

Picture This: Using Experiential Learning to Teach Photography

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Introduction/Need for Study

Photography is an important competency of agricultural communications graduates (Terry & Bailey-Evans, 1995; Morgan, 2012) and is a core skill taught in undergraduate agricultural communications curriculum. The Texas Tech University agricultural communications program offers a digital photography course in its curriculum: once during the traditional spring semester and once during the 12-day “intersession” between the spring and summer semesters. During the traditional semester, photography principles are taught inside the classroom, and students have to experiment with their cameras and complete assignments on their own time. The intersession’s experiential course structure allows for lengthier class periods and flexibility in how and where the course is taught. Intersession class time is spent traveling to farms, ranches, and outdoor locations where students can photograph agricultural subjects. While much agricultural communications research has focused on photography as a needed skill, there are relatively few studies that examine methods of teaching photography in the college classroom. The purpose of this study was to compare student performance in an agricultural communications digital photography course taught with an experiential learning approach to a traditional classroom approach. This study can assist instructors in developing “meaningful, engaged learning in all environments” (Roberts, T. G., Harder, A., & Brashears, M. T., 2016, p. 37).

Theoretical Framework

“The study of photography can clearly be understood as stages of an experiential learning process” (Horner, 2016, p. 81). Kolb’s Theory of Experiential Learning (1984) served as the theoretical framework for this study. Horner (2016) provided examples for how a photography class can utilize Kolb’s (1984) four-stage experiential learning cycle: concrete experience, reflective observation, abstract conceptualization, and active experimentation. This study focused specifically on Horner’s (2016) example within concrete experience that “photographing in unfamiliar surroundings offers a high degree of potential for experiential learning” (p. 82).

Methodology

This quasi-experimental study, exempt by the Human Subjects Review Board, compared student performance in an agricultural communications digital photography course offered in two different instruction formats in the spring and intersession 2016 semesters. Both course offerings utilized the same instructor, concepts and assignment structure. Seven photography assignments (light, depth of field, action, color, black and white, editorial, and portrait) used the same grading rubric, which scored five criteria: clarity, composition, creativity, artistic expression, and assignment requirements. Data was collected from consenting students’ graded assignment rubrics in the traditional semester (n=27) and experiential intersession (n=13). Independent-samples t-tests compared instruction format by students’ cumulative mean assignment scores, individual assignment mean scores, and rubric criteria mean scores. The one-sample Kolmogorov-Smirnov test revealed assignment scores were normally distributed for both groups. Homogeneity of variance was assessed by Levene's Test for Equality of Variances. Limitations of the study include individual differences in participants and self-selection bias.

Results

This study found students in the experiential intersession course had statistically significantly higher mean cumulative assignment scores ($M = 183.00$, $SD = 7.33$) compared to students in the traditional course ($M = 170.70$, $SD = 12.03$), $t(38) = -3.38$, $p < 0.01$. Further,

Cohen’s effect size ($d = 1.17$) suggested a very large practical significance. Of the seven assignments, the Depth of Field assignment was the only individual assignment found to have significantly different mean scores from students ($t(38) = -3.38, p < 0.01$). The effect size for this analysis ($d = .79$) was found to show a large effect. These results indicate students in the experiential intersession ($M = 23.54, SD = .88$) earned significantly higher scores than students in the traditional format course ($M = 20.33, SD = 4.99$). Additionally, as shown in Table 1, students in the traditional format course scored significantly lower than students in the experiential intersession on specific rubric criteria in four of the seven assignments. Black and White-Composition was the only rubric criterion with a higher mean score during the traditional format than for the experiential intersession.

Table 1. Significant Comparisons of Students’ Rubric Criteria Scores by Instruction Method

| Variable | Traditional (n=27) | | Experiential (n=13) | | <i>t</i> | <i>df</i> | <i>p</i> | Cohen’s <i>d</i> |
|-----------------|-----------------------|-----------|------------------------|-----------|----------|-----------|----------|------------------|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | | | |
| Light | | | | | | | | |
| Composition | 4.00 | 1.04 | 4.77 | .44 | -2.55 | 38 | .02 | .88 |
| Clarity | 3.85 | 1.03 | 4.54 | .52 | -2.27 | 38 | .03 | .79 |
| Creativity | 4.07 | 1.17 | 4.77 | .44 | -2.01 | 38 | .05 | .72 |
| Depth of Field | | | | | | | | |
| Creativity | 4.04 | .85 | 4.77 | .44 | -2.90 | 38 | .01 | 1.00 |
| Artistic | 3.93 | .73 | 4.85 | .38 | -4.26 | 38 | <.01 | 1.47 |
| Requirements | 4.07 | .87 | 4.77 | .44 | -2.70 | 38 | .01 | .94 |
| Action | | | | | | | | |
| Requirements | 4.07 | 1.11 | 4.77 | .44 | -2.17 | 38 | .04 | .76 |
| Black and White | | | | | | | | |
| Composition | 4.37 | .57 | 3.77 | .60 | 3.09 | 38 | <.01 | 1.06 |

Significant at the $p < .05$ level

Conclusions

The results of this study suggest instruction method does have an effect on student performance in agricultural communications digital photography courses. Specifically, the results suggest when participating in a course utilizing an experiential intersession format, students’ mean assignment scores increase. These findings support Horner’s (2016) suggestion that an experiential approach to photography instruction is beneficial to students’ understanding of basic photography skills. While individual assignment performance was less affected by instruction format, the results show students’ understanding of specific photography skills (rubric criteria) was higher when in the experiential intersession format.

Implications/Recommendations

Based on the results of this study, experiential learning activities should be used to improve student performance and enhance their understanding of photography principles in agricultural communications photography courses. Experiential activities have been implemented in the traditional semester format of the course. Experiential teaching strategies will continue to be evaluated in both formats to examine if there is an effect on student performance.

References

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