

Technology and Livelihood Education

Industrial Arts- Module 1: Importance and Methods of Enhancing and Decorating Bamboo, Wood, and Metal Products



TLE – Grade 6
Alternative Delivery Mode
Quarter 2 – Module 1: Importance and Methods of Enhancing and Decorating
Bamboo, Wood, and Metal Products
First Edition, 2020

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Published by the Department of Education
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Undersecretary: Diosdado M. San Antonio

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Printed in the Philippines by _____

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Technology and Livelihood Education

Industrial Arts

Module 1:

Importance and Methods of Enhancing and Decorating Bamboo, Wood, and Metal Products

Introductory Message

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are carefully stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

Pre-tests are provided to measure your prior knowledge on lessons in each SLM. This will tell you if you need to proceed on completing this module or if you need to ask your facilitator or your teacher's assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check your learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, Notes to the Teacher are also provided to our facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. And read the instructions carefully before performing each task.

If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.

Thank you.



What I Need to Know

This module was designed and written with you in mind. It is here to help you master the skills in enhancing and decorating bamboo, wood and metal products. The scope of this module permits it to be used in many different learning situations. The language used recognizes the diverse vocabulary level of learners. The lessons are arranged to follow the standard sequence of the course. But the order in which you read them can be changed to correspond with the textbook you are now using.

This module focusses on the following topics:

- a. The importance of enhancing and decorating the product.
- b. The methods of enhancing wood and bamboo products
- c. Methods of enhancing metal products

At the end of this module, you should be able to:

- a. Discuss the importance and methods of enhancing and decorating bamboo, wood and metal products. (TLE6IA-0a-1)



What I Know

Directions: Read each item and choose the letter of the correct answer.
Write your answer on a separate sheet of paper.

1. Which of the following is a process of enhancing finished product?
 - a. Improving the appearance of the finished product
 - b. Buying a finished product
 - c. Selling the finished product
 - d. Painting the product
2. The process of adding more items to improve its appearance is called _____.
 - a. Painting the product
 - b. Varnishing the product
 - c. Decorating the product
 - d. Finishing the product
3. What technique on enhancing metal product uses hammer, metal, stamp, stencils, and other materials to create imprints on the metal surface?
 - a. Painting
 - b. Etching
 - c. Embossing
 - d. Beautifying

4. What do you call the items that enhanced the beauty of the products?
 - a. Finishing materials
 - b. Accessories
 - c. Sketches
 - d. Decoration
5. Which of the following refers to the ease in selling a product?
 - a. Enriching
 - b. Improving
 - c. Innovate
 - d. Marketability
6. The following are the reasons why there is a need to enhance your finished product, except ONE. What is it?
 - a. It is more saleable
 - b. More durable and beautiful
 - c. It makes a product more expensive
 - d. More attractive
7. Which is an example of a product made from metal?
 - a. Woven basket
 - b. Wind Chimes
 - c. Wooden Lamp
 - d. Bottle Flower Vase
8. How can you make your product saleable and beautiful?
 - a. Enhance and decorate the product.
 - b. Copy the work of other people.
 - c. Use expensive materials.
 - d. Use any method.
9. What characteristics does a handicraft maker need to possess in order to make his/her products salable and attractive?
 - a. Pride and honor.
 - b. Creativity and innovativeness
 - c. Orderliness and cleanliness
 - d. Health and profit
10. Which of the following are product made of wood?
 - a. Crystal accessories
 - b. Wooden utensils
 - c. Wind Chimes
 - d. Woven bamboo basket

Lesson

1

Importance and Methods of Enhancing and Decorating Bamboo, Wood and Metal Products

Finished products tend to be more saleable to the customers when enhanced and decorated. Enhancing and decorating finished products helped maintain their durability and toughness against harsh elements that may damage the product. Improving the appearance of the product increase the possibility that it can be easily notice or to be eye catching. Decorating it well, will also give an artistic look in which other product doesn't have. This will also raise the chance that customers would want to buy that product.



What's In

A. Directions: List at least 5 products that can be made from the following materials. Write your answer in a separate sheet of paper.

1. Bamboo

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____

2. Wood:

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____

3. Metal:

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____

B. Directions: Arrange the scrambled words to form a correct word through its meaning. Write your answer on separate sheet of paper

- | | |
|------------------|---|
| 1. TAMARLIKEBITY | is a measure of whether a product will appeal to buyer and sell to a price range to generate profit |
| 2. VANONIVETI | introducing new ideas, original and creative thinking |
| 3. CENEHAN | further improve the quality of the product |
| 4. SSOACCESIER | a thing which can be added to something else in order to make it useful, versatile or attractive. |
| 5. RACODETE | look more attractive by adding extra items or images on it. |



What's New

Mang Jose and Mang Tano are both bamboo craft makers. Renato observed that more people are buying the products of Mang Jose.

What could be the reason why customers are attracted to the products of Mang Jose?

One morning, he asked one of the customers of Mang Jose the reason why they like to buy his products. The customer replied, “the products of Mang Jose are durable, functional and more aesthetically attractive.”

Durability, functionality, and the aesthetic appearance of the product promotes marketability, therefore maintaining the good quality of the product is very essential if you want to gain more profit from selling the product. This depends on your creativity and workmanship to improve, enrich and make the appearance of your product superior.



What is It

The Importance of Enhancing and Decorating the Product

A. Attractive and More Salable

People tends to buy product that are attractive. Once a product is enhanced and decorated it is more appealing to the customers. Thus, resulting to more sales and profit.

Finished products are more saleable to costumers when enhanced and decorated.

B. Durable and more beautiful

Durability of the product depends on the materials used. We are rich of local materials in the community favorable for project or furniture making. Once a product is enhanced and decorated using innovative finishing materials the product is more durable and will last longer. Finishing materials preserve and protect the product.

Enhanced and decorated bamboo, wood and metal products help maintain their durability against harsh elements.

C. Profitable

Profitability of the product depends on the quality of the materials used, the workmanship and creativity of how it is done and heart to satisfy the clients. Enhanced and decorated product also increases sales and bring more profit.

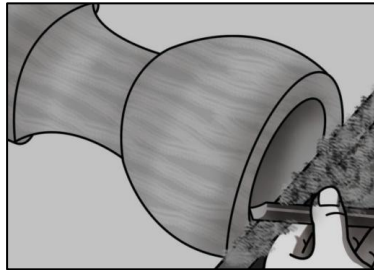
Finished products that are enhanced and decorated would beautify the product itself.

The Methods of Enhancing and Decorating the Product

There are different methods and considerations of enhancing and decorating products. Depending on the availability of materials, customer's preference, and marketability of the product.

Methods of Enhancing Wood and Bamboo Products:

1. **Wood Turning** - is a process of using a lathe to make various forms and shapes of wood.



2. **Pyrography** - the art or technique of decorating wood or leather by burning a design on the surface with a heated metallic point.



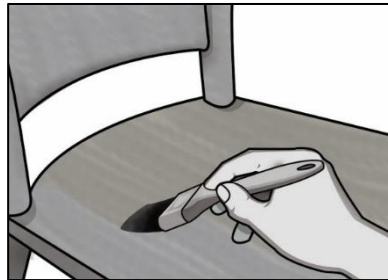
3. **Hand Carving** - is considered a woodcraft in which a sharp object is used to create designs on the wood. Chip carving knife, gouges and chisels are used in this technique.



4. **Flocking Technique** - lines the interior of drawers and boxes with a soft velvety finish



5. **Inlaying** - combines several techniques that involve inserting decorative pieces into a base object to incorporate new designs on the original products.



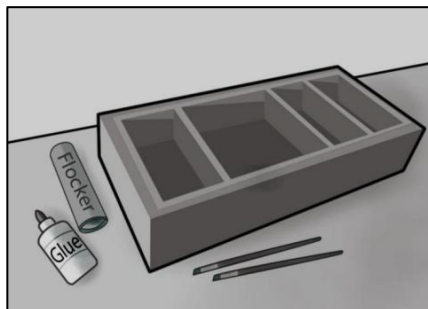
6. **Gilding** - decorative technique in which powder is applied on wood or other materials to give a thin coating of gold. Method of this technique include gluing, chemical gilding, and electroplating/coating.

7. **Staining** - is used to color wood to give an illusion of texture. This may come in two varieties.

- A. **Pigment-based** stain will color large pores of the wood
- B. **Dye-based** stain will color small pores of the wood



8. **Painting** - the simplest way of decorating wood since there are a variety of colors that you can choose from. One may also add a lacquer finish to make it shiny and glossy.



Methods of Enhancing Metal Products

1. **Engraving** - transferring a design on metal using hardened steel tool called burin or graver to cut into the surface of the metal.
2. **Etching** - is a process used to make designs or pictures on a metal plate by using acid that produces corrosive action.

How Etching is made:

- A. Etching begins with metal plate, most commonly copper.
 - B. Acid resistant wax, called the ground, is applied to the entire surface of the plate.
 - C. The artist scratches an image into the surface using a burning (needle), exposing the metal underneath.
 - D. Once the image is complete, the plate is submerged in an acid.
 - E. The acid will bite away at the exposed metal, creating recessed lines on the plate.
 - F. The plate is then removed and cleaned.
 - G. The plate is inked. Ink fills the lines on the plate created by the acid.
 - H. The excess ink is removed so the ink only remains in the recessed lines.
 - I. Dampened paper is placed over the plate and put through a printing press.
 - J. The press squeezes the paper and plate together, impressing an inked image onto the paper.
 - K. Additional impressions can be created by re-inking, cleaning, and putting the plate through the printing press again.
3. **Metal Enhancing Media** - use of metal paints, markers and antiquing kits give color to the metal product. Metal paints may be applied using a brush or spray.
 4. **Texturing and Embossing** - in this technique, you will need a hammer, metal, stamp, stencils, and other materials to create imprints on the metal.



What's More

Activity 1: Understanding the importance

Learning the Skills: Explaining the importance

Directions: Put a **check (✓)** if the statement demonstrates the importance of enhancing and decorating a finished product and put a **cross (x)** if it does not. Write it on a sheet of paper.

- _____ 1. Many people have the tendency to buy products that are enhanced and decorated.
- _____ 2. Improved and ornamented products are durable, strong, and of superior quality.
- _____ 3. Enhanced and decorated products tend to be more salable.
- _____ 4. Enhanced and decorated products are less profitable.
- _____ 5. There are many methods in enhancing our products.
- _____ 6. Wood carving is an example of methods of enhancing and decorating finished products.
- _____ 7. Painting is the simplest way of enhancing the finished products.
- _____ 8. Products that are made from wood and bamboo do not need to be decorated because of their natural beauty.
- _____ 9. Finished products that are enhanced and decorated beautify the product itself.
- _____ 10. Wood, metal, and bamboo products must be enhanced and decorated.

Activity 2: Understanding the words better

Learning the Skills: Word recognition

Directions: Match column A with Column B. Write the letter only. Use separate sheet of pad paper.

| A | B |
|-----------------|--|
| 1. PYROGRAPHY | A. Process of making various forms and shapes of wood using a lathe |
| 2. STAINING | B. Powder is applied on wood or other materials to give thin coating of gold also include gluing, electroplating/coating |
| 3. WOOD TURNING | C. Transferring a design on metal using hardened steel tool called burin or graver |
| 4. PAINTING | D. Inserting decorative pieces into a base object to incorporate new designs on the original product |

- | | |
|-----------------|--|
| 5. HAND CARVING | E. Coloring of wood to give an illusion of texture either by pigment-based stain or dye-based stain |
| 6. ENGRAVING | F. Using acid to produces corrosive action as design on metal |
| 7.GILDING | G. Decorating technique on wood by burning a design on the surface with a heated metallic point |
| 8.ETCHING | H. Simplest way of decorating wood using variety of colors to choose from |
| 9.INLAYING | I. To create imprints on the metal, this technique uses hammer, metal, stamp, stencils and other materials |
| 10.EMBOSSING | J. A sharp object is used to create design on the wood using carving knife, gouges and chisels |



What I Have Learned

Directions: Read the statement below and fill in the blank with the appropriate terms or words. Choose your answer from the box below. Write it on a separate sheet of paper.

| | | |
|--------------|-----------|----------|
| durability | metal | Flocking |
| Hand carving | Embossing | Etching |

- _____ is considered a woodcraft in which a sharp object is used to create designs on the wood.
- _____ is a process used to make designs or pictures on a metal plate by using acid that produces corrosive action.
- Enhanced and decorated bamboo, wood and metal products help maintain their _____ to against harsh elements.
- Metal enhancing media uses of metal paints, markers and antiquing kits to give color to the _____ product.
- _____ is a technique that needs hammer, metal, stamp, stencils, and other materials to create imprints on the metal.



What I Can Do

Directions: Read the phrases and do the activity below. Write your answer on a separate sheet of paper

Your TLE 6 teacher assigned you to make project using local materials such as bamboo, wood or metal found in your community. He instructed you to make this project attractive and saleable.

1. What possible method of enhancing bamboo, wood or metal product are you going to use and why?
2. Write two to three sentences about the method you have chosen.



Assessment

A. Directions: Read each item and choose the letter of the correct answer and write it on a separate sheet of pad paper.

1. What is the importance of enhancing and decorating finished products?
 - a. It makes the products more attractive and salable.
 - b. Finished products are easy to buy.
 - c. We can sell finished product.
 - d. It can be painted.
2. Which one is not considered as the importance of enhancing/decorating finished products?
 - a. varnished materials
 - b. More attractive and saleable
 - c. Profitable
 - d. Durable and beautiful
3. _____ is the art or technique of decorating wood or leather by burning a design on the surface using a heated metallic point.
 - a. Engraving
 - b. Pyrography
 - c. Painting
 - d. Hand carving

4. Using carving knife, gouges and chisels to create designs on the wood is called _____.
 - a. Wood Turning
 - b. Flocking
 - c. Embossing
 - d. Hand Carving
5. What enhancing techniques that lines the interior of drawers and boxes resulted to soft velvety finish?
 - a. Wood Turning
 - b. Painting
 - c. Etching
 - d. Flocking
6. The following are reasons to enhance your finished product, except ONE. What is it?
 - a. It is more salable.
 - b. More durable and beautiful
 - c. It makes the product more expensive.
 - d. It is more attractive
7. Why is it important to know the different skills in enhancing and decorating finished products?
 - a. It develops skills and creativity for livelihood.
 - b. So that people will admire you.
 - c. People will not buy your product.
 - d. To pay more taxes.
8. How can you make your product salable and beautiful?
 - a. Use the appropriate methods to enhance the product.
 - b. Copy the work of other people.
 - c. Use expensive materials.
 - d. Use any method.
9. Enhancing the finished product improves one's _____ and _____.
 - a. Pride and honor.
 - b. Creativity and workmanship
 - c. Orderliness and cleanliness
 - d. Health and profit
10. A process of transferring a design on metal using hardened steel tool called burin or graver to cut into the surface of the metal?
 - a. Engraving
 - b. Metal Enhancing Media
 - c. Texturing or Embossing
 - d. Etching

B. Identify the method of enhancing wood, bamboo and metal products used. Choose your answer inside the box.

| | | |
|--------------|------------------|--------------|
| Wood Turning | Lacquer Painting | Engraving |
| Hand Carving | Gilding | Hand Carving |

1. Typhoon Quinta left the province of Aurora with so much big trunks of drift woods. Mang Kardo wants to turn it into wood pots. What method of enhancing wood product will Mang Kardo used?
2. Brgy. Ara-al is well known for its bamboo plantation. The residents make use of bamboo as their source of livelihood. Most of them are into making bamboo sofa to be sold at the nearby local market. One customer does not want it painted by variety of colors instead its natural look be preserved. What will the locales used to make it shiny and glossy?
3. Aling Martha was given by her daughter a gift of 12 sets of spoons and forks during her 50th birthday. She does not want it to be lost since most of her relatives are fond of borrowing her silver-plated silverware. She decided that her name be imprinted at the back of spoon and fork. What method is best for transferring design on metal?
4. Aling Lourdes is a furniture store owner brought hard drift woods left by typhoon Quinta from the residents of their province. She wanted to turn these into useful home decor. What woodcraft enhancing method her workers will use to create designs on the wood.
5. Aling Loring, a balikbayan build a new home in her hometown. She wanted that all wooden materials to be used in her furniture has a touch of gold. She ordered the furniture maker to glaze it with gold coating. What method of enhancing woodcraft will the furniture maker used?



Additional Activities

Directions: Complete the table below by providing 5 materials you can use to enhance or decorate Wood, Bamboo and Metal products. Use a separate sheet for your answer.

| Wood craft | Bamboo craft | Metal craft |
|------------|--------------|-------------|
| | | |
| | | |
| | | |
| | | |
| | | |



Answer Key

Assessment

A.

- A
- B
- D
- D
- C
- A
- A
- B
- A
- A

B. Possible responses

- Enhanced and decorated products are attractive and beautiful.
- Finishing materials like paints, varnish, and shellac preserve, protect and beautify the product.
- People buy products they like and need.
- Refine work and creative design are attractive.
- Products of good quality and durable can be useful for a longer period of time.

Additional Activities

Answers may vary

What's More

1.1

| | | |
|-----|---|-----|
| 6. | / | 6. |
| 7. | / | 7. |
| 8. | / | 8. |
| 9. | x | 9. |
| 10. | / | 10. |

1.2

| | | | |
|----|---|-----|---|
| 1. | G | 6. | C |
| 2. | E | 7. | B |
| 3. | A | 8. | F |
| 4. | H | 9. | D |
| 5. | J | 10. | I |

What I Have Learned

- Hand Carving
- Etching
- Durability
- Metal
- Embossing

What I Can Do

1. Possible answers:

*** For wood and bamboo products**

- A. Wood Turning
- B. Pyrography
- C. Hand Carving
- D. Flocking
- E. Inlaying
- F. Gilding
- G. Staining
- H. Painting

*** Metal Products**

- A. Engraving
- B. Etching
- C. Metal Enhancing Media
- D. Texturing & Embossing

2. Answer may vary

What I Know

| | | | |
|----|---|-----|---|
| 1. | A | 6. | C |
| 2. | C | 7. | B |
| 3. | C | 8. | A |
| 4. | B | 9. | B |
| 5. | D | 10. | B |

What's In

- possible responses

Activity A

Bamboo Products

- plates
- cups
- bowls
- Tables and chairs
- lamp shades, etc.

Wood Products

- furniture
- dinner ware
- utility boxes
- jewelry box
- wooden toys, etc.

Metals

- Stainless steel containers
- kitchen wares
- steel furniture
- jewelry box
- steel arts, etc.

B.

- marketability
- Innovative
- Enhance
- accessories
- decorate

References

Department of Education Curriculum Guide 2016, EPP 6, Industrial Arts pages 38 – 41

Department of Education MELCs in EPP/TLE Grade 6 Industrial Arts pages 353 – 354

Meaning of marketability in business – Google Search

<https://www.google.com/search?q=meaning+of+marketability+in+business>

Methods of Enhancing Wood and Bamboo Products

<http://iamvnhancing.blogspot.com/2018/09/methods-of-enhancing-wood-and-bamboo.html>

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