

## HERITAGE CONSERVATION PRACTICES AND THE STUDENTS LEARNING PROCESS OF TRADITIONAL WOODCRAFT PRODUCTION

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### ABSTRACT

*Preservation of traditional woodcraft has brought about the need to educate and train people in heritage conservation, hence the design and implementation of the project should enable its participants to acquire related skills and knowledge. One of the implementations is setting out students learning process of wood craft production through studio practices. This paper aims to explore the making process of wood craft as experienced by the applied arts and design students majoring in Conservation. Craft practice has become one of their studio's focuses. Proper craft practices are essential for successful learning outcomes of the studio project for conservation students. Woodcraft like woodcarving is traditionally associated with the making of objects that requires manual dexterity while its production is to exercise skill-based knowledge. In this paper, two objectives of study are; to identify the practical requirements needed by the students in the woodcraft production and preservation and to examine their level of participation in the craft making process through the heritage conservation practices. The research found that the craft of woodcarving requires the students to have full understanding of method, sensibilities of materials and handling of techniques in the production process. Students who have gone through this learning process including their prior background research have been able to complete their projects with high technical and aesthetical values and principally bounded by the inherited traditional essence. Their full participation in the studio and workshop practices is necessary to give them experiential knowledge throughout the learning process. The outcome of the learning is the students' awareness towards heritage conservation through proper training and practice. The protection for traditional craft production is essential through transmitting of its knowledge and technical skill to the younger generation so as to retain its heritage value.*

**Keywords:** Teaching-learning process, wood craft, heritage conservation, AAD Studio

### INTRODUCTION

Tradition of arts and crafts goes back to thousands of years with different eras and each era gives birth to a new form of artistic activity, and yet maintaining continuity. Consequently, a rich legacy of cultural heritage of stone works, metal objects, wooden works, decorative objects of various types, glass, ceramics, tiles and many more have come to existence. These works are very important and it is vital to preserve them because they impart message of each period of civilization and glory and their value lies not only in their aesthetic appeal but the role they play in furthering human knowledge (Agrawal 1993). Owing to the good values of the art and craft of the past, many of them are kept in various institutions like museums, libraries, archives and private collections. They are precious evidence of human development through the ages and their preservation and conservation is vital for next generation. Despite the will to preserve and conserve these precious art objects from deterioration and disappearance, the necessary knowledge is lacking. Wood, Rust and Horne (2009) posits handicrafts are, historically, part of a generation to generation learning, passed down along a line of inheritance, and the transfer of tacit knowledge. Hence, the preservation of craft tradition is vital through this mode of transfer. Over the last century, industrial production has steadily replaced traditional handmade production in countries around the world (Wood, 2011). In Malaysia, the handicraft, for an example, wood carving has quite often deserted, especially by the younger generation (Farish and Eddin; 2003). Recently, sustaining of the craft industry is not easy because the interest by the young generation has been decreased due to rapid urbanization and industrialization. The youth have migrated to cities on account of better employment opportunities. This condition would give negative impact on the sustainability of the craft industries. Therefore, preservation of traditional woodcraft has brought about the need to educate and train young people through conservation programmes. The design and implementation of the programme should allow its participants to acquire related skills and knowledge. One of the implementations is setting out teaching-learning process in wood craft production through studio practices. Apart from their teaching responsibilities, academic staffs have a duty to educate their students within the ethical code of conservation and both parties shall serve as an advocate for the heritage preservation of cultural property like woodcraft.

This paper aims to explore the making process of wood craft as experienced by the applied arts and design students majoring in Conservation. The craft practices have become one of the studio's focuses. Proper craft practices are essential for successful learning outcomes of the studio project for conservation students. Wood craft like wood carving is traditionally associated with the making of objects that requires manual dexterity while its production is to exercise skill-based knowledge. Therefore, two objectives of this study are; 1) to identify the practical requirements needed by the students in the wood craft production and preservation, and 2) to examine their level of participation in the craft making process through the heritage conservation practices.

### DEFINITION AND IMPORTANCE OF TEACHING-LEARNING PROCESS

Learning means the activity or process of gaining knowledge or skill by studying, practicing or experiencing something (Dalziel, 2003). These are processes followed by learners to achieve a learning goal. Teaching learning process (TLP) consists 4 basic

elements, namely assessment, planning, implementation and evaluation (Park, 2003). TLP is the most powerful instrument of education to bring about desired changes in the students. An individual's behaviour (knowledge, skill and attitude) can change as a result of learning. Therefore, TLC is important when it involves the planning and implementation of instructional activities and experiences to meet intended learning outcomes. Cate et. al (2004) emphasizes if teaching is to facilitate learning, clearly, teaching activities should have an orientation toward the learning process. Cate et. al (2004) propose a model for teaching that can help teachers understand what motivates students and why learners should be the central focus of teaching activities. This model has 3 critical components of the learning process, namely cognitive, affective and metacognitive. The model aims at a common understanding of teaching and learning processes.

## **HERITAGE CONSERVATION**

Heritage means the combined creation and products of nature and of man that make up the living environment in time and space (UNESCO 2005). UNESCO has proposed five broad domains of intangible heritage for the purpose of manifestation, namely oral traditions and expression, performing arts, social practices, rituals and festive events, knowledge and practices, and traditional craftsmanship. Intangible cultural heritage is collective works originating from a given community based on tradition. These products of heritage are transmitted either orally or by gesture (Vecco, 2010). In comparison with the tangible heritage, intangible heritage needs a continuous community involvement in order to sustain its existence. Traditional craftsmanship of craft production, for example, is grouped under intangible heritage because it is manifested through skilfulness of craftsman in the use of craft tools and different materials. A study by Zumahiran, Khalilah and Siti Najwa (2017) relates the heritage value of traditional Malay wood carving to serve as an evident of expression of creativity, craftsmanship and skilfulness. Meanwhile, Wood (2011) stresses that craft is not only an important source of livelihood; it is often connected to sociocultural traditions, and elemental to the preservation of cultural diversity and identity (Wood, 2011). Therefore, conservation of craft tradition is vital. However, this effort faces many challenges as Joffe and Newton (2007) posits that craft industry has to compete in terms of the use of technology, mass-production and related economic value and possibly functionality.

## **CONSERVATION PRACTICES IN APPLIED ARTS AND DESIGN STUDIO**

Conservation means all measures and actions aimed at safeguarding tangible cultural heritage while ensuring its accessibility to present and future generations (UNESCO 2005). Conservation embraces preventive conservation, remedial conservation and restoration and all measures and actions should respect the significance and the physical properties of the cultural heritage item (ICOM-CC, 2008). The primary goal of conservation professionals, individuals with extensive training and special expertise, is the preservation of cultural property. Cultural property consists of individual objects, structures, or aggregate collections. It is material which has significance that may be artistic, historical, scientific, religious, or social, and it is an invaluable and irreplaceable legacy that requires preservation for future generations. The conservation professionals shall strive to attain the highest possible standards in all aspects of conservation, including, but not limited to, examination and analysis, documentation, treatment, research, and education. Caring for cultural heritage need to understand and follow the ethic in conservation. Code of ethics and guidelines for practice by the American Institute for Conservation of Historic & Artistic Works (AIC) sets forth the principles that guide conservation professionals and others who involve in the care of cultural property. One of the principles is the conservation professional shall serve as an advocate for the preservation of cultural property while recognizing the right of society to make appropriate and respectful use of cultural property. Meanwhile, Smith (1997) raises many of the ethical issue which concern the conservation profession. She posits conservation practice also embodies a philosophical approach to the object which should become part of the actions of anyone working with real objects.

At the Department of Applied Arts and Design, Kulliyah of Architecture and Environmental Design, International Islamic University Malaysia, various core courses that relate to conservation are offered to students majoring in Conservation. The Applied Arts and Design (AAD) Studio is one of the important core subjects that introduces various projects encompassing the needs of conservation majoring areas including research and documentation, historical and scientific analyses and product and development. Students receive guidance to enhance their problem-solving skill in learning. The learning goals of the studio-based subject are to teach students on advanced skills handling various applications of materials and technical design solutions. Emphasis is also given in instilling Islamic awareness and values whilst ensuring that students will be able to apply Islamic concepts in their studio projects. Under the studio projects, conservation practice embodies a philosophical approach to the object, especially the one that has heritage value and later should unite with the actions of working with real objects. Field lecturers usually set clear learning objectives and outcomes and carefully plan the experiences they intend their students to have, taking into account educational aims, time available, and availability of resources including financial and material. The development of conservation treatments and materials is an essential aspect of the conservation of cultural heritage through the practice of conservation science. According to Caple (2000), conservation science of cultural heritage is the interdisciplinary study of conservation of art, architecture, and other cultural works through the use of scientific inquiry. This involve many areas of research and the most common one concerns the structure and technology of artistic and historic works, which also focuses on the materials and media of the works.

In short, awareness and knowledge on the importance of heritage conservation requires promotion through the various projects under Applied Arts and Design studio, especially among the students majoring in conservation. This has allowed them to experience learning process in the attempt to conserve the craft heritage. Many conservation projects have allowed them to explore various material and techniques, gain new insights, and undertake technical-know how learning process.

## Relevance of conservation practices in project-based learning and academic research

At the Department of Applied Arts and Design, conservation study becomes one of the fields embraced by few academic staff. Among the main focuses in conservation major are activities devoted to conservation science. In the lower years of their study, the Applied Arts and Design students who major in conservation learn the organic and inorganic materials and techniques of artworks as well as the basic principles of conservation. Both theoretical and practical aspects where the focus and it is more on Islamic Art. In the majoring years, the students need to fulfil the project requirements of studio course which determine their level of study for completing their bachelor degree. Many works of the projects are tuned to heritage conservation focusing on the study of cultural heritage through scientific inquiry. The academic staffs use a variety of approach for the studio projects related to this area. They can usually decide on the theme or area of focus from the four categories of conservation project based on their scientific knowledge and skills, especially in the field of conservation science (Figure 1). As an example, an investigation on the reason of using certain materials and techniques in the past that has improved the stability of the cultural heritage. The investigation usually involves the materials identification through scientific analysis and detailed documentation of the materials.

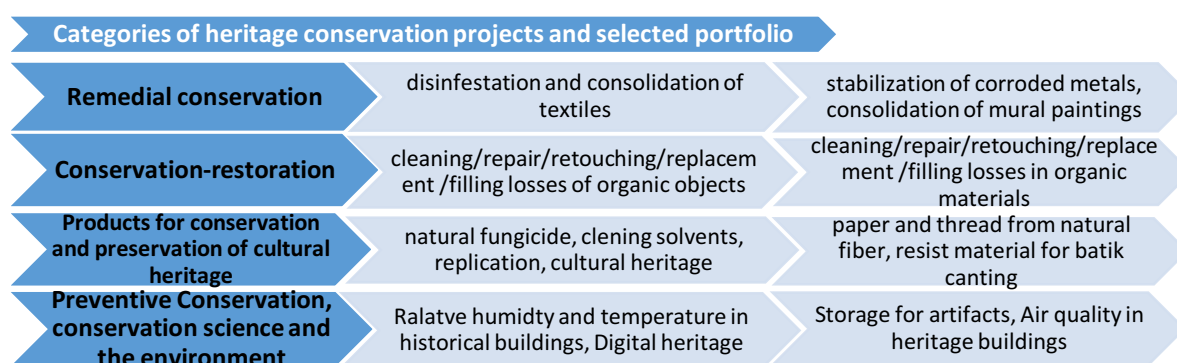


Figure 1: Categories of conservation projects in Applied Arts and Design

Apart from investigation on the materials and techniques of cultural property, the development of conservation treatments and materials is another aspect of the conservation of cultural heritage through the practice of conservation science. The conservation science practice has been essentially and consistently treasured by the academics and students at the department of Applied Arts and Design through their researches and projects. These include preventive and remedial conservation leading to the development of conservation materials, for example developing cleaning solvents for corroded metals using natural resources, namely tamarind, lime juice, and lemon juice.

## RESEARCH METHODS AND DATA COLLECTION

This section describes the methodology adopted in the research including detailed explanation on the main methods of data collections and techniques of analysis. This qualitative research involved several weeks of participant observation at the timber workshop as a primary data-gathering technique.

### Observation of Students' Participation and Their Works on Carving Products

This study focused on the making process of wood craft as experienced by the applied arts and design students majoring in Conservation. The craft practices have become one of their studio's focuses for the semester 1, 2017/2018 session. Direct and participant observation was conducted to obtain relevant materials for documentation and it was vital for interpreting and clarifying concepts and ideas related to the research scope. This ensured that the primary data were not only gathered through oral interaction but also through attentive observation of students' participation in the woodcraft production at the timber workshop, Kulliyyah of Architecture and Environmental Design. The making of craft objects requires manual dexterity while its production is to exercise skill-based knowledge. Therefore, direct investigation on their involvement whilst producing carvings is relevant. Through this method of research, the author had observed the works in stages. The researcher had conducted the observation according to the project schedule and a checklist of observation served as an observation guide. The checklist not only gave the author a structure and framework for the observation but also serves as communication guide with the students and workshop facilitators including the lecturer, woodcarver and technician. In addition, the author used systematic note taking and data recording to gather the required information.

Participant observation involved the effort of the author to watch, listen and talk to the students at their working environments. In this account, the data collection through the observation also involved face-to-face discussion with the students that allowed the author to gather as much information as possible through interactive means. Observation involves a complex set of activities experienced by the researcher at the research setting (Pole and Lampard, 2006) and requires a certain degree of flexibility in the method (Berg, 2004). Her first-hand and direct interaction with the students and their handy-works at the workshops required an ongoing interpretation of those materials observed. Hence several forms of research instruments, namely recording device and camera were very useful for documentation purpose. This ensures the accomplishment of a proper data analysis at a later stage.

In the last part of observation, the author documented several woodworks from the students, which are of self-designing carvings that embraced its traditional meaning and techniques as heritage object. Hence, the distinct of this methodological approach and research outputs that comprise two forms of documentation: (1) pictorial data, and (2) students' opinion of their craft works that demonstrate the traditional concepts and innovation of Malay wood carving for heritage preservation.

## PROCESS OF WOOD CRAFT PRODUCTION: OBSERVATION AND ANALYSIS

This paper reflects on the research and project done by the second-year students of applied arts and design programme. A total of 16 students have participated in the research. Their lecturer who have scientific knowledge and skills in the field of conservation has become their project supervisor. The title of the project was traditional Malay wood carving of architectural heritage. The project immersed the students on heritage conservation by engaging them with the complexities and challenges of woodcraft production and preservation. The traditional art and craft of carving relates the use of wood hence it is prone to disappearance or deterioration due to natural and human causes or negligence. Object analysis, documentation and production are among valuable methods to preserve the art of wood carving. Therefore, the main emphasis of the project is on a complete documentation of their research, studio and practical engagement for making of wood carving using the traditional concept.

Based on the observation, the arrangement of the project was in consistent with the course learning outcomes. At the end of the project, students should firstly be able to apply basic knowledge of conservation studies particularly pertaining to the preservation of wood as organic materials and techniques. Secondly, they should be able to describe the meaning of wood carving and its heritage value of traditional Malay buildings. Thirdly, they could identify and analyse the visual and physical attributes of the woodcarving. The lecturer formulated series of learning tasks within the specific project duration to achieve the learning outcomes as explained in the following paragraphs.

### Project Duration, Learning Tasks and Instrumentation

Every project of the AAD Studio for Conservation major comes with schedule with specific tasks within the time frame of each regular semester which consists 14 weeks. In the semester 1, 2017/2018 session, the conservation of woodcraft heritage become the focus of the project to meet the theme of the first studio project, which is wood-based materials and techniques. This project took 7 weeks to complete with different stages of development including the submission period as shown in Figure 2. Furthermore, the execution of the project required students to adhere to the 2 fundamental tasks; Task 1 and Task 2. Task 1 was a group work that required the students to do background research and case study. The students worked into groups and each group should research on the following subjects; 1) development of Art and craft of traditional Malay wood carving and its socio-cultural and philosophical meanings, 2) forms, methods and techniques of carving and its application in traditional art and architecture, and 3) heritage and preservation of Malay traditional wood carving. At a later stage, the students need to present their research materials in their studio with the aids of audio-visual presentation for approximately 20 minutes.

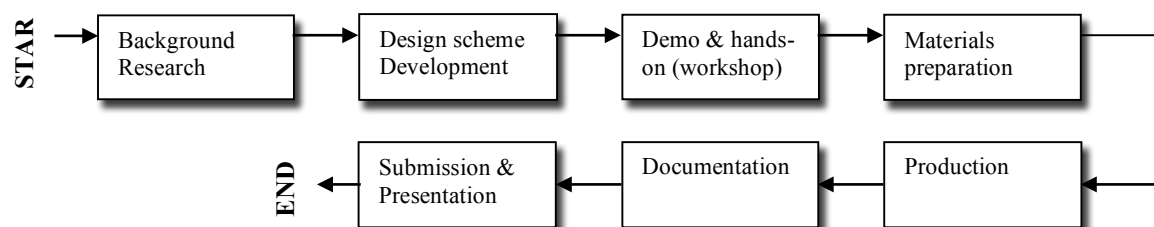


Figure 2: Flow of project

Based on the observation and as highlighted in the flow diagramme of the project, Task 2 involved students to explore with various traditional carving motifs as well as the methods, materials and techniques in the production of woodcarving. They should conduct their work independently and to come up with their individual design scheme. After obtaining some understanding on the background studies, students continued the process to explore the methods and techniques of making wood carving panels by having practical hands on in the timber workshop. The second task is the most challenging task because the

practical hands on require the students to work diligently in the workshop following the project schedule and using different types of tools and machines.



Figure 3: The students use the appropriate hand tools to form the wood carving panel

The observation reveals 3 important components of learning instrumentation for the craft production as shown in Figure 4. These include methods and materials, working place condition and technical skills. A physical demonstration on wood carving by an invited expert craftsman, Encik Muhaimin Hasbullah was partly important in the project schedule. Therefore, practical understanding of the learning components including health and safety measures was crucial through this session. Then, the students can produce carving panels based on their selected old traditional wood carving motifs and patterns using different types of carving techniques. They had opportunities to experiment with the different carving techniques to produce suitable panels within the appropriate sizes and shapes.

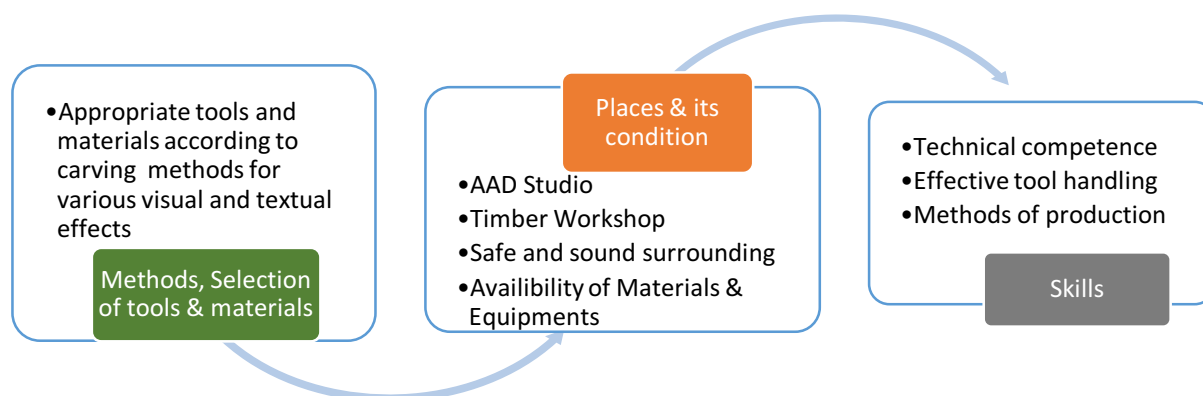


Figure 4: Associated components of learning instrumentation for craft production

In addition to the exploring using appropriate design pattern, they also need to determine suitable finishes to achieve good quality products. Each student should produce a minimum of 1 panel based on his or her selected wood carving from their case study with appropriate application including proposed location and orientation. They should follow the project requirements and criteria as shown in Table 1 for the craft of woodcarving panel.

Table 1: Observation notes on the requirements and criteria for wood carving panel

Requirement	Criteria	Notes
1   Material	Choice of suitable woods for carving	Jelutong or Meranti wood
2   Motif & technique	Appropriate selection of carving motifs, pattern and techniques	Relief and perforated, perforated and semi perforated techniques
3   Carving	Apply traditional concept and philosophical meaning of	<i>Awan larat</i> concept



	concept	Malay wood carving.	
4	No of panel	One carved panel	A finished wood carving
5	Size and shape	Suitable size and shapes and in harmony with the proposed orientation and location	Window, door or wall panels
6	Physical quality	Good quality of craftsmanship	Require good understanding of materials and techniques
7	Finishes	Good finishes	Suitable finishes as protective layer
8	Style	Consideration of innovative, creative, interesting and refreshing design	Traditional style for contemporary use
9	Islamic principles	Integration with Islamic principles	Appropriate selection of motifs and materials

The process of woodcraft production allowed the students to experiment with different tools and techniques during this learning process, especially when they perform their works under fully supervision by the expert. They need to record all steps and work processes and these materials including photographs, sketches and drawings were items for documentation in an A3 size report and for portfolio safekeeping.

## FINDINGS AND DISCUSSION

The research has two objectives to achieve. The first objective was to identify the practical requirements needed by the students in the wood craft production and preservation. Based on the observation, the craft of woodcarving requires 3 practical learning qualities; 1) the full understanding of method, 2) sensibilities of materials, and 3) handling skill of techniques in the production process. Students who have gone through this learning process including their prior background research have been able to complete their projects with high technical and aesthetical values and principally bounded by the inherited traditional essence. However, the 3 learning qualities are so obvious that they can be easily overlooked by the students, hence they need frequent reminder about the qualities throughout the process. It is the lecturer task to assist the students to construct knowledge by advising them of using appropriate learning resources and methods as well as directing them to align learning towards their learning objectives. As pointed by Park (2003), the design and implementation of the programme should accommodate its participants to acquire related knowledge and skills. The researcher has obtained plausible explanation from the students regarding the process of carving whilst observing their works. One of the students explains “attending the workshop regularly and doing the work with good practices determines the successful outcome of the woodcarving product. I also have made my self clear about the product requirements and criteria set by my lecturer”. This is apparent in the panel as shown in Figure 5 that exhibits good technical and philosophical values.



Figure 5: A carving panel that reflects the student's understanding of the project requirements and criteria

Most of the students have been able to come up with the good idea according to the design philosophy for the wood carving panel. Smith (1997) stresses that a philosophical approach to the heritage object is part and parcel of conservation practice and it is necessary to adopt this approach into the working activities with actual objects. Old traditional Malay crafts, for example wood carving are synonymous with the traditional Malay culture with varieties of design patterns and beautiful motifs that reflect the Malay culture. These are beautiful products made from fine materials and by skilful artisans. The students also should be able to grasp the full understanding of method, materials, and handling of techniques in the production process. However, a few students have some difficulties to apply the method of production, especially in handling the carving techniques due to lack of understanding and technical skill. As a result, their works demonstrate poor quality of physical properties and characteristics.

The second objective was to examine the students' level of participation in the craft making process through the heritage conservation practices. The research found that self-discipline and full participation in the studio and workshop practices are necessary that give them experiential knowledge throughout the learning process. Students gain understanding of materials and processes, of aesthetic, emotional and cultural issues through extensive experience of (manually) working with materials and processes (Wood, Rust and Horne: 2009). These qualities enable craft makers or practitioners to acquire knowledge and skills through experience. The knowledge is largely tacit, and becomes the basis of expertise and competency. Furthermore, during the process, the students are expected to be in the studio and workshop for the specific tasks during the stipulated dates and times. This requirement demands their full commitments with self-discipline attributes. Likewise, focusing and active participation are among the fundamental principles of learning. One of the students who have been diligently participated in all workshop activities reiterates "in the process of woodcraft production, I can experiment with different tools and gain some knowledge and skill on carving techniques under fully supervision by Encik Muhaimin and he was always there to assist". In conservation practice, all actions or processes are generally aimed at safeguarding the character-defining elements of wood carving so as to retain its heritage value and extend its physical life. This practice demands the right supervision and guidance as observed in the workshop training session assisted by Encik Muhaimin as shown in Figure 6.



Figure 6: Encik Muhaimin consistently guides the students throughout the workshop session

In short, students who have received proper guidance and obtained full understanding of the subject matters with constant participation throughout the learning process managed to enhance their creativity in solving design problem for the small-scale heritage conservation project. In their second year of study, the studio course serves as the continuation from fundamental level to further expose and develop students' skills in the conservation project. The learning goals of the studio-based subject are to teach students on advanced skills of design and building process, and to enhance student's capability on handling various applications of materials and technical design solutions. In a nut shell, for a successful accomplishment, the students are bound to meet the project requirements and developments as specified for the Task 1 and Task 2 including research, analytical and technical study, and application and implementation.

## CONCLUSION AND RECOMMENDATIONS

The findings of research indicate that there are three aspects of practical requirements needed by the students in the wood craft production and preservation. These include their full understanding of the production method, their sensibilities towards

materials and their handling of crafting techniques. Students need to go through these requirements as part and parcel of their learning process in the studio-based project. Apart from the practical requirements, the conduct of background research is also vital to ensure that they can complete their woodcraft projects with high technical and aesthetical values with principally bounded by the inherited traditional essence. The research also found that the craft making process demand students' discipline and full participation during the studio and workshop practices. Students' focuses and active participation are among the fundamental principles of learning and this would ensure successful accomplishment of learning outcomes. As a result, they gained experiential knowledge throughout the learning process for the heritage conservation. This paper presents a research that involves the education of conservation on woodcraft production based on studio approach in Applied Arts and Design Department, Faculty of Architecture and Environmental Design. The application of basic knowledge in the conservation studies particularly pertaining to the wood as organic materials and techniques involved a studio project with a suitable learning process. Findings of the study suggests an opportunity to extend the research to promote the conservation practices through scientific and ethical approaches for sustaining of woodcraft heritage. Also, the outcome of the learning is the students' awareness towards heritage conservation, which requires more initiatives and development through education and proper training in conservation practices. The protection of traditional craft production is essential through transmitting of its knowledge and technical skill to the younger generation so as to retain its heritage value.

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