

Introduction to the color wheel and color harmony

Summative Evaluation Results

IDT525

Lee Engeswick

Introduction

The course covers a basic introduction to the color wheel and color harmonies and has been developed as an enrichment activity for working adults between the ages of 20 and 60 with some level of post general.

Goal of the instructional materials

At the end of the learning system, the learner will be able to demonstrate basic knowledge of the structure of the color wheel as well as the first four principles of color harmony.

- Learners will be able to demonstrate the concept of Primary Colors
- Learners will be able to demonstrate the concept Secondary Colors
- Learners will be able to demonstrate the concept Tertiary Colors
- Learners will be able to demonstrate the principle of Monochromatic Color Harmonies
- Learners will be able to demonstrate the principle of Complementary Color Harmonies
- Learners will be able to demonstrate the principle of Split- Complementary Color Harmonies
- Learners will be able to demonstrate the principle of Analogous Color Harmonies

Goals and objectives of the summative evaluation

The goal of the summative evaluation is to identify the effectiveness of the learning system in instructing learners of core concepts of the color wheel and color harmony. The specific goals of the summative evaluation is to assess the learners ability to demonstrate knowledge of the goals and objectives of the instructional materials as identified above.

The aesthetics, motivation and navigation of the learning system taken in to account during the formative evaluation and with suggestions/corrections implemented, no further evaluation was required.

Methods and data collection protocol

Data collection was carried out as a post-test. At the end of the instruction the learners took a self paced, multiple choice exam delivered in the form of a word doc which was then emailed back to the instructor/designer (me). A roster of the learners was created to track who turned in the exams.

Results of data analysis

Number of learners.....24
Mean Score (total).....4.25 out of 6 possible.
Item difficulty index.....0.70 - 1.00
Item discrimination index0.00 - 0.60

Conclusion

Overall, the leaning system was a effective. There was a high percentage of learners who received 100% (10 out of 24), there where 4 learners who did not turn in their final exams who received 0%. The item difficulty index as well as the item discrimination index both fell within the range required indicating that the learners could successfully demonstrate knowledge of the material.

During the formative evaluation, the final exam was delivered via Survey Monkey. It was concluded that collection and collation of the learners individual scores was not effective, the instructor/designer (me) was not able identify and track who selected which answer. In response an PDF form was created, in which the learner was to select correct answers in a check box, at the end of the exam, the learner was supposed to be able click on a “Submit Exam” button which would email the PDF directly to instructor/designer (me). This to met with no success, the Submit Exam” button required a email program (not web based email) to send the PDF. Since the learners where using their own equipment to run the learning system and take the final exam, difficulties

arose with saving/sending back the exam. All of the learners had Microsoft Word so the learners were sent a Word version of the exam and were instructed to email the exam back to the instructor/designer (me). It was identified during the final exam that the example for question 5 was the same as the example for question 4, after review question 5 was thrown out of the exam.

Recommended revisions or enhancements for improvement

- Some students indicated confusion of the examples in the exam although enough answered correctly not to warrant revision during the exam. Clearer examples should be used/created for the final exam.
- The example for question 5 should be corrected.
- A more effective delivery system of the learning system and post test should be implemented. The instructor/designer (me) has access to D2L and should use Blackboard for delivering the learning system and final exam. This will make the learning system easier to manage and update.

Appendix

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
|----|----------|----------|----------|----------|----------|----------|----------|---|------|
| 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 6 | 100% |
| 2 | 1 | 1 | 1 | 0 | | 1 | 0 | 4 | 67% |
| 3 | 1 | 1 | 1 | 0 | | 1 | 1 | 5 | 83% |
| 4 | 1 | 1 | 0 | 0 | | 1 | 1 | 4 | 67% |
| 5 | 1 | 1 | 1 | 1 | | 1 | 1 | 6 | 100% |
| 6 | 1 | 1 | 1 | 1 | | 1 | 1 | 6 | 100% |
| 7 | 1 | 1 | 1 | 1 | | 1 | 1 | 6 | 100% |
| 8 | 1 | 1 | 1 | 1 | | 1 | 1 | 6 | 100% |
| 9 | | | | | | | | 0 | 0% |
| 10 | 1 | 1 | 1 | 0 | | 1 | 1 | 5 | 83% |
| 11 | 1 | 0 | 1 | 1 | | 1 | 0 | 4 | 67% |
| 12 | 1 | 1 | 1 | 1 | | 1 | 1 | 6 | 100% |
| 13 | | | | | | | | 0 | 0% |
| 14 | 1 | 1 | 0 | 1 | | 1 | 1 | 5 | 83% |
| 15 | 1 | 1 | 1 | 0 | | 1 | 1 | 5 | 83% |
| 16 | 1 | 0 | 0 | 0 | | 1 | 1 | 3 | 50% |
| 17 | 1 | 1 | 0 | 1 | | 1 | 0 | 4 | 67% |
| 18 | 1 | 1 | 1 | 1 | | 1 | 1 | 6 | 100% |
| 19 | | | | | | | | 0 | 0% |
| 20 | 1 | 1 | 1 | 1 | | 1 | 1 | 6 | 100% |
| 21 | | | | | | | | 0 | 0% |
| 22 | 1 | 1 | 1 | 1 | | 1 | 1 | 6 | 100% |
| 23 | 1 | 0 | 0 | 1 | | 1 | 0 | 3 | 50% |
| 24 | 1 | 1 | 1 | 1 | | 1 | 1 | 6 | 100% |

Appendix (cont.)

High

| | | | | | | | |
|----|---|---|---|---|--|---|---|
| 1 | 1 | 1 | 1 | 1 | | 1 | 1 |
| 5 | 1 | 1 | 1 | 1 | | 1 | 1 |
| 6 | 1 | 1 | 1 | 1 | | 1 | 1 |
| 7 | 1 | 1 | 1 | 1 | | 1 | 1 |
| 8 | 1 | 1 | 1 | 1 | | 1 | 1 |
| 12 | 1 | 1 | 1 | 1 | | 1 | 1 |
| 18 | 1 | 1 | 1 | 1 | | 1 | 1 |
| 20 | 1 | 1 | 1 | 1 | | 1 | 1 |
| 22 | 1 | 1 | 1 | 1 | | 1 | 1 |
| 24 | 1 | 1 | 1 | 1 | | 1 | 1 |

| | |
|---|------|
| 6 | 100% |
| 6 | 100% |
| 6 | 100% |
| 6 | 100% |
| 6 | 100% |
| 6 | 100% |
| 6 | 100% |
| 6 | 100% |
| 6 | 100% |
| 6 | 100% |

Correct

| | | | | | | |
|----|----|----|----|---|----|----|
| 10 | 10 | 10 | 10 | 0 | 10 | 10 |
|----|----|----|----|---|----|----|

Low

| | | | | | | | |
|----|---|---|---|---|--|---|---|
| 2 | 1 | 1 | 1 | 0 | | 1 | 0 |
| 4 | 1 | 1 | 0 | 0 | | 1 | 1 |
| 3 | 1 | 1 | 1 | 0 | | 1 | 1 |
| 11 | 1 | 0 | 1 | 1 | | 1 | 0 |
| 10 | 1 | 1 | 1 | 0 | | 1 | 1 |
| 16 | 1 | 0 | 0 | 0 | | 1 | 1 |
| 17 | 1 | 1 | 0 | 1 | | 1 | 0 |
| 14 | 1 | 1 | 0 | 1 | | 1 | 1 |
| 15 | 1 | 1 | 1 | 0 | | 1 | 1 |
| 23 | 1 | 0 | 0 | 1 | | 1 | 0 |

| | |
|---|-----|
| 4 | 67% |
| 4 | 67% |
| 5 | 83% |
| 4 | 67% |
| 5 | 83% |
| 3 | 50% |
| 4 | 67% |
| 5 | 83% |
| 5 | 83% |
| 3 | 50% |

p=

| | | | | | | |
|------|------|------|------|------|------|------|
| 10 | 7 | 5 | 4 | 0 | 10 | 6 |
| 1.00 | 0.85 | 0.75 | 0.70 | 0.00 | 1.00 | 0.80 |

D=

| | | | | | | |
|------|------|------|------|------|------|------|
| 0.00 | 0.30 | 0.50 | 0.60 | 0.00 | 0.00 | 0.40 |
|------|------|------|------|------|------|------|

Mean Score 4.25