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THE STUDY ON UNDERWATER PHOTOGRAPHY IMAGES FOR EDUCATION PURPOSE

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Abstract

It is important to introduce students to the basic techniques that can be use in this research. Variety of methods such as underwater photography and diving technique can be use to make the process more interesting. By applying several different techniques in scuba diving will allow them an opportunity to start exploring inside the ocean itself. This research will greatly enhance the understanding of underwater photography images for education purposes.

Keywords: Underwater photography, color theory, light theory, impact photograph

1 INTRODUCTION

A photograph has a lot of stories to tell us, the subject within the picture's frame, how the photographers made the image and what happen after the picture was taken. The use of underwater photography has greatly expanded the abilities of the researcher to collect data. Understanding and participating in underwater photography can help to gathering all informative data for future analysis.

In addition to collect data information through photography, it is important to use an interesting visual to help students to understand the content of the photograph and to encourage them in underwater photography activities. Rich visual images expose others to layers of knowledge including aesthetics, features/ characteristics, historical perspectives.

With this, they would have the opportunity to learn and understand about aquatic life. That diversity provides student with a distinctive learning advantage. Students will become increasingly interested in learning, add new dimensions to what they already know, and enhance their expectations for learning even more. Not only they can learn all the process but also they can experience on how to preserve our coral ecosystems

2 LITERATURE REVIEW

Underwater photography can helps student to develop the knowledge, skills and practical techniques necessary to obtain excellent photographs with a digital camera. Students can learn what equipment they need to take great underwater photographs, how to prepare their underwater photo system, and basic underwater photo techniques while diving in an environmentally friendly manner. Students need to know about file formats, resolution settings, making their images lighter or darker, getting good color, composing their photo, downloading photographs into their computer and adjusting them to look their best.

2.1 OBSERVATION AND REFLECTION

The skills necessary for successful achievement in many subjects area are regularly put to practice. For example, underwater photography required observation and reflection. Student must observe their subject matter and then reflect upon the best way to illustrate real life via photography. Observation and reflection are important skills for problem solving in underwater photography.

2.1.1 COLOR THEORY

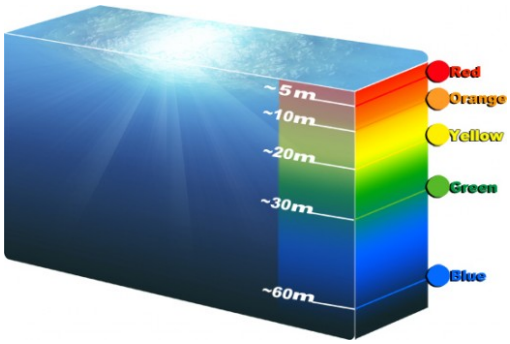
Color is an important aspect of the workflow of any underwater photographer. Underwater photographers are faced with a dramatic loss of color the deeper they dive.

Seawater absorbs the colors of the visible light spectrum at different rates with increased depth. Reds and oranges are the first to be absorbed, followed by yellows, greens and lastly, blues. The digital revolution

has changed the way photographers manage color, with the use of digital cameras and computer software, they are able to achieve color quality more quickly and efficiently. This means that the color values in the underwater camera should match color values of the computer display.

Students can make accurate predictions of color reproduction with the use of white balance and calibration. By calibrating all devices used in the creation of underwater images, colors will be more precise and easier to maintain across all devices.

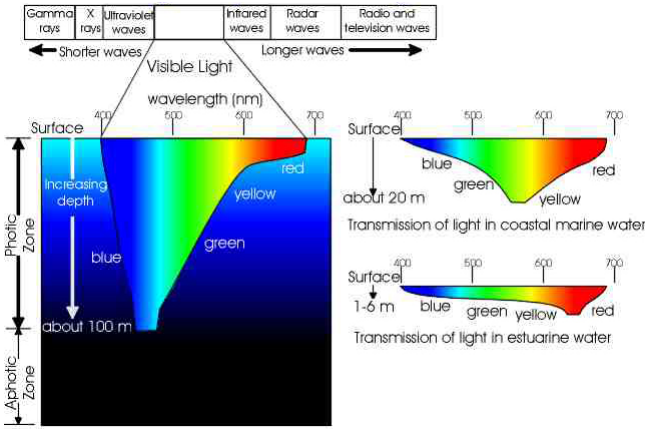
Filter photography produces different results and are more effective in bright conditions. Filters do not add color to an image but they work by reducing unwanted colors in the image. The desired color filter is the complementary color of the unwanted color. For instance, in water that has a cyan cast, the underwater photographer would benefit from using a red filter. Green water would require a magenta filter. Filters can be used creatively to capture subject matter that would otherwise be drowned out by backscatter from a flash.



SLATE I: Underwater colour spectrum

2.1.2 LIGHT THEORY

As a photographer, the first thing that we have to keep in mind when capturing images is the light condition. The location of the dive site has an effect on the amount of light and color underwater. The amount of light underwater is primarily affected by depth and visibility. The better the visibility, the greater the available light underwater. Underwater photographers can use natural light in their images by understanding and working with these characteristics. An understanding of light is essential for any photographer. To capture the essence of what lies underwater, the photographer must know how to learn and control light.



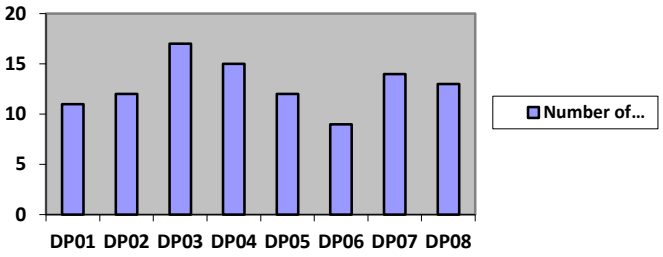
SLATE 2: Electromagnetic spectrum of sunlight

3 METHODOLOGY

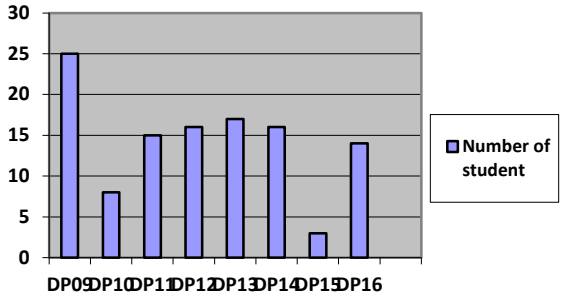
This study will be carrying out using a qualitative method to study on underwater photography images for education purpose. Documenting this amazingly underwater scenery required a wide variety of photographic techniques. The objective of this research is to investigate if the student can produce a very quality of underwater photograph. However, from the educational point of view, the outcome of this research can be used as tools for future reference.

There are various methods in collecting information or more precisely data gathering. The research methods used for this study purpose are based on documenting data and review of literatures. On data sampling, student from Diploma Photography Technology from DP01 to Dp20 are involve.

The scope identified the boundaries of the study in term of subject, objectives, facilities, area, time frame and the issues to which the research is focused.



SLATE 2



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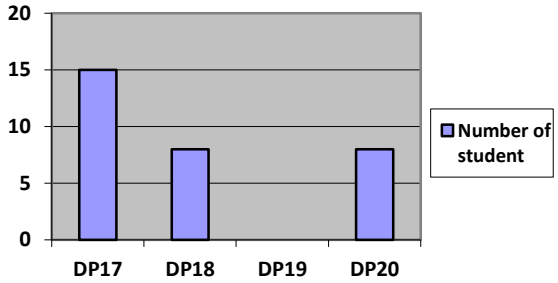

SLATE 4

4 CONCLUSION

In this chapter, the researcher would present the conclusion and recommendation based on the research findings that have been discovered. However, from the educational point of view, the outcome of this research can be used as tools for future reference.

The researcher can conclude that underwater photography can contribute very important role in producing a high impact photograph for education purpose. This research has recorded a potential element and principle in underwater photography method that can be used in future research.

For the recommendation, the researcher would explain on suggestion for the future research. The recommendation for future research is:

a) What are the best techniques to achieve optimal color reproduction when working in the field of underwater photography? Beside that the research also easier to focus on subject matter and source of light.
b) Underwater photographer must work close with a lighting specialist. It will make the process of data collection more structure and organise.
c) The future researches strongly suggest to plan strategies for achieving perfect color reproduction using digital cameras, computer software and color correction tools.

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