

Design Education, Mobile Photography and Its Propagation in Social Media: Photography Workshop for Kargil Students

Keyur S. Sahasrabudhe¹, Pranita Ranade²

^{1,2}Symbiosis Institute of Design, Symbiosis International (Deemed University), Pune, India
Email: ¹keyur@sid.edu.in

Abstract

This research deals with the experience to work and know the understanding of undergraduate students of Kargil in the domain of mobile photography. Three hours of photography workshop on mobile photography conducted for Kargil students. The focus of this workshop was to impart knowledge of photography using a mobile camera and its operations with the basic principles of photography with the latest technology e.g. photograph sharing, editing software. Students' performance is assessed by pre and post-test. It was a challenging task to conduct the insightful workshop in stipulated time and share the feedback. Andragogy workshop content is developed based upon the 'Perception-in-Action' model (Schön). The aim of the workshop is not only to enhance the knowledge about the mobile camera, photography and technology among the students but it will help to promote the tourism industry of Kargil sector by posting photographs on social media. By regular practice and experiential learning of photographic skills, these amateur photographer's skills will enhance and they can earn by selling their photographs online on various websites. It eventually helps them in generating the employability. The objective of the workshop is to understand, identify strategies to develop students' perception in design education.

Keywords: Mobile Photography, Andragogy, Composition, Principles of Photography, Experiential Learning, Design Education

Introduction

Kargil is an India-Pakistan borderland district place in Ladakh region of Jammu and Kashmir with inclement weather, rough terrain, and natural habitat. Post-1999 Kargil war, the life of youth in this sector has seen development in the transport, education and other businesses. Army has opened up schools for normal as well as differently able children. Kargil youth is moving towards globalization because of the introduction to the internet, smartphones, social media, and development in the tourism sector (Ozer, Bertelsen, Singla, & Schwartz, 2017). Current research deals with the experience to work and know the understanding of the junior college level students of Kargil in the domain of mobile photography. A three hours classroom based photography workshop organized for the students, which is further extended into outdoor field visit next day for more exploration and hands-on experience. The focus of this workshop is to impart knowledge of photography through a mobile camera and its operations with basic principles of photography with the latest technology, e.g. composition, the rule of third, image editing software. Students are introduced to the functions of a mobile camera and its hidden technology (exposure, aperture, lens, ISO, sensor, shutter and concept of DOF) which everyone is not aware of. Student's performance is assessed by Pre-test and post-test. It was a challenging task to conduct the insightful workshop in a stipulated time and share the feedback, hence content development for the workshop is planned strategically. The

current study focuses on the design thinking, creative design process, innovative ideas and perceptions while learning photography through the perspective of design education. A workshop model is based on the methodological design paradigm proposed by Schön, the 'Reflective Practice' with its Reflection-in-Action Process (Schon, 1983). The undertaken research is based on action concepts of action research and reflective practices.

The research aims will be accomplished through achieving the following objectives:

1. understanding use of mobile photography for social media.
2. to assess student's perception regarding knowledge and application of photography for social and economic development in the context of Kargil region.
3. to develop content interventions for minor workshops on photography based on design fundamentals.

Literature Review

The aim of the literature review is to understand allied topics with respect to the social media, mobile photography, and its use by students of Kargil. In this systematic literature review, constructs and variables identified. (See Table 1). Later researcher has conducted a systematic literature review through secondary sources such as books, journals, articles, and online sources, published and unpublished work.

Table 1: Theoretical Framework

Constructs	Variables
Photography	Mobile photography, Domestic Photography, Photography and Culture, Entrepreneurship
Society and Current Trends	Social Media, Student Psychology, the user experience of Mobile technology,
Design Education	Perception, Perception in Action, Experiential Learning, Higher Education
Employment	Self-motivation, educational level, cultural impact, Political and economic condition
Culture, Tourism	Ethnic Groups, Festivals, Religion, Beliefs

Digital Photography, Society, Culture, Social Media and Current Trends

Sarvas and Frohlich described elaborately domestic photography by amateur and professional photographers. It is also known as family or snapshot photography. It constitutes the family members and cultural identities. It is a part of everybody's life and in last two decades, its pattern is changed. With the advent of inventions in photography, domestic photography has witnessed changes in technology, tools, media, conventions, vocabulary that involves the

activities such as; sharing, commenting, copying, editing, printing, etc. (Sarvas & Frohlich, 2011).

An interesting study conducted by Wang in China shows that because of the Cultural Revolution, Chinese people started communicating using smartphones. The study reveals that the circulation rate of visual material is increased on social media. The study shows that 64 per cent of people considerably liked visual posts than only text-based posts. Wang has identified 15 main genres of visual postings among rural migrants. These middle-class people from Shanghai added more genres and patterns to the traditional photography (Wang, 2016, pp. 57-96).

Miller et al. reported that while surveying in Trinidad, they observed that youngsters attract more likes by posting their selfies and these posted visuals are appreciated by their friends. While posting those selfies, Brazilian and Trinidadian youngsters commonly showed their visual association with brands i.e. holding a bottle, etc. (Miller, Costa, Haynes, & McDonald, 2016).

According to Safko social media components such as blogs, visual words, photo sharing plays an effective role in developing the strategic marketing plan for an individual or company. There are many photo sharing websites e.g. Flickr, Picasa, SmugMug, PhotoSwrm which housed millions of photographs. As the mobile phones are less expensive and completely portable, people from third world countries can easily make use of smartphones for mobile marketing (Safko, 2010).

A survey has been conducted by Ranade to know how globalization affected young Indian generation. It revealed that development in new media technology and industrialization has played an important role in globalizing youth generation of India. Ranade proposed the use of social media and related applications to preserve the cultural heritage using smartphone technology. Which can capture, edit and share cultural activities (Ranade, 2016).

Fisher discussed in his book regarding the changes took place in the technology. How one can adapt them to the shift in paradigm to work more successfully and with good organization. People carry the apple and android mobile phones but when it comes to photography, it is literally called mobile photography just not because you are using mobile Smartphone or tablet, but you are mobile. Mobile means the ability to adjust. Many apps help with editing images and for that one need not have to sit behind the desktop screen. Storing, reviewing, and editing of photographs is an easy task with the revolution of technology (Fisher, 2014).

Paino et al. observed a new model of public involvement by hashtagging and populating photographs on social media. In the tourism sector, one can influence people by multiple interpretations of the same territory (Tourism, Culture and Heritage in a Smart Economy: Third International Conference IACuDiT, Athens 2016, 2017).

Alper pointed out use of new photo filter, Hipstamatic on Instagram depicting images of US soldiers in Afghanistan war. These images are highly criticized because these filters depicted

war in a vintage style. It has also raised concern about ethical issues in photojournalism, and amateur vs. professional photography (Alper, 2013)

Design Education, Experiential Learning and Curriculum Planning

Stead suggested 101 self-employment businesses. Stead thinks that above-average person can easily start a mobile photography business. Techniques of photography can be learnt by reading books and services can be offered to small-scale business or events (Stead, 2006).

According to Hamilton experiential learning mainly is the non-classroom educational program in which learning is gained by doing and personal interaction. Objectives of experiential learning for youths is to motivate them in finding career opportunities, to form close-knit groups to work in collaboration. Youths also know the responsibilities of roles to be. It enhances the skills or competencies, and productiveness in youth (Hamilton, 1980).

According to Schon, design thinking is thinking in a variety with new semantic and material combinations. To think about the possibilities, the designer needs to liberate him or herself from routines of perception. This liberation is the basis for all innovative ideas. Taking into account the dominant role of a deliberately orientated perception in the creative design process, Schön considers design as a Perception-in-Action Process (Schön).

According to Vyas while imparting design education at NID, India, the focus has always been kept learning from the field, understanding social and industrial reality and value in the quality of life for people. Vyas thinks that the design field is directly connected to the economy and India and it needs to provide thousands of designers. He further suggests local handicrafts of India and their sustainable model should be advocated with the interventions of design education (Vyas, 2018).

Spoerner suggested process in which he elaborated on how to improve vocabulary of visual perception while teaching photography in elementary school. According Spoerner to improve the taxonomy understanding of form, space, movement, event, illusion and representation is important. Perceptual development is based on goals and objectives (Spoerner, 1978).

Based on the literature review the authors want to study the effectiveness of mobile photography using new media. Therefore, further investigations need to be taken place to know change in perception after a short intervention.

Research Design

This section deals with the methodology followed to design and conduct a workshop. It also establishes a framework for research study. The stages involved in study are outlined as:

- To define objective of the study
- To define the research framework, hypotheses, pre - posttest questionnaire design, content development
- Statistical testing (T.Test) to be used for the purpose of the study
- hypotheses development

Research Model:

1. **Content Development** - It was a great challenge to develop a content in context with the educational specialisation, political, social, cultural, geographical, and demographic nature of the participants.

1.1. Basic Photography Zine Guide for mobile camera - A folding pocket size booklet on photography which provides basic information related to anatomy of camera, lighting and its behavior on subjects and composition, image editing software, and sharing app like Instagram. edition, social media applications. With the help of Photography students developing content for the workshop was done by students of Symbiosis Institute of Design by discussing about the objective of the course. Students came up with the lots of suggestion that has to be sorted out and reworked to get the best final out put in the form of zine.



Figure 1: Folded Zine

2. Session planning: Use of ICT application with live demonstration. Presentation slides designed based on three key areas of photography as; capturing, editing, and sharing along with tasks to be conducted. Details of the key areas in the presentation are as below:

2.1.1. Capture - Camera, subject and its relation to light. Task - Capturing images of friend in various lighting conditions, e.g. direct sunlight, against sunlight, shade, and inside a room

2.1.2. Composition - Identify English Capital Alphabets in surrounding and Compose a photograph

2.1.3. Share - The third and the last was a demonstration using a live demonstration method to be seen via video camera attached to the laptop for projection. Such a task using ICT was interesting and appealing for the workshop. A demonstration regarding light and its modifier applied to the object were well appreciated.

3. Questionnaire prepare for pre and post-test Questionnaire is designed for an intervention of three hours, leading to compare in change, the change can be in its interest and perception toward research objective.

4. Onsite Live demonstrations

4.1. Basic ICT applications; use of web camera to display live activity on big screen.

4.2. Explained and demonstrated the task



Figure 2: Live Demonstration of Light and Shade on object.

- 4.3. Students worked upon and completed the given task
5. Research Analysis and Conclusion

Aim

To study change in student's perception by giving them inputs on mobile photography education and observe the recordings in a stipulated time frame.

The objectives of the workshop are: -

- To introduce the process of photography to the students of Kargil using a smartphone camera and in-camera adjustments for capturing better pictures.
- To introduce Photography as a process using a mobile phone, photo editing software's like photoshop express, snapchat, in-camera-app, etc.
- To introduce social media image sharing apps like whatsapp, flickr, Instagram, facebook, etc.
- To introduce the structured process of photography; compose, capture, edit and share.

Hypothesis

Following are several hypotheses formed based on the aim and objectives of the workshop.

Ho1: By in large people believe that good photographs can be captured by only professional photographers, with expensive equipment.

Ho2: Photography is a difficult subject.

Ho3: Photographs are not to be shared.

Ho4: My friends capture better photographs than me.

Ho5: Good composition leads to a good photograph.

Ho6: Photographs helps in promoting works.

Ho7: Given a chance, one can develop his/her place for tourism industry.

Procedures

The researcher has used lecture, demonstration, and task methods for teaching mobile photography. Communication medium was mainly in Hindi language and for technical vocabulary English language was used.

This workshop was organized in a specific pattern:

- (i) with a pre-test for the participant;
- (ii) discussion and a presentation on camera and lighting;
- (iii) task assignment, discussion and feedback;
- (iv) post-test.

Types of Task: -

Task 1: Camera Angle and Lighting

Task 2: Composition - Find English Capital Alphabets in the Surroundings

Data Analysis and Research Findings

Research questions are designed considering the cultural impact and its prejudice on the thinking of the participants. 24 students from Government Degree College of Kargil, J&K, India.



Figure 3: Group Photograph of Participants.

Q 1: Photography is my... this question is an open-ended question which lead to the respondent's interest, thought, perception, about photography. Majority of students contemplated photography as a hobby and an interesting profession. Few considered photography is not a difficult task to do and they can be good photographers.

Q 2: I believe, good photographs are made by professional photographers, with expensive equipments. The question refers student's confidence, command, and control over their photograph taking skills and observing and analyze others photographs, which are been appreciated. The response has changed towards negative after the intervention but not significant that only this workshop has contributed to the change. The students believe that good photographs are made by professional photographers with expensive gadgets, the analysis of the sample of 24 students have changed of means from 3.25 to 3.21 but the probability value is 0.42 which is above 0.05 of standard value, hence the null hypothesis is rejected.

Q 3: I believe photography is a difficult subject. The question refers to the hesitation by an individual about photography and perception has been changed after the workshop. The analysis was done on the sample of 24 has significantly decreased by the mean from 2.88 to 2.25. Result shows that there is a change in the perception of the students towards its difficultness in photography. However, the probability value is 0.01 which is smaller than standard value of 0.05 Therefore, the null hypothesis is accepted. Result shows that photography is a difficult subject but after intervention in the workshop, there is significance positive change in confidence level.

Q 4: I think photographs are not to be shared. This question describes the student's personal space where they feel photographs are their intimate personal memories which should not be shared. Although the concept of mobile photography with the advent of social media this barrier has been enlarged by sharing once personal space. The objective of this question was to find students willing to share their photographs on the social media as for promoting photography by large. The student perception toward the question has changed from not to be shared to, to be shared after the workshop, here two tail tests was used as we are not sure where the probability will shift. The mean has changed from 2.21 to 1.83 showing that students' perception has changed from 'agree to not share' to 'to share'. The change in decision observed due to the intervention in the workshop with the concept of photography with a purpose. The belief of not sharing of photographs has decreased from $M = 2.21$ ($SD = .78$) to $M = 1.83$ ($SD = .92$). However, this change was not very significant $t(23) = 2.07$, $p = 0.11$ as the probability value is more than 0.05 hence rejected. This means there might be some more factors affecting this change. This should be another research question to be studied later.

Q 5: I believe photographs, I take are not of good quality. This question was a tricky one the researchers objective was to check participants confidence for photography. The result shows no difference even after intervention for the sample ($N=24$). The assumption of, 'photographs are of bad quality' signifies no change in confidence level of capturing photographs still after intervention from $M=2.46$ ($SD= 0.78$) to $M=2.46$ ($SD=0.72$). However, there is no significant

change affecting the perception even after intervention where $t(23) = 0.00$, $p = 0.50$ which is greater than 0.05, hence rejected. There might be something else apart from the workshop is concerned.

Q 6: I think my friends' photographs looks very good. This question is a linked with Q 5 to further understand the confidence level. It is found that participants mostly enjoy watching others photographs than theirs. This question will guide the researcher further as the analysis shows 'students thinking of others photographs looks good as compared with oneself' is been rejected after intervention in a sample ($N = 24$). The mean has reduced after the workshop from $M=3.04$ ($SD 0.81$) to $M=2.88$ ($SD 1.03$). However, there is no significant contribution of the workshop in a change-in-perception of the students. There might be some other factor influencing the decision.

Q 7: I think good composition leads to a good photograph. An understanding of composition will sure give a well-composed photograph. We organise the different elements in the frame to create a visual story. This visual story holds the viewer attention towards the picture for a longer time. Such compositions are considered as a good photograph. The hypothesis of good composition leads to a good photograph has changed after intervention in a sample ($N = 24$), The conviction of 'good composition leads to good photograph'. The results indicate an increment, after the intervention from $M = 3.29$ ($SD .81$) to $M = 3.50$ ($SD =0.66$). However, there is no significant contribution to the change $t(23) = -1.31$, $P = 0.10$. The hypothesis, however, is rejected as probability value is more than .05. It means that even though there is a change in mean the intervention has no significant impact on the student there might be some other factor affecting this change.

Q 8: I think photographs helps to promoting works. This question is about sharing of our work to the masses thus promoting our work. It helps economically as well as gain popularity. This has an indirect impact on society by large. As the hypothesis is 'a photograph helps promotes work', it is supportive, as in case of product photo which explains all the details of that product and creates an appealing impact on the viewers. The hypothesis of 'photographs helps to promote works' has positive change after the intervention. In a sample ($N = 24$) the belief of 'photographs helps to promote works' has increased after the intervention from $M = 3.21$ ($SD .88$) to $M = 3.58$ ($SD =0.50$). However, there is a significant contribution to the change $t(23) = -1.81$, $P = 0.04$, as the probability value is just below 0.05 standard value. Hence the null hypothesis is accepted. The effect of the workshop has mainly contributed to the change in perception that photographs help promote the work.

Q9: I believe given a chance I will develop my place for tourism. This question was a direct question for which all participant supported in pretest. They had some reservation about it but as the workshop went the understanding changed to strongly agree with the hypothesis. As the content of the workshop were about promoting Kargil to the world and considering it as a tourism place. The hypothesis of 'promoting our place for tourism' has changed after the intervention. In a sample ($N = 24$) the expectation of 'promoting our place for tourism' has increased after the intervention from $M = 3.08$ ($SD = .83$) to $M = 3.63$ ($SD =0.49$). However,

there is a significant contribution to the change $t(23) = -3.00$, $P = 0.003$, the probability value is less than the 0.05 hence accepted.

Table 2: t.test analysis of pre and post-test

t-Test: Paired Two Sample for Means	Q2		Q3		Q4		Q5		Q6		Q7		Q8		Q9	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Mean	3.2500	3.2083	2.8750	2.2500	2.2083	1.8333	2.4583	2.4583	3.0417	2.8750	3.2917	3.5000	3.2083	3.5833	3.0833	3.6250
Variance	0.6304	1.1286	0.6359	0.8913	0.6069	0.8406	0.6069	0.5199	0.6504	1.0707	0.6504	0.4348	0.7808	0.2536	0.6884	0.2446
Observations	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Pearson Correlation	0.5026		0.1588		0.1725		0.4612		0.3712		0.4497		0.0081		0.1854	
Hypothesized Mean Difference	0.0000		0.0000		0.0000		0.0000		0.0000		0.0000		0.0000		0.0000	
df	23.0000		23.0000		23.0000		23.0000		23.0000		23.0000		23.0000		23.0000	
t Stat	0.2138		2.6979		1.6763		0.0000		0.7780		-1.3101		-1.8127		-3.0031	
P(T<=t) one-tail	0.4163		0.0064		0.0536		0.5000		0.2223		0.1015		0.0415		0.0032	
t Critical one-tail	1.7139		1.7139		1.7139		1.7139		1.7139		1.7139		1.7139		1.7139	
P(T<=t) two-tail	0.8326		0.0128		0.1072		1.0000		0.4445		0.2031		0.0830		0.0063	
t Critical two-tail	2.0687		2.0687		2.0687		2.0687		2.0687		2.0687		2.0687		2.0687	
SD Pre-test	0.7940		0.7974		0.7790		0.7790		0.8065		0.8065		0.8836		0.8297	
SD Post-test	1.0624		0.9441		0.9168		0.7211		1.0347		0.6594		0.5036		0.4945	
T test Critical value is less then 0.05 then we accept the Ho																

Discussion and Conclusion

The aim of the workshop was to introduce students of Kargil mobile photography and using social media for promoting their culture, ethnicity and nature of region. Hence, it should help in converting hobby into employment and generate an income source to uplift the sociocultural and economic status of the youth. Investigating interest in the field of photography by students of borderland district place in Ladakh region of India, which has faced 1999 Kargil war, advanced our understanding of perception in learning photography by qualitative and quantitative analysis. The researchers ignited the interest among the students through the photography. Favorable results indicates that workshop has created the change in the students perception although there are some exception due to certain influential factors e.g. education, knowledge, socio-cultural circumstances.

T-Test analysis demonstrates that this workshop has improved the participant's confidence by understanding the design concepts in photography using mobile in-camera features e.g. rule of thirds grid for composition. It also enhanced their technical understanding allied to exposure compensation, manual features, panorama, photo editing and photo sharing applications.

On account of socio-cultural constraints, students hesitated in the circulation of images across social media. Post workshop test results proved that the assumptions were shifted towards the positive change as the students found the purpose and objective of the photography.

To promote the socio-cultural happening in the Kargil sector to the world, participants can associate their selfies with the people, cuisine, nature, cultural events, habitats, etc. Eventually, it will promote the social and cultural matters in the Kargil sector to the world.

Indirectly, such activities can help in attracting more tourists in the region. Consecutively, increase in tourism will lead to the development of socio-economic upliftment of the people of Kargil region.

With the exposure of globalisation, youths are exposed to social media and internet. They have been introduced to various types of platforms, technologies, gadgets, and applications available for sharing images on social media. This study shows that social media and internet as a platform to promote Kargil region for tourism and study have indicated that photography is a best medium suited for the promotion, as participants have agreed to it. Study also proved the mobile photography can motivate entrepreneurs to initiate self-employment.

The 'belief for professional photographers and photography as a difficult subject' has made affirmative impact on students after the workshop. It gave confidence of the participants to such an extent that they can shoot photos better than earlier, as it, majorly influenced by the content related to composition, camera operation and live demonstration.

This study proposes that small intervention also can change the perception of a student, and they can be elevated to a higher level of thinking.

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