Research

Proficiency on Basic Hand Sewing Tools Among Grade 5 Learners: An Input for Video Production

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Despite the production of ready-made clothes and the rise of machines, learning basic hand sewing tools is increasingly overlooked. However, the Department of Education (DepEd) continues to teach these skills. This study used a descriptive case study approach and examined the proficiency of Grade 5 learners in basic hand sewing tools. Thirty (30) learners from San Rafael Elementary School in San Marcelino, Zambales participated in the study, which used descriptive statistical technique to analyze the data. The findings revealed that learners' proficiency with tools like scissors and needles was developing but needed a deeper understanding, while challenges arose with tools such as thimbles and seam rippers due to fine motor skills. To address these challenges, an instructional video aligned with the Edukasyong Pantahanan at Pangkabuhayan (EPP) Curriculum was created, receiving positive feedback for its clear demonstrations, step-by-step instructions, and slow pacing, which helped improve learners' comprehension and skill proficiency.

Sewing aims to improve sewing abilities of the students, whether for aesthetic or essential uses, it was a part of the Home Economics curriculum a few years ago in West Africa. In the twenty-first century, sewing abilities are still highly valued, particularly in the academic or career growth of students as well as in the hands-on learning of basic hand sewing at the elementary school level. Learning sewing skills was an important part of educating children, especially girls, for opportunities in the clothing sectors, responsibilities at home, and to become independent (Joana, 2015).

In the Philippines, the K to 12 curriculum included Edukasyong Pantahanan at Pangkabuhayan (EPP) and Technology and Livelihood Education (TLE). Home economics includes basic skills specifically basic hand sewing for intermediate grade level from grade 4 to 6. The content standard in Grade 4 is Tungkulin sa sarili and the learning competencies

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are nasasabi ang gamit ng mga kagamitan sa pananahi sa kamay, and naisasaayos ang payak na sira ng kasuotan sa pamamagitan ng pananahi sa kamay (halimbawa: pagkabit ng butones). It focuses on basic knowledge of the students about hand sewing tools and basic repair of clothes. Furthermore, for the Grade 5, the content standard includes Pangangalaga sa kasuotan and the learning competencies are naisasaayos ang payak na sira ng damit sa pamamagitan ng pananahi sa kamay (halimbawa: pagsusulsi ng punit sa damit, pagtatahi ng tastas, pagkabit ng butones), and naisasagawa ang pagsusulsi ng iba't ibang uri ng punit. The Grade 5 learning competencies provide more focus on stitching or repairing ripped clothes through hand sewing. Meanwhile, for the Grade 6 learning competencies classify tools and materials based on their use such as measuring, cutting, sewing, identify supplies/materials and tools needed for the project, and drafts pattern for household linens. It mainly focuses on how the learners can apply their learning about basic hand sewing tools in creating products or outputs that can help their family at home. Thus, Home economics in intermediate grade level offers and provides a spiral progression of learning to the learners wherein from teaching basic knowledge to the learners about basic hand sewing tools to teaching the learners on how they can apply effectively and help their family at home in terms of sewing clothes. In addition, Kaur (2022), with the guidance of their parents, children at home helps their parents in simple way of repairing their torn clothes, such as patching any design to it. The need for repairable clothing, how to decrease waste, why they need to reduce it, and, of course, how to hold a needle and sew are all excellent teaching opportunities that will strengthen the bond of parents with their child.

In Michael Oak Waldorf School in Cape Town located at South Africa, many children at elementary school performs hand sewing, knitting and other forms of crafting as part of their daily life. However, it appears that the majority of the local schools no longer teach it, and no one has been able to identify why. On the other hand, parents can help their children develop this skill at home. In fact, several parents have asked teachers for tips on how to introduce sewing to their children (Mamacos, 2021).

Therefore, the learning process of the students in terms of basic hand sewing not only happens or stops within the four corners of their classroom, but it is extended and can be applied their homes, where they can help their parents repair and sew simple sewing tasks. It is a continuous learning process, thus the skills and learning of students are continuously developing and improving.

To address, this research aimed to identify the proficiency of Grade 5 learners on basic hand sewing tools. Thus, developing an effective instructional video can contribute to enhance the proficiency of the learners.

Significance of Study

This study aimed to know the proficiency and the difficulties encountered by the learners in the intermediate level in terms of learning and using basic hand sewing tools. Thus, this study provided results that helped to create a meaningful learning environment for the learners.

Learners. This study would benefit the learners to acquire meaningful information and practical skills that they can apply to do sewing task.

Teachers. This study would help the teachers to incorporate the accurate and complete basic hand sewing tools in teaching the learners to improve their skills and proficiency in terms of sewing.

Elementary Schools. This study would help schools to provide and conduct a comprehensive curriculum review that would help learners become more proficient with basic hand sewing tools.

Future Researchers. The results of the study can be used as a foundation for further study on learners' proficiency in basic hand sewing tools and provide information for the future researchers.

Literature Review

Hand stitching is a simple way to repair and sew clothing as in basting, hemming, attaching buttons and fasteners and creating buttonholes. Sometimes, the task is better completed by hand or they might not have access to a sewing machine. Thus, stitching allows for greater precision and is sometimes the only way to accomplish a specific outcome, tailoring fashion is almost always associated with hand stitching. In short, some final touches in ones clothes is finished through hand stitching. Nowadays, many children are no longer interested in sewing because of readymade clothes. They have become aware of the modern era that is why they still need to study when there are already things done. However, many were taught how to sew at a young age by women in the families, like mother, grandmother, or aunt, either at home or in school. One major reason why basic hand sewing tools must be learned by every pupil is for unavoidable instances like loose and missing buttons and fasteners, ripped hems and torn clothes.

Home Economics as Curriculum for Elementary Level

Understanding the history of Home economics curriculum in the Philippines is important to incorporate lessons learned from prior endeavors into curriculum reform efforts, as they give significant insights to guide future curricular activities and vital information to comprehend the present. Home economics curriculum under the Philippine Basic Education changed over time in response to several curriculum reforms and internal and external causes (Llige, 2021).

The Department of Education, Culture, Sports, Science, and Technology's (MEXT) Course of Study determines the objectives and subject matter of school education in Japan. The Study Program has approximately every ten years have been updated. In 2017, Japanese saw the most recent change for elementary education that Fabric-related craft is named, per the Program of Study utilizing cloth crafts, enhance everyday existence. It is one of the materials for an elementary school student's healthy, comfortable, safe, and productive living that includes clothing, food, and shelter (MEXT, 2017). Other class teachers and home economics teachers felt that each style of teacher had pros and cons of their own. Although many classroom teachers lack significant expertise teaching home economics and they are well-aware of the abilities and living situations of their students (Momota & Ogawa, 2018).

By the beginning of the twentieth century, in Cornell University, Ithaca, New York, Home economists conducting outreach and extension programs had trained girls in the use of paper patterns to update old clothing and enhance the fit and efficiency of new items. In the past, Home economics teachers emphasized girls' creativity and self-reliance by including home sewing as an important part of their curriculum (Booker et. al, 2012).

In twenty-first century, the focus on sewing abilities in exploratory or introductory courses at middle schools continues because sewing made easy and fast when good quality tools are on hand. High-quality tools will ensure a more professional

look to the sewn project and will make the job easier and more pleasant (Savage 2020). Eilenberger (2023) states that the ability to sew skillfully by hand will enable to complete any project that will produce in the cleanest, most polished manner possible way. Additionally, hand sewing is the greatest method for repairs and mends (Colgrove, 2022). Hand sewing also is a gentle way to make clothes (Sonstroem, 2021).

Recently, the US municipality of Plymouth, Connecticut, constructed a new school that has a great sewing facility. They only have one class, "Clothing and Fabric," and the sewing teacher works one-on-one with each pupil to assist them get to a higher level of ability. Sewing is included in a rotation lesson offered by the Newtown, Connecticut, school system. Throughout the academic year, pupils divide between sewing, cooking, computers, health, and tech education. Their rotations allow them to sew without spending a lot of time on it (Mohr, 2023).

In Sweden and Finland, similar issues regarding classroom activities. Granberg et. al (2018), classroom amenities Malin (2011), and teacher cooperation across subject boundaries Janhonen (2016) where the curriculum solely concentrates on Home economics because the subject encompasses both Home Economics and Handicrafts.

Modern Hand Sewing Skills and Interests

Sewing is a skilled activity when an individual does just for own enjoyment and to make things for friends and family at home. It develops good skills and to use for income generation to earn a living. Like all skills sewing has to learn first what to do and then practice as often as possible leading to mastery.

Everything was sewed by hand before the modern era, when sewing machines are more widely used. Repair is necessary for extending the lifespan of clothing and creating a circular economy since it can reduce the amount of clothing purchased and wasted textiles. Clothing repairs involve a variety of skills, from simple ones like sewing on a misplaced button to more complex ones like fixing a broken zipper (McQueen et al., 2023).

Kids are naturally creative and inquisitive, when they desire to make something new, they think about how to make it and what it might be used for in addition to how it appears. They can benefit much from sewing as it promotes the development of fine motor skills. Sewing also helps kids learn how to manage their fingers while working on a project since it demands coordination between the eyes, hands, and fingers. Grasping small objects with the thumb and pointer finger is known as a pincer grasp, and it is necessary to thread a needle. Kids who may struggle with this important ability might improve it with sewing (Peled, 2023). In addition, Kauffman (2023) states the calming rhythm of sewing by hand involves slowly yet steadily moving the needle up and down through the fabric. Another nice thing about hand sewing is that it usually means the end is near. When the bibs' Velcro was sewed on and the turning opening was closed shut, it was a satisfying accomplishment.

Moreover, hand sewing is an affordable, low-tech, portable hobby that teaches children a useful, practical skill (Symonds, 2021). Children are creative and inquisitive by nature. When children want to create something new, they think about how to achieve it as well as its possible use. Furthermore, this could be the reason for the rise in hand sewing interest during pandemic year (Smith, 2020).

Home economics teachers were interviewed at the University of Minnesota, in USA, about the skills that students should acquire to be ready for life in a

world that is dynamic. On the construction of the garment this seems to suggest that while some of them thought clothing creation should be taught, others thought it should be left out. In the study focused on revising topics related to clothing and fabrics at Pennsylvania State University in USA, the participants thought that teaching building skills at the expense of other important skills left today's pupils unable to meet their needs and interest (Macatangay, 2013).

In New York, Colgrove (2022) states that being skilled in basic hand sewing techniques enables one to do modest tasks and repairs quickly. Sometimes, hand sewing produces better results than using a sewing machine. In addition Locker (2017), sewing can be used to develop something commercial and personal skills, quality awareness, and self-worth.

With the increasing popularity of hand sewing during the year 2019, there have been a number of new books, online courses, kits, and other resources available that are all centered around the age-old custom of using our fingers to thread a needle through material, one stitch at a time. However, Sonstroem (2021) taught hand sewing workshops at Blue, the Tatter Textile Library in Brooklyn, which offers a variety of stitching classes, prior to COVID-19. Everything went online when the pandemic struck, enabling even more sewers to receive training from home.

Additionally, Peled (2023) states that stitching by hand, children can develop their hand sewing skills and learn how to make something from scratch. Sewing is a precision craft that improves hand-eye coordination. Everyone who is ever engaged in manual labor understands that it frequently requires more mental strength and analytical thought than is occasionally needed when concentrating on homework difficulties when seated at a desk. Furthermore, Yilmaz (2022) states that curriculum is current in terms of the interests and needs of the students should be prioritized. A review of present and future lifestyles, modern facilities and equipment, and the capacity to apply information and abilities acquired in the field of clothes to other facets of everyday life are additional crucial factors.

Using Sewing Tools according to Sex

It is commonly believed that only girls sew (Thompson, 2022). In Kingston, Ontario, sewing is clearly no longer seen as a household chore, but rather is belittle because it is associated with girl's labor. It is a leisure activity rather than as means of sewing for other people is seen as a kind of feminist resistance.

There was a growth in the number of boys and girls sewing among the younger generation. Meanwhile girls remained the majority, boys were using the sewing machine at higher rates than before, and neither gender indicated a preference for any particular improvement (Kangethe, et al, 2014). Sewing may be very beneficial for girls in particular, regardless of their career path, but especially in marriage and raising a family (Cuddeback, 2023). But in Los Angeles, a frequently easy chat develops new twists from the noisy, virtuous voice of the modern guys who join the global sewing circle. Moreover, the number of girls who can start and run a sewing-related business as Chief Executive Officer (CEO) is still higher than the number of boys who are not very interested in sewing (Glassenberg, 2015).

It seems that gender and sewing have a complicated relationship that is hard to resolve. Children have hours of fun doing things, and it fosters their individuality and creativity

(Thompson, 2022). These days, a mix of boys and girls attend home economics classes in elementary schools and both genders are often highly engaged in appearance and attire (Yilmaz, 2022).

Furthermore, Biney-Aidoo (2013) states that girls who are good in sewing have profited from sewing apprenticeships since they are able to work from home most of the time and yet have time for taking care of their family without any obstacles.

The majority of girls sew clothes for their families and themselves throughout the 20th century. Making clothing was a socially constructed aspect of femininity as well as a requirement for the economy. Working-class girls sewn to make themselves and their families look respectable (Kolpashnikova & Man-Yee, 2021). Moreover, it is clear that mastery played a significant role in elite boys' and girls' education in early modern Europe. On the other hand, manual skills were never as important or a gendered practice for guys' education as needlework was for girls, needlework instruction was necessary for girls' education. In addition to being a useful skill, sewing was also instructive. It developed among girls a sense of morality, hard effort, and respect as well as assisted them in managing their behavior, emotions, and feelings (Ilmakunnas, 2016).

As the project progressed and different enhancements were added, more children engaged with sewing and the number of both boys and girls increased. Although girls continued to be in the overall majority, more boys than previously observed were sewing and neither gender showed a preference for a particular enhancement. What this reveals perhaps is that the provision became more interesting to the children, increasing their curiosity to explore and revisit, igniting their intrinsic motivation (Debicka-Krawzyk, 2022).

Problems in Teaching Basic Hand Sewing Tools

Starting a hand sewing hobby is not too expensive however, having a basic understanding of hand stitching will prove to continuous benefit notwithstanding, being able to perform a few simple hand adjustments might occasionally be a lifesaver. Hand sewing can be used to sew different clothing, permanent and temporary stitches as well as repair rips including errors in stitching garments. Handel (2022) highlights that many sewers find hand sewing methods to be challenging. They believe hand sewing as slow, difficult, and imprecise.

Insufficient light during sewing might strain the eyes and result in poor sewing posture. To provide a safe environment, utilize enough lighting in both cases and adopt good posture when hand sewing and skillful stitching background. With a needle, thread, and some knowledge, it can make the distinction between a rumpled article of clothing that ought to be thrown away and an appropriate modification. "Knowledge is power," and being able to patch holes, apply fasteners, and sew basic stitches are all essential concepts to learn and understand on one's own (Deaton, 2021).

Macatangay (2015) emphasizes students' experiences in home economics sewing classes tend to make them less likely to sew at home in the future. Many children thought that sewing was a chore that would have to be done in the far future. They stated that kids who learned to sew from their mother or another relative were more likely to continue sewing than those who learned at school. There are many that advocate teaching sewing in public schools, even if the majority of people think that sewing should be prioritized less. Moreover, Locker (2017) states that sewing can be used to cultivate self-worth, creativity, marketable talents, and the ability to recognize excellence.

Crafts that are handmade are out of date in this day of labor-saving technology and quick delivery. People would regularly inquire about why bother making clothes when it is easier to buy them (Hausstatter, 2019). The arguments for sewing enthusiasts not to sew with their children are constantly different and include it is too messy, too dangerous, and too slow (Cuddeback, 2023). Clothes can be resewn for a variety of purposes, such as mending damage or changing the way they fit or look or remodeling (Laitala, 2018). A simple patch made from an unused piece of fabric that matches the material of the item that needs to be fixed is the most basic repair for any damaged clothing (Fulop, 2020).

Therefore, these results indicate to the need for additional education about maintenance of good clothes, in particular for younger consumers. Although many failed to imitate this hand sewing techniques, but hand stitching is an essential life skill with both practical and health benefits.

Conceptual Framework

In this study, the researchers used Input, Process, and Output. For the Input, the questions that the researchers wanted to know about the respondent's profile. In the Process, it included the instruments and data gathering procedure. Lastly, the Output, the researchers used the results to create video on basic hand sewing tools to improve the proficiency level of the learners in the intermediate grade level.

The study was supported by four theories of learning, these are the proficiency theory, constructivist learning theory, skill acquisition theory, and experiential learning theory. The proficiency theory binds the acquisition of knowledge and skills to improve performance, thus making it an important drive for learning (Knox, 2024). The constructivist learning theory is a learning theory that suggest learners actively construct their own knowledge through experience and social interaction. Skill acquisition theory is a psychological theory that explains how learners learn their skills, from the beginning to advance proficiency. Experiential learning is best done through hands-on experiences, and that knowledge is created by transforming the experiences, (Kolb, 1984).

This interconnected model showcases how these four theories together create a comprehensive approach to understanding the learning process and the development of proficiency in the field of Home Economics specifically on the use of basic hand sewing tools.

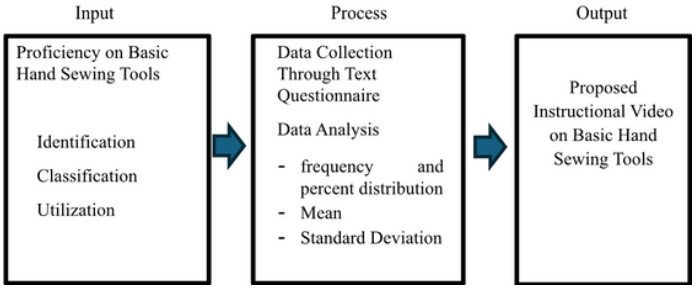

Figure 1. Research Paradigm

This conceptual framework integrates the strengths of each of these four learning theories to explain how knowledge and skills are acquired, refined, and transformed. It emphasizes the importance of active engagement, experience, reflection, and social interaction in shaping proficient learners. **Figure 1** shows the paradigm of the study.

This is a step-by-step approach to create educational content, starting with getting familiar with the tools, collecting data from users to shape the content and produce an instructional video.

Research Problems

This study determined the proficiency of the learners in Grade 5 in terms of basic hand sewing tools. The study sought to answer the following questions:

1. How proficient are the respondents on basic hand sewing tools in terms of:
   a. identification,
   b. classification, and
   c. utilization?
2. Which basic hand sewing tools can learners already use from the given examples?
3. Which basic hand sewing tools do learners find challenging to use?
4. What features of an instructional video on basic hand sewing tools may be proposed to improve the proficiency level of the learners?

Scope and Limitations of the Study

This study determined the learner's proficiency and the problems that the learners encountered in the learning process and in using basic hand sewing tools. There are thirty learners involved in this study. This study was conducted at San Rafael Elementary School in Barangay San Rafael, San Marcelino, Zambales, specifically for Grade 5 pupils for the S.Y 2023-2024. Each learners received a questionnaire that was developed by the researchers, this was the primary source of data for this study.

Methodology

Research Design

This study used descriptive case study that focused on the proficiency on basic hand sewing tools among Grade 5 learners. Its usefulness stems from the idea that observation, analysis, and description may be used to solve issues and improve methods. Descriptive studies aim to characterize certain people, events, or circumstances via investigation, Siedlecki (2020).

Sampling and Respondents

The respondents of this study were the 31 Grade 5 Section Maalalahanin learners of San Rafael Elementary School in San Marcelino, Zambales have EPP subject, specifically in sewing. However, only 30 Grade 5 learners participated in this study because of the absence of a pupil. They were selected using purposive sampling. The following table shows the frequency and percent distribution of the learners.

Grade Level	Number of Learners	Percent (%)
Grade 5 Male	15	50
Grade 5 Female	15	50
Total	30	100

Table 1. Frequency and Percent Distribution of Respondents. There were 15 or 50% male and 15 or 50% female with a total of 30 learner participants in the study.

Research Setting

This study was conducted in San Rafael Elementary School, a DepEd-supervised school located in Purok 1, Barangay San Rafael, San Marcelino, Zambales. The school is 8.8 km away from the San Marcelino town proper with a total land area of 9,432 square meters. San Rafael Elementary School has 374 officially enrolled learners for the school year 2023-2024, 31 of whom are Grade 5 pupils. It is a home of 13 dedicated teachers under the leadership of a principal. The school has earned notable recognition over the years, receiving prestigious awards such as 1st Place in the Municipal Search for Best Gulayan sa Paaralan Implementer in the Medium School Category in 2019, a Level 2 rating for its School-Based Management Practices and 2nd Place in the Division Search for Best Gulayan sa Paaralan Implementer in 2015. These achievements reflect the school's commitment to excellence in both academic and extracurricular activities. Figure 2 shows the map of San Rafael Elementary School where the study was completed.

Figure 2. Map of the Research Locale

Research Instrument

The researchers used a survey-questionnaire in gathering data guided by the performance standard of the Department of Education (DepEd) Edukasyong Pantahanan at Pangkabuhayan where the topics were taken. A comprehensive table of specification was constructed with twenty-five items taken from the third quarter of Grade-5 EPP. A twenty - five items identification of hand sewing tools together with twenty - five items checkboxes for classification of hand sewing tools to complete fifty-item test. The items from the classification of sewing tools are three measuring, five marking, three drafting, six cutting tools and eight sewing aids (Appendix A).

The test questionnaire consisted of pictures of basic hand sewing tools taken by the use of cellphone, the name of the tools is asked and the list of checkboxes where the tool is classified. Lastly two open-ended questions were asked to answer the tools they already use, tools known to the learners and the tools that are challenging to use. The questionnaire was presented to Home Economics specialists and a language specialist for feedback and recommendations. The suggestions were incorporated in the revision of the final copy (Appendix B).

A pilot testing was administered to thirty Grade 5 – Daisy learners of Nagbunga Integrated Elementary School with Cronbach Alpha result of 0.829 in identification test and 0.800 in classification test both interpreted as good (Appendix C).

Data Gathering Procedure

This study used survey-questionnaire to collect and to measure information. Figure 3 shows the flowchart connecting of four phases which guided the researchers throughout the study from approval of request up to administration to target learners.

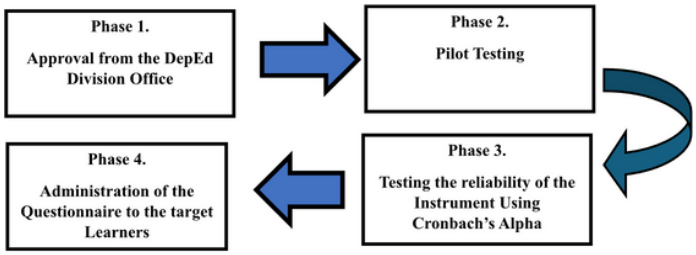

Figure 3. Data gathering process

This conceptual framework integrates the strengths of each of these four learning theories to explain how knowledge and skills are acquired, refined, and transformed. It emphasizes the importance of active engagement, experience, reflection, and social interaction in shaping proficient learners. **Figure 1** shows the paradigm of the study.

This is a step-by-step approach to create educational content, starting with getting familiar with the tools, collecting data from users to shape the content and produce an instructional video.

Phase 1. Approval from the DepEd Division Office. A letter of request to the Schools Division Superintendent of Zambales was sent via e-mail and approved after 3 days. A letter of request to the San Rafael Elementary School Principal was handed and approved to administer the test to Grade 5 learners (Appendix D)

Phase 2. Pilot Testing. The printed survey questionnaires were administered to Grade Section Daisy learners of Nagbunga Integrated School for pilot testing on March 12, 2024.

Phase 3. Testing the Reliability of the Instrument Using Cronbach's Alpha. The reliability is the degree to which the result can be depended on the accuracy. The data was subjected to Cronbach's Alpha to test the reliability of the instrument. The result in identification test was 0.829 and 0.800 in classification test both interpreted as good (Appendix C).

Phase 4. Administration of Test to the Target Learners. The printed survey questionnaires were administered to 30 Grade 5 learners of San Rafael Elementary School on April 3, 2024.

Data Analysis

The gathered data was analyzed and interpreted with the use of statistical tools, such as: frequency and percent distribution, the mean, standard deviation, and proficiency level rating scale.

Frequency and Percent Distribution. These were used to determine the frequency counts and percent distribution of the raw scores of the learners.

Mean. This was used to measure and determine the average scores of the grade 5 learners in the test.

Standard Deviation. This was used to measure the homogeneity/heterogeneity of scores based on the pupil's proficiency level concerning the mean.

Proficiency level. This was used to measure and evaluate the proficiency of the learners.

Scale	Score	Verbal Description	Symbol
4	19-25	Advanced	A
3	14-18	Proficient	P
2	7-13	Developing	D
1	1-6	Beginning	B

Table 2. The Proficiency Rating Scale Using the Likert Scale. The verbal description and the symbols were used to describe the proficiency of the Grade 5 learners of San Rafael Elementary School. A 4-point Likert scale was used to elicit the precise responses of the learners. Beginning (B) proficiency refers to the necessary fundamental knowledge of the respondents that have not been sufficiently learned. Developing (D) proficiency demonstrates fair understanding of the respondents on basic hand sewing tools. Proficient (P) level demonstrates a high level of understanding of the respondents on basic hand sewing tools. Advanced (A) level represents the highest level of understanding and performance of respondent in terms of knowledge and use of basic hand sewing tools. The verbal description of the scale was adapted from the DepEd Order No. 31 s. 2020 (GOVPH, 2020). Through this rating scale the proficiency of the learners based on their understanding and skills on basic hand sewing tools were assessed.

Ethical Considerations

In this study, the researchers strictly maintained and established ethics that addresses the following:

The personal information of the learners was protected by the power of the law based on Republic Act 10173, The Data Privacy Act of 2012, which is the law that aims to protect the all types of information (GOVPH, 2023). The researchers assured the learners who participated in this study, that their personal information and their answers in the instrument were kept and used only as basis for this study. Furthermore, the researchers provided necessary and accurate information of the study that involved transparent communication between the researchers and the learners, where the researchers explained about the purpose, procedures, benefits, and any other relevant information about the research study (McKee & Bransford, 2023).

Also, the researchers provided the Grade 5 class adviser with consent letters for parents/guardians, informing them of their children's participation in the study. The class adviser distributed the letters during the release of the quarterly report cards.

Therefore, all the information needed in this study and data that were gathered in this study remained private and solely intended for this study.

Results

Scores	Frequency	Percent %	Verbal description
19-25	3	10	Advance
14-18	7	23	Proficient
7-13	15	50	Developing
1-6	5	17	Beginning
Mean (x̄)	11.33		Developing
Standard Deviation (σ)	0.44		

Table 3. Proficiency in Identifying Skills on Basic Hand Sewing Tools

Scores	Frequency	Percent %	Verbal description
19-25	4	13	Advance
14-18	3	10	Proficient
7-13	23	77	Developing
Mean (x̄)	11.8		Developing
Standard Deviation (σ)	0.58		

Table 4. Proficiency in Classifying Skills on Basic Hand Sewing Tools

		Type of Test			
		Identification		Classification	
Item Number	Name of Tool	Frequency of Correct	Rank	Frequency of Correct	Rank
1	Pins	25	3rd	16	16.5
2	Needle	24	4.5	17	14.5
3	Tailor's Chalk	26	1.5	16	16.5
4	Tape Measure	23	6.5	17	14.5
5	Seam Ripper	5	17.5	12	19th
6	Measuring Gauge	1	24th	11	20th
7	Carbon Paper	11	12.5	7	23.5
8	Shears	13	10th	7	23.5
9	Tracing Wheel	5	17.5	6	25th
10	Thread Cutter	4	20th	9	22nd
11	Pinking Shears	2	22nd	14	18th
12	French Curve	5	17.5	10	21st
13	L-Square	7	15th	18	13th
14	Hip Curve	12	11th	19	12th
15	Safety Pins	23	6.5	20	10.5
16	Emery Bag	14	8.5	20	10.5
17	A Pair of Scissors	24	4.5	23	8.5
18	Ruler	26	1.5	24	6th
19	Pin Cushion	14	8.5	26	4th
20	Wooden Sewing Gauge	2	22nd	24	6th
21	Tapestry Needle	0	25th	28	1st
22	Thimble	9	14th	27	2.5
23	Pencil Chalk	11	12.5	27	2.5
24	Buttonhole Cutter	2	22nd	23	8.5
25	Needle Threader	5	17.5	24	6th

Legend: *Top 3 Highest Score,* *Bottom 3 Score*

Table 5. Proficiency in Identification and Classification Skill Test on Basic Hand Sewing Tools

CLASSIFICATION	NAME OF TOOL	FREQUENCY	RANK
Measuring	Tape measure, Ruler	18	3
Marking	Tailor's chalk, Pencil chalk	12	4
Drafting	Hip curve	10	5
Cutting	Pair of scissors	30	1
Sewing aids	Pins, Safety Pin, Needle	28	2

Table 6. Classification of Basic Hand Sewing Tool which Learners Already Use

NAME OF TOOLS	SIGNIFICANT STATEMENT	FREQUENCY	RANK
Pair of Scissors	"Ginagamit pang gupit ng tela at papel" (L18)	30	1
Safety Pins	"Lagi ko itong nakikitang ginagamit sa ni mama sa aking uniporme" (L17)	28	3
Needle	"Nakikita ko palagi pag nananahi si nanay ng mga punit at tastas na damit"(L25)	28	3
Pins	"Ginagamit ito sa pagtutupi ng mga dulo ng damit na tinatahi nil ola sa patahian niya" (L30)	28	3
Ruler	"Ginagamit sa pagdrawing ng tuwid na linya, at ng pahigang linya" (L23)	18	5
Tape Measure	"Ginamit ito noong sinukatan ako ng uniform na ipapatay ni nanay" (L22)	18	5

Table 7. Basic Hand Sewing Tools that Learners Already Know

NAME OF TOOLS	SIGNIFICANT STATEMENT	FREQUENCY	RANK
Thimble	"Hindi ako komportable sa pagsuot ng thimble kapag nananahi" (L4)	20	1
Seam ripper	"Ginagamit ito sa pantastas, pwede naman ang blade" (L8)	17	2.5
Hip curve	"Hindi na dapat gamitin, para lang ito sa modesta" (L13)	17	2.5
Needle threader	"Para lang ito sa malalabo ang mga mata" (L5)	16	4
French curve	"Di pa ako nakagamit ng French Curve" (L12)	16	4

Table 8. Sewing Tools that Learners Found Challenging to Use

Features of Instructional Video on Basic Hand Sewing Tools

Teachers utilize instructional videos as a key resource to facilitate engaging and effective learning among learners. This study provides an instructional video about basic hand sewing tools, their name, classification, and the utilization. It provides learning opportunities and help both teachers and learners improve their teaching and learning proficiency in terms of basic hand sewing tools.

It presents the best features in such a way that it is aligned with the Department of Education (DepEd) curriculum, which consists of five different classifications of basic hand sewing tool that are mentioned in the Grade 5 Edukasyong

Pantahanan at Pangkabuhayan (EPP) curriculum guide. The tools that have been used in the instructional video are the exact and accurate tools that are prescribed by the curriculum. The medium of instruction used in the video is Filipino in order for the learners to easily understand the tools presented and how to use are demonstrated. It has clear visual demonstrations with clear close up of the tools enhance focus, clarity and emphasize details for correct use and how tools work in the sewing process. Moreover, it has step-by-step instructions that are easy to follow for clear guidance, error preventions, better accessibility, and increased retention while presenting the fundamental aspects with proper handling of tools until its utilization. Other best features of the instructional video has slow pacing which gives viewers sufficient time to grasps each step as it breaks the tool presentation into a smooth speed, increasing clarity, highlighting essential task, facilitating understanding and better replication. Other features of the video can be viewed from the comments in the video, (https://www.facebook.com/share/v/5QJmMndHuj5Rcwk6/?mibextid=jmPrMh).

Therefore, this instructional video with the script will surely serve as an effective instructional material for the proficiency and educational progress of the learners and as an effective material for EPP teachers and TLE teachers (Appendix E).

Results

Based on the research findings, the following conclusions were drawn:

1. The Grade 5 learners belong to developing proficiency in using basic hand sewing tools. They require further development of knowledge and skills in identification, classification and utilization of these tools.

2. The learners are familiar with a pair of scissors, needles, pine and safety pins because these are fundamental to beginners as they form the foundation of basic sewing techniques.

3. The thimble, seam ripper and hip curve pose challenges for learners as they require fine motor skills, comfort and fit in wearing them. Thus, these tools require unique techniques and may take longer time of mastery on how to use.

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1. Amalfa, A. (2020). Basic Hand Sewing Tools. https://amalfa.uk/pages/basic-handsewing-tools
2. Akhamzadeh. D. (2023). The Proper Use of Needle Threaders Pros and Cons https://www.goldstartool.com/blog/the-proper-use-of-needle-threaders-pros-and-cons.htm
3. Biney-Aidoo, V., Antiaye, E., & Oppong, J. A. (2013). An assessment of the apprentice-ship system as a means of acquiring sewing skills in Ghana. Developing Country Studies, 3(11), 145-151.
4. Booker, J. K. (2012). Home Economics Curriculum Cornell University Ithaca New York.
5. Burman, B. (2023). The Point of the Needle: Why Sewing Matters. Reaktion Books.
6. Butlers.E .(2019). CUTTING-TOOLS.https://www.thecreativecurator.cutting-tools for-sewing
7. Combrinch C. (2020). https://www.combrinch/Tools-and-Materials-for-Hand- Sewing/
8. Campellone. J. (2024). Understanding the "Pins and Needles" Feeling https://content.aspx?ContentTypeID1&ContentID=58
9. Colgrove, D. (2019). How to Make Sure Your Sewing Project Will Fit Properly. The Spruce Crafts Retrieved 21 September 2022, from https://www.thesprucecrafts.com/sewing-pattern-alteration-and- fittingarticles-2977364.

10. Cuddeback. (2023, July).Sew a softiehttps://sewasoftie.com/2023/07/hand sewing-with kids.html
11. Deaton, A. C. A. (2021). Production Unit 5 Hand Sewing. https://uark.pressbooks,pub/Teaching apparel design/part/unit- 5hand-sewing/
12. Debicka-Krawczyk, M. (2022). Is sewing a gender equal play occupation within our setting?. The University of Edinburgh.
13. Dritz. D. (2024). How to Adjust Sewing Patterns https://www.handicraft.com /inspiration/how-to-adjust-sewing-patterns
14. Dyer, S. (2024). Labour of the Stitch: The Making and Remaking of Fashionable Georgian Dress. Elements in Eighteenth-Century Connections.
15. Eilenberger, E. (2023). Journal of Home Economics of Japan.
16. Fairy.C. (2022). TOP 8 SEEWING AIDS YOU ABSOLUTELY NEED https://www.claireyatfairycrafters./top-8-sewing-aids-you-absolutely-need
17. Folles D. (2019). https://www.basichandsewing.folles.uk/what-are-the-tools-used in-sewing/
18. Fulop, L. (2020, June 21). Wear, Repair, Repurpose: A Makers Guide to Mending and Upcycling Clothes. https://figjamandlimecordial.com/2020/06/21/wearrepair0repurpose-bylilyfulop/
19. Gillian. M. (2021). Embroideryhttps://trc-leiden.nl/trc needles/tools/embroidery/tapestry-needle.
20. Gladstone.B. 2025. HOME CLINIC; WHY A SHARP BLADES IS SAFER, AND HOW TO KEEP IT THAT WAY https://www.nytimes.com/2025/01/29/nregion/home-clinic-why-a-sharp-blade-is-safer-and-how-to-keep-it-that-way.html
21. Glassenberg A. (2015, January 30). Sewing talk- Thoughts on Gender and Sewing. https://while shenaps.com/2015/01/gender-and-sewing.html.
22. Gra.S. 2018. How to Use French Curve. https:sewbeautifullmagGra.com/2014/04/how-to-use-french curve.html?m=1
23. Granberge, A. Katherine, Venäläinen, C. Rja. (2018). Home Economics Curriculum in Slovenia.
24. Haapaniemi, J., Palojoki, P., & Taar, J. (2022). Future Directions of Home Economics Education: Nordic-Baltic Perspectives. Journal of Home Economics Education Research, 34(12), 71-86.
25. Handel, E. (2022, December 8). Hand sewing techniques every garment sewist should know. https://siemachtsewingblog.com/2022/12/handsewingtechniques
26. Hausstatter, H. J. (2019, July). Sew A Softie. https://sewasoftie.com/2019/07/hand sewing-with-kids.html
27. Hwy.C. 2019. Tracing wheel and Carbon paper https://www.tracingwheel /search/dressmakers-carbon-paper
28. Hynes .C. (2022). Types of Sewing Pins https://www.craftsy./post/types-of-sewing pins/?
29. Ilmakunnas, J. (2016). Embroidering women and turning men: Handiwork, gender, and emotions in Sweden and Finland, c. 1720–1820. Scandinavian Journal.
30. Jane. H. (2017). Uses for Sewing gauge https://sewhayleyjane /5-uses-for-a sewing-gauge
31. Janicki, A. (2023). Sustainable Wardrobe. ForeWord, NA-NA.
32. Jeppson G. (2019). https://www.jeppson/dressmaking-and-tailoring-learning.
33. Joana, A. (2015, August 11). Academic performance of the students in dressmaking. https://www.scribd.com/doc/236446414/academicperformance-of-the-students-in-dressmaking.
34. Kangethe, N. S., Lyria, K. S., & Nyamanga, A. M. (2014). The Gender Socialization Question in Education: Influence on Boys' and Girls' Academic Achievement. European
35. Kolpashnikova, K. & Man-Yee, K. (2021) Gender gap in housework time: how much do individual resources actually matter?, The Social Science Journal, DOI: 10.1080/03623319.2021.1997079
36. Kaufman, A. (2023). What Do You Love About Hand Sewing?. https://www.sewdaily.com/sewing/tipstechniques/what-do-you-love-about-hand-sewing
37. Kaur, P. (2022, December 14). Teacher Warrior 2022: Stich of Empowerment. http//scoonews.com/news/teacher-warrior-2022-stich-of empowerment/?amp=1
38. Knox, A.B (1980, October 4) Contemporary Educational Psychology Volume 5, Pages 378-404
39. Laitala, K. (2018). Motivatios for and against second hand clothing acquisition. 10.1386/cc.5.2.247_1) [Oslo Metropolitan University]. Clothing Culture.
40. Llige. S. Aurora (2022) Understanding the history of a home economics curriculum In the Philippines https://web.p.ebscohost.com/abstract/26AN%3d153802575 (HE)
41. Locker, E. (2017, March 6). The Creative Curator. The Benefits of Sewing: 9 Reasons Why Sewing Is Important!https://www.thecreativecurator.com/benefits-of-sewing
42. Lumarda, R. (2016). Edukasyong Pantahanan at Pangkabuhayan (EPP) and Technology and Livelihood Education (TLE) DepEd Curriculum Guide. History, 41(3), 306-331.
43. Macatangay, R.G., (2015, August 11). Academic performance of the students in dressmaking. https://www.scribd.com/doc/236446414/academicperformance-of-the-students-in-
44. Martinez.R. (2024). Sewing Measuring Tools https://crochetncrafts./sewing measuring-tools/
45. McFee. B. (2022). Different Marking Tools for Sewinghttps//: mcfee_2022/different marking-tools-for-sewing/
46. McQueen RH, Jain A, McNeill LS, Kozlowski A. The role of resources in repair practice: Engagement with self, paid and unpaid clothing repair of young consumers Textile Research Journal. (2023);93(3-4): 57 591.doi:10.1177/00405175221123067
47. Mamacos, E. (2021, December 8). We should bring the age-old skill of sewing back into schools. https://www.news24./life/archive/-20211208
48. Mohr, A. M. (2023, December, 21). Threads.https://www.threadsmagazine.com/2023/12/21/is-sewing-taught -in-your-local-school-system

49. Molina-Azorin, F. (2020). Qualitative Quantitative Mixed Methods https://delvetool.com/blog/mixedmethods
50. Momota, Y., & Ogawa, I. (2018). Education of Craft with Fabrics in Home -Economics for Elementary School Students. International Journal of Learning, Teaching and Educational Research, 17(3), 15-27.
51. Peled, O. (2023) Why sewing is a valuable skill for kids to learn https://www.enrichingkidz.com/blog/why-sewing-is-a-valuable-skillforkidsto-learn
52. Rae.L. 2023. How to Use a French Curve and L-Square https://www.sewtogrow./single-post/how-to-use-a-french-curve-l-square.
53. Reynolds.L. 2020. Curved Rulers https://www.craftsy./post/curved-rulers
54. Sargeant K. (2021). https://www.sergent/cutting-tools-for-sewing/?fbcli
55. Savage, W. Adam. (2020). Tips and Tricks for Making the Savage Industries EDC OneBag.https://www.instructables/Tips-and-Tricks-for-Making-the- Savage-industry.
56. Smith, E. J. (2020) Home Economics in University of Minnesota USA.
57. Sonstroem, L. O. (2021). Hand sewing clothing: A Guide. Gulemo, Independently Published Hamdbook Inc., in Willimantic, CT.
58. Symonds, T. (2021). Sew a Softie https://sewasoftie.com/2021/07/ hand-sewing with-kids.html
59. The Department of Education, Culture, Sports, Science and Technology Course of Study (MEXT). (2017)
60. The K to 12 Edukasyong Pantahanan at Pangkabuhayan (EPP) and Technology and Livelyhood Education (TLE). (2016).
61. Thompson, E. (2022, January). Labour of love: Garment sewing, gender, and domesticity.In Women's Studies International Forum (Vol. 90, p. 102561). Pergamon.
62. Valentine.H. 2024. Pin, Ruler, and Tailors chalk https://pin-ruler-and-tailors chalk/about/
63. Wilson.M. 2023. The Power of a Recognition Tool: The Impact on Social Relationships, Reducing Work-Related Stress and Burnout. https://bucketlistrewards.com/blog/the-power-of-a-recognition-tool/
64. Yilmaz, S. (2022). Study of operations in sewing process of girls' pants. Industria Textila,73(3), 241-248.
65. Yu, M., Liang, B., Zhang, X., Zhu, X., Li, X., & Tomizuka, M. (2024). In-Hand Following of Deformable Linear Objects Using Dexterous Fingers with Tactile Sensing. arXiv preprint arXiv:2403.12676.