, S3			
15	3/18	B1, B2, B3 D1, D2, D3	S1, S2, S3			
16	3/19	B1, B2, B3 D1, D2, D3	S1, S2, S3			
17	3/20	B1, B2, B3 D1, D2, D3	S1, S2, S3			
18	3/24	B1, B2, B3 D1, D2, D3	S1, S2, S3		0	

19	3/27	B1, B2, B3 D1, D2, D3	S1, S2, S3			
20		B1, B2, B3 D1, D2, D3	S1, S2, S3			
21		B1, B2, B3 D1, D2, D3	S1, S2, S3			
22		B1, B2, B3 D1, D2, D3	S1, S2, S3			
23		B1, B2, B3 D1, D2, D3	S1, S2, S3			

* The count kept of the break card use and set completion is the daily assessment for the secondary learning target of break card intervention.