

# INTEGRATION OF TECHNOLOGY-DRIVEN TEACHING STRATEGIES FOR ENHANCING PHOTOJOURNALISM COURSE

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## ABSTRACT

*This study examined the technology-driven teaching strategies used in Photojournalism course in Lyceum of the Philippines University-Batangas. Specifically, it determined the frequency of use, the effectiveness and the problems encountered by the students during the execution of the strategies used. The participants of the study were the twenty-seven (27) officially enrolled AB Mass Communication students in Photojournalism class during the 1<sup>st</sup> Semester of SY 2012-2013. The data were analyzed through descriptive and inferential statistics (Pearson-Product Moment Correlation). The results of the study indicated that the effectiveness of the technology-driven teaching strategies depends on how frequently they are used in the class, while effectiveness is not affected by the problems encountered during the entire course.*

**Keywords:** Technology-driven teaching strategies, photojournalism, student learning

## INTRODUCTION

Philippine Higher Education's are at the crossroads, faced with many new demands and challenges brought by the new typology set by Commission on Higher Education (CHED) and implementation of the Outcomes-based Education (OBE). There are demands for curriculum revisions to meet the graduate learners skills required in the fast-changing and global standard workforce needs.

Compounding current issues and challenges are the demands of a new and unique population of learners converging upon higher educational institutions. The Net Generation or Millennials, who are now entering colleges and universities, have learning expectations, styles, and needs different from past students (Skiba and Barton, 2006). Thus, Oblinger and Oblinger (2005) mentioned that current and future faculty should expand their understanding of the Net Generation, technology, and pedagogy in an effort to improve teaching and learning.

According to Harding (2011), technology use allows many more students to be actively thinking about information, making choices, and executing skills than is typical teacher-led lessons. When technology is used as a tool to support students in performing authentic tasks, the students are in the position of defining their goals, making design decisions, and evaluating their progress. In this aspect, Cockburn as cited by Killen (2005), learners are responsible for their own learning and progress, an outcome-based learning approach. . It is not enough for instructors to accept that learning may occur in these places; they must go there as well as scholars with information to share, as researchers attempting to gain insight, and, more importantly, as learners acquiring a new kind of understanding (Mabrito and Medley, 2008).

According to Gros, Garcia and Escofet (2012), although access to and use of ICT is widespread, the influence of teaching methodology is very decisive. For academic purposes, students seem to respond to the requirements of their courses, programmes and universities. There is a clear relationship between the students' perception of usefulness regarding certain ICT resources and the teachers' suggested uses of technologies.

In Lyceum of the Philippines University-Batangas (LPU-B), Photojournalism course deals with the basic photography principles on composition, proper exposure and lighting that enable students apply those skills in a more specific practice of journalistic photography. It touches both visual arts and ethical concerns depending on how things or scenes are captured. This is a mixture between two-dimensional, visual art and journalistic ethic. At photojournalism's worst, photographs can re-enforce stereotype and strip people of their dignity. But when photojournalism is working at its best, it opens the mind of the people as agent of communication to entertain, inform or even influence them to act on something which is relevant to societal issues.

Like any other teaching-learning process, teaching photojournalism requires teaching strategies intended to trigger their visual art interest and eventually develop their skills to becoming a good photojournalist. To fulfill the student learning objectives of the course, the class facilitator integrated technology-driven teaching strategies in the learning experience of the students including multimedia presentations, World Wide Web resources, open line of communication thru email, networking sites page, video/photo portfolios, digital cameras and photo editing software.

In the pursuit to improve teaching and learning, this study assessed the technology-driven strategies used by the class facilitator during the entire semester. The researcher argues that frequency of use affect the degree of effectiveness of the selected technology-driven teaching strategies. Thus, the researcher hopes that the results of this study would help the course facilitator to enhance the teaching and learning process.

## **OBJECTIVES OF THE STUDY**

This study is sought to assess the technology-driven teaching strategies in Photojournalism course. Specifically, this paper:

- 1) identified the frequency of use of the selected technology-driven teaching strategies employed by the facilitator;
- 2) determined the effectiveness of the technology-driven teaching strategies in the attainment of student learning objectives;
- 3) identified problems encountered during the execution of the technology-driven teaching strategies under institutional/departmental-factors, self/student-centered factors and faculty/facilitator factors; and
- 4) tested if there are existing significant relationship among the frequency of use, effectiveness of the technology-driven teaching strategies and the problems encountered by the students.

## **RESEARCH METHODOLOGY**

### **Research Design**

This research employed the descriptive survey method. The survey method was used to evaluate the technology-driven teaching strategies utilized in Photojournalism course.

## Participants

The participants of the study were the twenty-seven (27) officially enrolled AB Mass Communication students in Photojournalism class during the 1<sup>st</sup> Semester of SY 2012-2013.

## Instrument

The scales and items that were used in the instrument were self-made and were formulated based on the objectives, reviewed literature and the syllabus adopted by the course facilitator/researcher. Part 1 described the frequency of use of the technology-driven teaching strategies during the entire course. Part 2 described the degree of effectiveness of the selected technology-driven teaching strategies in teaching Photojournalism class. Meanwhile, part 3 illustrated the common problems they encountered during the execution of the technology-driven teaching strategies which are institution/department, self/student and faculty/facilitator related factors.

The face and content validity of the instrument were evaluated by an expert including the appointed member from the Council of Research Referees and Evaluators, Director for Research and Statistics and a Statistician. Changes that were recommended by the validation panel, when appropriate, were incorporated at the instrument. These changes included the wording of items, the design of scales, and in the instructions for completing the instrument. Internal consistency coefficient of 0.80 for the scales in the instrument was obtained using Cronbach's Alpha.

## Procedures

After a series of evaluation and validation of the instrument, the researcher distributed them to the participants after discussing the main objective of the study. The confidentiality of their responses was used solely for the purpose of this research. The retrieval rating of 100% was achieved after two to three days.

## Statistical Treatment of the Study

The data gathered were tallied, encoded and interpreted using descriptive and inferential statistics. Weighted mean was used to describe the frequency of use, degree of effectiveness and problems encountered during the implementation of the technology-driven teaching strategies. Pearson-Product Moment Correlation was also used to test the significant relationship among the selected variables. All data were supported using PASW version to further analyze the results.

## RESULTS AND DISCUSSION

This section presents the analysis and interpretation of the data gathered from the participants of the study.

In terms of frequency of use of technology driven strategies, respondents perceived that the use of PowerPoint presentation is always used which got the highest weighted mean of 3.64 among all the teaching strategies. This is followed by the use of digital cameras and digital images from the internet. However, the least use strategies according to the respondents are the use of websites on photography for further reading/learning, use of photo editing software and the use of YouTube and other videos (like Adorama TV) for interactive learning. In general, the strategies used in the course were often used with 3.32 composite mean.

Table 1 presents the frequency of use of technology-driven strategies:

**Table 1. Frequency of Use of Technology-Driven Strategies**

<i>Frequency of Use</i>	<i>Weighted Mean</i>	<i>Verbal Interpretation</i>	<i>Rank</i>
1. Use of PowerPoint Presentation	3.64	Always	1
2. Use of websites on photography for further reading/learning	3.20	Often	8.5
3. Use of personal emails for communication (lectures/assignments/output)	3.36	Often	5
4. Use of networking sites as for collaborative learning	3.36	Often	5
5. Use of multimedia project (photo essay)	3.28	Often	6
6. Use of video clips (Youtube/Adorama TV) for interactive learning	3.00	Often	10
7. Use of Digital cameras	3.44	Often	2
8. Use of digital images from the internet	3.40	Often	3
9. Use of Photo editing software (Photoshop)	3.20	Often	8.5
10. Use of Audio Video Presentation	3.36	Often	5
<i>Composite Mean</i>	<i>3.32</i>	<i>Often</i>	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 – 1.49 = Never

Jones (2003) noted that many modules require students to give presentations as a part of the course and generally resulting to use of PowerPoint presentations. Prescott & Oduyemi, as cited by Jones (2003) revealed that, frequently, these are requested without giving students the appropriate training and caution that the effort students put into such presentations may be excessive. The use of PowerPoint presentations by students undoubtedly offers the opportunity for development of a valuable transferable skill but its use in that context remains to be developed in many institutions. In the present study, the lecturer deliberately adopted PowerPoint presentations knowing its advantages as efficient means of introducing learners to new topic and sets the stage of learning. Likewise, textbooks used in photojournalism course are limited in the library which also compelled the lecturer designed PowerPoint lectures to help the students integrate and synthesize a large body of knowledge for clarification of difficult parts and advance knowledge in the absence of these textbooks.

Photographers strive to communicate with digital images. Therefore, digital camera is the most important tool in photojournalism course. In the present study, students brought their respective digital cameras including the lecturer's camera for demonstration of specific learning objectives, specifically on the basic elements of digital photography including the camera parts and functions, exposure controls, exposure triangles, focusing modes, white balance and the like. Moreover, digital cameras become the major equipment of the students in accomplishing students projects like photo essay, photo portfolio and photo exhibit.

In the context of learning the photography principles, compositions and techniques, digital images from the internet become vital to supplement the learning experience of the students. These images become the representations of the concepts and thoughts being learned in the classroom to motivate them for deeper appreciation and critical thinking.

Table 2 shows the degree of effectiveness of the technology-driven teaching strategies

**Table 2. Degree of Effectiveness of the Technology-Driven Strategies**

<i>Degree of Effectiveness</i>	<i>Weighted Mean</i>	<i>Verbal Interpretation</i>	<i>Rank</i>
1. Utilized a visual presentation with examples of images and text like PowerPoint	3.60	Highly Effective	1
2. Directed to relevant internet sites for supplementary learning	3.32	Effective	7.5
3. Posted/Sent assignments, deadlines and lectures to personal emails	3.32	Effective	7.5
4. Created a networking site group for collaborative learning , updates and announcements	3.16	Effective	9.5
5. Created a personal/group digital portfolio	3.40	Effective	5
6. Used a video/tutorial demonstration for interactive learning	3.44	Effective	4
7. Used digital cameras to demonstrate the acquired skills expected of the student	3.52	Highly Effective	2
8. Required students to download sample images relevant to the lesson	3.16	Effective	9.5
9. Utilized photo editing software Adobe Photoshop	3.36	Effective	6
10. Used Audio Video Presentation relevant to the lesson	3.48	Effective	3
<i>Composite Mean</i>	3.38	<i>Effective</i>	

Legend: 3.50 – 4.00 = Highly Effective; 2.50 – 3.49 = Effective; 1.50 – 2.49 = Less Effective; 1.00 – 1.49 = Not Effective

The students assessed that using PowerPoint and digital cameras are highly effective as indicated by the weighted mean scores of 3.60 and 3.52, respectively. They also perceived Audio Video Presentation (AVP) and Video/Tutorial demonstration for interactive learning as effective strategies to enhance the learning experience in Photojournalism course.

However, based on the respondents, there is a need to increase the effectiveness in using networking site group for collaborative learning, updates and announcements and download sample images relevant to the lesson which both obtained the lowest weighted mean of 3.16.

The composite mean of 3.38, however, indicates that the strategies used in the class were effective in attaining the lessons' objectives. They agreed that all these mediums were useful in realizing the expected outcome and skills of the students.

Using PowerPoint presentations and digital cameras become the primary and frequently used technology-driven strategies in the class which directed and assisted the students in learning the concepts, theories and technical aspects of the course. These strategies are supported and enhanced by using AVP and Video/Tutorial demonstration for interactive learning specifically Youtube Videos from Adorama Photography TV. Adorama Photography TV is an online source of exclusive photography tutorials and workshops for all levels (adorama.com).

The respondents' assessments concurred with the Excerpt from *Technology in the Secondary Science Classroom* published by NSTA Press (2008) which reported that, students who viewed a number of the subject specific video clips scored higher on content –knowledge tests than did students receiving instruction “in the usual manner” without the video clips.

Table 3 presents the problems encountered by the students in relation to execution of the technology-driven teaching strategies in terms of institutional/departmental factors.

**Table 3. Problems Encountered in Photojournalism Class in terms of Institutional / Departmental Factors**

<i>Institutional/Departmental Factors</i>	<i>Weighted Mean</i>	<i>Verbal Interpretation</i>	<i>Rank</i>
1. Malfunctioning LCD Projector	2.56	Serious	4
2. Poor lighting condition	2.48	Slightly Serious	5
3. Absence of WiFi	2.96	Serious	1
4. Absence of computers/handheld computers	2.92	Serious	2
5. Absence of sound system inside the classroom	2.80	Serious	3
<i>Composite Mean</i>	<i>2.74</i>	<i>Serious</i>	

Legend: 3.50 – 4.00 = Very Serious; 2.50 – 3.49 = Serious; 1.50 – 2.49 = Slightly Serious; 1.00 – 1.49 = Not a Problem

Among the items, absence of WiFi spot, absence of computers, sound system, and malfunctioning LCD projector become serious problems observed by the respondents with weighted mean 2.96, 2.92, 2.80 and 2.56, respectively. Meanwhile, lighting inside the classroom becomes a slight problem with a weighted mean of 2.48.

In general, a composite mean of 2.64 confirms that problems under the institutional/departmental factors are serious which need to be addressed. These problems affect the execution of the technology-driven teaching strategies resulting to difficulty in getting to interactive learning materials, poor visibility of PowerPoint presentation, and poor audio and video quality in case of AVP presentation/video tutorials.

Technology and Education Reform Archive reported that quite a bit of technical support is needed in schools where all or most teachers are using technology, particularly if new or experimental systems are involved or extensive use is made of computer networks.

At least five kinds of technical assistance are necessary: helping in planning for technology uses and acquisitions; providing training on how to use new hardware and software; providing demonstrations and advice on how to incorporate technology into instruction; providing on-demand help when software problems or hardware failures arise; and performing low-level maintenance on the system.

Table 4 presents the problems encountered by the students in relation to execution of the technology-driven teaching strategies in terms of self/student factors.

Results in table 4 revealed that the students considered their photo and video editing software skills as their primary problem among the items as indicated by 2.48 weighted mean. They also expressed that owning a digital camera, handheld computers and regular access to personal email addresses become a slight problem in dealing with the requirements of the course. Meanwhile, they found little issues on having personal email address and networking

site account which serve them the channel to communicate and access the requirements of the course.

Meanwhile, a composite mean of 2.29 affirms that the students have slight serious problems under self/student factors. These factors somewhat affect the effectiveness of the technology-driven teaching strategies that range from how they manage their email address and other networking sites in order to access and respond to the various communications posted or sent by the class facilitator up to their skills in photo and video editing.

**Table 4. Problems Encountered in Photojournalism Class in terms of Self/Student Factors**

<i>Self/Student Factors</i>	<i>Weighted Mean</i>	<i>Verbal Interpretation</i>	<i>Rank</i>
1. I do not have personal email address	2.24	Slightly Serious	5
2. I do not regularly open my personal email addresses	2.40	Slightly Serious	3.5
3. I do not have account in networking sites	2.00	Slightly Serious	7
4. I do not regularly open my networking sites account	2.08	Slightly Serious	6
5. I do not own personal laptop, ipad and other handheld computers	2.40	Slightly Serious	3.5
6. I do not own a digital camera	2.44	Slightly Serious	2
7. I do not have the skills in photo and video editing software	2.48	Slightly Serious	1
<i>Composite Mean</i>	<i>2.29</i>	<i>Slightly Serious</i>	

Legend: 3.50 – 4.00 = Very Serious; 2.50 – 3.49 = Serious; 1.50 – 2.49 = Slightly Serious; 1.00 – 1.49 = Not a Problem

Ramanau, et. al. (2010) reported that patterns in student uses of digital technologies do vary across groups of respondents both at the level of expectations and actual reported frequencies of use, although the extent of this variation depends on the particular demographic group. Students thus came to university with certain views on their prospective experiences of digital and networked experiences and these views seemed to contribute to their uses of digital technologies in the future.

Table 5 presents the problems encountered by the students in relation to execution of the technology-driven teaching strategies in terms of faculty/facilitator.

The respondents expressed that the lecturer/facilitator is inconsistent with the integration of technology-driven strategies with weighted mean of 2.36. They also found that the facilitator/lecturer must ensure that communication thru emails/networking sites are successfully sent and videos, images and portfolio must be relevant with the subject matter, which both obtained 2.24 weighted mean. Meanwhile, among the items, respondents believed that the facilitator/lecturer have the least issues when it comes to knowledge in operating technological equipments and the delivery of PowerPoint presentation as teaching strategy.

The composite mean of 2.23 indicates that the respondents consider the problems under the faculty/facilitator slightly serious problems. Inconsistency in integrating technology-driven teaching strategies became the major issue which was confronted by underlying concerns like the problems cited under the institutional/departmental and self/student factors.

**Table 5. Problems Encountered in Photojournalism Class in terms of Faculty/Facilitator-Centered**

<i>Faculty/Facilitator-Centered</i>	<i>Weighted Mean</i>	<i>Verbal Interpretation</i>	<i>Rank</i>
1. The lecturer/facilitator fails to produce artistic and creative presentations	2.20	Slightly Serious	4.5
2. The lecturer/facilitator fails to produce informative presentations	2.16	Slightly Serious	6
3. The lecturer/facilitator fails to send us communication thru emails/networking sites account	2.24	Slightly Serious	2.5
4. The lecturer/facilitator fails to deliver relevant videos, images, portfolio against the subject matter	2.24	Slightly Serious	2.5
5. The lecturer/facilitator has lack of knowledge in operating technological equipments	2.20	Slightly Serious	4.5
6. The lecturer/facilitator fails to consistently integrate the technology-driven strategies in the learning process	2.36	Slightly Serious	1
<i>Composite Mean</i>	<i>2.23</i>	<i>Slightly Serious</i>	

Legend: 3.50 – 4.00 = Very Serious; 2.50 – 3.49 = Serious; 1.50 – 2.49 = Slightly Serious; 1.00 – 1.49 = Not a Problem

Table 6 presents the relationship between frequency of use of technology-driven strategies, degree of effectiveness of the technology-driven strategies and problems encountered in Photojournalism Class

**Table 6. Relationship between Frequency of Use of Technology-Driven Strategies, Degree of Effectiveness of the Technology-Driven Strategies and Problems Encountered in Photojournalism Class**

<i>Variables</i>	<i>r-value</i>	<i>p-value</i>	<i>Decision</i>	<i>Interpretation</i>
Degree of Effectiveness of the Technology-Driven Strategies	0.527	0.007	Rejected	Significant
Problems Encountered in Photojournalism Class in terms of:				
Institutional/Departmental Factors	-0.082	0.695	Accepted	Not Significant
Self/Student Factors	0.094	0.655	Accepted	Not Significant
Faculty/Facilitator-Centered	-0.320	0.118	Accepted	Not Significant

Legend: Significant at p-value < 0.05

Based from the result, only degree of effectiveness of the technology driven-strategies shows significant relationship on the frequency of use since the obtained r-value of 0.527 indicates moderate positive correlation and the resulted p-value of 0.007 is less than 0.05 level of significance, thus the hypothesis of no significant relationship between the frequency of use of technology driven-strategies and the degree of effectiveness is rejected. This means that a relationship exists and implies that the degree of effectiveness of technology driven-strategies depends on the frequency of use.

On the other hand, the problems encountered do not show significant relationship on the frequency of use of technology driven-strategies. This implies that the existing problems



encountered by the students during the entire course are not affected regardless of frequent use of the technology-driven teaching strategies.

Table 7 reveals the relationship between the degree of effectiveness of the technology-driven strategies and problems encountered in Photojournalism Class.

As seen from the table, all computed r-values indicate almost negligible correlation and the resulted p-values were all greater than 0.05 level of significance. Therefore, the null hypothesis of no significant relationship between the degree of effectiveness of the technology driven-strategies and the problems encountered is accepted. This means that no relationship exists between the two. It implies that the degree of effectiveness is not affected by the problems they encountered and vice versa.

**Table 7. Relationship between Degree of Effectiveness of the Technology-Driven Strategies and Problems Encountered in Photojournalism Class**

<i>Problems Encountered in Photojournalism Class in terms of</i>	<i>r-value</i>	<i>p-value</i>	<i>Decision</i>	<i>Interpretation</i>
Institutional/Departmental Factors	-0.134	0.525	Accepted	Not Significant
Self/Student Factors	-0.041	0.845	Accepted	Not Significant
Faculty/Facilitator-Centered	-0.161	0.443	Accepted	Not Significant

Legend: Significant at p-value < 0.05

The set of problems encountered relative to the execution of the technology-driven teaching strategies does not affect the effectiveness of the latter because according to the students, which was also confirmed by the present study, the effectiveness of these strategies rely on the frequency of use of these strategies. Regardless of problems affecting the execution of these strategies, learning is still apparent.

## CONCLUSIONS

Based from the generated results and findings, the following conclusions were drawn:

1. The technology-driven teaching strategies were often used; specifically, the PowerPoint presentation being the frequently used and video tutorial clips as the least used.
2. PowerPoint presentations and digital cameras are highly effective in the delivery of instruction, along with Audio Video Presentation (AVP) and Video Tutorial Clips as effective strategies. However, using networking site group for collaborative learning, updates and announcements and download sample images relevant to the lesson are perceived as the least effective among the strategies.
3. There are serious problems encountered by the students relative to execution of the technology-driven teaching strategies under institutional/departmental factors while only slight problems under both self/student and lecturer/facilitator factors.
4. The degree of effectiveness depends on how frequent the technology-driven teaching strategies, while effectiveness is not affected by the problems they encountered during the entire course.

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