Photographic skill competency for vocational high school

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Abstract. The creative industry has great potential to become one of the important driving sectors to create a good and advanced economy. Photography is one of the sub sectors of creative industries also has great potential to be accessible by students of vocational high school. This research uses qualitative approach, informants come from non-formal photography school, photography industry, vocational school and provincial education office. Data collection using observation method, interview, document study and triangulation. Observations were made to see firsthand the activities in the photography industry, photography school and vocational school. Interviews were conducted to obtain information on the availability of human resources in the industry, the competencies required by the industry for vocational students and the readiness of vocational high school for the competence of photography skills. Document studied are vocational high school curriculum, Indonesian national photography work competency standard, photography school documents and draft file formation of new photography skills competence. The result of the data analysis is the work competence for the vocational high school students in accordance with industry needs. There are 18 photography competencies that a vocational high school student should possess. With this competency, vocational high school students will be accepted in the photography industry and can work well.

1. Introduction
The creative economy is a concept in a new economic era which intensifies information and creativity by relying on the idea and knowledge of human resources as the main factor of production [1]. This concept will usually be supported by the existence of creative industries that became the center of development. The term creative economy develops from the concept of creativity-based capital that can potentially increase economic growth in an area. The creative economy is the fourth wave economy in which the continuation of the third wave economy with an orientation to creativity, culture, and cultural and environmental heritage. The creative industry has also been an engine of significant strategic economic growth, job creation, and social cohesion [2].

The creative economy will be a driver of economic change and a source of competitive advantage. The creative economy is essential for good economic sustainability and post industrial economic growth. Efforts in the creative economy offer potential new job sources [3]. Globally, according to the Creative Economy Report of the United Nations Conference on Trade and Development (UNCTAD), the creative economy is a dynamic sector in the industrial world but few get the attention of business people in the industry [4].

The contribution of creative economy to the national economy is very much, based on the data of Medium Term Action Plan of creative industry 2015-2019, creative industry contribution that is, 5.76%
creative economy above average national growth, 7.05% share Domestic Products Gross, 10.7% employment.

Vocational High School must be able to compete in the business world and industry, as well as in the nation market of creative economy. But for now there is still no competence of photography skills. Based on the above exposure, the competence of photography expertise should be formulated. In order to fill the market demand for workers in the field of photography.

Vocational education should be more emphasis on the development of competence rather than just focus on terms of graduate and get a diploma [5]. In vocational high school education there is no competence of photography skills as well as curricula that regulate the field of photography. While the needs of the world of creative industry in the field of photography is higher. But education for photography does not exist officially. Workers in the world of creative industry in the field of photography are more self-taught than studying in the course.

There are differences in students who get photography-specific material with those who do not get the material. This can be seen from the photos produced by students. There is more artistic value and understanding to students who get photographic material than students who do not [6]. Photography skills competency education is certainly a thing to do to get graduates who are vocational and are able to compete in the world of work.

This study aims to design competencies for vocational high school students (SMK) to be able to fill job opportunities in the world of photography industry. With this research, expected to be able to see the competence that must be owned by vocational students in order to compete in the industrial world.

Photography evolves not only as an image capture technology or image. Photography is also evolving along with the increasing benefits of photography in human life. Both processes are equally important in viewing the development of photography, because basically they are related and affect each other. For over a century and a half, photography has become the most popular and widespread way of shooting. The first and main photographic tools are cameras, and media changes and their applications are often associated with technical developments in the manufacture, reproduction, and distribution of photos [7].

Photography is always related to the technical side of the development of photography technology itself. This can be seen from the development of photography technology from analogue to digital. These developments alter the elements of photography thereby encouraging the adjustment of photographic definitions [8].

The term "photography" was widely introduced by Sir John Herschel in 1839. He used it to refer to some of the experimental processes he undertook in moving the image of an object into a two-dimensional medium. But apparently, the word "photographie" already existed from the previous five years; precisely in 1834, the word "photographie" was used by a Brazilian inventor named Antoine Hércule Romuald Florence in his notes. The record was successfully examined Boris Kossoy in 1976 [9].

2. Method
The research approach used in this research is descriptive research with qualitative approach. Descriptive research aims to collect information about the status of an existing symptom, which describes "what is" about a situation or symptoms without the necessary administration and control of the treatment [10]. Qualitative research is an approach by exploring and understanding a symptom centrally [11]. Qualitative research method is a research procedure that produces observed data, meaning that the issues to be discussed in this study are not related to the numbers, and the goal is to analyze the competence of new skills photography for vocational high schools.

Participants and research sites will be conducted in several places including:
1. School of photography
2. Photography industry
3. Vocational High School
4. Provincial Education Office
Qualitative research as a human instrument, serves to define the focus of research, selecting informants as data sources, analyzing data, interpreting data and making conclusions on its findings [12]. In qualitative research, the instrument or research tool is the researcher himself so that the researcher should be validated. Validation of the researcher, including the understanding of qualitative research methods, mastery of insight into the field under study, the readiness of researchers to enter the object of research both academically and logically. The data in this research is obtained qualitatively, this research process using several data collection techniques, among others (a) Observation, (b) interview, (c) Documentation, (d) Triangulation.

Stages in conducting this research data analysis is by reducing the data, the data collected about the competence of vocational high school students competence of photography skills through the process of observation, interview, documentation and triangulation then reduced. data reduction is a form of analysis that sharpens, classifies, directs, discards the unnecessary and organizes the data in such a way that the final conclusion can be retrieved. the next stage is to perform the presentation / display data, all research data about the competence of vocational high school students competence of photography skills. Data are presented in the form of narrative text (in the form of field notes), lists of competencies and tables. The presentation of qualitative research data differs from the presentation of quantitative research, no consistency found in the literature relating to visual label display specifically used in qualitative research [13]

3. Finding and discussion

Observations were made to observe the process of learning in the school of photography, the number of students who learn and what equipment is needed in the learning process. Readiness of teachers and things that support the learning process. Interview conducted in the school of photography involves several speakers, interviews are conducted to obtain information in full and depth about the competencies that must be students in photography schools, competencies that must be owned by vocational students for the competence of new skills photography, facilities that support the teaching and learning materials.

Observations in the photography industry are conducted to obtain information related to the activities of photographers and vocational students who are apprentices in the industry. An interview with the director of the photography industry. Interviews are conducted to obtain information in depth and intact about the information availability of human resources in the industry, information on human resources needed in the industry and competency standards that must be owned by vocational high school graduate students for new photography skills competence.

Interviews and observations at vocational high schools are conducted to obtain information on the readiness of school infrastructure for new photography skills competencies and related information about teacher readiness for new photography skills competencies. Interviews were conducted with Kaprodi and teachers on the competence of multimedia expertise and visual communication design.

Interviews were conducted with curriculum experts at the Provincial Education Office to obtain in-depth and complete information on the design of the initial curriculum for vocational high schools.

Document study is done by analyzing the document of photography school, standard of national work competence of Indonesia, vocational high school curriculum, and document the formation of new skill competence. Document studies are conducted in accordance with the objectives of the study to obtain the competence of photography expertise in accordance with industry needs.

Based on the data analysis, the competencies required by students of vocational high school graduates are competence that corresponds to level 3 in skkni photography. Standard of national work competence of Indonesia level 3 competence must be owned by vocational graduate students so that they can work well in the photography industry.

Standard of national work competence of Indonesia level 3 competency, which has the main objectives, key functions, basic functions and basic functions. In each section, what competencies are to be achieved. From the competency map on the basic competencies that must be owned by students of vocational high school graduates are:
1. Choosing Camera Type  
2. Checking Camera Device  
3. Determining the Lighting Element  
4. Adjust Image Sharpness  
5. Determining the Angle of Taking  
6. Define Background-Background  
7. Determining Shooting Composition  
8. Identify the Direction, Character and Color of Light  
9. Determining the Radiation Device  
10. Selecting the Picture as needed  
11. Saving and Moving Image Data  
12. Doing Basic Digital Sports  
13. Printing a Picture  
14. Develop and Communicate the Photographic Concept  
15. Calculating Production Costs  
16. Performing Work Process in accordance with the Principle of Occupational Safety and Health (K3).  
17. Evaluating Results of Work  
18. Implementing Work in Context of Organization of Photography  

4. Conclusion  
Availability of human resources in the industrial world is very large but not many have entered the photography industry because it does not have enough competence. Opportunities for vocational students to enter the world of photography industry is very large. To enter the world of photography industry, vocational students must have 18 basic competencys of photography. With 18 basic competencies of photography then the students can work well in the photography industry and can develop their own business in the field of photography.  

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