

Teacher Modified Tactile Letter Technique towards Learners' Engagement

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ABSTRACT

The main thrust of the study was to determine the learner's engagement through the utilization of teacher-modified tactile letter technique in the elementary school. The researchers used the experimental method using the pretest-posttest experimental group design to achieve this purpose. The kindergarten learners were randomly divided into the control and the experimental groups which contain the pre-test, the experimentation, and the post-test of the pupils who are exposed to the teacher-modified tactile letter technique. The researchers found out that both groups have moderately observed learner engagement in learning alphabet before the intervention. However, after the utilization of the teacher-modified tactile letter technique the pupils' engagement significantly improved as compared before the experiment as to their effort, initiative, disruptive behavior, and inattentive behavior. Teacher modified tactile letter technique inspired the learners to learn and engage more in the teaching and learning process.

Keywords: Teacher-modified tactile letter technique, experimental method, learner engagement, curriculum enhancement, modification

INTRODUCTION

Tactile learning, which comprises activities such as touching, building, moving, or sketching, is one of the elements of learning in kindergarten that plays a key part in child development. Learners learn best by doing; therefore, they benefit from manipulating objects, engaging in role plays and simulations, and using other techniques of subject presentation that physically involve them in the learning process. They enjoy experimenting and getting hands-on experience, which helps them learn. Additionally, they learn best when a class period's activities are diverse (Kelly, 2017). Through this technique, children learn through their senses and that they can recall more easily if they participate in a more enjoyable and interesting activity.

Moreover, individualization or modification of the strategy provides students with a sense of the possibility of increasing in investing oneself in education technique.

Even if this approach has been found to be efficient in earlier studies (Ellis, 2000) a strategy can only be effective if it is completely embraced and incorporated by students in their toolkit for learning. Strategies typically address a process that students find difficult and provide them with some method of recalling the steps for enactment (Berry et.al.2004). This is especially true for students from diverse backgrounds. Keeping in mind the needs of students, we must have strong academic learning skills in order to succeed minor modifications to strategies that keep the original spirit of the method appropriately.

In addition, engagement and productivity increased when modeling processes were added to the modifications, results were frequently just as significant when modeling was applied to the activities that had not been modified (Miller,2003).

Performance of the pupils were highly related to its learning engagement hence; teacher modification is part of the learning improvement to suit learner's needs.

Moreover, the demand of learning modifications has been viewed due to the two-year modular distance learning. Young learners were more likely to fall in the pandemic era has slightly been disconnected to various tactile learning set-up since printed modules is largely on track. This alarming scenario leads the researcher to utilize teacher-made tactile letter technique to enhance the learners' engagement in learning alphabet.

Theoretical Framework

The greatest way to learn for kinesthetic or tactile learners is to directly involve or experiment with the material. Since tactile learners finish their learning by doing it themselves, this method is frequently referred to as multi-sensory learning. In contrast to auditory and visual learning, where learners must see or hear instructions in order to pick them up, this is totally different. On the other hand, kinesthetic learning is hands-on and largely focuses on a student trying things out for themselves. By these, Kolb's theory believed that individual learning styles emerge as a result of our genetics, life experiences, and current environmental demands. The observation is based on immediate and concrete experiences. Following that, the individual reflects on his or her observations and begins to construct a general theory of what this information might mean (Chery, 2020).

In addition, Mugabi (2020) stated that teachers are frequently obliged to put students into groups when setting up an exercise or activity in the classroom. By this, teacher able to learn more on each pupil. They can watch how to act in different situations, how it engages learning positively and negatively with varied classmates and grouping techniques. Recording findings in a notebook can also be much more illuminating. This allows the teachers to learn from mistakes, improve the things that worked, and reduce the things that did not work.

Research Design

The researchers used the experimental method using the pretest-posttest experimental group design to achieve this purpose. The measurements were taken both before and after a treatment to see the effects of the treatment on a group. The kindergarten learners were randomly divided into the control and the experimental groups.

The design contains the pre-test, the experimentation, and the post-test of the pupils who are exposed to the teacher-modified tactile letter technique. An observation checklist is present also to know the level learners' engagement before and after the utilization of teacher modified tactile letter technique.

Environment and Participants

The study was conducted in the kindergarten class of Lungsodaan Elementary School-Candijay District of the province of Bohol, Philippines. It is located in the eastern part of the province and about 100 kilometers away from the city of Tagbilaran, Bohol, Philippines.

There were twenty- six (26) kindergarten learners as the respondents of the study. The learners were randomly divided equally into thirteen (13) as the control and the experimental group.

Instrument

The researchers used two sets of modified questionnaires specifically for the purpose of this study. The first set have 2-parts questionnaire, for the demographic profile such as age, sex, and Progress Report on their performance, and the level of learner's engagement before and after the utilization of the teacher modified tactile letter technique consists of 24 items that has descriptive values of 5-Always Observed, 4-Fairly Observed, 3 Sometimes Observed, 2-Rarely Observed, and 1-Never Observed. This questionnaire was adopted and modified from the study of Cassar, Jang (2010) Investigating the effects of a game-based approach in teaching word recognition and spelling to students with reading disabilities and attention deficits.



Figure 1. Teacher-Modified Letter

Data Gathering Procedures

The respondents go through the proper procedure of securing the approval and official permit from the Department of Education in the province of Bohol, Philippines and the School Head of the school to conduct this study. During the process, the researcher identified first the learners' alphabet knowledge performance through a conduct of pre-test using the RRSP-Literacy Assessment Sub-Test 5 Tool. After which the teacher crafted tactile letter activities that uses real objects on upper and lower case lay-outs that represents the beginning of its mother-tongue name (e.g. /a/-alimango shells mosaic activity and /m/- mais seed pattern) to accommodate also the letters that are not available in the mother-tongue, the researcher used other tactile materials that are usable in the thematic teaching based on the instructional plan.

The teacher accumulated real materials and toys to use in the implementation with an Instructional Plan for tactile –letter activities. After the tools have been prepared, the teacher conducted an orientation and presentation on the overall stage of implementation, purpose and methodology on the conduct of intervention.

Before the implementation, parents were requested to sign a consent and disclosure letter on the results of assessment. Teacher also conducts pre-test assessment on alphabet knowledge to all twenty-six (26) learners.



Figure 2. Tactile –letter activities

Data Analysis

The results on the level of engagement after the utilization of teacher modified tactile letter technique shows a composite mean of 4.41 for positive engagement of learning interpreted as always observed and a reversed value of 1.59 for negative engagement of learning interpreted as never observed. Pupils' sense of

self-efficacy and intellectual engagement are closely tied to effort. Intellectually engaged students are eager to study, interested in what is being taught in class, and put out a lot of effort in their academic pursuits. The pupils showed almost similar levelling of engagement as to their effort and initiative as both got an average weighted mean of 4.67 and 4.68 respectively interpreted as always observed. This meant that the pupils in general have often given their effort and initiative during the implementation process, they have work smartly in engaging the tactile letter technique activities which made the learning meaningful and fun to do.



Figure 3. Implementation of Modified Tactile Letter Technique

In the study by Mohamad et al. (2017) it states that the use of tactile letters could promote learning and aid youngsters in improving fundamental abilities such as alphabet recognition and pronunciation. A reliable modification of teaching aid to cater the transition from modular print of learning to this school year’s full face-to-face method is to be considered.

Table 1. Learners’ Level of Engagement Before and After the Utilization of Teacher-Modified Tactile Letter Technique N = 13

Statement	Before			After		
POSITIVE ENGAGEMENT OF LEARNING						
1.1. Effort	WM	DI	Rank	WM	DI	Rank
1. Pays attentions to letter activities .	4.08	FO	2	4.69	AO	4
2. Works well with the teacher.	4.08	FO	2	4.62	AO	6
3. Completes assigned activities .	4.00	FO	5	4.62	AO	6
4. Is persistent when activities seems difficult.	3.92	SO	7.5	4.46	AO	8
5. Approaches new set of activities with sincere effort.	4.00	FO	5	4.85	AO	1
6. Tries to finish activities even when they are difficult.	3.92	SO	7.5	4.62	AO	6
7. Is excited when new tasks is introduced.	4.00	FO	5	4.77	AO	2.5
8. Likes to share what they have done in school to peers at school and home	4.08	FO	2	4.77	AO	2.5

Average Weighted Mean	4.01	FO		4.67	AO	
1.2. Initiative						
1. Attempts to do his/her work thoroughly & well rather just trying to get by.	3.92	SO	8	4.69	AO	4
2. Participates actively during activity instructions.	4.08	FO	6	4.85	AO	1
3. Asks questions to get more information	4.23	AO	2.5	4.69	AO	4
4. Raises his/her hands to answer questions.	4.31	AO	1	4.69	AO	4
5. Completes lesson related works easily	4.15	FO	4.5	4.62	AO	6.5
6. Tells teacher/guardian of the last lesson taken	4.15	FO	4.5	4.62	AO	6.5
7. Do work even not being reminded	4.00	FO	7	4.54	AO	8
8. Loves to do work with his/her own style	4.23	AO	2.5	4.77	AO	2
Average Weighted Mean	4.13	FO		4.68	AO	
NEGATIVE ENGAGEMENT OF LEARNING						
1.3. Disruptive Behavior						
1. Acts restless, is unable to sit still	2.38	RO	3	2.00	RO	2
2. Needs to be reprimanded.	2.54	RO	1.5	2.00	RO	2
3. Annoys or interferes with peers/sibling in the middle of lesson work.	2.31	RO	4	1.92	RO	5.5
4. Talks with classmates too much.	2.54	RO	1.5	1.92	RO	5.5
5. Shouts in the middle of learning periods.	2.00	RO	7	1.92	RO	5.5
6. Gets discouraged and stops trying when encounter difficulties	2.08	RO	6	1.92	RO	5.5
7. Is easily frustrated when they don't like lesson materials	2.15	RO	5	2.00	RO	2
8. Sings in the middle of class or home learning	1.46	NO	8	1.31	RO	8
Average Weighted Mean	2.18	RO		1.88	RO	
1.4 Inattentive Behavior						
1. Doesn't seem to know what's is going on the class when ask.	2.18	RO	5	1.77	RO	6.5
2. Is withdrawn ,uncommunicative	2.08	RO	7	1.54	NO	8
3. Doesn't take independent work and must be helped out .	1.46	NO	8	2.08	RO	2
4. Doesn't listen to instruction.	2.54	RO	1	2.00	RO	4
5. Forget what is being instructed .	2.38	RO	3	2.23	RO	1
6. Frequent moving during learning periods.	2.46	RO	2	2.00	RO	4

7. Attention is difficult to catch.	2.15	RO	6	2.00	RO	4
8. Looked tired during learning periods.	2.26	RO	4	1.77	RO	6.5
Average Weighted Mean	2.19	RO		1.92	RO	
Composite Mean	3.97	FO/Moderate Engaged		4.41	AO/Highly Engaged	

Legend: Rating Scale	Descriptive Interpretation	Weighted Mean (WM)
4.20 – 5.00	Always Observed(AO)	Highly Engaged
3.40 – 4.19	Fairly Observed(FO)	Moderately Engaged
2.60 – 3.39	Sometimes Observed(SO)	Fairly Engaged
1.80 – 2.59	Rarely Observed (RO)	Rarely Engaged
1.00 – 1.79	Never Observed(NO)	Not Engaged

Table 2 presents the test of difference of the level of pupils’ engagement before and after the utilization of teacher modified tactile letter technique. A Wilcoxon Signed-Rank test result revealed that the pupils’ engagement of the teacher-modified tactile letter technique was significantly improved as compared to their level of engagement before the experiment as to their effort, $Z=2.689$, $p=0.007$, initiative, $Z=2.670$, $p=0.008$, disruptive behavior, $Z=3.075$, $p=0.002$, and inattentive behavior, $Z=2.881$, $p=0.004$, thus reject the null hypothesis. This implies that the teacher modified tactile letter technique positively influence to learn and engage more in the teaching and learning process.

Table 2. Test of Difference Between the Learners’ Engagement Before and After the Utilization of the Teacher-Modified Tactile Letter Technique $N_1 = 13$; $N_2 = 13$

Variables	Z-value	p-value	Interpretation	Decision
Effort	2.689	0.007	Significant	Reject H_0
Initiative	2.670	0.008	Significant	Reject H_0
Disruptive Behavior	3.075	0.002	Significant	Reject H_0
Inattentive Behavior	2.881	0.004	Significant	Reject H_0
Overall Level of Engagement	3.181	0.001	Significant	Reject H_0

*Difference is significant at 0.05 (2-tailed)

According to Akey (2006), teachers have a crucial role in encouraging pupils’ growth engagement. They should closely collaborate with the pupils to give the most impact on a student's educational experience. Meanwhile Kolb’s theory believed that our individual learning styles emerge as a result of our genetics, life experiences, and current environmental demands. Observation is based on immediate and concrete experiences. Thus, the individual reflects on his or her observations and begins to construct a general theory of what this information might mean (Chery, 2020). Moreover, the pupil’s overall level of engagement after the utilization of the teacher-modified tactile letter technique was significantly improved, $Z=3.181$, $p=0.001$. This infers that the teacher modified tactile letter serves as a springboard to positive learning.

CONCLUSIONS

The researchers found out that the teacher-modified tactile letter technique enhanced pupils’ engagement in

learning activities. This clearly demonstrate that this technique created a highly positive learning environment so that pupils exhibited consistent high levels of effort and initiative, and showing motivation to actively involved.

In conclusion, the teacher-modified tactile letter technique had a profound positive effect on pupil engagement, leading to enhanced motivation and active participation. This further affirms the effectiveness of this teaching strategy in making the learning process more engaging and enjoyable for the learners.

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