Ergonomic Garment Table with Hydraulic Height Adjustment Mechanism

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ABSTRACT

This study aimed to develop and construct an ergonomic garment table with hydraulic height adjustment mechanism in garment shops with the following features: rotatable top, extendable sides, adjustable height, and tiltable top surface. The research further aimed to test the functionality of the ergonomic garment table with hydraulic height adjustment mechanism with the aforementioned features. Likewise, the study aimed to evaluate the acceptability of the ergonomic garment table with hydraulic height adjustment mechanism in terms of durability, features, serviceability, and stability, and formulate a user's guide. The research design used was developmental-descriptive methods of research. A researcher-made questionnaire was utilized to interpret the acceptability of the product among the 15 respondents comprising students and faculty of Garment Trade Technology and industry practitioners, as the respondents of the study. Based on the evaluation of the level of acceptability of the ergonomic garment table with hydraulic height adjustment mechanism, all parameters were rated very highly acceptable using the mean and standard deviation as statistical tools. Moreover, the user's guide was designed to provide instructions on the use and operation of an ergonomic garment table with hydraulic height adjustment mechanism.

Keywords: Development-Descriptive Research, ergonomic, garment table, hydraulic height adjustment mechanism

INTRODUCTION

Background of the study

Tables have countless applications, but they all have one thing in common: a work surface that is typically horizontal and flat. Wherever it is necessary to draw, cut, lay out, mark, and trace the fabric, including at homes, shops, and schools, tables are present. One of the examples is a garment table with a long surface with an incorporated yard on one corner and a long groove for scissors crossing the middle.

One of the steps in the clothing-making process according to (Sarkar, 2016) is cutting. Various tools, equipment, and machines are available for cutting fabrics including garment tables. They are utilized based on the demand and volume of production and depending on where cutting is needed, such as in the industry, schools, or even homes.

The layout of the workplace, however, on the other hand, has a significant impact on musculoskeletal disorders (Indian Journal of Health & Wellbeing, 2020). Employees in industries, instructors and students in schools, and all the like-related persons that perform repetitive tasks as part of their jobs are more prone to this illness. It is vital to fathom the health risks associated with prolonged sitting and static posture while sewing and standing while performing tasks prior to sewing.

The students taking fashion and apparel courses and other related courses, both in the secondary and tertiary levels, typically spend many hours in the sewing laboratory which emphasizes the significance of researching their environment to detect problems in identifying ergonomic requirements, which aid in the assessment and

formulation of suggestions for improvement in the sewing laboratory, improving the effectiveness and efficiency of the practices carried out there as well as the health and wellbeing of the students, technicians, and teachers who use this workspace (Priya, 2022).

Due to a lack of proper cutting tools and equipment in garment shops, students and instructors frequently have trouble cutting cloth. Based on these observations, the researcher has come up with a solution that will start with the garment shops at Carlos Hilado Memorial State University to lessen their burden. As a result, the researcher created a customary yet improved product with various uses that will make life easier for dressmakers and tailors while drafting, as well as the domestic users from the abovementioned institution.

The goal of this study was to come up with an ergonomic garment table with hydraulic height adjustment mechanism design that would be ideal for garment laboratory shops to be utilized by teachers, students, industry practitioners, garment shop proprietors, housewives, and others who are fond of sewing, designing, and drafting. This could be beneficial to drafting students, draftsmen, and the like. It will provide comfort and help the seamstress carry out the fabric-designing, lay-outing, marking, pinning, and cutting process more easily.

Along this premise, the researcher developed an ergonomic garment table with a hydraulic height adjustment mechanism that will allow users to work more quickly and efficiently compared to a standard flat ordinary table.

Objectives of the Study

Generally, this study aimed to develop an ergonomic garment table with hydraulic height adjustment mechanism.

Specifically, it aimed to:

1. design and construct an ergonomic garment table with hydraulic height adjustment mechanism with the following features:

    a. rotatable top (degree)

    b. extendable sides (width)

    c. adjustable height (height)

    d. tiltable center top surface (angle)

2. test the functionality of the ergonomic garment table with hydraulic height adjustment mechanism based on the aforementioned technical features

3. evaluate the acceptability of the ergonomic garment table with hydraulic height adjustment mechanism in terms of:

    a. durability

    b. features

    c. serviceability

    d. stability

4. formulate a user's guide of the ergonomic garment table with hydraulic height adjustment mechanism

Framework of the Study

The IPOO model, a framework created by Brown and Svenson (1996), was employed in this study. The IPOO Model, also known as the input, process, output, and outcome model, is a horizontal information flow that appeals to the overseers. Additionally, Neely (2000) portrayed the model as a continuum spanning from a

hierarchical to a process-focused framework at one extreme. The advantage is it highlighted the differences between input, output, process, and product outcome.

The IPOO model is interpreted as follows: Input consists of the resources required to create the product. The Process metric tracks the advancement of the project and aids in the early detection of plan deviations for prompt remedial action. To identify trends and progress over time, the Output metric measures the direct resolves of the new product-created knowledge and support. The Outcome metrics assess innovation success and are centered on user satisfaction (Janssen S., et al., 2011). Figure 1 on the next page illustrates the schematic diagram of the framework of the study.

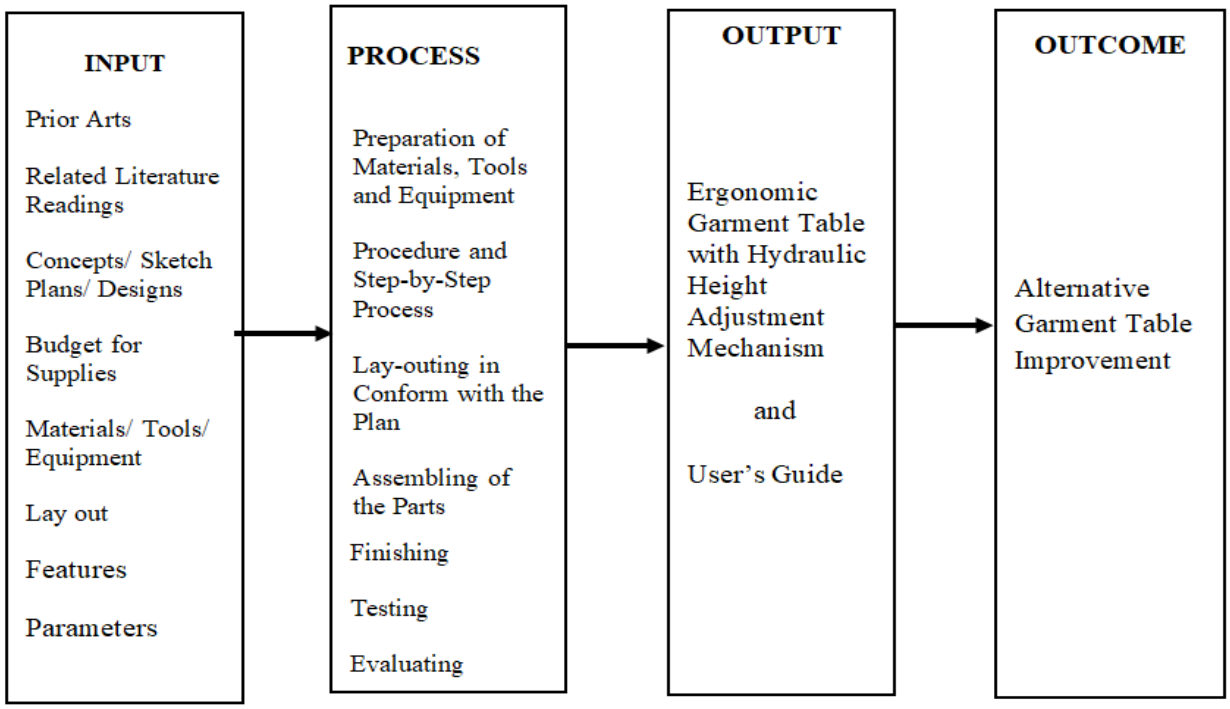


Figure 1: Schematic Diagram Illustrating the Framework of the Study

To provide an intensive presentation of the direction of the study, the Figure 1: Schematic Diagram Illustrating the Framework of the Study illustrating the framework of the study was discussed.

The input of the study involves the prior arts, related literature readings, concepts/sketches plans/designs, budget for supplies, materials/tools/equipment, layout, features, and parameters. The ergonomic garment table with hydraulic height adjustment mechanism construction started with the idea generated from reading the prior art gathered by drafting and designing the product to capture its details and specifications. Then, these ideas or concepts were evaluated for finalization. The budget was identified to allocate the systematic purchase of the needed materials, tools, and equipment. The features and parameters were also considered to determine its acceptability and functionality.

The process of the study involves the preparation of materials, tools, and equipment, procedure, and the step-by-step process, lay-outing in conform with the plan, assembling of the parts, finishing, testing, and evaluation. The initial construction of the ergonomic garment table with hydraulic height adjustment mechanism started with the lay-outing wherein its dimensions are identified for cutting its various components. Assembling its various parts gave form to the said garment table along with the attachment of other parts like the storage compartments and other parts which completed the ergonomic garment table with a hydraulic height adjustment mechanism based on the design plan. Testing was performed to check if all major parts are working and evaluation in terms of its acceptability was identified to determine its strong and weak points for future enhancement of the ergonomic garment table with hydraulic height adjustment mechanism.

The output was the developed ergonomic garment table with a hydraulic height adjustment mechanism with its user's manual and the outcome is the operational and efficient alternative garment table improvement.

RESEARCH METHODOLOGY

This chapter presents the research design, design criteria, design plan, preparation and fabrication, valuation procedure, instrumentation, data to be gathered, parameters for analysis, and cost analysis.

Research Design

This study adopted both developmental and descriptive research designs. Richley (1994) defined developmental research as a systematic, working drawing of existing knowledge directed to produce new materials, products, devices, new processes, systems, or services and to improve substantially produced. Meanwhile, Sebastian (2019) defined descriptive research design as a research method that describes the characteristics of the population or phenomenon that is being studied. This methodology focused more on the "what" of the research subject rather than the "why" of the research subject. In other words, descriptive research primarily focused on describing the result of the evaluation of the garment table.

The development of the ergonomic garment table with a hydraulic height adjustment mechanism comprises the developmental research and the evaluation of the ergonomic garment table with a hydraulic height adjustment mechanism's acceptability as perceived by experts will comprise descriptive research. Furthermore, the study employed designing and evaluating an approach that focused on developing new products and processes. The study follows the PASUC VI, 2011 research format on designing and evaluating.

Design Criteria

The ergonomic garment table with hydraulic height adjustment mechanism was designed to provide users with multifarious functions and to realize this end, it must possess the following features:

a. **Rotatable Top.** The ergonomic garment table with hydraulic height adjustment mechanism surface has a rotatable tabletop surface to avoid moving around while cutting the fabric. It can rotate in both clockwise and counterclockwise directions. By manually rotating, it freely reached 360° in both directions.

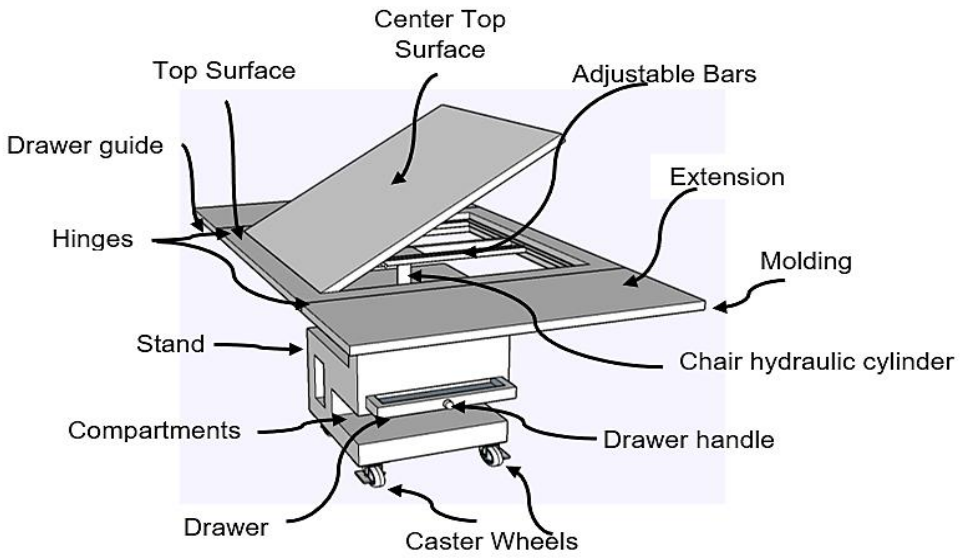
b. **Extendable sides**. The ergonomic garment table with hydraulic height adjustment mechanism surface has extensions on both sides for additional space in cutting long fabric. It can be folded down and stored easily when not in use using the drawer guide. Pulling the extensions slowly to extend and folding them downward then pushing under the top surface to keep it.

c. **Adjustable Height.** The ergonomic garment table with hydraulic height adjustment mechanism surface provides convenience for the users due to its adjustable height that can be adjusted from the lower to standard inch by inch depending on the user's height and preference. The center top surface should be pushed down until it reached the lowest part then pressing the hydraulic chair mechanism little by little until it reached the desired height.

d. **Tiltable center top surface.** The ergonomic garment table with hydraulic height adjustment mechanism's center top surface is tiltable that serves as a space for easy drafting, lay-outing, drawing, or designing conveniently which can be adjusted into three different angles. There are three wooden angle bars that can be used for tilting from 6 cm as the lowest to 19 cm. The longest angle bar can be adjusted for an additional height of 4 cm since it has a bolt and a screw that can be tightened or loosened when tilting.

Design Plan Preparation and Fabrication

The development of the ergonomic garment table with a hydraulic height adjustment mechanism started with conceptualizing the design plan preparation, fabrication techniques, and technologies to facilitate the construction. (Figure 2: Pictorial Drawing of the Ergonomic Garment Table with Hydraulic Height Adjustment Mechanism with Parts)



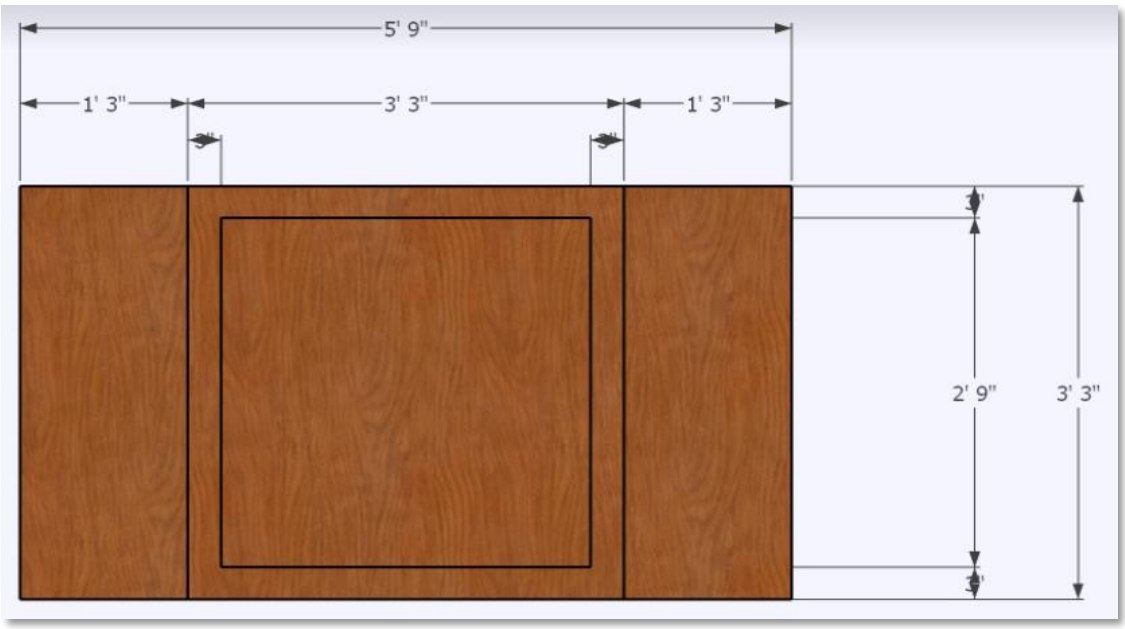


Figure 3 shows the Top View of the Ergonomic Garment Table with Hydraulic Height Adjustment Mechanism with Parts

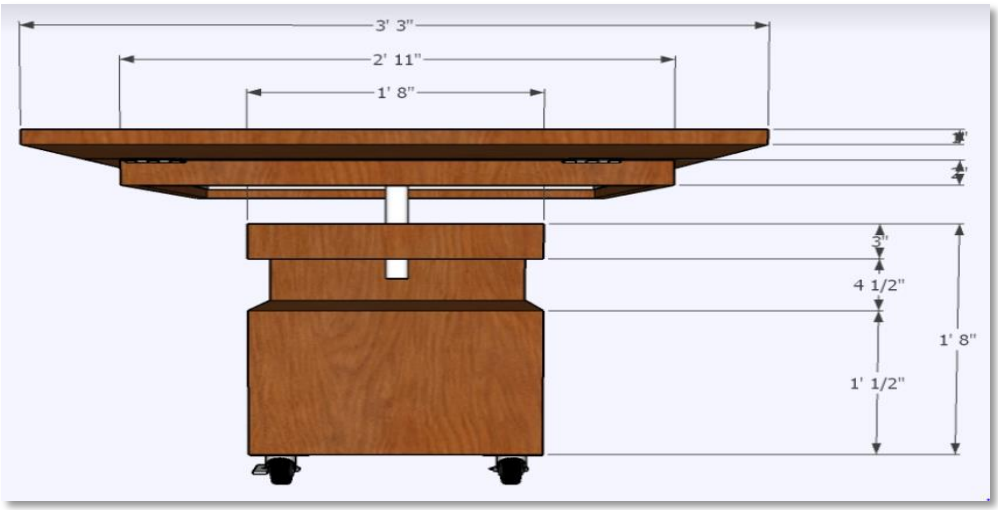


Figure 4 shows the Right-Side View of the Ergonomic Garment Table with Hydraulic Height Adjustment Mechanism with Parts

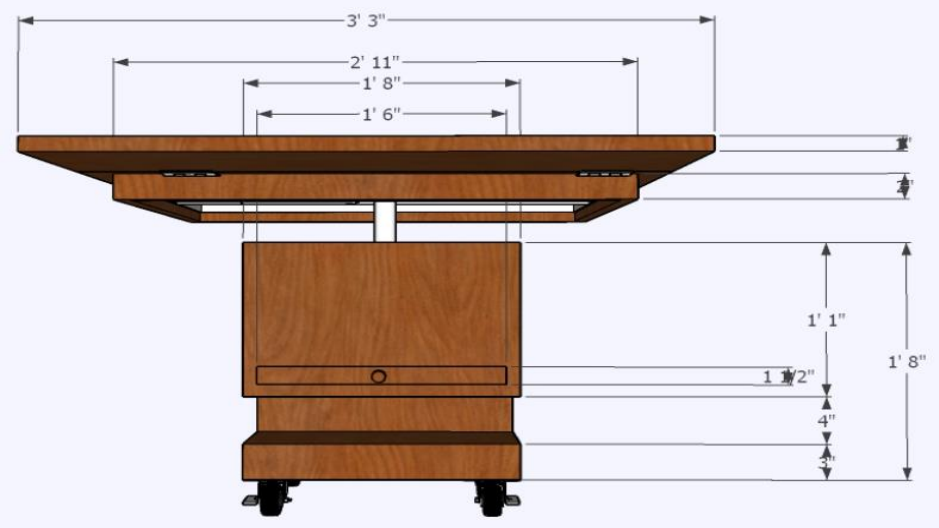


Figure 5 shows the Left Side View of the Ergonomic Garment Table with Hydraulic Height Adjustment Mechanism with Parts

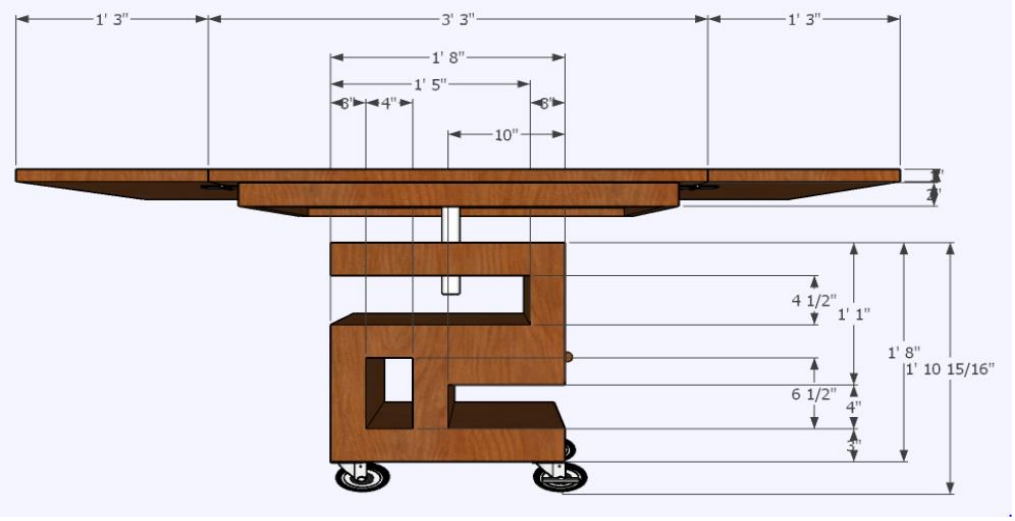


Figure 6 shows the Front View of the Ergonomic Garment Table with Hydraulic Height Adjustment Mechanism with Parts

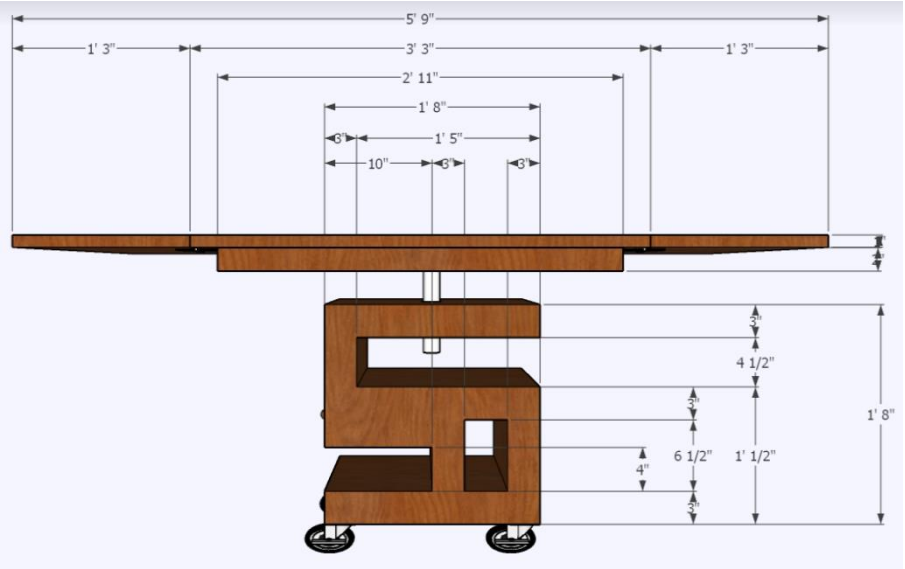


Figure 7 shows the Rear View of the Ergonomic Garment Table with Hydraulic Height Adjustment Mechanism with Parts

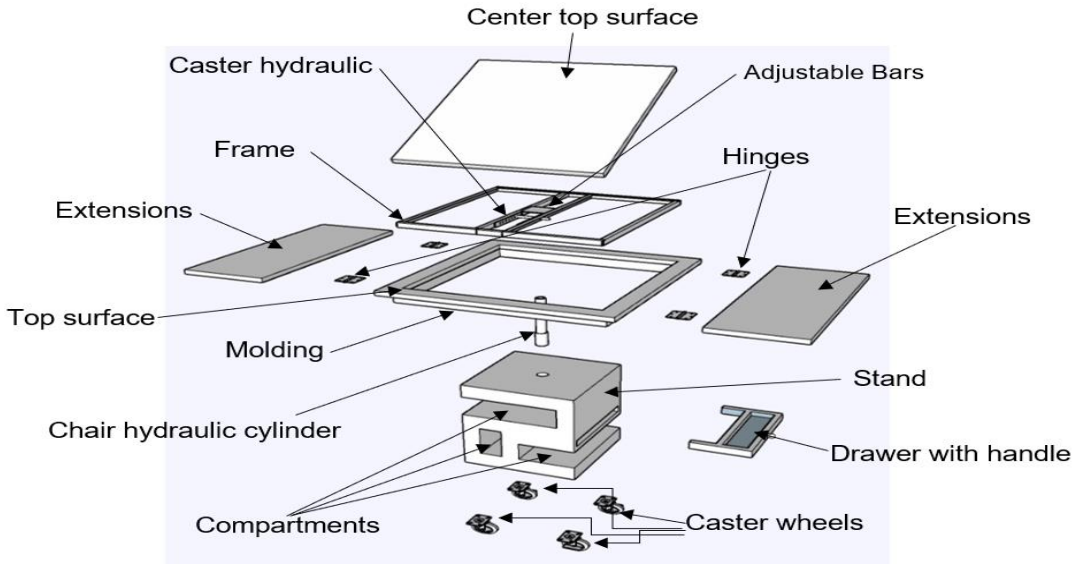
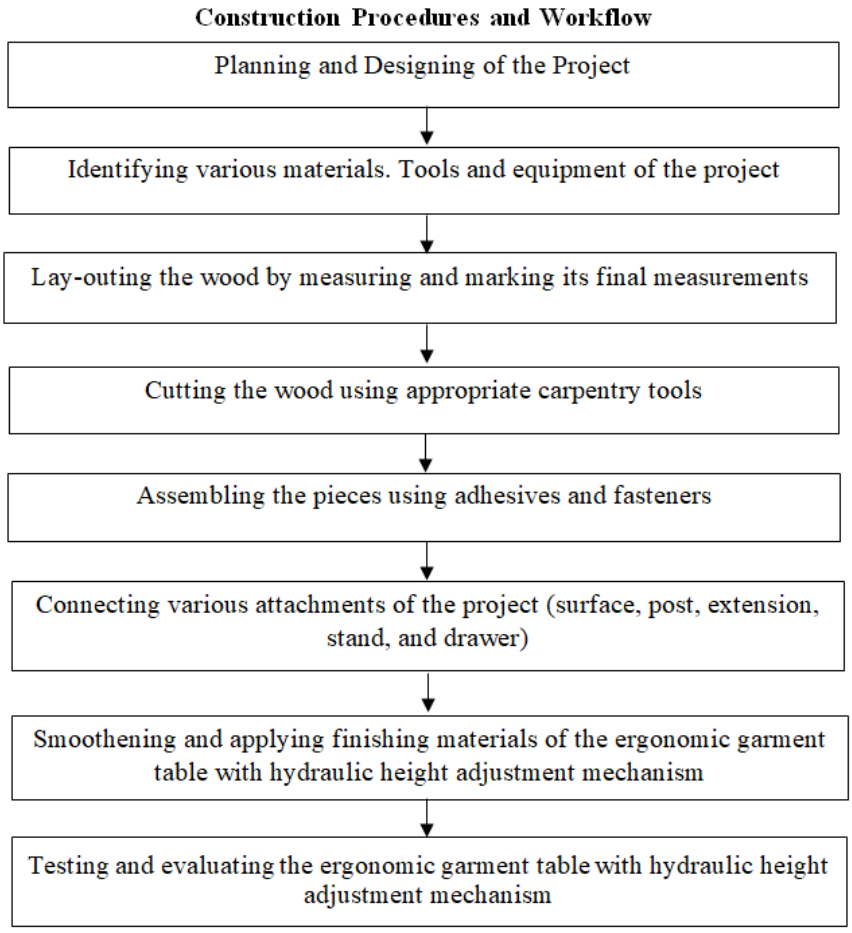


Figure 8: Exploded Drawing of the Ergonomic Garment Table with Hydraulic Height Adjustment Mechanism with Parts shows the exploded drawing of the ergonomic garment table with a hydraulic height adjustment mechanism. comprised of the following parts: a center top surface, hinges, extension on both sides, a solid stand, a drawer with handle, lockable caster wheels, three compartments, a chair hydraulic cylinder, moldings, a top surface, a frame, lockable caster wheels, and adjustable bars.

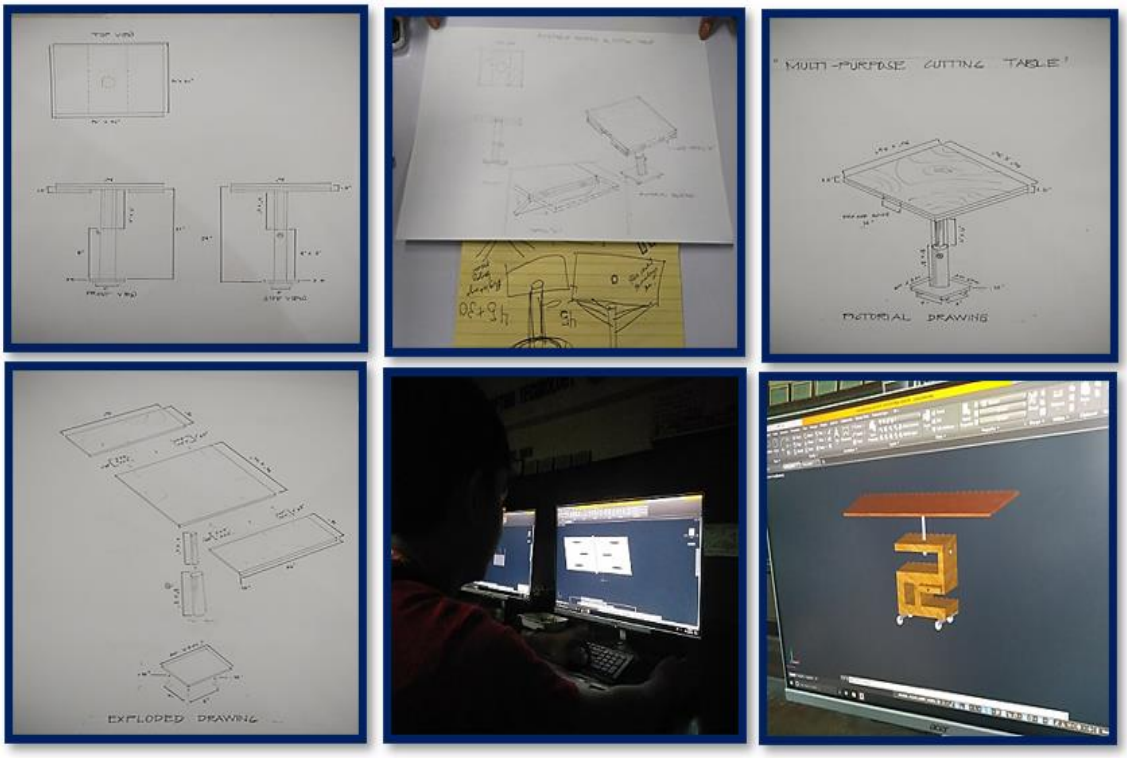


The construction of the ergonomic garment table with a hydraulic height adjustment mechanism started with preparing all the needed materials, tools, and equipment. Materials are measured and cut out based on specifications set in the plan. Then parts of the ergonomic garment table with hydraulic height adjustment mechanism are assembled, and finishing materials are applied. The developed ergonomic garment table with a hydraulic height adjustment mechanism has undergone testing and evaluation as shown on Figure 9: Workflow of the construction procedures of the ergonomic garment table with hydraulic height adjustment mechanism.

Construction Procedure

The construction procedures of the ergonomic garment table with hydraulic height adjustment mechanism are as follows:

Step 1. Planning and designing an ergonomic garment table with hydraulic height adjustment mechanism.



Step 2**.** Identifying the various materials, tools, and equipment of the ergonomic garment table with hydraulic height adjustment mechanism.

Tools and Equipment Used and Their Functions

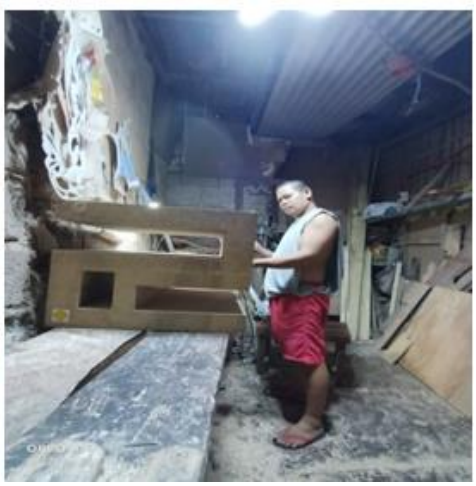
Table 1 Tools and Equipment Used and Their Functions Used in the Study

Tools and Equipment	**Functions**
Marine plywood	For exterior and high water-exposure applications
Lumbers	For construction framing, as well as finishing
Finishing nails	Prevents splitting in the thinner wood
Sandpaper	Smoothens surfaces and removes loose paint, grit, or dirt
Wood glue	Tightens bond pieces of wood together
Drawer guide	Provides for the smooth opening and closing of drawers
Hinge	Connects two swinging objects or points to one another
Sanding sealer	Gives an added layer of protection to the wood and creates a nice smooth finish
Paintbrush	Spreads evenly the finishing materials into the wood

Lacquer thinner	Thins and cleans lacquer, which is a type of wood finish
Rubber caster	Offers maximum floor protection and the ability to roll over various obstructions.
Bolt screws	Mounts the parts of the casing/frame
Gas/pneumatic cylinder	Takes the pressured power of compressed gas and forces it through a chamber which then moves a piston in the required location
Claw hammer	Drives various types/sizes of nails
Crosscut saw	Cuts the wood across its grain
Pull push rule	Standard measuring tool for carpentry works
Tray and framing scale	Test the angles of the project
Chalk line	Creates long and straight marks on the wood
Screwdriver	Tightens various types/sizes of screws
Nail setter	Embeds the head of nails into the wood
Plainer	Spreads evenly the finishing materials
Jig saw	Smoothens and evens out wood surfaces
Compressor	Cuts the wood/plywood in various shapes and sizes
Electric hand drill	Bores holes

As shown in Table 1: Tools and Equipment Used and Their Functions Used in the Study, the following list of tools and equipment in constructing the ergonomic garment table with hydraulic height adjustment mechanism. It uses marine plywood, mahogany lumber, finishing nails, sandpaper, wood glue, drawer guide, hinges, sanding sealer, paintbrush, lacquer thinner, rubber caster, bolt screw, and other needed materials and equipment in constructing the ergonomic garment table with a hydraulic height adjustment mechanism. A gas/pneumatic cylinder is also used for adjusting the height of the said table.

The researcher, together with the carpenter also determined the bill of materials used and the procurement process.



Step 3**.** Lay outing the wood by measuring and marking its final measurements

Step 4**.** Cutting the wood using appropriate carpentry tools.

Step 5. Assembling the pieces of wood using adhesives and fasteners.

Step 6. Connecting various attachments of the ergonomic garment table with hydraulic height adjustment mechanism.

For top surface

For the stand and pot using chair hydraulic cylinder

For the drawer

For the extensions and center top surface

Tilted center top surface using wood angle bars

Step 7. Smoothening and applying finishing materials to the ergonomic garment table with hydraulic height adjustment mechanism.

Finishing and retouching

Step 8. Testing and evaluating the ergonomic garment table with hydraulic height adjustment mechanism to determine its durability and functionality.

Construction Time Frame

The estimated construction time frame of the ergonomic garment table with a hydraulic height adjustment mechanism is as follows:

Table 2 Gantt Chart of the Construction Time Frame

Tasks	December	January	February	March	April	May	June
1. Planning							
2. Product lay outing							
3. Visiting the carpenter							
4. Initial payment							
5. Purchasing the materials							
6. Revision of the new design							
7. Enhancing the product							
8. Finishing the product							
9. Finished product							
10.Testing and revision of the product							

Table 2, the Gantt Chart of the Construction Time Frame presented the working activities and the total number of days allotted in making the ergonomic garment table with hydraulic height adjustment mechanism. The planning, product lay outing, and the first visit to meet the carpenter were done for the month of December. The initial payment and purchasing of the materials were done in January. The revision of the new design after

consulting the draftsman and the adviser were done in February. The enhancement of the product, following up and checking with the carpenter in March. The finished product was done during the month of May and the testing and revision of the product were done in June.

Evaluation Procedure

The researcher went through the following steps in the evaluation procedure of the product.

First and foremost, the Dean of the College of Industrial Technology was humbly asked to seek permission to conduct the research study on the following students of the Garment Trade Technology laboratory room as the respondents of the study. The researcher gathered the respondents in the evaluation of the product. The respondents were gathered and the researcher personally administered the distribution of the research-made instrument, instructed them on what to do, and assured them of confidentiality. The researcher also discussed the functions, uses, and safety measures of the technology. Finally, researcher gathered the evaluation questionnaires from the respondents.

For the testing and revisions, it was tested using the available tools of the carpenter who made the ergonomic garment table with hydraulic height adjustment mechanism. The first test was on the rotatable top as to what degree it can be rotated. The second test was on the extendable sides using a meter tape to determine its length. The third test involved the hydraulic chair cylinder and the meter tape as well to measure the height it can reach while pressing the chair mechanism. The fourth test was on the tiltable top surface determining the different angles it can be tilted using the wood bars using the meter tape.

The acceptability evaluation of the ergonomic garment table with hydraulic height adjustment mechanism was conducted using a researcher-made instrument which was rated by fifteen (15) respondents on the areas of durability, features, serviceability, and stability.

Instrumentation

The following instrumentation was used to gather salient data for processing, analysis, and conclusions of the research study.

Only two instruments which were the durability, features, serviceability, and stability test used in this study underwent validity testing. The content validity of the research instrument was established using the criteria set forth by Good and Scates (1954) to determine whether the instrument is acceptable or not. The self-made instrument was presented to the five (5) validators who were considered experts in the field of garments and drafting constructions. Out of 5 validators, 1 was a male instructor teaching the BSIT students who rated 4.60, 2 female instructors from Garment Trade Technology who have a combined rating of 4.70, and another 2 female drafting instructors with a combined rating of 4.65. The total number of items rated as acceptable revealed that the research instrument was valid. The research instrument passed both validation and reliability testing. The validation testing garnered a mean score of 4.66 and a reliability testing score of 0.779 using Cronbach's Alpha which means that the research instrument is valid and reliable. The respondents of the study comprised 5 Garment Trade instructors, 5 Garment Industry Practitioners (Sewers), and 5 Garment Trades Students (Third year).

Respondents of the Study

Table 3 Respondents of the Study

Respondents of the Study	**f**
Garment Trades Instructors	5
Garment Industry Practitioners (Sewers)	5

Garment Trades Students (Third year)	5
Total	**15**

As shown in Table 3, the Respondents of the study, a total of fifteen (15) respondents were identified to evaluate the acceptability of the ergonomic garment table with hydraulic height adjustment mechanism composed of five (5) garment teachers, five (5) garment industry practitioners who are sewers, and five (5) third-year garment students as shown in the table above.

Data to be Gathered

The data was gathered for the test of the performance of the ergonomic garment table with a hydraulic height adjustment mechanism on the rotatable top, extendable sides, adjustable height, and tiltable top surface were collected.

For the acceptability evaluation, the mean scores and standard deviation data on an ergonomic garment table with a hydraulic height adjustment mechanism in terms of a rotatable top, extendable sides, adjustable height, and tiltable top surface were gathered.

Parameters for Analysis

In this study, the parameters that the researcher used are durability, features, serviceability, and stability of the ergonomic garment table with hydraulic height adjustment mechanism.

The parameters set by the researcher were subjected for analysis involved the results of a test trial of the ergonomic garment table with a hydraulic height adjustment mechanism on the rotatable top, extendable sides, adjustable height, and tiltable top surface was analyzed.

In terms of the ergonomic garment table with hydraulic height adjustment mechanism's acceptability evaluation, the mean scores and standard deviation were used in evaluating the levels of acceptability of the parameters mentioned and then were analyzed.

The following indicators will be used in interpreting the collected data on acceptability evaluation:

Numerical Scale	Range	Verbal Description
5	4.20 - 5.00	Very Highly Acceptable (VHA)
4	3.40 - 4.19	Highly Acceptable (HA)
3	2.60 - 3.39	Moderately Acceptable (A)
2	1.80 - 2.59	Not Acceptable (FA)
1	1.00 - 1.79	Highly Not Acceptable

All these data were treated using the mean scores and standard deviation as statistical tools.

Statistical Data Analysis

To achieve the stated objectives, the following was observed: In objective number one, the researcher gave figures or illustrations of the designed project. In objective number two, the researcher gave descriptions of the parts, functions, and features. In objective number three, the researcher gave the mean and standard deviation, and SPSS, and in objective number four, the researcher formulated and developed a user guide.

Cost Analysis

The ergonomic garment table with a hydraulic height adjustment mechanism cost entailed the identification of the cost of material, labor, and contingencies. Cost of materials involved materials, labor cost, and other expenses materials to be used in the construction of an ergonomic garment table with a hydraulic height adjustment mechanism as shown in Tables 4 and 5, respectively.

The following are the supplies and materials for the construction of the ergonomic garment table with a hydraulic height adjustment mechanism.

Bill of Materials

Table 4 Bill of Materials of the Research Study

QTY.	UNIT	DESCRIPTION	UNIT COST	TOTAL COST
2	pcs	Marine plywood, ¾" x 4'x8'	₱1,560.00	₱3,120.00
4	pcs	Mahogany lumber, 2"x2"x6'	100.00	400.00
4	pc	Mahogany lumber, 1"x8"x4'	135.00	540.00
4	pcs	Mahogany lumber, 1"x4"x8'	135.00	540.00
1/2	kg	Finishing nails, #2	80.00	40.00
1/2	kg	Finishing nails, #1	80.00	40.00
1	pc	Sandpaper, #120	25.00	25.00
1	pc	Sandpaper, #80	95.00	95.00
1	500ml	Wood glue	150.00	150.00
2	pairs	Drawer guide	305.00	610.00
8	pcs	Hinges	20.00	160.00
1/2	gal	Sanding sealer	700.00	350.00
1	pc	Paintbrush #2	50.00	50.00
1	gal	Lacquer thinner	450.00	450.00
4	pcs	Rubber caster	90.00	360.00
6	pcs	Bolt screw	15.00	90.00
1	pc	Hydraulic chair cylinder	1, 500.00	1, 500.00
		Total material cost		**₱8,520.00**
Labor cost		Carpenter		4, 500.00
		Painter		2, 000.00
		Subtotal		1 5, 020.00
Overhead cost (10%)				1, 502.00
Total				**₱16, 522.00**

Table 4 shows the total cost of the project is ₱8, 520.00 pesos wherein the hydraulic chair cylinder and marine plywood have the most expense. Some of the expenses will go to the purchase of mahogany lumber, finishing nails, sandpaper, wood glue, drawer guide, hinges, sanding sealer, paintbrush, lacquer thinner, rubber caster, bolt screw, and other needed materials and equipment.

The remaining budget will be used for the purchase of materials for the construction of the ergonomic garment table with a hydraulic height adjustment mechanism.

Cost of Materials

Table 5 Cost of Materials of the Research Study

Sources of cost	Total Cost (PhP)
Cost of Supplies and Materials	₱8, 520.00
Carpenter labor cost Painter labor cost Overhead cost 10%	₱4, 500.00 ₱2, 000.00 ₱1, 502.00
Total cost	**₱16, 522.00**

The total cost of the project was sixteen thousand five hundred twenty-two pesos (₱16,522.00) which comprise the cost of supplies and materials, labor costs, and overhead costs.

Presentation, Analysis, And Interpretation of Data

This chapter presents the analysis and interpretation of the gathered data based on the objectives of the study

Designing and Constructing an Ergonomic Garment Table with Hydraulic Height Adjustment Mechanism

The first objective of the study was to design and construction of the ergonomic garment table with a hydraulic height adjustment mechanism requires to have the following features such as a rotatable top, extendable sides, adjustable height, and a tiltable top surface was realized which is shown in figure 10 below.

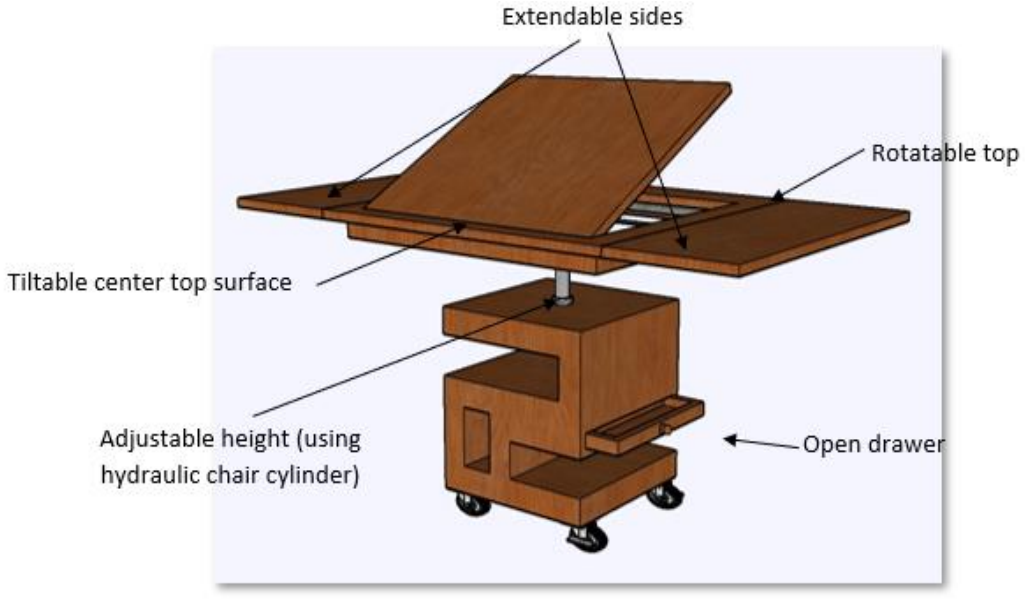


Figure 10: Perspective Drawing with Open Drawer, Tilted Surface, and Extended Extensions

Figure 11: Perspective Drawing with Folded Extension on Both Sides

Figure 12: Actual photo of the ergonomic garment table with hydraulic height adjustment mechanism

As shown in Figures 10 to 12 are the perspective drawing with an open drawer, tilted surface, extended (sides) extensions, folded extensions on both sides, and its actual photo.

Technical Testing and Functionality

The second objective of the study presents the required testing of the functionality of the ergonomic garment table with hydraulic height adjustment mechanism according to the following aforementioned technical features.

a. A rotatable top – it can be rotated both clockwise and counterclockwise direction.

b. Extendable sides

c. Adjustable height

d. Tiltable center top surface

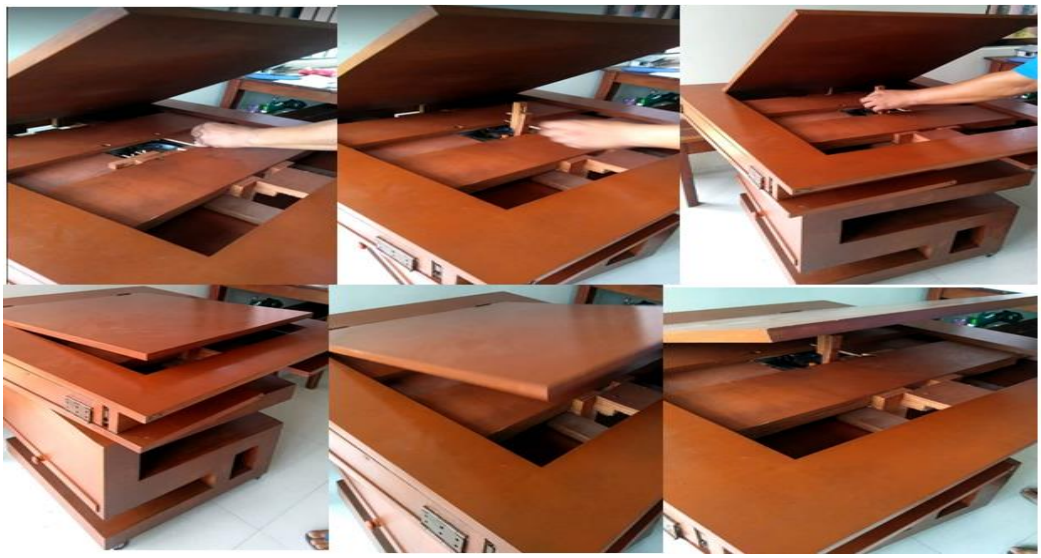


Table 6 Technical Testing and Functionality of the Research Study

Features	Aspects	Measurement	Capability
Rotatable top	Degree	360°	Clockwise and counter- clockwise directions
Extendable sides	Length	13”	Each side
Adjustable height	Height	28 ½” – 32”	From lowest to standard
Tiltable center top surface	Angle	6 cm – 20 cm	60° to 90°

Acceptability of the Ergonomic Garment Table with Hydraulic Height Adjustment Mechanism in Terms of Durability, Features, Serviceability, and Stability

The third objective of the study was to determine the level of functionality of the ergonomic garment table with hydraulic height adjustment mechanism be tested in terms of durability, features, serviceability, and stability.

Table 7 Mean Scores on the Level of the Acceptability of the Ergonomic Garment Table with Hydraulic Height Adjustment Mechanism in Terms of Durability

Aspects	Mean	SD	Interpretation
1. It can be used for a long period of time since it was made of a matured mahogany tree.	4.87	0.35	Very Highly Acceptable
2. It can withstand the demand of its use due to its life cycle.	4.67	0.62	Very Highly Acceptable
3. Standard quality materials are used and are locally available.	4.33	0.62	Very Highly Acceptable
4. It does not require excessive maintenance or repair.	4.00	0.85	Highly Acceptable
5. It is locally available in the market.	4.27	0.70	Very Highly Acceptable
6. It does not wear out easily.	4.40	0.83	Very Highly Acceptable
7. It is solid and stable and much less likely to twist, warp, split, or crack over time unlike made from softwood.	4.80	0.41	Very Highly Acceptable
Grand Total	**4.48**	**0.43**	**Very Highly Acceptable**

Legend: Very Highly Acceptable (4.20-5.00), Highly Acceptable (3.40-4.19), Moderately Acceptable (2.60-3.39) Not Acceptable (1.80-2.59), and Highly Not Acceptable (1.00-1.79)

The table further reveals that the highest obtained mean score was 4.87 interpreted as Very Highly Acceptable on the item “It can be used for a long period of time since it was made of a matured mahogany tree”.

On the other hand, the lowest obtained mean score was 4.00 interpreted as Highly Acceptable, in the item “It does not require excessive maintenance or repair”. The findings imply that the items on the ergonomic garment table with hydraulic height adjustment mechanism in terms of durability need further improvement in the design in terms of maintenance and repair parts.

Table 8 Mean Scores in the Level of Acceptability of the Ergonomic Garment Table with Hydraulic Height Adjustment Mechanism in Terms of Features

Aspects	Mean	SD	Interpretation
1. Has extensions on both sides that provide additional space for cutting.	4.93	0.26	Very Highly Acceptable

2. It provides convenience for the user due to its adjustable stand.	4.93	0.26	Very Highly Acceptable
3. It has a drawer to keep small sewing tools and materials.	4.93	0.26	Very Highly Acceptable
4. The surface is rotatable to avoid moving around while cutting.	4.80	0.56	Very Highly Acceptable
5. It has lockable caster wheels for easy transfer.	4.93	0.26	Very Highly Acceptable
6. It has a user guide that is easy to follow and understand.	4.73	0.59	Very Highly Acceptable
7. It has a smooth surface to protect the fabric from raveling.	4.87	0.35	Very Highly Acceptable
8. The center top surface is tiltable for easy drawing and drafting.	4.93	0.26	Very Highly Acceptable
Total	**4.88**	**0.24**	**Very Highly Acceptable**

Legend: Very Highly Acceptable (4.20-5.00), Highly Acceptable (3.40-4.19), Moderately Acceptable (2.60-3.39) Not Acceptable (1.80-2.59), and Highly Not Acceptable (1.00-1.79)

Presented in Table 8 are the mean scores on the level of acceptability of the ergonomic garment table with hydraulic height adjustment mechanism in terms of features. The table further reveals that the total mean score of 4.88 respectively interpreted as Very Highly Acceptable. The table further reveals that the highest obtained mean score was 4.93 interpreted as Very Highly Acceptable in the items "Has extensions on both sides that provide additional space for cutting," "It provides convenience for the user due to its adjustable stand," "It has a drawer to keep small sewing tools and materials," "It has lockable caster wheels for easy transfer," and "The center top surface is tiltable for easy drawing and drafting." On the other hand, the lowest obtained mean score was 4.73 interpreted as Very Highly Acceptable in the item "It has a user guide that is easy to follow and understand". This implies that there is a need to further improve the design and contents of the user guide to be more understandable and appealing to the readers as well as the users.

Table 9 Mean Scores in the Level of Acceptability of the Ergonomic Garment Table with Hydraulic Height Adjustment Mechanism in Terms of Serviceability

Aspects	**Mean**	**SD**	**Interpretation**
1. There is a label that provides a specific guide.	4.73	0.46	Very Highly Acceptable
2. Can be repaired without excessive effort since the attachments are simple.	4.53	0.52	Very Highly Acceptable
3. Safety measures are included in the operation of the project.	4.73	0.46	Very Highly Acceptable
4. The parts are easy to install and operate using the user's guide.	4.87	0.35	Very Highly Acceptable
5. It is easy to maintain to serve better due to its kind of materials.	4.73	0.59	Very Highly Acceptable
6. It can increase the speed of work while performing tasks.	4.73	0.52	Very Highly Acceptable
7. Lots of time and effort are saved in using it.	4.87	0.35	Very Highly Acceptable
8. It adjusts to the height of the user while the center top surface is tilted.	4.87	0.35	Very Highly Acceptable
Total	**4.76**	**0.35**	**Very Highly Acceptable**

Legend: Very Highly Acceptable (4.20-5.00), Highly Acceptable (3.40-4.19), Moderately Acceptable (2.60-3.39) Not Acceptable (1.80-2.59), and Highly Not Acceptable (1.00-1.79)

The table above reveals that the highest obtained mean score was 4.87 respectively interpreted as Very Highly Acceptable on the item "The parts are easy to install and operate using the user's guide", "Lots of time and effort are saved in using it", and "It adjusts to the height of the user while the center top surface is tilted." On the other hand, the lowest obtained mean score was 4.53 interpreted also as Very Highly Acceptable in the item "Can be repaired without excessive effort since the attachments are simple". The findings imply that the items on the ergonomic garment table with hydraulic height adjustment mechanism in terms of serviceability need further improve the design in terms of repair and attachments.

Table 10 Mean Scores in the Level of Acceptability of the Ergonomic Garment Table with Hydraulic Height Adjustment Mechanism in Terms of Stability

Aspects	**Mean**	**SD**	**Interpretation**
1. It is designed to be sturdy.	4.00	0.38	Very Highly Acceptable
2. All the hinges and latches were placed so that the top has the optimum support creating a strong stable working surface.	4.33	0.49	Very Highly Acceptable
3. It sits on four heavy-duty casters in securing stability and easy mobility.	4.20	0.41	Very Highly Acceptable
4. It is constructed using closed wood profiles for long-term durability and stability.	4.53	0.64	Very Highly Acceptable
5. Additional locks are attached under the top surface securing the extensions on both sides.	4.47	0.52	Very Highly Acceptable
6. The extensions on both sides can be folded down and stored easily without affecting the function of the top surface.	4.20	0.56	Very Highly Acceptable
7. The support stand is solid enough to withstand the weight of the top surface.	4.40	0.51	Very Highly Acceptable
Total	**4.31**	**0.27**	**Very Highly Acceptable**

Legend: Very Highly Acceptable (4.20-5.00), Highly Acceptable (3.40-4.19), Moderately Acceptable (2.60-3.39) Not Acceptable (1.80-2.59), and Highly Not Acceptable (1.00-1.79)

Table 10 shows that the highest obtained mean score was 4.47 which is interpreted as Very Highly Acceptable. It also shows that the "Additional locks are attached under the top surface securing the extensions on both sides" got the highest mean score of 4.47 which is interpreted as Very Highly Acceptable. The lowest obtained mean score, on the other hand, was 4.00 which is interpreted as Highly Acceptable in the item "It is designed to be sturdy". The findings imply that the items on the ergonomic garment table with hydraulic height adjustment mechanism in terms of stability need further improve the design in terms of how stable the product.

Summary of the Mean Scores on the Level of Acceptability of the Ergonomic Garment Table with Hydraulic Height Adjustment Mechanism Acceptability in Terms of Aspects

Table 11 Summary of the Mean Scores on the Level of Acceptability of the Ergonomic Garment Table with Hydraulic Height Adjustment Mechanism Acceptability in Terms of Aspects

Aspects	**Mean**	**SD**	**Interpretation**
Durability	4.48	0.43	Very Highly Acceptable
Features	4.88	0.24	Very Highly Acceptable

Serviceability	4.76	0.35	Very Highly Acceptable
Stability	4.31	0.27	Very Highly Acceptable
Total	**4.61**	**0.32**	**Very Highly Acceptable**

Legend: Very Highly Acceptable (4.20-5.00), Highly Acceptable (3.40-4.19), Moderately Acceptable (2.60-3.39) Not Acceptable (1.80-2.59), and Highly Not Acceptable (1.00-1.79)

Table 11 shows the summary of the mean of mean scores on the level of acceptability of the ergonomic garment table with hydraulic height adjustment mechanism of 4.61 which is interpreted as Very Highly Acceptable in terms of aspects. Among the four aspects, the stability obtained the lowest mean score of 4.31 interpreted as Very Highly Acceptable. The highest obtained mean score was 4.88 interpreted as Very Highly Acceptable on the aspects of the product.

The User's Guide of the Ergonomic Garment Table with Hydraulic Height Adjustment Mechanism

The fourth objective of the study was to develop a user's guide of the ergonomic garment table with hydraulic height adjustment mechanism which is composed of various parts namely: the introduction, parts, and leading features. It is also included in the user's guide the care and safety instruction, caution, warning, and specifications. The details of the user's guide are shown below.

Figure 13 presents the User's Guide which shows the finished product of the ergonomic garment table with hydraulic height mechanism, the product specification, product features, product illustration, product parts and functions, operating procedures, and maintenance

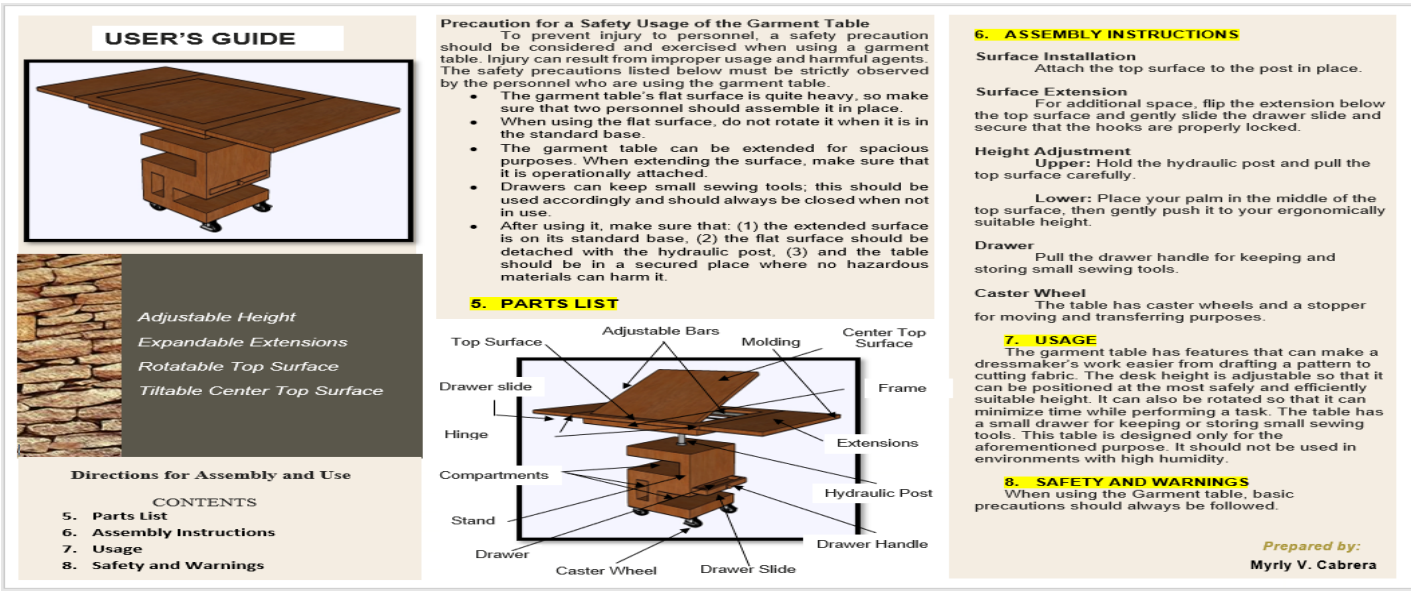


Figure 13. The User's Guide of the Ergonomic Garment Table with Hydraulic Height Mechanism

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents the summary of findings from the data collected, the conclusion, and recommendations of the study.

Findings of the Study

The following were the summary of the findings of the study:

1. The ergonomic garment table with hydraulic height mechanism is using locally available materials feasible to design and develop based on the plan and design.

2. The level of functionality of the ergonomic garment table with hydraulic height mechanism was very highly acceptable in terms of durability, features, serviceability, and stability.

3. The level of acceptability of the ergonomic garment table with hydraulic height mechanism in all parameters was very highly acceptable in terms of durability, features, serviceability, and stability.

4. The user's guide was designed to provide instructions on every part of the ergonomic garment table with hydraulic height mechanism.

Conclusions of the Study

Based on the finding of the study, the following conclusion was formulated:

1. The ergonomic garment table with hydraulic height mechanism can be replicated and used for practical instructions in Garments Technology.

2. The ergonomic garment table with hydraulic height mechanism is functional and operational in the laboratory and practicum activities of garment students and instructors.

3. The ergonomic garment table with hydraulic height mechanism can be replicated as additional equipment in teaching Garments Technology and TLE subjects.

4. The user's guide can provide informative ideas and theoretical knowledge.

Recommendations of the Study

Based on the findings and conclusions, the following recommendations are advanced:

1. Consider utilizing the ergonomic garment table with hydraulic height mechanism for the utilization of the Garment Trade Technology as well as the TLE teachers of DepEd in Bacolod City and Negro Occidental.

2. Mass production of the ergonomic garment table with hydraulic height mechanism requires a series of testing not only by the Garment Trade Technology but also by the industry partners and users.

3. Disseminate the user's guide to the industry partners and users for massive transfer of the technology to the community.

4. Further enhancement of the ergonomic garment table with hydraulic height mechanism specifically, the protrusion of hinges on the side of the center part of the top surface should not be visible for it can affect the fabric while performing tasks prior to sewing.

5. The ergonomic garment table with hydraulic height mechanism is strongly recommended for utility model application.

REFERENCES

1. 2012/01/04/antique-needlework-tables. (2012, January 4). Retrieved from homethingspast.com: https://homethingspast.com/2012/01/04/antique-needlework-tables/
2. Agarwal, D. (2020, March 31). indiaMART interMESH Ltd. Retrieved from Corporate.indiamart.com: https://corporate.indiamart.com/
3. 2. Ashan, C. (2023, March 28). linkedin.com. Retrieved from www.linkedin.com: https://www.linkedin.com/pulse/ergonomics-apparel-industry-chulaka-ashan
4. Basham, B. (2022, January 24). blog/entry/amish-extendable-dining-tables. Retrieved from www.countrysideamishfurniture.com: https://www.countrysideamishfurniture.com/blog/entry/amish-extendable-dining-tables

5. BITESIZE. (2023). bbc.co.uk. Retrieved from www.bbc.co.uk: https://www.bbc.co.uk/bitesize/guides/zkwxgwx/revision/6#:~:text=Stability%20is%20a%20measure%20of,objects%20topple%20over%20very%20easily.
6. Brown, J. M. (1998). American Psychological Association. 750 First Street NE 20002-4242, Washington, DC 20002-4242. Retrieved from psycnet.apa.org: https://psycnet.apa.org/record/1998-06419-005
7. Burry, M. (2022, January 12). best-sewing-tables-5094361. Retrieved from www.thesprucecrafts.com: https://www.thesprucecrafts.com/best-sewing-tables-5094361
8. Caballer, M. (2016). Jonkoping University. Retrieved from www.diva-portal.org: https://www.diva-portal.org/smash/get/diva2:1051115/FULLTEXT01.pdf
9. Center, A. R. (2023, March 18). research. Retrieved from libguides.chicagohistory.org: https://libguides.chicagohistory.org/research
10. Click, K. (2023, January 10). /types-extendable-dining-tables. Retrieved from diningfurnitureshowcase.com:https://diningfurnitureshowcase.com/blog/types-extendable-dining-tables
11. Consulting, D. (2014, July 5). what-is-ergonomics. Retrieved from https://www.ergonomics.com.au/: https://www.ergonomics.com.au/what-is-ergonomics/
12. Council, I. E. (2000, August). /topics/ergonomics/. Retrieved from ehs.unc.edu/topics/ergonomics/: https://ehs.unc.edu/topics/ergonomics/
13. Cuofano, G. (2022, December 28). fourweekmba.com/dimensions-of-quality/. Retrieved from fourweekmba.com: https://fourweekmba.com/dimensions-of-quality/
14. Curry, M. (2018, July 5). monicacurryquiltdesign.com. Retrieved from www.monicacurryquiltdesign.com: https://www.monicacurryquiltdesign.com/2017/11/how-to-raise-your-quilting-table.html
15. Cuuickshanka, L. (2017). Designing, Adapting and Selecting Tools for Creative Engagement. The Innovation Dimensions: Designing in a Broader Context, Cruickshank, L. 2010 In: Design Issues. 26, 2, p. 17-26. 10 p. Retrieved from www.lancaster.ac.uk: https://www.lancaster.ac.uk/arts-and-social-sciences/about-us/people/leon-cruickshank
16. Cuuickshanka, L. (2019, October 30). Amazon Services LLC Associates Program. Retrieved from craftsselection.com: https://craftsselection.com/best-fabric-cutting-table/
17. Del Siegel, P. (1990). Qualitative evaluation and research methods. Retrieved from www.siegel.com: https://www.siegel.com
18. Edwards, C., Fortingo, N., & Franklin, E. (2022). Ergonomics. East Tennessee State University, Johnson City, TN: National Library of Medicine.
19. Furnish, L. U. (2019, August 9). blogthe-table-a-brief-history/. Retrieved from www.furniturerentalonline.co.uk/blog/the-table-a-brief-history/: https://www.furniturerentalonline.co.uk/blog/the-table-a-brief-history/
20. Garvin, D. A. (2017, April 23). Your Article Library the Next Generation Library. Retrieved from yourarticlelibrary.com: http://www.yourarticlelibrary.com/management/8-important-dimensions-of-quality-formulated-by-david-a-garvin/3489
21. Gross, D. A. (2014, February 21). SMITHSONIANMAG.COM. Retrieved from https://www.SMITHSONIANMAG.COM
22. Hadfield, R. (2021, October 4). blogs/news/dining-101-extendable-tables. Retrieved from dufresne.ca: https://dufresne.ca/blogs/news/dining-101-extendable-tables
23. Hakoo, A. (2019). Testex Textile. textileschool. Fabtech Solutions, India. Retrieved from www.texttileschool.com: https://www.textileschool.com/author/ashokhakoo/
24. Hanlong, J. (2002). Sewing table. Retrieved from www.xm-sintop.com/: http://www.revolvy.com/page/Sewing-table
25. Harper, D. (2018, March 10). Retrieved from www.etymonline.com: https://www.etymonline.com/word/construct
26. Heng, G. (2022, October 15). blog. Retrieved from gwenstellamade.com: https://gwenstellamade.com/tutorials/making-the-best-adjustable-sewing-and-cutting-table
27. Hill, T. U. (2000, August). ehs.unc.edu. Retrieved from ehs.unc.edu/topics/ergonomics/: https://ehs.unc.edu/topics/ergonomics/

28. Hunt, D. D. (2014, January 13). Retrieved from http://www.pharmacopeia.cn/v29240/usp29nf24s0_c1191.html.
29. Illari, P. (2011, January). What_is_a_mechanism_Thinking_about_mechanisms_across_the_sciences. Retrieved from researchgate.net: https://www.researchgate.net/publication/225790224 What_is_a_mechanism_Thinking_about_mechanisms_across_the_sciences
30. Jabagat, K. D. (1998). Rushurgent Working Group. Retrieved from Art.com.: http://rwg-tag.bravehost.com/joomla/index.php/people?id=75
31. Jana, P. (2008, October 1). Retrieved from apparelresources.com: https://apparelresources.com/business-news/manufacturing/ergonomics-in-apparel-manufacturing-i/
32. Jansen, A. (2019). JansenLuxury Lifestyle Furniture. Retrieved from jansenfurniture.com: https://jansenfurniture.com/product-category/livingstone-terrasso/nostalchic-outdoor-furniture/tables/
33. Jessica. (2023, June 12). blog. Retrieved from quiltnco.com: https://quiltnco.com/what-is-a-good-height-for-a-sewing-cutting-table/
34. Kathleen Kuiper. (2016, October 2006). Encyclopedia Britannica. Retrieved from https://www.britannica.com/topic/table-furniture
35. Labesnky, S. R. (2018). A Textbook of Culinary Fundamentals, 6th ed. Prentice Hall, 1995.
36. Lee, S. (2021, April 27). bobvila.com. Retrieved from www.bobvila.com: https://www.bobvila.com/articles/best-sewing-table
37. Li, H. H. (2015). Foldabilizing Furniture. ACM Transactions on Graphics, 34 (4).
38. Longman. (2023). www.ldoceonline.com/dictionary/rotate. Retrieved from www.ldoceonline.com: https://www.ldoceonline.com/dictionary/rotate
39. Maynes, S. (2021, March 18). Collapsible Measuring and Cutting Craft Table. Commerce, California, USA.
40. Meyer, T. H. (2004, December 1). opencommons.uconn.edu/cgi/viewcontent.cgi? Retrieved from opencommons.uconn.edu: https://opencommons.uconn.edu/cgi/viewcontent.cgi?article=1001&context=thmeyer_articles
41. Middlesworth, M. (2013, March 7). blog. Retrieved from ergo-plus.com: https://ergo-plus.com/ergonomics-definition-domains-applications/
42. Mills, J. (2000). Performance Management System Design. Developing and testing a process-based approach.
43. Naini, F. B. (2022, May 2). article/S0889-5406(14)00693-3/pdf. Retrieved from www.ajodo.org: https://www.ajodo.org/article/S0889-5406(14)00693-3/pdf
44. Neely, A. (2000). Performance-Measurement. Retrieved from researchgate.net: https://www.researchgate.net/topic/Performance-Measurement
45. Nguyen, S. J. (2022, March 8). Retrieved from productcollective.com: https://productcollective.com/what-are-product-features-definition-examples-and-5-types/
46. Nielsen, L. (2021, July 15). artifact-of-change-the-antique-sewing-table/. Retrieved from styylish.com: https://styylish.com/artifact-of-change-the-antique-sewing-table/
47. Pearson Education Limited. (2018). Retrieved from www.Idoceoonline.com: http://www.Idoceoonline.com
48. Pinefinders. (2015, May 14). new-blog/2015/5/14/the-history-of-tables. Retrieved from www.pinefinders.co.uk: https://www.pinefinders.co.uk/new-blog/2015/5/14/the-history-of-tables
49. Priya, K. (2022, January 21). textileschool.com. Retrieved from www.textileschool.com: https://www.textileschool.com/7727/ergonomic-improvements-in-textile-industry/
50. Productplan. (2023). www.productplan.com/learn/product-features/. Retrieved from www.productplan.com:https://www.productplan.com/learn/product-features/#:~:text=Definition %3 A%20Product%20features%20are%20a,a%20suitcase%20is%20made%20from.
51. Putty. (2021, August 3). www.sewmyplace.com/fabric-cutting-table. Retrieved from www.sewmyplace.com: https://www.sewmyplace.com/fabric-cutting-table
52. quality-management/eight-dimensions-of-quality. (2023, February 24). Retrieved from toolshero.com: https://www.toolshero.com/quality-management/eight-dimensions-of-quality/
53. Rohn, D. (2015). Retrieved from themontagecollage.com: https://themontagecollage.com
54. Rosenkrantz, L. (1994, October). sewing-table. Retrieved from www.americanheritage.com: https://www.americanheritage.com/sewing-table

55. Rosenkrantz, L. (1994, 12 January). The Sewing Table. Retrieved from www.craftselection.com: www.craftselection.com/topic/the-sewing-table
56. Safi, N. (n.d.). dictionary/p/furniture-furnishings/furniture--type/sewing-table. Retrieved from www.worthpoint.com: https://www.worthpoint.com/dictionary/p/furniture-furnishings/furniture--type/sewing-table
57. Sarkar, P. (2019, August 6). cutting-table-length-and-width. Retrieved from www.onlineclothingstudy.com: https://www.onlineclothingstudy.com/2019/08/cutting-table-length-and-width.html
58. Singh, R. (2017, February 17). everything-you-need-to-know-about-user-guides-and-manuals. Retrieved from biznology.com: https://biznology.com/2017/02/everything-you-need-to-know-about-user-guides-and-manuals/
59. Smardzewski, J. (2015a). en/the-history-of-furniture-construction/2463694. Retrieved from www.springerprofessional.de: https://www.springerprofessional.de/en/the-history-of-furniture-construction/2463694
60. Soceity, J. E. (n.d.). Retrieved from www.ergonomics.jp/e_index/e_outline/e_ergono-history.html: https://www.ergonomics.jp/e_index/e_outline/e_ergono-history.html
61. Stolen, K. (2019). Technology Research Explained: Design of Software, Architectures, Methods, and Technology in General. Jessheim,Norway: ISBN 978-3-031-25816-9.
62. Sunurriah Buseri, A. A. (2022, June 25). Fabric Cutting Table for Homebased Tailors. Universiti Tun Hussein Onn Malaysia, Parit Raja, Batu Pahat, Johor, Malaysia.
63. Superlabelstore. (2021, July 14). uperlabelstore.com/blog/sewing-cutting-table/. Retrieved from superlabelstore.com: https://superlabelstore.com/blog/sewing-cutting-table/
64. Taylor, F. (2018, February 26). antiques/antique-furniture/antique-furniture-care-restoration/expanding-tables-grow-to-suit-needs. Retrieved from www.antiquetrader.com: https://www.antiquetrader.com/antiques/antique-furniture/antique-furniture-care-restoration/expanding-tables-grow-to-suit-needs
65. Taylor, F. (2018, September 26). furniture/expanding-tables-grow-to-suit-needs. Retrieved from www.antiquetrader.com: https://www.antiquetrader.com/furniture/expanding-tables-grow-to-suit-needs
66. Taylor, F. (2020, September 2). furniture/expanding-tables-grow-to-suit-needs. Retrieved from www.antiquetrader.com: https://www.antiquetrader.com/furniture/expanding-tables-grow-to-suit-needs
67. Team, M. T. (2022). /www.mindtools.com/axzeq31/garvins-8-dimensions-of-quality. Retrieved from www.mindtools.com: https://www.mindtools.com/axzeq31/garvins-8-dimensions-of-quality
68. the-adjustable-height-desk-a-b. (n.d.). Retrieved from www.nextdesks.com: http://www.nextdesks.com/…/the-adjustable-height-desk-a-b
69. Thomas, J. (2018, December 17). careertrend. Retrieved from careertrend.com: https://careertrend.com/facts-5901756-difference-between-tailor-seamstress-.html
70. Toolshero. (2023, February 24). quality-management/eight-dimensions-of-quality/. Retrieved from toolshero.com: https://www.toolshero.com/quality-management/eight-dimensions-of-quality/
71. topic/table-furniture. (n.d.). Retrieved from www.britannica.com: https://www.britannica.com/topic/table-furniture
72. Valentine, H. (2023). thesewingloftblog.com. Retrieved from thesewingloftblog.com/about/: https://thesewingloftblog.com/about/
73. Vernelle. (2023, March 1). Retrieved from sewinginsight.com: https://sewinginsight.com/buying-guide/best-fabric-cutting-table-for-sewing/
74. wards; Nyemkuna Fortingo; Emily Franklin. (2022). Ergonomics. East Tennessee State University, Johnson City, TN: National Library of Medicine.
75. Wordsense. (2022). Retrieved from www.wordsense.eu/tiltable/: https://www.wordsense.eu/tiltable/
76. Writer. (2022, September 2). heres-why-you-need-a-sewing-table. Retrieved from t2conline.com: https://t2conline.com/heres-why-you-need-a-sewing-table/
77. Xiamen Sintop. (2019, 25 June). wooden furnitures. Retrieved from www.xm-sintop.com: www.xm-sintop.com/wooden/woodenfurnitures/woodentables
78. Youhanna, D. (2014, February 15). echairparts.com. Retrieved from choosing-the-right-office-chair-gas-cylinder: https://www.echairparts.com/