

# The Effect of Storytelling Through Craft Activities on Reading, Writing and Reading Fluency in Students with Learning Difficulties

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**Abstract:** In today's information-driven era, proficiency in literacy skills, notably reading and writing, is of utmost importance. These skills are integral to academic achievement and social interaction, particularly for students in their school years. The objective of this research is to investigate the effect of incorporating storytelling into craft activities on the improvement of reading, writing, and reading fluency among students who are academically challenged and face difficulties with these fundamental literacy skills. The study focused on five underperforming students in the lower grades of an elementary school who attend a C Local Children's Center in D county, Jeollanam-do. The study's purpose was communicated to the head of the center, and a notice was posted at the center to proceed with the activities, subject to the consent of the interested students and their parents. Ultimately, five students were selected based on the specified criteria and participated in the study. In order to ascertain the efficacy of the program, standardized assessments were employed, notably the Korea Test of Literacy Diagnosis, through which both pre-tests and post-tests were conducted. In addition, the homogeneity of the student cohort was evaluated using the Korean adaptation of the Korean-Colored Progressive Matrices, a standardized measure for assessing cognitive abilities. In the 'Storytelling in Craft Activity' program, a total of eight sessions of intervention were conducted for 80 minutes per week, excluding the initial and final assessments. As a result, all participating students demonstrated positive improvements in reading, writing and reading fluency. In the concluding phase of the program, these outcomes were observed. Participants engaged in narrative-based exercises, wherein they cataloged key terms associated with prompts such as bamboo, bicycle, and lighting. Moreover, they partook in a sequential word reading task and transcribed reflections onto 'wish notes'. Furthermore, the activity of examining and reflecting on the completed projects of both oneself and one's peers, and then expressing their observations through writing and drawing, was found to be effective. In subsequent studies, it is essential to expand both the participant pool and the number of intervention sessions, focusing on underperforming students in both lower and upper grades. Additionally, the research should include broader literacy skills as intervention goals, alongside investigating the impacts on reading, writing and reading fluency. In this study, Storytelling in craft activities increased the concentration and interest of underachiever students, which was shown to increase interest in learning. This suggests that it is effective in reading, writing, and reading fluency.

**Keywords:** Craft Activity, Storytelling, Reading, Writing, Reading Fluency

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## 1. Introduction

### 1.1 Necessity and Purpose of the Study

Reading and writing are fundamentally crucial for learning and are essential skills required for social activities. The reading and writing abilities of school-aged children influence not only their academic achievements but also their social[1]. Students who struggle with these skills are referred to as students with learning difficulties. Students facing learning difficulties can be categorized into several distinct groups: first, those whose academic performance is below the expected level for their grade due to limited intellectual ability; second, students who do not achieve the standard academic benchmarks of their grade; third, learners whose actual learning achievements are not aligned with their measured intelligence quotient; fourth, individuals who lack motivation or are insufficiently engaged in learning activities; fifth, students who are willing to learn but do not show academic progress despite their efforts; and finally, those who are unable to meet the developmental and educational objectives of their educational stage due to a variety of internal and external influences[2]. Such students need to cultivate the ability to communicate by expressing their thoughts through words and writing. However, due to academic challenges, they might experience difficulties in forming relationships with peers and might lack emotional support. Using art as a medium can effectively help these students to verbalize their emotions and thoughts[3]. Among various art activities, three-dimensional expression activities foster interest and expressive abilities. Activities during the process, such as kneading, stamping shapes, stamping letters, strengthening the hand, aiding in writing, and reading activities during program progression also positively affect students' language use[4]. For students who are not proficient in language and letter use, playful and pictorial expression activities stimulate interest in learning, cultivate self-expression abilities, and enhance language expression abilities[5]. Art activities promote language proficiency by acquiring new words in the process of using various colors, textures, and forms[6]. Discussing the created artworks and sharing opinions stimulate aesthetic interest and aid in vocabulary acquisition, as students explain their work and ask about others' works[7]. Discussing and appreciating artworks improve language proficiency and are associated with the development of literacy skills, like word reading and writing[8]. Additionally, storytelling through the appreciation of art masterpieces effectively enhances language abilities[9].

Storytelling allows students to express their thoughts verbally and engages them in a communication process where they listen to others' opinions[10]. In the process of craft activities, students have the opportunity to verbalize and express their emotions through storytelling on specific words and activity topics, obtain new information, and know the difference between other people's thoughts and my thoughts[11]. Given these previous studies that show the positive effects of storytelling in craft activities on students' self-expression abilities, language proficiency, and literacy development, this research aims to examine the influence of storytelling within craft activities on students with learning difficulties, particularly in terms of reading, writing and reading fluency.

### 1.2 Study Question

This study endeavors to ascertain the impact of incorporating storytelling within craft activities on word reading, word dictation, and reading fluency of lower-grade elementary students facing learning challenges. The proposed research questions, based on our objectives, are:

1. How does storytelling within craft activities influence the reading abilities of underperforming students?
2. How does storytelling in craft activities impact the writing capabilities of underperforming students?

3. How does storytelling in craft activities affect the reading fluency of underperforming students?

## 2. Theoretical Background

### 2.1 Crafting Activities

If fine art is made for beauty itself, there is an important difference in that crafts are made for the purpose of use by adding decorative value to practical objects. In craft activities, acceptance of stimulation through appropriate interaction with the environment and the experience of expressing one's intention affect cognitive development. In addition, creativity and creativity are developed in the process of thinking, talking, and exploring with the goal of what and how to make [12]. Craft activities are direct experience-oriented activities that can encourage attention and voluntary participation by developing cognitive development along with emotional stability by cultivating eye-hand coordination and hand skills through active aesthetic experiences by students. Craft activities stimulate interest and creativity by providing students with a variety of visual stimuli, and improve self-resilience by providing high experiences in self-expression [13]. It enhances students' confidence by giving them positive experiences such as developing concentration, solving problems, and promoting intimate interaction. Various experiences in craft activities help students improve their positive thinking and emotional control skills [14]. A study [4] on the therapeutic effect of art education through three-dimensional molding activities in students' art activities said that three-dimensional expression activities using easy-to-handle craft materials such as clay make them feel like play and help self-expression by cultivating interest and expressiveness. During the activity process, activities such as rubbing, shaping, and writing soil are effective in writing by developing strength in the hands, and reading books as reinforcement at the end of the session are also effective in reading students' language use and speaking in sentences.

[5] In the impact of the integrated art education approach on the formation of self-concepts of underachievers, it was revealed that expression activities through play and painting stimulated interest in learning and improved language expression ability for students who were not good at using language or letters. Drawing on activity topics, sharing stories, reading, writing using word cards, and reading books related to activity topics during each program helped improve language function. In various craft activities, you can try your emotions or language expressions through your work, and you can get a stable opportunity by unraveling your repressed emotions or feelings through a creative process.

In group craft activities, it can be said that it is a process of achieving individual and collective emotions together through works expressed by people with similar needs. Various materials and works put into craft activities can be an appropriate tool to promote and promote the development of social emotions by inducing curiosity, observation, a desire for achievement, and a sense of stability through the search for direction and subsequent expression activities.

### 2.2 Storytelling

Storytelling allows students to express their thoughts verbally and engages them in a communication process where they listen to others' opinions [10]. Through storytelling, students share stories related to specific topics, gaining new information and understanding the differences between their thoughts and those of others [11]. In addition, sharing stories plays an important role in improving thinking and expression, and students learn to listen to other people's stories and wait for their turn.

Therefore, sharing stories not only contributes to verbal interaction and language development, but also has a positive effect on social, cognitive, and learning development. For this reason, sharing stories is an activity that has an important value in terms of student's holistic development [15].

## 2.3 Students with Learning Difficulties

Students facing learning difficulties can be categorized into several distinct groups: first, those whose academic performance is below the expected level for their grade due to limited intellectual ability; second, students who do not achieve the standard academic benchmarks of their grade; third, learners whose actual learning achievements are not aligned with their measured intelligence quotient; fourth, individuals who lack motivation or are insufficiently engaged in learning activities; fifth, students who are willing to learn but do not show academic progress despite their efforts; and finally, those who are unable to meet the developmental and educational objectives of their educational stage due to a variety of internal and external influences[2].

Students with learning difficulties lack language skills, have negative self-concept, and have lower learning motivation and satisfaction with school life than general students. Task concentration and attention concentration are also low, parents' level of learning support is low, and learning time tends to be low[16]. Overall, intellectual curiosity is low, interest level is low, and academic performance is low, so they do not want to study further, resulting in low confidence and inferiority[17]. In particular, it was found to have characteristics such as depression and loss of interest[18].

Students with learning difficulties often fail to acquire basic language skills due to lack of reading or conversation experience at home, which may lead to poor understanding and thinking skills[19]. Due to academic problems, social and emotional problems such as self-regulation behavior and social interaction are also shown[20]. If special learning opportunities are not provided to students with learning difficulties, learning deficits and learning gaps with peers will be large, and accumulated failures affect learning in other subjects due to learning lethargy and problems in reading and writing[21].

## 3. Methodology

### 3.1 Participants

The participants of this study were five lower-grade elementary school students attending Center C in a local children's center located in D County, Jeollanam-do.

For this study, we explained the purpose of the study over the phone to the heads of two local children's centers with more than 10 lower-grade elementary school students who have difficulty learning in D-gun, Jeollanam-do, and received cooperation. After visiting the institution, after hearing the information of students suspected of having difficulty in learning, the C Regional Children's Center was selected as the final research institution, except that one institution is mostly multicultural students. A notice of recruitment for research participants was attached to the C Regional Children's Center, and the contents of the study were explained to parents and students and consent was obtained for those who wished to participate.

A standardized test tool, the Korea Test of Literacy Diagnosis[22], was conducted on eight students who agreed to the study. Three of them were students who had difficulty learning only one thing in reading and writing, so they were excluded from the study. The final study included two first-year students (male 1 and female 1), two second-year students (male 2 and female 2), and one third-year student (female 1). Five students with difficulty in learning diagnosed with  $-1.5$  SD or less were selected in the Korea Test of Literacy Diagnosis[22]. The selection criteria are as follows.

1. A student demonstrating poor learning performance at the center, specifically in reading and writing.
2. A student without emotional and behavioral disorders, cognitive impairments, or other sensory disorders.
3. A Students with reading and writing ability of  $-1.5$  SD or less in the Korea Test of Literacy Diagnosis.

4. A student who has recorded a Korean-Colored Progressive Matrices -1SD standard deviations or lower.
5. A student who, along with their parents, expressed a willingness to participate in the study and provided written consent.

The general characteristics of the study subjects are as follows:

Student A is a female third-grader who tends to become easily bored and exhibits signs of distraction. She faces challenges in reading, writing, and comprehension, often reading words slowly with noticeable pauses. Her difficulties extend to writing words without final consonants. Additionally, she is sensitive to surrounding noises and frequently interrupts her peers' conversations, which has impacted her peer relationships negatively.

Student B is a second-grade female student who is quiet and introverted. She is a student who has no problems reading words without consonants, but has difficulty reading difficult words with consonants, has weak hands, and has difficulty writing letters. She is a student who reads each syllable sparingly and cannot read fluently.

Student C is a second-grade male student who has difficulty concentrating on parts he is not interested in. He has no difficulty reading easy sentences without consonants, but he easily gives up reading difficult words and has difficulty reading and understanding them. This student has more difficulty writing words with final consonants and diphthongs.

Student D is a first-grade female student who leaves her seat when it comes to parts she is not interested in and shows distracted behavior due to poor concentration. This is a student who has no difficulty reading simple sentences without consonants but has difficulty reading and understanding them and tends to give up easily when reading difficult words. In terms of word writing, this student has difficulty writing words with final consonants and double vowels.

Student E is a first-grade male student who is quiet and tries to actively participate in everything. In terms of reading and writing, he is a student who has difficulty reading and writing consonant letters or irregular words, has no confidence in reading text, reads slowly one letter at a time, and has difficulty reading double consonant words.

## **3.2 Study Instruments**

### **3.2.1 The 'Storytelling in Craft Activity' Program**

The 'Storytelling in Craft Activity' program was developed by referencing studies conducted by Sin Hye-Kyung[23] and Choi Hyun-sook[24]. The program's session content was evaluated for validity by a panel of experts, including one special education specialist, one doctor of pedagogy, and one child art psychologist. They scrutinized the program for content validity, achievement of learning objectives, and the overall appropriateness of session structure. Originally comprising 12 sessions, the program was revised following this review. The entire program consists of 12 sessions, Three sessions were omitted due to their mismatch with the participants' level, (two sessions of the program with the risk of dyeing by boiling the dye, and one session of the program to make a flower basket by collecting flowers and plants), One session (wooden chair making program) with difficulty in achieving the learning goal was deleted and composed of a total of 8 sessions. The final program structure included three initial phase sessions, three mid-phase sessions, and two concluding phase sessions. Each session lasted 80 minutes and was conducted weekly. A detailed overview of this Storytelling Program within the Craft Activity context is provided in [Table 1].

[Table 1] Craft Activity Program

Stage	Session	Activity Theme	Program Content
Introduction		Pre-test	- Word reading, word dictation, word reading fluency test
Initial Phase	1	Craft Activity using Wood (Making a Bamboo Bicycle)	- Explore various uses of wood - Create toys using bamboo - Practice word reading and dictation, play word games - Write and share feelings about the activity, engage in storytelling
	2	Craft Activity with Bamboo and Korean Paper (Making a Lamp)	- Create a lamp using bamboo and write a wish note - Express oneself through the wish note, engage in storytelling - Decorate the wish note, play word games - Note down keywords from the activity and take turns reading them
	3	Craft Activity using Recycled Plastics (Making a Mobile)	- Craft using discarded plastics - Learn about new uses for plastics - Combine with Korean paper to create a mobile - Write and share feelings about the activity, engage in storytelling, play word games
Mid Phase	4	Craft Activity using Cardboard Tubes (Making a Multi-purpose Holder)	- Use discarded cardboard tubes to make a multi-purpose holder - Feel the texture of the Korean paper and glue while crafting - Express oneself through words and drawings - Write and share feelings about the activity, draw, engage in storytelling
	5	Craft Activity using Paper (Making a Box with a Lid)	- Create a box body and lid using paper - Use various Korean paper techniques like weaving and pasting to craft a personalized box - Express oneself through words and drawings - Write and share feelings about the activity, draw, engage in storytelling
	6	Craft Activity using Paper Clay (Making a Multi-purpose Holder)	- Sketch a desired design before crafting - Use discarded paper on cardboard tubes to create and decorate with paper clay, creatively expressing one's thoughts - Discuss feelings about the texture of paper clay - Write and share feelings about the activity, draw, engage in storytelling
Concluding Phase	7	Craft Activity using Recycled Fabric I (Making a Comfort Doll)	- Craft using various types of recycled fabric - Design and sketch the craft before creating - Compliment peers on their work - Write and share feelings about the activity, draw, engage in storytelling
	8	Craft Activity using Recycled Fabric II (Making a Sock Neck Mat)	- Express desired craft using recycled fabric in drawings - Create mats, baskets, etc. using the sock neck technique - Compliment peers on their work - Write and share feelings about the activity, draw, engage in storytelling
Conclusion		Post-test	- Word reading, word dictation, word reading fluency test

The 'Storytelling in Craft Activity' program was structured into various stages: Introduction (Preliminary Assessment), Initial Stage (Sessions 1 to 3), Intermediate Stage (Sessions 4 to 6), Final Stage (Sessions 7 to 8), and Conclusion (Post-Assessment). In each session, activity sheets were utilized to aid the students' understanding. During the conclusion of every session, participants wrote and drew on these sheets, and they spent time sharing their reflections and storytelling.

### 3.2.2 Evaluation Tools

For this study, the Korea Test of Literacy Diagnosis[22], a standardized test tool used in the study of Ryu Sung-yong[25] and Jeong Hye-won[26], was used to find out the effectiveness of the story-telling program in the craft activities of students with learning difficulties, and pre- and post-tests were conducted with the reading, writing, and reading fluency tests of this tool. To find out the homogeneity of participating students.

A standardized inspection tool, the Korean-Colored Progressive Matrices[27], was conducted.

#### (1) Korean-Colored Progressive Matrices

In order to find out the homogeneity of participating students, the Korean version of the Korean-Colored Progressive Matrices[27] was conducted. Korean-Colored Progressive Matrices is a standardized test tool and consists of a total of 5 sets of A, B, C, D, and E, and consists of a total of 60 questions, 12 questions each. In this study, in the case of the lower grades of elementary school, only sets A to D were conducted according to the manual. This test is a test that selects by looking at the presented visual pattern and inferring the missing pattern. 1 point was given for responding correctly to the presented stimulus, and 0 point was given if not.

#### (2) Reading Test

In this study, type A of word reading test was conducted in the Korea Test of Literacy Diagnosis[22] to find out the reading ability of students who have difficulty in learning in the lower grades of elementary school. Type A of the word reading test consists of 96 questions in total, consisting of plain characters without a support (1 to 11), words including letters with a support (12 to 36), connections, consonant tangents, and oral phonetics (37 to 96). As for the test method, students with learning difficulties were presented with a font plate, checked that the participating students read correctly, and 1 point was given for reading, and 0 point for reading if not, and if 5 questions were wrong in a row, the test was terminated. Since there are a total of 96 word reading tests in scoring, the highest score is 96 points, and the lowest score is 0.

#### (3) Writing Test

In this study, the Writing test type A, a sub-test of the Korea Test of Literacy Diagnosis[22], was conducted to find out the writing ability of students who have difficulty in learning in the lower grades of elementary school. The Writing test was conducted by allowing the examiner to read the words first to students having difficulty in learning and then write the words he heard on the answer sheet. The Writing test type A consists of a total of 35 questions. If a student having difficulty in learning correctly writes, 1 point is given, if he does not, 0 point is given, and if he is wrong three times in a row, the test is stopped. The highest score of type A writing test is 35 points, and the lowest score is 0.

#### (4) Reading Fluency Test

In this study, the type A reading fluency test of the Korea Test of Literacy Diagnosis[22] was conducted to measure the reading fluency ability of students having difficulty in learning the lower grades of elementary school. In the reading fluency test, 49 words of two syllables are composed of a total of 98 syllables. Scores were obtained by measuring the number of syllables read quickly and accurately in 40 seconds.

In this study, the highest score of type A of reading fluency test was 98 points and the lowest score was 0 points, and the reading fluency test of underachiever students was conducted.

### 3.2.3 Research Procedure

The research was conducted from April to October 2022.

For this study, we explained the purpose of the study over the phone to the heads of two local children's centers with more than 10 lower-grade elementary school students who have difficulty learning in D-gun, Jeollanam-do, and received cooperation. After visiting the institution, after hearing the information of students suspected of having difficulty in learning, the C Regional Children's Center was selected as the final research institution, except that one institution is mostly multicultural students. A notice of recruitment for research participants was attached to the C Regional Children's Center, and the contents of the study were explained to parents and students and consent was obtained for those who wished to participate. A standardized test tool, the Korea Test of Literacy Diagnosis[22], was conducted on eight students who agreed to the study. Three of them were students who had difficulty learning only one thing in reading and writing, so they were excluded from the study. The final study included two first-year students (male 1 and female 1), two second-year students (male 2 and female 2), and one third-year student (female 1). The Korean-Colored Progressive was conducted on five additional students.

The 'Storytelling in Craft Activity' program of this research was conducted at the C Local Children's Center every Wednesday from May to July 2022, with each session lasting 80 minutes. To ascertain the students' progress, the center's social worker and assistant instructor actively participated in the program and maintained an observation diary documenting the students' responses.

The program guidance stages for each session are shown in [Table 2].

The first step is to allow the teacher to present materials and reference works to the student and appreciate the work. Step 2 allows you to conceive a work by writing or drawing a work to be done on the activity sheet provided by the teacher. Step 3 is to relieve stress and increase concentration through the creation of a work. Step 4 allows you to write or draw your feelings and the process of completing the work on the activity sheet. Step 5 allows you to freely express your feelings and feelings while creating the work through sharing stories.

[Table 2] Program Guidance Steps by Session

Stage	Content
1	Materials and Reference Works and Appreciation
2	Creation of Artwork Concept Paper
3	Making the Artwork
4	Writing About the Activity Process and Reflections
5	Sharing Story with Friends

### 3.2.4 Data Analysis

This study aimed to evaluate the impact of 'Storytelling in Craft Activity' on the reading, writing, and reading fluency of underachieving students. To achieve this, post-test assessments were conducted under the same conditions as the pre-tests. For data processing, descriptive statistics from the SPSS statistical program were used. The results were compared in terms of original scores, standard scores, and overall scores. The original score represents the number of students who got hit, and the standard score means the converted score.

Additionally, the students' attitudes towards the participation activities were analyzed based on insights drawn from the observation diaries of the participating students.



## 4. The Results of the Study

### 4.1 Impact on Reading Enhancement

The 'Storytelling in Craft Activity' program showcased notable progress in reading skills among underperforming students, as detailed in [Table 3]. Upon evaluating the reading capabilities based on pre- and post-assessments, while variations existed among individual students, a unanimous enhancement was evident in their post-assessment scores. Participating students showed confidence in reading through the program, and were able to read the part they had read with confidence. Notably, Student D displayed the most marked improvement: their foundational reading score leaped from 38 to 59 points, again of 21 points. Similarly, their standard reading score ascended from 4 to 10 points. Student D often exhibited distracting behaviors and decreased concentration, frequently leaving Student seat when disinterested. However, a notable shift in engagement was observed during Student participation in the craft activity program. Student displayed increased interest, particularly when creating a multi-purpose holder using paper clay, a task that allowed Student to experience the tactile sensation of the material. This engagement was reflected in Student sense of achievement and confidence, evident in her completed work. Furthermore, it was observed that the higher her interest in the activity, the more organized her activity sheets became, and she presented them with greater confidence. Consequently, Student D demonstrated the most significant improvement in word reading as a result of these interventions.

[Table 3] Pre-Post Effect on Reading

Tool	Pre score			Post score		
	raw score (96score)	standard score (20score)	Conversion score	raw score (96score)	standard score (20score)	Conversion score
A	50	3	64	58	4	69
B	42	6	78	43	6	79
C	40	5	77	42	5	78
D	38	4	77	59	10	99
E	36	6	64	39	6	82

### 4.2 Influence on Writing Enhancement

Exploring the effect of the 'Storytelling in Craft Activity' program on writing skills of underperforming students brought forth insights illustrated in [Table 4].

[Table 4] Pre-Post Effect on Writing

Tool	Pre score			Post score		
	raw score (35score)	standard score (20score)	Conversion score	raw score (35score)	standard score (20score)	Conversion score
A	5	1	26	8	1	80
B	2	3	64	8	4	72
C	6	5	73	16	9	93
D	5	4	70	7	6	80
E	4	4	68	6	6	78

According to the data in [Table 4], the pre-and post-assessment reviews on writing abilities of participants in the 'Storytelling in Craft Activity' program indicated consistent advancement. Students showed confidence in writing without resistance to writing while doing writing activities through play in the program. Student C's performance stood out significantly: their baseline dictation score amplified from 6 to 16 points, an upswing of 10 points. Concurrently, the standard score saw an uplift from 5 to 9 points. Student C showed less concentration, distracting behavior, and giving up easily, but in the course of the program, he was interested and participated the most when he expressed his favorite bicycle with bamboo. In addition, he showed confidence while receiving praise and support in the process of expressing and presenting the completed work in writing and painting. As the session continued, he participated intensively in the program, and it can be said that it is the result of writing and presenting his or her feelings about his or her work and his or her friend's work.

### 4.3 Enhancement in Reading Fluency

The influence of craft activity combined with storytelling on the fluency of reading in underperforming students is delineated in [Table 5].

[Table 5] Pre-Post Effect on Reading Fluency

Tool	Pre score			Post score		
	raw score (98score)	standard score (20score)	Conversion score	raw score (98score)	standard score (20score)	Conversion score
A	43	2	59	54	3	63
B	40	4	69	43	5	72
C	60	7	83	87	10	99
D	18	1	54	64	9	93
E	45	5	73	47	6	78

As per the results in [Table 5], a comparative study of pre-and post-assessments in reading fluency showcased a unanimous ascent post the intervention of the 'Storytelling in Craft Activity' program. Reading fluency is an important factor in performing studies along with reading and writing. During craft activities, reading the words and sentences presented and storytelling activities proceeded naturally like play, which was effective in reading fluency. Of all participants, Student D's progress was especially noteworthy. Their baseline fluency score soared from 18 to 64 points, witnessing an impressive rise of 46 points, while their standard score escalated from a mere 1 to 9 points. Prior to the commencement of the program, Student D displayed behaviors indicative of displacement and distraction. However, a notable transformation occurred once Student engaged in the craft activity program. Student demonstrated a growing interest, which translated into a sense of accomplishment and confidence, particularly evident through Student completed work. As the sessions progressed, Student participation became increasingly focused. Student D actively expressed her feelings and appreciation towards both her work and that of her peers, employing both writing and painting as mediums of expression. Student confidence was further highlighted during her presentations, where she showcased her work assertively.

## 5. Conclusion

This study investigated the effect of sharing stories in craft activities on reading, writing, and reading fluency of students who have difficulty learning in the lower grades of elementary school.

As a result of reviewing the pre- and post-test according to reading, writing, and reading fluency of students with difficulty in learning in craft activities, all five participating students showed higher post-test results than pre-test results. These results can be said to be effective in reading, writing, and reading and writing, and expressing your friend's work in writing and painting, such as talking about one's feelings in craft activities, reading and writing words such as bamboo, bicycles, and dolls that were active using the work activity sheet. In addition, hand-to-arm coordination was developed in the process of attaching and weaving materials used in craft activities by hand using a variety of friendly materials obtained around them, and it can be said that writing wishes and keywords for the day's activities with friends was also effective in writing. It is also interpreted as the result of getting interested and voluntarily and actively participating in classes, and improving learning attitudes by gaining satisfaction and confidence through completed works.

As a result, storytelling in craft activities shows that it is effective in reading, writing, and reading fluency for students showing academic difficulties

## 6. Discussion and Suggestions

This study aimed to examine the effects of the 'Storytelling in Craft Activity' program on reading, writing, and reading fluency in underperforming lower-grade elementary students.

As a result, it was confirmed that sharing stories in craft activities is effective in reading, writing, and reading fluency of underachiever students.

The study aligns with existing research suggesting that craft art activities effectively aid underachieving students in verbalizing their emotions and thoughts[3], and that language expression abilities improve when students explain their work post-activity[28]. It resonates with findings that integrated art education programs enhance language literacy skills in underachieving students[5] and that individual art activities boost concentration and language expression by sparking students' interest[29]. Language abilities are further enhanced by acquiring new vocabulary related to arts, understanding time concepts, and developing literacy[6]. The mediums used in craft activities are familiar and appealing to underperforming students, positively influencing their creative and language problem-solving skills[30]. Discussions and appreciative activities through artwork bolster language abilities, intertwining with the development of reading and writing literacy[8]. Additionally, underperforming students, particularly those who are easily distracted or have low self-esteem, show improvements in reading and writing through participation in three-dimensional art activities[4].

Therefore, storytelling in craft activities is considered to mean the possibility of a program that can be useful as part of character education, life guidance, and guidance for students in crisis as well as students with learning difficulties, and it has educational significance in further generalization.

The limitations of this study and suggestions for follow-up studies are as follows.

First, this study is a study obtained through five underachievers in the lower grades of elementary school, and it is somewhat difficult to generalize to all underachievers, and in subsequent studies, it is necessary to increase the number of subjects and intervention sessions for underachievers as well as lower grades.

Second, in this study, the effects of reading, writing, and reading fluency, which are linguistic characteristics of underachiever students, were analyzed, but research needs to be conducted by adding intervention goals such as improving literacy and self-esteem.

Third, it is necessary to evaluate whether the research is being conducted consistently through the creation of intervention fidelity and to obtain reliable results by considering the control of variables and the intervention environment.

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