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# Social Studies Performance Of Pupils With Intellectual Disability: The Effect Of Demonstration Method And Storytelling

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**ABSTRACT:** This study investigated the effectiveness of demonstration and storytelling methods on the performance of pupils with intellectual disability in social studies. Moderating effects of gender and learning styles were also examined. The study employed a quasi-experimental research design. The sample for the study consisted of thirty (30) pupils with intellectual disability purposively selected from three intact classes, and who were randomly assigned to two experimental groups and a control group. Findings indicated that the experimental group (demonstration method) outperformed other groups ( $\bar{x}$  =8.30; std dev. =2.058, N = 10) followed by the storytelling group ( $\bar{x}$  =6.40; std dev. =3.098, N = 10) and control group ( $\bar{x}$  =1.60; std dev. =2.797, N = 10). This implies that demonstration, as a treatment, had the highest mean scores. This was indicative that demonstration strategy had a significant positive effect on the performance of pupils with intellectual disability in social studies. It is recommended that social studies teachers maximize the use of demonstration methods while teaching Social Studies concepts.

**Keywords:** Demonstration, storytelling, strategy, Intellectual disability, Social Studies

## **Introduction**

Over the past decade, the social studies curriculum has evolved dramatically in both content and methodology. Social studies enhances the acquisition of knowledge and assimilation of values needed for effective interaction with social processes and society. It contributes to the achievement of social goals through the education of citizens (Chinasa & Kabir, 2018). Schalock et al. (2010) contend that social studies should be centred on innovative approaches which seek the truth, such as problem detection, analytical thinking, and learning through experimentation and discovery. In essence, the importance of teaching social studies to students with intellectual disabilities cannot be overstated, as it will likely aid in the development of conflict resolution skills, which will lead to better and more effective social living. The teaching of social studies aims to promote citizenship and values education and skill development (Adeyemi & Ajibade, 2011). Despite the enormous benefits of incorporating social studies into our school curriculum, there appears to be poor handling of the subject (Akpochofo, 2001).

This has resulted in difficulty in achieving the objectives of teaching social studies. Most teachers of social studies continue to rely heavily on the lecture method to convey information, which is a significant source of concern. The presentation style is, however, supposed to be activity-based. According to Akinlaye et al. (2000) and Oganwu (2004), the teacher becomes an expositor and drillmaster, while the learner remains a listener. The learner is considered a repository of facts which can be retrieved when the teacher calls upon a pupil to answer a question. Based on a study of teaching behaviour and student achievement in science, Akuezuilo (1989) discovered that learner-centred activities are more effective than teacher-centred activities in promoting real learning experiences. Many pupils, including those with intellectual disability, currently live in environments characterised by social ills and moral decadence. They may not intuitively know how to interact maximally and safely in their environment without instruction in social studies. This study, therefore, investigated the significant main effect of the demonstration method and storytelling on the performance of pupils with intellectual disability in social studies.

## **Literature review**

Concept of intellectual disability

Intellectual disability is also called mental retardation, a cognitive disability that results in significantly lower intellectual functioning due to incomplete mental development, which occurs either before, during, or after birth (during the developmental period). It appears alongside significant deficits in social and adaptive skills. Intellectual disability is viewed as a disability which is associated with significant limits imposed on both cognitive processing and adaptive behavioural patterns, and it occurs before the age of eighteen (Schalock et al., 2010). Oyundoyin (2013) views intellectual disability as a disability arising from a delay in brain development during the developmental period,

resulting in significant limitations on an individual's academic, social, emotional, behavioural, and adaptive functioning.

Mangal (2007) identified persons with an intellectual disability based on the British classification system. This groups intellectual disability into the following categories: profound intellectual disability with an intelligence quotient of below 20-25; severe intellectual disability with an intelligence quotient of about 20-25 to 35-40; moderate intellectual disability with an intelligence quotient of about 35-40 to 50-55; and mild intellectual disability with an intelligence quotient of about 50-55 to approximately 70. Most persons with mild intellectual disability can benefit from being taught basic academic subjects, can be provided with functional academic skills, and receive social and vocational training involving routine activities. They can also learn and apply concepts taught in social studies. Careful attention must, however, be paid to instructional strategies that will help pupils ensure maximum performance. This is because of specific inherent learning characteristics. These include difficulty learning in abstract, challenges when remembering what has been taught, poor generalisation skills, and difficulty gaining and sustaining their attention during teaching. It is therefore essential that methods of teaching make up for some of these shortcomings. One of these methods is storytelling.

#### Storytelling and social studies performance

Storytelling is the oldest form of instruction (Pedersen, 1995). It is a simple but effective teaching technique that creates storylines to assist pupils in understanding the multifaceted and disorganised world of experience (Bruner, 1990; Gils, 2005). Although storytelling is not a new concept, the concept of digital storytelling is (Meadows, 2003). Three approaches to using stories to support learning were proposed by Jonassen and Hernandez-Serrano (2002). First, they can be used as exemplars of concepts or principles being taught by direct instruction. Second, they can be used as problem-solving scenarios for pupils. Third, stories can be used to provide advice to pupils and help them learn how to solve problems.

According to Tsou et al. (2006), incorporating digital storytelling into the language curriculum is a creative language learning technique that can improve pupils' reading, writing, speaking, and listening skills. Furthermore, storytelling in the social studies curriculum improves the communication skills of pupils, motivates them to learn about the past and present, and fosters a class bond through shared experiences (Combs & Beach, 1994). According to Jonassen (2003), the most common problem-solving education is through problems in stories. Pupils begin solving story problems in early elementary school and continue to do until they graduate from high school or beyond. Mello (2001) asserts that the use of storytelling in the classroom impacts pupils' interpersonal relationships. This could be encouraged if pupils were motivated to

reflect on their experiences. Some stories may serve as a model that can be emulated by the pupils, helping to strengthen their relationships with other community members.

### Demonstration method and social studies performance

In the demonstration method, a systematic approach is adopted for the teaching and learning processes. Mundi (2006) defined the demonstration method as a display or exhibition performed by the teacher while the students observed with bated breath. In other words, it involves explaining how something works or the steps involved in a process. The method entails the teacher doing whatever the pupils are expected to do at the end of the lesson. The teacher demonstrates, either directly or through the use of instructional media relevant to the subject matter or material that will be presented, by showing them how to do it and explaining the step-by-step process (Ameh et al., 2007; Syah, 2003).

The goal of teaching using a demonstration method is to show the process of occurrence of an event according to the teaching materials, how they are attained, and the ease with which the pupils can understand the teaching-learning process. Daluba (2013) examined the effect of demonstration methods on pupils' achievement. The findings showed that the effect of the demonstration method on pupils' achievement was significant compared to the conventional lecture method. According to Dahyana (2014), the demonstration method can improve learning outcomes by increasing pupils' learning activities, such as taking notes on the subject matter, asking and answering questions with other students and teachers, conducting demonstrations, and concluding the subject matter. The demonstration method is a type of learning method that can assist students to understand better. The research of Lestari et al. (2016) supports the conclusion that the mathematical problem-solving abilities can be met individually through problem-based learning.

## Methodology

### Research design

The research design used was the quasi-experimental approach. The study adopted a pretest, posttest, control group quasi-experimental design. Treatment was at two levels (demonstration method and storytelling) while the control group was treated using placebo. The study treatment is presented below:

Experimental group 1: (E<sub>1</sub>): O<sub>1</sub>    X<sub>1</sub>    O<sub>4</sub>  
Experimental group 2:        (E<sub>2</sub>): O<sub>2</sub>    X<sub>2</sub>    O<sub>5</sub>  
Control group 3:        (C): O<sub>3</sub>            O<sub>6</sub>

E<sub>1</sub> represents demonstration method

E<sub>2</sub> represents storytelling

Where  $O_1$ ,  $O_2$ , and  $O_3$  represents pretest scores while  $O_4$ ,  $O_5$ , and  $O_6$  represents post test scores.

$X_1$  represents the treatment package for experimental group1 (demonstration method).

$X_2$  represents the treatment package for experimental group2 (storytelling).

C for control group.

### **Participants**

The population for the study comprised pupils with mild intellectual disability who were selected from three (3) special schools using purposive sampling technique. Convenient sampling was used for the selection of thirty pupils diagnosed as having mild intellectual disability. The selected schools were randomly assigned to the treatment group.

The instruments used for data collection took the form of a social studies performance test. The social studies performance test had 20 objective questions (with pictures) which were developed from the Primary 2 social studies curriculum. This test assessed the social studies knowledge of pupils based on the concepts taught, namely, environment, family, food, and greetings.

### **Demonstration method**

The researchers selected the demonstration method as a means of improving the social studies performance of participants with mild intellectual disabilities. It has been adapted to meet the special needs of participants. A step-by-step guide was followed when implementing the treatment package for experimental group 1 (demonstration). Pupils followed the guide as the teacher demonstrated the expected skills. Students were given positive reinforcement for the actions they took when necessary to ensure they were doing the right thing.

### **Storytelling package**

The researchers selected storytelling as a teaching method as well. According to the Social Studies Book for primary 2, the stories were developed by teachers for the purposes of teaching specific skills. An appropriate social story is one that extols appropriate behavior. Tone and gestures were used to indicate mood in the story. During six weeks, three times per week, this process was followed when implementing the treatment package for experimental group 2 (storytelling). In this way, pupils were interested in seeing what they would learn next, which helped stimulate their interest. In addition, they were able to stay focused for a bit longer.

### **Procedure for data collection**

A pretest on course content was administered before the intervention, and a posttest was administered one week after the lessons were taught. Sessions were held twice a week for six weeks, with each session lasting 45 to 60 minutes. Participants in the demonstration group were led to demonstrate aspects of the teaching step by step

(using actual materials familiar to them), such as cleaning the environment, showing the roles of family members, and demonstrating how to greet. For the group exposed to storytelling, stories told to the participants included “Sharon finds the environment”, “Tina Cleans Her Environment”, “MrBabalola's Family”, “The Three Men and a Family”, “Prince and the Vegetable Kingdom”, and “Greetings”. The main teachings were then highlighted from the stories, based on the instructional objectives.

### Method of data analysis

The data generated from the study were analysed using the analysis of co-variance (ANCOVA) and a post hoc test at a 0.05 level of significance.

### Results

**Table 1: Summary of Descriptive Table**

Group	Mean	Std. Deviation	N
<b>Treatments</b>			
Demonstration	8.30	2.058	10
Storytelling	6.40	3.098	10
<b>Conventional Group</b>			
Control Group	1.60	2.797	10
<b>Total</b>	<b>5.43</b>	<b>3.866</b>	<b>30</b>

The results in Table 1 show that the demonstration has the mean score ( $\bar{x} = 8.30$ ; std dev. = 2.058, N = 10) followed by storytelling ( $\bar{x} = 6.40$ ; std dev. = 3.098, N = 10) and the control group ( $\bar{x} = 1.60$ ; std dev. = 2.797, N = 10). This implies that demonstration, as a treatment, has the highest mean scores.

There is no significant main effect of treatment (demonstration method and storytelling) on social studies performance of pupils with intellectual disability.

**Table 2: ANCOVA Showing the Effects of the Storytelling and Demonstration Methods on Social Studies Performance of Pupils with Mild Intellectual Disability**

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	255.050 <sup>a</sup>	4	63.763	8.940	.000	.589
Intercept	113.512	1	113.512	15.914	.001	.389
<b>Main Effect</b>						
Group	199.927	2	99.964	14.015	.000	.529
Error	178.317	25	7.133			

Total	1319.000	30				
Corrected Total	433.367	29				

a. R Squared = .682 (Adjusted R Squared = .515)

Table 2 presents the ANCOVA results showing the main effects of the storytelling and demonstration methods on social studies performance, with their learning styles and gender as covariates among pupils with intellectual disability. From Table 2, it can be seen that the Adjusted F-Value for the treatment group [ $F(2, 25) = 14.015; p = 0.000$ ] is significant. This, therefore, indicates that the introduction of treatments comprising storytelling and demonstration method significantly improved the pupils' performance in social studies. The partial Eta Squared ( $\eta_p^2$ ) of value 0.589 indicates the effect size of the treatment, and based on Cohen's guidelines (0.2 – small effect, 0.5 – moderate effect, 0.8 – large effect), it can be seen that the effect size of the treatment is moderate (0.33). This implies that the treatment accounts for a 58.9% variance in the dependent variable.

A posthoc analysis was carried out with the goal of difference among the groups (storytelling, demonstration, and the control group), and the post hoc test was carried out. The result of the post hoc test is presented in Table 3, showing there is a significant difference between the demonstration and control groups (mean difference = 6.315;  $p = 0.000$ ) and the storytelling and control groups (mean difference = 4.611;  $p = 0.000$ ).

**Table 3: PostHoc Analysis Showing the Main Difference Among the Groups**

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
					Lower Bound	Upper Bound
Demonstration	Storytelling	1.704	1.236	.540	-1.466	4.875
	Control Group	6.315*	1.248	.000	3.114	9.516
Storytelling	Demonstration	-1.704	1.236	.540	-4.875	1.466
	Control Group	4.611*	1.201	.002	1.528	7.693
Control Group	Demonstration	-6.315*	1.248	.000	-9.516	-3.114
	Storytelling	-4.611*	1.201	.002	-7.693	-1.528

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

### **Discussion of finding**

The findings showed that the social studies performance of pupils in the treatment group was enhanced significantly based on the use of storytelling and demonstration method as teaching strategies compared with the control group. The reason may be that the storytelling and demonstration methods provided participants with a tangible way to learn social studies effectively and enhance their performance. This finding on the effect of the demonstration method agrees with previous findings of Idoko and Oladimeji (2002) and Alio (1997). These researchers observed that the students in the experimental group that used the demonstration method as an instructional method performed better than those in the storytelling and control group who were mere passive listeners in their agricultural classes. The results of the hypothesis revealed that the mean achievement scores of the different groups of students taught with the different teaching methods – the demonstration method and storytelling strategy – were significantly different. The test scores recorded by pupils depended considerably on the method(s) adopted by the teacher. The finding is consistent with the submission of several scholars, who noted that the performance of learners depends on using attractive and stimulating method(s) for teachers and learners (Ibitoye, 2006; Eilks, 2002; Mundi, 2006).

Moreover, the findings show that the efficacy of storytelling aligns with Tsou et al. (2006), who averred that integrating digital storytelling into the language curriculum as a creative language learning technology could help improve the learning level of pupils in reading and writing, speaking and listening. The reason for the improvement is that stories, when told appropriately, draw the pupils' attention to the "sounds of language and helps children develop a sensitivity to the way language works" (Isbell, 2002, p. 27). It seems that storytelling is a practical and powerful teaching tool, especially for enhancing social studies performance, because it encourages the active participation of pupils through repetitive phrases, unique words, and enticing descriptions (Isbell, 2002). The finding is consistent with the submission that the ability to recall a story provides children with the opportunity to reorganise the sequence of events, use the vocabulary of the story, and expand their comprehension of the world (McGee & Richgels, 2000).

The findings show that storytelling "can indeed be a good vehicle to increasing language performance in that it has the potential to motivate students" (Tecnam, 2013, p. 27). This claim is supported by several studies (Sadik, 2008; Ohler, 2005). Pupils who exhibit a lack of social skills and problems in their interactions, according to Kinnamon (2003), can change for the better. If an appropriate teaching strategy is used, they can achieve good academic results while improving their social relationships.



## **Conclusion**

This finding highlights the importance of using appropriate teaching strategies in enhancing the social studies performance of children with intellectual disability. Because children with intellectual disabilities have the greatest need for improved interactions with peers and adults, it is critical to understand that storytelling and demonstration methods significantly impact their social studies performance, which is related to learning social skills. This finding is helpful for parents and teachers who are designing and implementing social skills interventions for children with intellectual disabilities and tracking these children's social outcomes.

## **Recommendations**

Based on the finding of the study, recommendations made includes social studies teachers should utilizing both the demonstration method (preferably) and storytelling in teaching social studies to pupils with intellectual disability. In addition to teacher of pupils with intellectual getting opportunity for in-service training, workshops, seminars and conferences to update their knowledge in the appropriate use of demonstration methods and storytelling in social studies classrooms.

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## **Conflict of interest**

The authors confirm that there is no conflict of interest with respect to the data presented in this article

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