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Cooperative Learning in Garments Technology-Dressmaking for Junior High School

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Abstract

The implementation of cooperative learning among Junior High School Students in Garments Technology-Dressmaking during the school year 2017-2018 as basis for an enhanced instructional plan has resulted to different approaches. Positive Interdependence, Group Processing and interpersonal Skills were the three Cooperative Learning Approaches developed among the students, while there is a need to focus on the development of Individual Accountability and Promotive Interaction. There was no significant correlation between the performance and developed behavior domain using of Cooperative Learning Approaches in teaching Garments. It was concluded that teachers should continuously use collaborative learning approach, hence evidence indicates that it raises achievement, promotes positive self-concept, and raises regard for others.

Keywords: vocational education, garment technology, cooperative learning

1. Introduction

The way students communicate with each other is one of the overlooked facets of teaching. Less preparation time is dedicated to helping educators manage appropriate experiences between students and resources (i.e., textbooks, instructional programs) and less time is spent on teacher-student communication. Therefore, student-to-student interaction is largely overlooked that ought not to be the case. How well students learn, how they feel about their school and teacher, how they feel about each other, and how much self-esteem they have to talk about their approach to student communication patterns, as well as to their students. Organizing students to work together in small groups is not recent, but an ancient worldwide tradition of learning (Slaven, 2006). Besides, the study shows that classrooms where students have opportunities to engage in small groups, stressing the collaborative and cooperative

nature of scientific research, will be able to share responsibility for learning, address divergent understandings and develop better critical thinking skills than those with low experiences with other students (Rebecca Teed, 2018).

In the Philippines, researcher conducted a study to provide empirical facts on the impact of multiple intelligence theory-supported cooperative learning methods on the achievement of students in mathematics (Valencerina, 2014). This analysis used the configuration of the control group that was nonequivalent. The instruments used were the multiple intelligence test followed by 90-items and the 40-item teacher-made test for the topics Fundamental Operations on Rational Algebraic Expressions, Positive Integral Exponents, and Zero and Negative Exponents. Results showed a statistically significant difference between the experimental and control group's post-test mean scores, which means that the achievement of students in mathematics is greatly affected when using cooperative learning methods as teaching strategies compared to conventional methods. Moreover, in my Dressmaking class, I had also observed that structuring classes around small groups that work together in such a way that each group member's success is dependent on the group's success is the true picture of cooperative learning. It is not just having students sit side-by-side at the same table to talk with each other as they do their assignments, nor assigning a report to a group of students where one student does all the work and the others just put their names on the product as well. Cooperative learning requires more than students working together on a project in a laboratory or area. It needs teachers to structure interdependence between students (Johnson, 1998).

1.1 Theoretical Framework

This study is based on three general theoretical perspectives and three Legal Bases. The three theories include the cognitive-developmental perspective based on the theories of Piaget and Vygotsky, the behavioral learning theory perspective by Skinner, Bandura, and Homans, and the social interdependence by KortKoffka, Kurt Lewins and Deutsch, Morton. Moreover, the legal basis of this study is Republic Act No. 10533, DepEd Order No. 50, s. 2004 and DepEd Order No. 35, s. 2016.

The cognitive-developmental perspective is based mainly on the theories of Piaget and Vygotsky. Piaget and related theorist's viewpoint are based on the premise that when individuals cooperate on the environment, socio-cognitive conflict occurs that creates cognitive disequilibrium, which in turn stimulates perspective-taking ability and cognitive development. This is achieved by exploration education, whereby doing and actively exploring kids learn best (Macleod, 2018). Moreover, the idea of Vygotsky and related theorists is based on the principle that knowledge is social, based on cooperative efforts to learn, understand and solve issues. The fundamental concept of the socio-cultural development theory of Vygotsky (1986) is that conceptual knowledge emerges from a repertoire of daily experience and interaction with adults and peers known as social interaction.

The perspective on behavioral learning theory focuses on group reinforcer impacts and rewards on learning. Skinner focused on group contingencies; Bandura focused on imitation;

and Homans, along with Thibaut and Kelley, focused on the social exchange balance of rewards and costs among interdependent individuals. Proponents' states that the interaction of environmental and cognitive elements emphasize how people learn from one another, by observation, imitation, and modeling influenced by factors of attention, retention, drive, attitude, and emotion. Learning follows based on social observations and actual imitations of displayed behaviors (Firmansyah & Saepuloh, 2022).

Social interdependence occurs when people share common goals, and the actions of others influence the success of each person (Johnson & Johnson, 1989). It can be distinguished from social dependency (i.e., one person's outcomes are influenced by a second person's actions, but not vice versa) and social autonomy (i.e., the outcomes of individuals are not affected by each other's actions). There are two forms of interdependence in society: cooperative and competitive. The lack of social interdependence and dependency contributes to individualistic actions. Human interdependence is one of human being's most important and omnipresent elements and influences all aspects of our lives (Deutsch, 1999).

According to Republic Act No. 10533 known as Enhanced Basic Education Act of 2013, "to achieve an effective enhanced basic education curriculum, it shall use pedagogical approaches that are constructivist, inquiry-based, reflective, collaborative and integrative." DepEd Order No. 35 s. 2016 stipulates that DepEd institutionalizes Learning Action Cells (LACs) that aim to develop and support successful teachers by nurturing their knowledge, attitudes, and competencies in terms of curriculum, instruction, and assessment in their workstations. Key aspects of the process are ongoing collaborative or cooperative learning, problem-solving within a shared domain of professional interest, self-directed learning, reflective practice leading to action self-evaluation, and collective competence. Department Order No. 50 s. 2004 stressed that cooperative learning is considered as one of the teaching methods and strategies for schools to be included in the Model of Excellence Schools Program.

1.2 The Study

This research assessed the use of cooperative learning in Garments Technology–Dressmaking among Junior High at Mandaue City Comprehensive National High School, Mandaue City during School Year 2018-2019 as the basis for an enhanced instructional guide.

Specifically, the study sought to answer the following:

1.Using the cooperative learning techniques what is the performance of the students in the following competencies:

1.1 drafting and cutting pattern;

1.2 preparing and cutting materials;

1.3 sewing; and

1.4 applying finishing touches on casual apparel

2. What team roles students had performed in the aforementioned competencies?

3. As perceived by the dressmaking students, to what extent has the cooperative behavior domains developed their:

3.1 positive interdependence;

3.2 promotive interaction;

3.3 individual accountability;

3.4 interpersonal skills; and

3.5 group processing?

4. Is there a significant correlation between performance and developed behavior domains?

5. Based on the findings, what enhanced instructional guide using cooperative learning can be proposed?

1.3 Statement of Hypothesis

H_1: The hypothesis of this study was tested at 0.05 level of significance. The 0.05 level of significance is a five percent error with a 95 percent probability. Cooperative learning has significant improvement on the academic performance, skills and participation of junior high school students in garments technology - dressmaking.

Ho: There is no significant correlation between the student's performances and their developed behavior domains. Cooperative learning has no significant impact on the academic performance, skills and participation of junior high school students in garments technology - dressmaking.

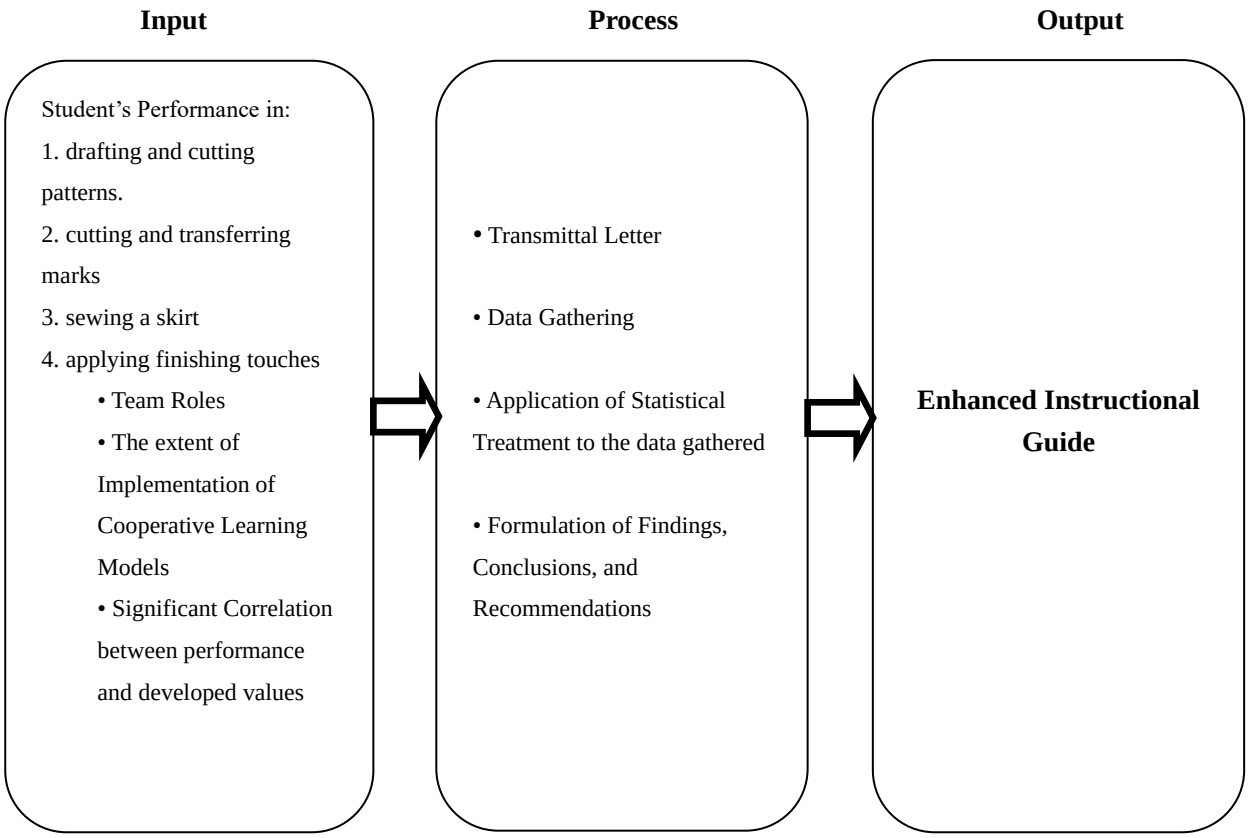
2. Method

This study employed descriptive survey method as it offers a systematic collection of data to the current practices, views and results from the respondents. This method helps researcher to understand how educators and students interact with the use of cooperative learning strategies. Moreover, it explores the existing behaviors without any other manipulation making it more natural interactions. It allows for standardization and uniformity both in the questions asked and in the method of approaching subjects. It also ensures higher reliability than some other techniques. Descriptive research centers on collecting data that presents events systematically in order to illustrate the results (Glass & Hopkins, 1984). This approach often use visual tools such as graphs and charts to assist reader to better understand the data effectively.

2.1 Flow of the Study

As reflected in Figure 1, this study envisioned a proactive plan for Garments Technology Students of Mandaue City Comprehensive National High School aligned with the K to 12 Curriculum. The flow of the study utilized the input, process, and outputs. Included in these subsections the information essential to comprehend and replicate the study. Insufficient detail leaves the reader with questions; too much detail burdens the reader with irrelevant information. Consider using appendices and/or a supplemental website for more detailed

information.



2.2 Research Environment

The research environment of this study was conducted at Mandaue City Comprehensive National High School (MCCNHS), Plaridel Street, Mandaue City where the researcher is currently teaching. The school was established last February 25, 1986, with five (5) teachers and 150 students. At present, there are already 183 teachers and a total student population of more than 4000. The school offers both Junior and Senior High School Curriculum. The school is offering a special science class aside from technical-vocational specializations like Garment Trades, Masonry, Cookery, Cosmetology, Electrotonic, Electricity & Industrial Maintenance, Computer Servicing, and Carpentry. The school is offering General Academic Strand (GAS), Humanities and Social Sciences (HUMS), Technical- Vocational and Livelihood (TVL), and Science Technology, Engineering and Mathematics (STEM) Tracks.

2.3 Respondents

The respondents of the study were eighty (80) Grade 10 students taking up Garments Technology-Dressmaking Students as well as their respective Garments Technology teachers of MCCNHS for School Year 2017-2018

Table 1 indicates the data, and the number of respondents included in this particular study.

Table 1. Distribution of Respondents no=80

Section	Male		Female		Total	
	f	%	f	%	F	%
10-Pearl	1	1.25	15	18.75	16	20.00
10-Strawberry			10	12.50	10	12.50
10-Dove			10	12.50	10	12.50
10-Cattleya			15	18.75	15	18.75
10-Quarts			15	18.75	15	18.75
10-Sapphire			14	17.50	14	17.50
TOTAL	1	1.25	79	98.75	80	100.00

2.4 Instrument

The questionnaires, direct observations and personal interviews were the most needed tools in research. In this study, the questionnaire was utilized by the researcher in data gathering. Some of the questions were adapted from the Capstone Project of Ling Xuan of the State University of New York at Fredonia, New York. However, some questions were modified to suit to the present study.

The instrument consisted of three parts: Part I – The performance of the students in different competencies using the Cooperative Learning Approach. Part II- The team roles which the students had in performing the aforementioned competencies and Part III - The extent that cooperative behavior domains had been developed as perceived by the students.

2.5 Data Gathering Procedure

After the approval of the questionnaire by the thesis committee of Cebu Technological University, Cebu City, the final copies of the questionnaire were reproduced corresponding to the number of students taking Garments Technology who composed the respondents of this research. The research sought a written permit from the Dean of the CTU Main Graduate School and the School Principal of Mandaue City Comprehensive National High School before she distributed the questionnaire to the Grade 10 respondents. Upon the approval of the permit, she distributed them during off-hours or Garments Technology Classes through the permission of their respective teachers. The questionnaire was distributed and retrieved by the researcher personally.

2.6 Statistical Treatment

The research carefully analyzed the responses of the respondents to each item of the questionnaire. The data gathered were statistically treated by the aid of statistical software. For sub-problem 1 on the performance of students in garments technology - dressmaking, the mean and standard deviation were used. For sub-problem 2 on team roles that the students had performed during cooperative learning activities, the simple percentage was used. For sub-problem 3 on the extent of cooperative behavior domains as perceived by students, the weighted mean was used. For sub-problem 4 on the significant correlation between

performance and behavior domains developed, the Chi-square test of independence was used.

Rubrics were prepared per competency, and in scoring the instrument, the qualitative categorization using the three response categories was established as the parameter of limits for the quantification of the average ratings:

Scoring Procedure

Performance Assessment		
Range of scores	Category	Verbal Description
28.81-36.00	Outstanding	Performance targets accomplished to 100% of the planned targets.
21.61-28.80	Very Satisfactory	Performance of 51% to 99% of the planned targets accomplished
14.41-21.60	Satisfactory	Performance exceeding the target by 30% and above of the planned targets accomplished
7.21-14.14	Unsatisfactory	Performance exceeding the target by 15% to 29% of the planned targets
0.00-7.20	Poor	Performance failing to meet planned targets by 50% or below

3. Results and Discussion

This contains the performance of the dressmaking students in Comprehensive National High School after they were exposed to cooperative activities by the teacher. The competencies include (a) drafting and cutting pattern, (b) preparing and cutting materials, (c) sewing and (a) applying finishing touches on casual apparel.

Drafting and Cutting Pattern

Using Cooperative Learning Approach, the first step is to design a garment by pairs. They need to take the body measurements of each other, draft a final pattern using the given body measurements and then cut the final pattern.

Table 2. Student's Performance in Drafting and Cutting Pattern n=80

Range of Scores	Drafting and Cutting Pattern				
	f	Performance	$\bar{x}$	s	Verbal Description
28.81 - 36.6	26	Outstanding	26.13	4.525	Very Satisfactory
21.61 - 28.80	36	Very Satisfactory			
14.41 - 21.60	18	Satisfactory			

Legend: Outstanding (28.81-36.00) Very Satisfactory (21.61-28.80) Satisfactory (14.41-21.60) Needs Improvement (7.21-14.40) Poor (0.00-7.20)

As shown in Table 2 among 80 respondents who were taught using the cooperative learning approach, twenty-six rated themselves as **Outstanding** with scores between 28.81 – 36.00,

thirty-six were rated as **Very Satisfactory** with scores between 21.61 – 28.80, eighteen were **Satisfactory** with scores between 14.41 – 21. 60, while nobody was rated **Needs Improvement** and **Poor**. Their total weighted score is 26.13 with a standard deviation of 4.525. This suggests identifying more on the strategies and techniques based on the Cooperative Learning Approach that is deemed more favorable as compared to the Traditional Approach. Strategies and techniques include group works, think-pair-share, note-taking pair, and other related techniques. Data revealed that although they were exposed to cooperative activities still there is no impact yet to their performance in drafting and cutting pattern. They still need to be taught on the importance of patternmaking, types of patterns, types of commercial patterns, methods of making patterns and pattern symbols. Moreover, they need to be exposed to cooperative learning on practical skills in patternmaking to gain knowledge in drafting the following basic blocks such as bodice, skirt, torso, and shirt.

Preparing and Cutting Materials

In this competency, the students must learn how to prepare the materials to select the best fabric and care that is suitable for the design.

Table 3. Student's Performance in Preparing and Cutting Materials n=80

Range of Scores	Preparing and Cutting Materials				
	f	Performance	$\bar{X}$	S	Verbal Description
28.81-36.00	36	Outstanding	24.53	3.242	Very Satisfactory
21.61-28.80	40	Very Satisfactory			
14.41-21.60	4	Satisfactory			

Results also showed that among 80 Respondents who were taught using the Cooperative Learning Approach, 36 of them were rated as **Outstanding**, 40 **Very Satisfactory,** and four (4) **Satisfactory.** Nobody was rated as **Needs Improvement** and **Poor**. Their average weighted mean is 24.53 with a standard deviation of 3.242. This recommends creating more on the strategies and techniques based on the Cooperative Learning Approach that is deemed more favorable as compared to the Traditional Approach. Strategies and techniques include group works, think-pair-share, note-taking pair, and other related techniques. This finding has significant implications on improving the student's performance especially in mastering the skill in drafting and cutting patterns to prepare the student for the next competency. Data revealed that most respondents had rated themselves as Very Satisfactory. However, more students were rated as Outstanding and Very Satisfactory after being exposed to cooperative learning activities as compared with students who were exposed to the traditional approach. With the help of a teammate, they were more motivated and interested in preparing and cutting their apparel ready for sewing.

Sewing Garments

In this competency, you are going to prepare the cut parts of the garments. In this, you will pair the front and back of the bodice. After pairing the parts, it is time to assemble cut parts to form into a garment.

Table 4. Student's Performance in Sewing Garments n=80

Distribution	Sewing Garments				
	f	Performance	$\bar{x}$	S	Verbal Description
28.81-36.00	6	Outstanding	16.50	2.996	Very Satisfactory
21.61-28.80	38	Very Satisfactory			
14.41-21.60	32	Satisfactory			

Results also showed that among 80 respondents exposed to the cooperative learning approach, six (6) of them were rated **Outstanding**, thirty-eight (38) **Very Satisfactory,** and thirty-two (32) **Satisfactory**. Their average weighted mean is 16.50with a standard deviation of 2.996. There is a need to identify more on the strategies and techniques based on the Cooperative Learning Approach that is deemed more favorable as compared to the Traditional Approach. Strategies and techniques include group works, think-pair-share, note-taking pair, and other related techniques. This finding has significant implications on improving the student's performance especially in mastering the skill in drafting and cutting patterns to prepare the student for the next competency. Therefore, there is still a need for the Dressmaking Teachers to identify the sewing skill level of the students as the basis for the technical assistance to be given to those who were rated as Satisfactory. Hence most of them are inexperienced yet due to the limitation of industrial sewing machines of the school, there is a need for the teachers to discuss the need of buying additional industry sewing machines with the school principal as not to hamper the learning of the students.

Applying Finishing Touches

The competency of applying finishing touches adds more trimming or decorations to make the garment more attractive and meaningful.

Table 5. Student's Performance in Applying Finishing Touches n=80

Range of Scores	Applying Finishing Touches				
	f	Performance	$\bar{x}$	s	Verbal Description
28.81-36.00	8	Outstanding	16.50	2.863	Very Satisfactory
21.61-28.80	44	Very Satisfactory			
14.41-21.60	26	Satisfactory			

On the other hand, results also revealed a slight difference between the 80 respondents exposed to the cooperative learning approach. Eight (8) of them were rated **Outstanding**, forty-four (44), **Very Satisfactory**, and twenty-six (26) **Satisfactory**. Their average weighted mean is 16.50with a standard deviation of 2.863. In applying the finishing touches, the student gains more in keeping the garments ready to wear and saleable. It can be used in the future if they get employed in a company or industrial garments. It will be easier for them to learn and adjust if they are assigned in the packaging area. This can be also used in keeping their garments in a cabinet and know how to fold properly without wrinkles. With this, garments look more attractive to customers. Table 5 recommends the teacher to identify more on the strategies and techniques based on the Cooperative Learning Approach that is deemed more favorable as compared to the Traditional Approach. Strategies and techniques include group works, think-pair-share, note-taking pair, and other related techniques. This finding has significant implications on improving the student's performance, especially in mastering the skill in drafting and cutting patterns to prepare the student for the next competency.

Summary of Students' Perception

Table 13 shows the Summary of Students' Perception with the following indicators;(1) Positive Interdependence 3.68; (2) Promotive Interaction 3.55; (3) Individual Accountability 3.50; (4) Interpersonal Skills 3.57; and (5) Group Processing 3.62. All of these indicators got an **Agree** as Verbal Description.

Table 6. Summary of Students' Perception

Indicators	Weighted Mean	Verbal Description
1. Positive Interdependence	3.68	Agree
2. Promotive Interaction	3.55	Agree
3. Individual Accountability	3.50	Agree
4. Interpersonal skills	3.57	Agree
5. Group processing	3.62	Agree
Grand Mean	3.58	Agree

4. Conclusion and Recommendation

The results of the study showed that the use of cooperative learning in garments technology and dressmaking offers a positive impact towards the performance of students. Most of the students have high performance in various competencies such as in drafting, cutting, preparing and sewing garments. On the other hand, the perceptions students on cooperative learning have played significant role, as they concurred with the indicators of positive interdependence, promotive interaction, individual accountability, interpersonal skills, and group processing. These findings mean that cooperative learning can be a significant approach to develop the skills and increase the involvement of students in dressmaking. The study recommends the educators to integrate more hands-on activities to assure that students are engaged in cooperative settings. Moreover, should continuously examine the competencies of students and give proper assistance. There should be a comprehensive training to incorporate a personalized approach for mastery. Therefore, the school`s must support by providing accessible resources necessary for effective teaching and learning.

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Competing interests

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Informed consent

Obtained.

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The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

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Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

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Appendix A
QUESTIONNAIRE IN COOPERATIVE LEARNING IN GARMENTS TECHNOLOGY-DRESSMAKING FOR JUNIOR HIGH SCHOOL

Name of Student: _____ Section: _____
Garments Technology Teacher _____ Grade Level: _____

A. Student Team Roles

Direction: Kindly check the spaces provided for each item, which represents your answers.

1. What is your performance in the following competencies after being exposed to collaborative learning techniques?
    1.1 Drafting and cutting pattern
    1.2 Preparing and cutting materials
    1.3 Sewing
    1.4 Applying Finishing Touches
2. What team roles did you able to perform in cooperative learning activities in the aforementioned competencies?

_____ 1. Organizer
_____ 2. Recorder
_____ 3. Checker
_____ 4. Assessor
_____ 5. Encourager
_____ 6. Questioner
_____ 7. Summarizer
_____ 8. Time Keeper
_____ 9. Team Facilitator
_____ 10. Research Runner

B. Extent of Implementation of Cooperative Learning Models

Direction: Below are statements concerning your opinion on how Cooperative Learning Activities in Junior High School had developed your learning approaches. Kindly place a checkmark on the space provided for following the following:

SA - Strongly Agree
A - Agree
U - Undecided
D - Disagree
SD - Strongly Disagree

Learning Approach	SA (5)	A (4)	U (3)	D (2)	SD (1)
A. Positive Interdependence					
1. I like working in groups.					
2. In collaborative learning activities, we were arranged that we are positioned to face each other for the direct eye to eye contact.					
3. I depend upon my teammates and vice versa to meet our goals.					
4. The lesson becomes more interesting with a cooperative approach.					
5. I love to participate in group discussions.					
B. Promotive Interaction					
6. In our group, we are empowered by our teammates.					
7. When I am work in a group, I do better quality work.					
8. When I work in a group, I end up doing most of the work.					
9. We share resources and help, support and encourage one another in our group.					
10. In our group, we had built an academic support system.					
C. Individual Accountability					
11. I am willing to accept responsibility and help my group attain its goal.					
12. As a group member, I am accountable for the assigned task given to me by my teammates.					
13. I do not like hitchhiking on my group members' accomplishments.					
14. When I work with other students, I can work at my own pace.					
15. My group member gets good grades even if they do not do much work.					
D. Interpersonal Skills					
16. Group study helps me to learn Garments technology easier.					
17. My groupmates respect my opinion as I also respect their opinions as well.					
18. My garments teacher teaches teamwork skills, cooperation, and conflict management.					
19. I don't like teachers' intervention when we do group work					
20. The cooperative learning approach trains me to be a good leader and a good follower.					
E. Group Processing					
21. As a group, we make decisions about which behaviors to continue and which behaviors to change.					
22. I cooperate much in the group. I wish my teacher could use more group studies and cooperative learning activities in the class.					
23. As a group, we usually celebrate the successful outcomes of our group work.					
24. As a group member, I am given a chance to express my feelings and opinions without being afraid to be ridiculed or embarrassed.					
25. I am given different roles to perform in every cooperative learning activities.					

Appendix B
RUBRICS FOR RATING THE PERFORMANCE OF RESPONDENTS IN DIFFERENT DRESSMAKING COMPETENCIES

Rubrics for Drafting Pattern

Criteria	Competent (5)	Developing (3)	Beginning (1)	Score	Weighted Score	Percentage
Tools and Materials (20%)	Complete, appropriate and properly used.	Complete, appropriate but not properly used	Incomplete			
Workmanship (40%)	Followed the steps correctly and systematically.	Failed once in following the steps.	Failed to follow the steps correctly and systematically.			
	All pattern symbols were indicated correctly; properly labeled.	Few of the pattern symbols; were missing, properly labeled	Pattern symbols were not indicated; no label at all			
	Observe neatness of work	Failed once to observe neatness of work	Did not observe neatness of work			
Accuracy (20%)	All measurements were accurate.	Most of the measurements were accurate	Most of the measurements were inaccurate			
Safety Work Habits (10%)	Was extra careful in using tools; proper posture was observed at all times	Was careful in using tools; proper posture was observed most of the time	Was not careful in using tools; proper posture was not observed.			
Time Management (10%)	Finished before the allotted time	Finished on time.	I was not able to finish on time.			

Legend:

Weighted Score = Score x Item (Weight)

Score percentage = $\frac{\text{Total Weighted Score x 50 + 50}}{\text{Perfect Score (3)}}$

Scoring Procedure: Outstanding (29-35) Very Satisfactory (22-28) Satisfactory (15-21) Needs Improvement (8-14) Poor (1-7)

Rubrics for Cutting and Transferring Marks

Criteria	Competent (5)	Developing (3)	Beginning (1)	Score	Weighted Score	Percentage
Tools and Materials (20%)	Used sharp shears; properly used	The pair of shears used was somewhat sharp; properly used	The pair of shears used was dull; not properly used			
Workmanship (40%)	Followed the guidelines in cutting the fabrics	Failed once in following the steps.	Failed to follow most of the guidelines.			
	Marks were clear and transferred correctly and neatly.	Their markings were heavy and some parts were not transferred correctly and neatly.	Three or more markings were hardly seen and were not transferred correctly.			
	Observe neatness of work.	Failed once to observe neatness of work.	I did not observe the neatness of work.			
Safety Work Habits (20%)	Was extra careful in using tools; proper posture was observed at all times	Was careful in using tools; proper posture was observed most of the time	Was not careful in using tools; proper posture was not observed.			
Time Management (10%)	Finished before the allotted time	Finished on time.	I was not able to finish on time.			

Legend:

Weighted Score = Score x Item (Weight)

Score percentage = $\frac{\text{Total Weighted Score} \times 50 + 50}{\text{Perfect Score (3)}}$

Scoring Procedure: Outstanding (25-30) Very Satisfactory (19-24) Satisfactory (13-18) Needs Improvement (7-12) Poor (1-6)

Rubrics for Sewing a Skirt

Criteria	Competent (5)	Developing (3)	Beginning (1)	Score	Weighted Score	Percentage
Tools and Materials (20%)	Complete, appropriate and properly used.	Complete, appropriate but not properly used	Incomplete			
Thread (10%)	The correct shade of thread matches the color of the fabric.	Correct king and color but do not match the shade of the fabric	The incorrect shade of thread does not match the color of the fabric.			
Machine Stitching (40%)	Stitches are even, and proper length followed the seam line.	Some stitches are crooked; they did not follow the seam line, same on both sides.	Uneven stitches too far from the seam line. Not similar on both sides.			
Hems (10%)	Correct even folds, smooth, flat and properly finished.	Correct, some folds are uneven, smooth flat and properly finished	Folds and stitches are uneven, not properly finished.			
Fitting (20%)	Comfortably fit on waist and hips.	Somewhat loose on the waist	Too tight on waist and hips			

Legend:

Weighted Score = Score x Item (Weight)

Score percentage = $\frac{\text{Total Weighted Score x 50 + 50}}{\text{Perfect Score (3)}}$

Scoring Procedure: Outstanding (21-25) Very Satisfactory (16-20) Satisfactory (11-15) Needs Improvement (6-10) Poor (1-5)

Rubrics for Applying Finishing Touches

Criteria	Competent (5)	Developing (3)	Beginning (1)	Score	Weighted Score	Percentage
Tools and Materials (20%)	Complete, appropriate and properly used.	Complete, appropriate but not properly used	Incomplete			
Application of Elements of Design (30%)	Elements of the design were chosen appropriately	Most of the elements of design were appropriately chosen.	Had not applied any elements of design appropriately.			
Addition of Trimmings (30%)	Use trimmings to garments to enhance its appearance.	Had used some trimmings to garments to enhance its appearance	Had not applied trimmings to garments			
Safety Work Habits (10%)	Was extra careful in using tools; proper posture was observed at all times	Was careful in using tools; proper posture was observed most of the time	Was not careful in using tools; proper posture was not observed.			
Time Management (10%)	Finished before the allotted time	Finished on time.	I was not able to finish on time.			

Legend:

Weighted Score = Score x Item (Weight)

Score percentage = $\frac{\text{Total Weighted Score} \times 50 + 50}{\text{Perfect Score (3)}}$

Scoring Procedure: Outstanding (21-25) Very Satisfactory (16-20) Satisfactory (11-15) Needs Improvement (6-10) Poor (1-5)