

Use of Reading Logs to Promote Learning to Learn in a Freshman Course

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Abstract

Student reading performance is foundational for follow-on coursework in a broad spectrum of disciplines. Literature on learning science informs us on pedagogical choices in freshman courses that promote this goal. A rubric to measure the quality of student reading log entries was developed based on Bloom's Taxonomy and elements of the AACU VALUE critical thinking rubric. This tool was used in a freshman Fashion Analysis course. Three raters were engaged to discern/validate levels of reading performance. Reading Log performance was then correlated with performance in course assignments, including a substantive project that involves content from the reading. Initial results show that instructor feedback to students on their performance has improved Reading Log performance by one-half to a full letter grade. Through Reading Log activities, such as those reported in this article, students can gain self-awareness and self-confidence that can be productively translated into many other teaching/learning situations.

Introduction

A central problem with academic success is the lack of ability to read for basic comprehension despite its critical importance for successful learning in courses where the reading is assigned. This is compounded when that comprehension impacts the ability to succeed in follow-on coursework requiring understanding of prerequisite material contained in readings. In many cases, students often lack not only the reading skills for college but also the confidence to perform, ultimately leading to poor performance and dropping out. The purpose of this study is to explore how to address the issue via the use of reading logs. Research questions which underlie this work include the following:

- Does student critical thinking ability as related to creating meaning from reading material improve with repeated use of reading logs?
- Does the use of reading logs increase student success in a freshman course?

In this paper, we describe a study to investigate the relationship between reading log assignments and overall student performance in a freshman Fashion Analysis course. This is an entry level course for students in a Fashion Marketing program. The course is offered each fall, where enrollment is a combination of purely online (38%), mix of on online and face-to-face (17%), and purely face-to-face students (45%). A rubric to measure

the quality of student reading log entries was developed based on Bloom's Taxonomy (Bloom, 1956; Anderson & Krathwohl, 2001) and elements of the AACU VALUE critical thinking rubric (AACU, 2017). This rubric is shown in Appendix A. This tool was used by three raters, with the results used to study the impact of the student reading logs on performance.

The purpose of the reading log assignments was to elevate the level of reading from simply browsing for the purpose of checking off quiz questions or repeating text in answering questions in class or on tests, to a higher level of reading and language skills development where critical thinking is practiced by employing the Reading Log Methodology (2013). These critical thinking skills are required to complete assignments and projects in the course. In this way, the reading log was a key course tool used to improve comprehension and build overall critical thinking capacity. Specifically, a reading log is a tool to facilitate learning during reading and is structured by asking students to supply written responses in twelve (12) key areas:

1. Establish a purpose for reading: Why am I reading?
2. Setting learning objectives: What do I want to learn?
3. Setting performance criteria: How do I know I am successful?
4. Estimating time involved: Can I manage time based on difficulty?

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5. Vocabulary terms: What terms do I need to look up?
6. Creating an outline: identifying the structure of the reading
7. Quick read: learning to skim and identify questions
8. Comprehensive read: using the questions from above, annotating and taking notes, formulating new questions and supporting your idea
9. Inquiry questions: elevating inquiry to higher levels of learning so that more significant issues can be addressed by applying this knowledge
10. Synthesis: combining the parts to a whole piece that addresses the learning objectives
11. Integration: integrating the new ideas to other parts of your life
12. Assessment: Did I meet my learning objectives, how long did it take compared to my estimated time, how can I improve my performance next time?

Appendix B contains example directions that were provided to students to support their learning how to complete the reading log. Appendix C contains examples of the first and fifth completed reading logs from one student.

Literature Review

In their analysis of student perceptions of the purpose of academic reading, Lasley, Hass and Pinto (2016) report that students view reading of textbooks as much more difficult than other forms of reading such as novels. They further state that many students do not view reading all of the assigned materials as necessary for understanding and participation in a course. They recommend that specific strategies such as the Reading Methodology (Apple, Morgan, & Hintze, 2015) be adopted to help guide students toward a critical thinking approach to their reading that can help them learn more effectively and more deeply.

For this paper, we describe a context where instructor expectations for student reading are clearly laid out in a Fashion Analysis course. The reading log assignments form a substantive portion of student work and contribute nontrivially towards the students' grades. This extrinsic motivation is important in order to get students to do the readings (Ruscio, 2001; Hoeft, 2012). Further, this approach directly works to overcome findings displaying low student motivation regarding expectations for reading (Lasley et al., 2016); initially, student motivation may typically revolve around choosing to complete readings only as necessary to achieve their targeted learning objectives.

However, when students do read, Lasley et al. (2016) find that the use of the Process Education Reading Methodology and Reading Log as described by Apple, Morgan, and Hintze (2015) aligns well with helping students to read for the purpose of learning successfully. Indeed, the literature supports strong relationships between reading and learning. For example, literature on the science of learning relates to the reading log structure. Brown, Roedinger, and McDaniel (2014) explain how the tasks of generation and reflection are both activities that improve learning. Additionally, retrieval and elaboration may be part of reflection, and these two processes also improve learning (p. 86-89). Their study on writing to learn showed reflective writing after a lecture improved test scores over verbatim notes (p. 89). All of these learning tasks are contained in the Reading Log. In chapter 2 of *How Learning Works: Seven Research-Based Principles for Smart Teaching*, Ambrose et al. describe suggested strategies for learning that include using multiple structures to organize knowledge. This can be accomplished in the "outline" and "key concepts learned" components of a reading log. They also suggest concept maps which could be used in place of the outline in a reading log. Further, in chapter 7 they suggest including performance criteria with assignments, which is a built-in part of reading logs. In addition, they suggest students annotate and review their own work. The critical thinking questions used at the end of a reading log assignment can accomplish this. Finally, Zull (2002, p. 164) writes that "the art of directing and supporting reflection is part of the art of changing a brain. It is the art of leading a student towards comprehension". This quote is part of a section in the book about reflection, which again supports the transformative concept of using a reading log to guide student reflection about what they are learning.

In terms of learning from the process of reading itself, the National Research Council report on *How People Learn* (2000, p. 132-133) describes how actively extracting knowledge to make sense of texts during the reading process on a broad scale (for the general population and not academic elites) began only in 1914 in U.S. Army training for WWI. Taking this extracting knowledge further, into analysis and interpretation, was only broadly implemented within school systems beginning in the 1970's. In short, reading to learn is an area that is still developing. Additionally, in their chapter "Learning from Text" in the *Handbook of Reading Research* (2000), Kamil et al. describe how students are often asked to read material they have not chosen themselves, know little about, and may care little about. This limits their ability for strategic processing and performance, especially at the acclimated learner level rather than competent or

expert levels. Therefore, they need “clear scaffolding that aids them in building a meaningful base of content knowledge and the seeds of personal interest”. Finally, in the following chapter from the same handbook, Goldman and Rakestraw describe how outlining and summarizing a reading (both features of a reading log) help students practice recognizing and using structural cues to the organization of the text, which the authors indicated is important for comprehension. In general, they argue that greater awareness of genre structure improves learning. They conclude: “structure-guided meaning construction appears to be particularly important for learning situations in which readers have little or no prior content knowledge.” Again, the use of a reading log supports this process for reading to learn.

Methods

The course in which the reading log assignment was employed is structured in a sequential manner. Skills learned are used in a progressive format to elevate the level of learning. The course starts with the basics of fashion and design principles and elements. Students must complete reading logs to engage them in the materials and begin the process of learning to read for basic comprehension while also building towards upper level thinking. The reading logs are part of the graded assessments in the course, representing 7% of the total grade.

The goals for the reading log assignment are to have students learn the parts of a reading log and apply them to the criteria for different levels of critical thinking. A sample completed reading log for this content area was created to demonstrate how to reach the top performance level on the rubric. This tool has helped students build confidence in their performance. Further, the rubric is posted online to ensure constant availability. Students are directed to review the rubric before assignments are begun and to ask questions about how to complete the reading log or how the scores are assigned. The instructor also conducted complete face-to-face debriefings using a pair share methodology to further assist students in reflecting on their work and in determining ways to improve.

The rubric used for this study was modified from the prior year’s version into the form used for this study. The coauthors worked together to create the final rubric used. In particular, the form was modified to be more explicit and it now more directly connects to criteria for critical thinking by using Bloom’s Taxonomy (Bloom, 1956; Anderson & Krathwohl, 2001) and elements of the AACU VALUE critical thinking rubric (2009). The goals for the rubric were to outline for students the criteria for completion of the reading log and to define the levels of

critical thinking. In terms of applying the rubric itself, the goal was also to encourage higher level reading and to offer clear feedback to students in order improve their output. The role the rubric can play in helping to generate positive reinforcement and objective feedback with examples for improvement is key to the confidence building needed to foster the personal growth.

We also analyzed the data collected from the raters to determine the inter-rater reliability of the rubric. We collected scores from three different raters. This setting for multiple raters is similar to one where an instructional faculty member or team directs a number of individual sections taught by teaching assistants, or where a large course is taught by a number of teaching assistants who do much of the grading. The inter-rater reliability analysis was performed using the same inter-rater comparison procedure published by Norback, Utschig, and Bryan (2012). Our score range on the rubric is a five level scale; for our case, based on the literature, a high percent of agreement within ± 1 level on the rubric is at 90% or above, with acceptable agreement at above 70%. For exact matches, acceptable levels of agreement should be at 30-50%, while agreement should be above 50% for high reliability (Mott, 2003; Newell et al., 2002; Stellmack et al., 2009; Davis, 2011).

For each of the rubric criteria, we analyzed the data using two levels of pairwise matching. In pairwise matching, each combination of rater scores for a skill are compared to each other. In this case the rubric developers are treated no differently than the other raters. The frequency of matches was then calculated for two cases:

- CASE 1: Pairwise 1-point score consistency (in %) where raters matched within ± 1 point of each other on the five point scale for the rubric.
- CASE 2: Pairwise exact score consistency (in %) where raters scores matched exactly.

Approval was granted by the Institutional Review Board to share the de-identified data for this research. We rated a total of three reading-related tasks from six students who completed all three tasks. These tasks involved two separate reading logs, each approximately two pages in length, and one fashion analysis assignment approximately three pages in length. The two reading logs were the first assigned reading log, which occurred in week two of the semester, and the fifth, which occurred in week five of the semester. The follow-up assignment where students applied what they learned from the readings occurred after the last reading log was completed, in week six. The researchers stopped to share impressions of how to interpret the levels on the rubric before the ratings were

conducted, and to discuss the ratings and rubric scales again after ratings were completed.

Results and Discussion

The data below came from eight students, each of which completed both Log 1 and Log 5. While the authors recognize the limited amount of data presented here, we assert that the trends observed are sufficient to make initial observations while preparing to collect additional data in follow-up studies.

Table 1 presents a summary of the average scores attained by the eight student entries for Log 1 and Log 5. While each of the raters differed by up to a point in their scores, all showed essentially the same trends in rating the different reading logs. The course instructor was the most generous throughout, one researcher was consistently the harshest throughout, and the other research was consistently in the middle. All three raters felt that students supplied substantive analysis and synthesis of their reading on the second page of the reading log. The language of the rubric was such that nearly all students ended up scoring in the highest three levels in all of the rubric dimensions. In this manner, the rubric inspired students to persevere by communicating early success even for Log 1. High expectations about the amount of time that needed to be devoted to doing the reading and completing the reading log were also seen as essential in discouraging short cuts that would promote bad habits. As shown in Table 1, there was also discernible improvement in student performance as they progressed from Log 1 to Log 5. The top three improvements noted across the student population were (1) recording more thorough detail of the quick read, (2) students asking more inquiry questions and/or asking more complex questions, and (3) students providing an elevated level of detail in the synthesis and integration areas. See a sample from a student in Appendix C.

Table 1 Reading Log Ratings

	Rater		
	1	2	3
Reading Log 1			
Critical Thinking	6.00	5.50	5.00
Completion	3.00	3.00	2.75
Reading Log 5			
Critical Thinking	6.50	6.17	5.67
Completion	2.92	3.00	2.83

Table 2 shows that the students were able to transfer their knowledge gained from the reading log to a later assign-

ment within the course. The average total scores for the eight samples of students who completed all of the logs and the assignment are shown here for each rater. These scores are out of 25 possible points. The Fall 2016 results for these eight students are in the 23-24/25 point range. This compares to an average score for all students in the course of 13.24 in the Fall of 2015 (scored only by instructor), and an average of 21.28 for all students in the Fall of 2016 (again using scores only from the instructor).

Table 2 Follow-up Assignment Ratings

	Rater		
	1	2	3
ASSIGNMENT: Principles of Design			
2016 Samples Only	24.33	24.17	23.33
Instructor			
2016 Overall	21.28		
2015 Overall	13.24		

The student whose work is displayed in Appendix C was able to achieve a score of 25/25 on the follow-up assignment on the principles of design. That student also completed other assignments utilizing the knowledge from the readings at a top level. See the sample assignment in the appendix.

Table 3 is a summary of the Inter-rater reliability results. Note that rating “within 1” indicates one level on the rubric (see Appendix A) and not necessarily one point towards the assignment, as the levels on the rubric sometimes jump multiple points or half-points between levels. These levels of agreement are generally within the acceptable range identified from the literature.

Table 3 Inter-Rater Reliability

Rating of Task	N	% Exact	% Within 1
Log 1 Critical Thinking	18	6%	67%
Log 1 Completion	18	89%	89%
Log 5 Critical Thinking	18	39%	83%
Log 5 Completion	18	78%	89%

Table 4 gives the grade distribution data for those who completed all 5 reading log assignments versus those who did not. The results indicate that students are far more successful in the final grade earned if they completed all required reading log assignments. For those who completed all of the reading logs 41% earned an A, 8% earned a B, and 50% earned a C; whereas for those who did not com-

plete all 5 required assignments: 20% earned a BC and 80 % earned a C.

Table 5 shows a comparison of overall grades compared between 2015 when reading logs were not emphasized to 2016 where reading logs were fully implemented. It is clear from these results that students who may have previously made D's or F's would very likely pass the course with a C or better when the reading logs are implemented.

Conclusions

The overall return on investment using this technique to elevate learning from reading and critical thinking skills has more broad applications than just success within the course. Our college advisory boards have identified critical thinking as a key workforce skill. When the reading methodology is used effectively, critical thinking is a major outcome of completing the reading log (Apple, Morgan, & Hintze, 2015). Businesses today are looking for people that think critically and advance the work of the organization. Managers and leaders need to read the materials of their business and perform more than checking off a list, but instead really focus on a deeper level to execute the work effectively.

In the Madison College Core Workforce Skills Surveys in 2014 and 2017, critical thinking was rated as number two and number three in importance by employers, respectively (Nickel & Tambone, 2017). The results of these surveys also showed a gap of 26% between employer ratings of importance and satisfaction in the level students display when hired. This is an area that reading logs can help improve.

There are several key discoveries made during this study. First, since this course is taught online as well as face to face, it is important to have a recording of how to complete and understand a reading log and the rubric for all delivery formats. Oral explanations conducted face-to-face need to be supplemented with an online version of the same explanation. Further, supplying specific examples of exemplary work is critical to the process of learning and growth for students. Therefore, in addition to the rubric, a copy of a completed high quality reading log is valuable in supporting learning expectations. In the future, the course instructor plans to add a recording to review these elements to better serve the varied audience.

Secondly, the grading and feedback process for the reading logs is also a key to student success. The grading process for faculty also has a learning curve. When fully trained,

Table 4 2016 Course Grade Distributions for All Reading Logs Complete vs Some or All Incomplete

	Number of Students Completing All Logs	Percent of Total Completing All Logs	Number of Students Not Completing All Logs	Percent of Total Not Completing All Logs	Percent to Total in Class
Reading Overall Academic Grade Fall 2016					
A	5	41.67%	1	16.67%	33.33%
AB		0.00%		0.00%	0.00%
B	1	8.33%		0.00%	5.56%
BC		0.00%	1	16.67%	5.56%
C	6	50.00%	4	66.67%	55.56%
D		0.00%		0.00%	0.00%
F		0.00%		0.00%	0.00%
<i>Total Students</i>	<i>12</i>	<i>100.00%</i>	<i>6</i>	<i>100.00%</i>	<i>100.00%</i>

Table 5 Performance When Reading Logs Not Emphasized (2015) vs When Emphasized (2016)

Overall Grade Distribution				
	Fall 2015	% Total	Fall 2016	% Total
A	5	29.41%	6	33.33%
AB	1	5.88%	0	0.00%
B	1	5.88%	1	5.56%
BC	1	5.88%	1	5.56%
C	4	23.53%	10	55.56%
D	2	11.76%	0	0.00%
F	3	17.65%	0	0.00%
Total	17	100.00%	18	100.00%

raters should be able to grade each reading log in 6-8 minutes. A less developed reading log will likely take more time to give specific and detailed feedback to improve the learner's performance. Over time, as performance improves for both the student and the instructor, less time is required to produce a better quality product. Indeed, time spent reading was a great indicator of student preparedness in reading. This allowed the instructor an opportunity to engage students with additional support systems when appropriate. Also, students noted in oral feedback that time spent preparing the reading log is often as long as the time spent reading.

Third, in future course cycles, the instructor will add a student survey to investigate the student perspective of effectiveness of the reading logs. Themes to investigate would include asking students to list the top benefits of using reading logs in the course, suggested self-improvements

they have for themselves if they were to complete another reading log assignment, and a reflection on how reading logs could help them in future courses or their work. The survey will collect qualitative and quantitative input from students. Additionally, the course instructor plans to have a first reading log that is not graded so that students can practice self and peer assessment by using the rubric to rate their own and then another student's work. For use in courses which come later in the curriculum, following the course in this study, the rubric is being adapted to facilitate higher levels of discussion about the readings assigned in the textbook.

Finally, for future work, data will be collected to review student persistence to future semesters. Multiple cohorts will be studied to add more long term data to the persistence and graduation data.

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Appendix A - Reading Log Rubric

Name Professional and Personal Development Rubric

Description

Rubric Detail

Levels of Achievement

Criteria	Did not do	Knowledge	Comprehension	Application	Analysis	Synthesis
Level of Critical Thinking	0 Points Did not do	2 Points Copies information from the book only	4 Points Retells the information in your own words	5 Points Retells the information in your own words and provides an example	6 Points Retells the information in your own words and classifies, categorizes and or differentiates parts of the whole	7 Points Takes the information and documents ideas, examples or other ways to use this information that are new to you
Completeness of work	0 Points Did not do	1 Point You have completed all but 4 or more parts	1.5 Points You have completed all but 3 or more parts	2 Points You have completed all but 2 parts	2.5 Points You have completed all but 1 part	3 Points You have completed all parts

Appendix B - Directions for Completing the Reading Log

<p>Book/Title, Pages Enter the book, chapter name, chapter number pages.</p>	<h1 style="margin: 0;">Reading Log</h1> <p>Name <u>Enter your first and last name</u> Date <u>What dates did you complete this</u></p>				
<p>1 My purpose is: <u>State here the reason you are learning this information</u></p>					
<p>2 My learning objectives are: Here is where you can use the objectives from the text book and then think beyond what is written to include examples to personalize them.</p>	<p>3 My performance criteria are: Here is where you will list how will you know you know this information? Ideas here are might be share your interpretation of the material in a discussion in the class in detail, be able to speak more effectively with industry people take a test or complete an assignment successfully</p>				
<p>4 Time I expect to spend reading: <u>Critical here to enter your expectations of time needed to read</u> Use each key word in a new context or phrase.</p>					
<p>5 Key Vocabulary</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-bottom: 1px solid black; padding: 2px;">Enter key words you are unfamiliar with here</td> <td style="width: 50%; border-bottom: 1px solid black; padding: 2px;">Look up the meaning of the word and state here how you would tell someone what it means using the rubric levels.</td> </tr> <tr> <td style="border-bottom: 1px solid black; height: 20px;"></td> <td style="border-bottom: 1px solid black; height: 20px;"></td> </tr> </table>		Enter key words you are unfamiliar with here	Look up the meaning of the word and state here how you would tell someone what it means using the rubric levels.		
Enter key words you are unfamiliar with here	Look up the meaning of the word and state here how you would tell someone what it means using the rubric levels.				
<p>6 Outline of reading (structure): There are several ways to outline you might do main and subheadings in a more traditional way. Copy this link for different methods http://www.sas.calpoly.edu/asc/ssl/notetakingsystems.html#cornell You might draw your outline out in a concept map method. Copy this link to see examples https://www.google.com/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=concept+map</p>	<p>7 Quick read (information about the reading and questions I have as I begin to read): Here is where you will jot down things as you are reading them to be able to go back to further investigate your thoughts as you have them along the way. This is important because it is so easy to forget what you were thinking at the time. It is important to learn to honor what you are thinking at the time before distractions occur.</p>				
<p>Student Success Toolbox Copyright © 2013 Pacific Crest</p>					

continued on other side

8

Comprehensive Read

Actual Time I spent reading: Put actual time here and compare the

9

Inquiry Questions Questions, ideas, opinions, discoveries:

- What does not make sense to you?
- Are there parts that you would like an example of?
- What are your thoughts about the chapter content?
- What all of a sudden made more sense to you in your learning of this content?

expected and actual
Do you need to change the amount of time to read.?

10

Synthesis Pull it together:

Here is where you will think/reflect about the objectives and the purpose of the reading and then enter a few statements here as if you were to share what you learned in this chapter with others.

Below are the guidelines to help you see how to earn the points and elevate your critical thinking ability.

- The knowledge level is copying the information from the book.
- The comprehension level retells the information in your own words.
- The application level retells the information in your own words and provides an example.
- The analysis level retells the information in your own words and classifies, categorizes and or differentiates parts of the whole.
- The synthesis level takes the information and documents ideas, examples or other ways to use this information that are new to you

11

Integrate The relationship between the new information and my previous knowledge and experience is:

Now that you have new information or perhaps are seeing information again how does this change what you knew before and how you can use the information in your career, in class work or other aspects of your personal life?

12

Assessment The following affected (positively or negatively) the quality of my reading performance and how I can improve:

This is a wonderful way to see how your environment affects you.
Examples might be where you are, who is around, are mobile devices or web surfing a distraction?
What worked really well for you and how will you continue this to support your learning environment?
For things that were distracting how can you change that to help you improve your learning environment?

**INSTRUCTOR
FEEDBACK**

Strengths:
Areas for Improvement:
Insights:

The instructor will fill this part out for you.

Student Success Toolbox

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Appendix C - Student Work Samples

Appendix C1 - 1st TRANSCRIPTION --- Title: Design Basics, Chapt 1

The following is a text transcription of the PDF image which follows, illustrating an actual sample of student work.

Purpose: Reading for the 2nd week of class

- Table 1.1 – Aspects of Design (very interesting)

Learning Objectives:

- Learning what design actually is
- Learn some terminology
- Evaluating the success of a design

Performance Criteria:

- Become familiar with any new terminology
- Be able to explain what design is.
- List steps in the design process

Expected Time: 20 minutes

Key Vocabulary:

Applied Design – design that is both aesthetic & functional

Design Elements – the building blocks (line, space, form, light, color, texture)

Design Principles – manipulation of design elements

Radiation – use of design lines that spread out in all directions

Functional design – ‘working’ design

Outline:

Introduction

Functional Design

3 user needs: movement, protection, safety

Structural design

2 impact factors – intended function & structure of the body wearing

Decorative design

Guidelines

Design as Process & Product

5 basic steps

Creativity in Design

Evaluating Success

Quick read:

- Clothing may suggest different interpretations
- It doesn't say so yet, but it design be very subjective based on people's point of view or encounters with people wearing the clothes

Actual Time: 30 minutes

Inquiry Questions:

Aspects of design guidelines are not rigid. Designers intentionally break them all the time in order to make a statement or express a style. Design and creativity go hand in hand. Novel, innovative, unique, effective, imaginative, and inspired are associated with creativity. How can taking this class increase/enhance my creativity?

Synthesis:


Design communicates. The interpretation of design is subjective and based on social, political, and economic circumstances. Well designed clothing will integrate functional design, structural design, and decorative design.

Integrate:

I didn't realize design incorporated so many elements like functional aspects, structural & decorative. I guess I knew that but hadn't actually broken it down into these components and thought about it in that great detail. Sometimes decorative aspects of design render a garment fairly non-functional or not-so-functional such as shoes that aren't comfortable or clothing that doesn't 'give' or move.

Assessment:

I was/am on the Greyhound bus. It is bumpy and noisy! There is a whiney baby on board. I'm making good use of time rather than just sleeping, eating, looking out the window, or listening to music, but it is hard to write nice.

Book/Title, Pages <i>Design Basics</i> <i>Chap. 1: Intro to Aspects of Design</i>		Reading Log 	
Name 		Date <i>Sept 2</i>	
My purpose is: <i>Reading for the 2nd week of assignments</i>			
My learning objectives are: <i>Learning what design actually is.</i> <i>Learn some terminology.</i> <i>Evaluating the success of a design.</i>		My performance criteria are: <i>Become familiar with any new terminology. To be able to explain what it is.</i> <i>List steps in the design process.</i>	
Time I expect to spend reading: <i>20 minutes</i>			
Key Vocabulary		Use each key word in a new context or phrase.	
<i>Applied design</i>	<i>Design that is both aesthetic & functional</i>		
<i>Design elements</i>	<i>are the building blocks - line, space, form, light</i>		
<i>Principles</i>	<i>manipulations of design elements</i> <i>color, texture</i>		
<i>Radiation</i>	<i>Use of design lines that spread out in all directions</i>		
<i>Functional design</i>	<i>also = 'working' design</i>		
Outline of reading (structure):		Quick read (information about the reading and questions I have as I begin to read):	
<i>Intro</i>		<i>Clothing may suggest different interpretations.</i>	
<i>Functional design</i> <i>3 basic needs: movement, protection, safety</i>		<i>It doesn't say so-yet-but it can be very subjective & based on people's own views or encounter the person wearing the clothes opinions & experiences.</i>	
<i>Structural design</i> <i>2 import factors intended function & structure of the body</i>		<i>Table 1.1 - Aspects of design - is interesting.</i>	
<i>Decorative design</i> <i>Guidelines</i>			
<i>Design as Process & Product</i> <i>• Basic steps 1-5</i>			
<i>Creativity in Design</i>			
<i>Evaluating Success</i>			

Inquiry Questions Questions, ideas, opinions, discoveries:

Aspects of design guidelines are not rigid. Designers intentionally break them all the time in order to make a statement or express a style.

Design & creativity go hand-in-hand. "Novel, innovative, unique, effective, imaginative, & inspired" are associated with creativity. How can taking this class increase my creativity?
enhance

Synthesis Pull it together:

Design communicates; the interpretation of design is subjective and based on social, political, & economic circumstances.

Well-designed clothing will integrate functional design, structural design & decorative design.

Integrate The relationship between the new information and my previous knowledge and experience is:

I didn't realize design incorporated so many elements like functional aspects, structural, & decorative. I guess I knew that but hadn't actually broken it down into these components and thought about it in that great of detail.

Sometimes decorative aspects of design render a garment fairly non-functional or not-so-functional such as shoes that aren't comfortable or clothing that doesn't give or move.

Assessment The following affected (positively or negatively) the quality of my reading performance and how I can improve:

I was / am on the Greyhound bus. It's bumpy and noisy! Whiney baby on board.

Good use of time on bus rather than just sleeping, eating, looking out window, or listening to music. but hard to write nice.

INSTRUCTOR FEEDBACK

Strengths:
 Areas for Improvement:
 Insights:

Appendix C2 - 2nd TRANSCRIPTION - Sample 2 from the Same Student, Later in the Course

The following is a text transcription of the PDF image which follows, illustrating an actual sample of student work.

Title: Design Basics, Chapt 5

Purpose: To learn lighting particulars and how it affects apparel design

Learning Objectives:

- Define light and learn types of light as well as sources of it
- Learn physical & emotional ways light impacts how we design and view apparel

Performance Criteria

- Understand what light is and particulars needed to discuss it knowledgeably in apparel design

Expected Time: 40 minutes

Key Vocabulary: (the ones I don't already know)

Bezold-Burke shift – change in illumination levels affects color perception

Purkinje effect – phenomena where dark & bright light effect different colored objects differently

Lumen – unit of measure of brightness of light

Newton's color wheel – seven colors that together make up white light

Subtractive color theory – explains the mixing of dyes and pigments to create a range of colors

Outline

Definition of Light

Light and the Eye

Mixing Color

Light Sources

natural light

types of bulbs

Physical effects

direction

sharp vs. diffuse

levels of illumination

How light affects color perception & texture

Emotional effects

How light affects apparel design

Quick read

- Eek! How will I remember all the different types of bulbs and their particulars? (Table 5.2)
- Rods are receptive to different amounts of light (work well in low light)
- Cones are sensitive to colors (don't work well in low light)
- Long wavelengths => red; Medium wavelengths => yellow; Short wavelengths => blue

Actual Time: 60 minutes

Inquiry Questions

I didn't think this would be one of my favorite chapters. There were lots of particulars about light that I might not be all that interested in. Table 5.1 and color mixing is weird! I've never felt that I look good under fluorescent lights. I like warm lighting. I will probably find out why. It blows my mind that you can take all the colors of the rainbow, add them together, and make white light.

Synthesis

Wow – mixing paint colors or dyes gives a dark color but mixing colored lights produces lighter colors!! There are lots of different types of bulbs for different uses and effects. The presence of light--its intensity, its direction, its color--plus the color & texture of the object all affect the physical viewing & interpreting of the design or apparel.

Integrate

Fortunately some of this is a review of light aspects we learned in Visual Merchandising last semester. I've referred to a different part of the electromagnetic spectrum in thinking about this subject: x-ray education. Sharp vs diffuse, the direction of the light, and levels of illumination can have dramatic effects on the subject or what is being viewed. The Purkinje effect & Bezold-Burke shift principles are hard to remember.

Assessment

My performance was affected once again by being on the bus and the fact that I forget my snacks in the fridge! Need food soon! Got a seat to myself though. Nice that I am here and forced to read the Light chapter that I would just as soon skip.

Book/Title, Pages
Design Basics
Chap 5 Light

Reading Log

Name [REDACTED]
Date *Sept 24*

My purpose is: *to learn lighting particulars and aspects of how it affects apparel design*

My learning objectives are:

Define light, learn types of light and sources of it.
Evaluate effects of light with regard to physical & emotional ways it affects how we design and view apparel

My performance criteria are:

Do I have a better understanding of what light is and the particulars I need to know to be able to discuss it knowledgeably?

Time I expect to spend reading: *40 mins*

Key Vocabulary Use each key word in a new context or phrase. *(the ones I don't already know)*

Bezold-Brucce shift - changes in illumination levels

Purkinje effect - phenomenon where dark & light affect different colored objects differently

lumen - unit of measure of brightness for lamps

Newton's color wheel - seven colors that together make up white light

subtractive color theory - explains the mixing of dyes & pigments to create a range of colors

Outline of reading (structure):

Definitions of light
Light and the Eye
Mixing color
Light Sources
Natural
Types of bulbs
Physical effects
Direction
Sharp vs diffuse
Levels of illumination
Light & how it affects color perception & texture
Emotional effects
How light affects apparel design.

Quick read (information about the reading and questions I have as I begin to read):

Yeah! How will I remember all the different types of bulbs and the particulars? Table

They talk about color a lot ^{5.2} in this chapter.

<p><u><i>Rods</i></u></p> <p><i>receptive to diff amounts of light</i> <i>work at low light</i></p>	<p><u><i>Cones</i></u></p> <p><i>sensitive to colors</i> <i>don't work well in low light</i></p>
<p> </p> <p>L M Short</p> <p>any cd. blue</p> <p>red green</p>	

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continued on other side

Inquiry Questions Questions, ideas, opinions, discoveries:

I didn't think this would be one of my fav chapters. Lots of particulars of light I might not be all that interested in. Table 5.1 and color mixing is weird! I've never felt I look good under fluorescent lights. I like warm lighting. I will probably find out why. It kind of blows my mind that you can take all the colors of the rainbow, add them together, and make white light.

want to see color spinning wheel white!

Synthesis Pull it together:

Wow - mixing paint colors or dyes gives a dark color but mixing colored lights produces lighter colors!! There are lots of different types of bulbs for different uses and effects. The presence of light, its intensity, direction, color plus the color & texture of the object all affect the physical viewing? interpreting the design or apparel

Integrate The relationship between the new information and my previous knowledge and experience is:

Fortunately some of this is a review of light aspects we learned in Visual Merchandising last semester. I've always referred to ~~the~~ a different part of the electromagnetic spectrum as an x-ray educator. Sharp vs diffuse, the direction of the light, and levels of illumination can have dramatic effects on the subject or objects being viewed. The Purkinje effect, & Beold-Bruck's shift principles are hard to remember.

Assessment The following affected (positively or negatively) the quality of my reading performance and how I can improve:

my performance was affected once again by being on the bus and the fact that I forgot my Snacks in the fridge! Need food soon! Eat the seat to myself though! Nice that I'm on here and forced to read the light chapter I'd just as soon skip.

INSTRUCTOR FEEDBACK

Strengths:
Areas for Improvement:
Insights:

Appendix C3 - Sample of Student Work from Assignment Utilizing Knowledge from Reading Logs

Sample Design Principles Assignment



Principle Repetition and Rhythm

Question	Describe the principle and how they are used to create the look
Describe the repetition	The outfit has some repetition when it comes to colors used as there are mainly four: blue pink, black, and white. Blue letters are repeated in sequence across the leggings giving a widening effect. The tutu or skirt has radiating lines from the waist. The triangular motif on the shirt radiates and points down. The garment and look is mostly symmetrical but not totally with one off the shoulder look, one gloved hand, and one lip print on one side of the shirt. Sunglasses are repeated as both the model and the face on the shirt have sunglasses. There is not a lot of green, but it is repeated in the earrings, feather, and necklace.
Define the rhythm	The rhythm of the outfit could be described as energetic, lifting, bright, whimsical, and busy because of the bright colors, the bouncy skirt, and the number of different things going on.

Principle Contrast and Emphasis

Question	Describe the principle and how they are used to create the look.
Describe the contrast	There is smooth (shirt and leggings) and rough (tulle skirt); bright colors vs. black; symmetrical (most of the outfit) and asymmetrical (the lip print, glove, and exposed shoulder); vertical lines (the triangle pointing down, the dangling necklace, long, dark leggings, and dangling earrings) and horizontal lines (the belt and wide skirt).
Where and what is the emphasis	I would say the skirt is the emphasis as it is texturally the most different item; it changes the silhouette from being just vertical; the triangle on the shirt points toward it; and it's double layered.

Principle Balance

Question	Describe the principle and how they are used to create the look
What type of balance is used	<p>Color is well balanced throughout with black well and evenly represented. The same with pink and with blue as well. If you divide the girl in half horizontally there is about the same amount of each color above and below the horizontal.</p> <p>The largest thing in the outfit—the skirt, is made of the lightest material.</p> <p>The widest part of the triangular graphic on the shirt is high and widens the shoulders to balance the wide illusion of the hips where the skirt is. If the triangle were flipped, it would make the hips look too heavy.</p>

Principle Scale and Proportion

Question	Describe the principle and how they are used to create the look
What are the scale sizes used here?	I would say everything is either small or average scale. Nothing is real oversized or real small. Everything coordinates well scale and size-wise.
What is the proportion; equal, very unequal or invites comparison	I would say very equal. The widest part of the silhouette is in the middle with the upper and lower halves being of equal portions size and detail-wise. Without the triangular graphic on the shirt it would seem bottom heavy. Without the bright pink shoes attracting attention at the bottom, it could seem top heavy. Pops of bright pink in all areas of the ensemble spread the attention around after noticing the skirt which is the main emphasis.

Principle Harmony, Variety and Unity

Question	Describe the principle and how they are used to create the look
Describe the harmony how all parts look together	All portions of the outfit are in harmony because they are bright, energetic, and youthful looking: the colors, the attention grabbing graphic tee, the tutu, the whimsical leggings, the style of shoes, and the fun earrings. The entire outfit says, "Hey! Look at me! I'm a star!"
Is this outfit varied or not varied?	It is varied in terms of texture and color but has unity in that everything coordinates well and the outfit seems complete. The unity of the theme (youth and fun) is clearly communicated.
Which Gestalt theory is used to create unity?	Continuity because your eye doesn't settle on just one thing or one area for long. Although the outfit has a lot of different details and shapes, they are scattered and grab your attention all over.

Appendix D - Grade Distribution

Overall Grade Distribution

	Fall 2015	% Total	Fall 2016	% Total
A	5	29.41%	6	33.33%
AB	1	5.88%	0	0.00%
B	1	5.88%	1	5.56%
BC	1	5.88%	1	5.56%
C	4	23.53%	10	55.56%
D	2	11.76%	0	0.00%
F	3	17.65%	0	0.00%
TOTAL	17	100.00%	18	100.00%

Course Delivery Method Student Took The Course

	# of Students	% Total
Face to Face	8	44.44%
Flex Choice	3	16.67%
On line	7	38.89%
Total	18	100.00%