

Technical Report # 20

**The Effect of Concept Mazes in a Ninth Grade Language Arts
Classroom**

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behavioral research & teaching

Published by

Behavioral Research and Teaching
University of Oregon • 175 Education
5262 University of Oregon • Eugene, OR 97403-5262
Phone: 541-346-3535 • Fax: 541-346-5689
<http://brt.uoregon.edu>

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Introduction

Effectively teaching low-achieving and learning disabled students is challenging. Concept-based instruction is recognized as a particularly effective technique for helping students in these populations attain high levels of achievement (Tindal, Nolet, & Blake, 1992). The maze (a reading selection where certain words have been deleted and students are given choices of words to use in each blank) is well established as a classroom-based reading measure (Parker, Hasbrouck, & Tindal, 1992; Fuchs, Hamlett, & Fuchs, 1990; Cranney, 1972-73; Guthrie, 1973; Kingston & Weaver, 1970) that can provide reliable assessments of student improvement in reading. Technology enables us to improve on the maze, delivering it via the internet, and thereby making it possible for students to receive almost instant feedback on their performance. To isolate the components of the MAZE that influence student learning, we designed our study in two parts. In Part One, we tested the effect of regular use of concept-based versus random mazes without feedback. In Part Two, we shifted our focus. All students received concept-based mazes, but students received different kinds of feedback on their performance. Together, the two parts of this study add to our understanding of the components of the MAZE that influence student learning.

Specifically, we have two research questions with related hypotheses. Research Question One asks, *What is the effect of regular use of concept-based mazes versus random mazes on student ability to use concept assessments of the ability to identify and use concepts in a 9th grade English class?* Research Hypothesis One states that *students who regularly use concept-based mazes will not outperform their peers who use randomly-designed mazes in assessments of the ability to identify and use concepts in a 9th grade English class when neither group of students receives feedback on their performance.* Research Question Two asks *What is the effect*

of receiving detailed feedback on concept-based mazes, specific to the concepts being taught, on student ability to identify and use concepts in a 9th grade English class? Research Hypothesis Two states that students who receive immediate, detailed, concept-specific feedback on their performance on concept-based mazes will outperform their peers who receive more general immediate feedback on their performance assessments of the ability to identify and use concepts in a 9th grade English class.

Methods

This study was conducted at a public high school of approximately 750 students in a small town in the Pacific Northwest. Part I of the study ran from the end of January of 2003 through the middle of March of 2003. Part II of the study ran from the end of March through the middle of June 2003. We used experimental designs for both parts of the study, with random assignment to treatments. The teacher involved in the study, a Caucasian female who had been teaching for four years, had also worked with university researchers the previous two years. She holds an initial teaching license in language arts and social studies. Both parts of the study used students from her three periods of regular 9th grade English/ language arts. Table 1 presents descriptive statistics of student participants, while Table 2 presents descriptive statistics of student performance on the oral reading fluency (ORF) test by treatment and control group for both parts of the study.

Table 1
Descriptive Statistics for Students Involved in the Study

		Gender		Designated SPED	Designated LEP	Free/Reduced Lunch
		Male	Female			
Part I	Treatment	18	17	5	3	
	Control	19	16	4	1	
	Total	37	33	9	4	
Part II	Treatment	15	19	5	1	
	Control	21	14	4	3	
	Total	36	33	9	4	

Prior to any intervention, we administered a test of ORF to check for reading skill differences between the groups. The analysis of variance (ANOVA) found significant differences in student ORF scores between the treatment and control groups in Part I of the study (see Table 3), suggesting the need to use ORF score as a covariant in subsequent analyses. There was no significant difference in student ORF scores between the treatment and control groups in Part II of the study.

Table 2
Descriptive Statistics for ORF Test

Group		<i>n</i>	<i>M</i>	<i>SD</i>
Part I	Treatment	33	142.24	25.81
	Control	34	162.41	36.82
Part II	Treatment	33	154.12	32.16
	Control	33	151.64	34.89

Table 3
Analysis of Variance Summary Table for ORF Test

Source	<i>df</i>	<i>F</i>	η^2	<i>p</i>
Part I Group	1	6.70*	.09	.01
Error	65	(1016.22)		
Part II Group	1	0.09	.00	.77
Error	64	(1125.83)		

Note. Values enclosed in parentheses represent mean square errors.

* $p < .05$

Part I

Question 1: *What is the effect of regular use of concept-based mazes versus random mazes on student ability to identify and use concepts in a 9th grade English class?*

Students were randomly assigned to one of two treatments. Both the teacher and the students involved in the study were blind to which group the students had been assigned. Students in the control group ($n = 27$) completed seven randomly-designed mazes over the course of the five week intervention, while students in the treatment group ($n = 27$) completed seven concept-based mazes during the same unit. These mazes were presented on single-sided paper, and covered material from the students' texts that they had not yet read. Students did not receive any direct feedback on their answers, although it was possible for them to check their answers independently by locating and reading the text from which the maze had been pulled after they had completed it. All other components of the students' education remained the same during the study. Both groups were comparable in terms of socio-economic status, gender, Special Education and English Language Learner designation, and prior achievement in the class. All the students were taught by the same teacher, received the same instruction and

activities (with the exception of the different mazes), and were assessed using the same measures and scoring rubrics.

Three dependent variables were analyzed in Part I of the study. The first, the *Post-Test on Concepts and Attributes*, was a selected response assessment of student ability to identify concepts and attributes of the unit of study: prose narratives. The second, the *Final Exam*, was a production response assessment of student ability to identify examples of attributes of prose narratives from the texts they had read during the unit and justify their selection of those examples. The third, the *Production Response*, required students to apply their understanding of the concept and attributes of prose narratives in writing their own original prose narrative.

Part II

Question 2: *Does the use of concept mazes WITH specific concept-related feedback to students have a greater positive effect on student ability to identify and use concepts in language arts than the use of concept mazes without concept-specific feedback to students?*

Students were once again randomly assigning to treatment and control groups, irrespective of which group they had been in during the first part of the study. Both groups completed concept mazes. Students in the Control group ($n = 33$) received general feedback on their performance (% correct overall, as well as a black and white re-print of the text with the previously missing words added in). Students in the Treatment group ($n = 33$) received specific feedback on how they did in each of the attribute categories (% correct for each attribute, as well as overall % correct) as well as a color-coded re-print of the text with the previously missing words added in, highlighted in green to indicate each word the student got correct and red to indicate each word the student got incorrect. The teacher did not receive any feedback on either

group's performance. As in Part I, all other components of the students' education remained the same during the study.

Production response assignments were not scored until Part II of the study was completed, to increase the reliability of the scores from the study as a whole. Once both parts of the study were completed, names and all identifying information were removed from the production response assignments prior to scoring, and the assignments were coded to ensure anonymity. All production response assignments were scored by two university students who were trained by the first author and who used the same scoring guide. The two scorers were within one point of each other on all production responses scored, with a 20% overlap of scored assignments.

Three dependent variables were analyzed in Part II of the study. The first, the *Post-Test on Concepts and Attributes*, was a selected response assessment of student ability to identify concepts and attributes of the two units of study: Shakespearean tragedy and epic poetry. The second, the *Final Exam*, was a production response assessment of student ability to identify examples of attributes of the two units of study from the texts they had read during the units and justify their selection of those examples. Although the concepts and attributes varied depending on the unit of study, all assessments were designed to demand the same level of cognitive difficulty. The third, the *Production Response*, required students to apply their understanding of the concepts and attributes of epic poetry in writing their own original epic.

*Results**Part I*

Descriptive statistics of student performance on all the measures are presented in Table 4.

As our research hypothesis predicted, ANOVA found no significant difference in student performance on any of the measures given to assess student knowledge (see Table 5).

Table 4

Descriptive Statistics for Part I of the Study (Prose Narrative Unit)

Group		<i>n</i>	<i>M</i>	<i>SD</i>
Post-test on Concepts and Attributes (Score given is % correct)	Treatment	28	77.23	19.01
	Control	27	84.49	36.82
	Total	55	80.80	33.28
Final Test (Score given is raw score)	Treatment	31	11.52	2.94
	Control	34	12.50	3.29
	Total	65	12.03	3.14
Production Response (Score given is raw score)	Treatment	21	5.21	1.00
	Control	24	5.58	1.35
	Total	45	5.41	1.20

Table 5

Analysis of Variance Summary Table for Part I of the Study (Prose Narrative Unit)

	Source	<i>df</i>	<i>F</i>	η^2	<i>p</i>
Post-test on Concepts and Attributes	Group	1	3.47	.06	.07
	Error	53	(208.70)		
Final Test	Group	1	1.61	.03	.21
	Error	63	(1125.83)		
Production Response	Group	1	1.06	.02	.31
	Error	43	(1.43)		

Note. Values enclosed in parentheses represent mean square errors.

**p* < .05

Part II

Descriptive statistics of student performance on all the measures are presented in Table 6. Initial ANOVA, using intact groups (Treatment and Control, regardless of how often students received the MAZE intervention), found no significant differences in student performance on any of the measures given to assess student knowledge (see Table 7).

Table 6

Descriptive Statistics for Part II of the Study (Shakespearean Tragedy and Epic Unit)

Group		<i>n</i>	<i>M</i>	<i>SD</i>
Post-test on Concepts and Attributes of Shakespearean Tragedy (Score given is % correct)	Treatment	33	67.73	14.64
	Control	35	68.00	12.20
	Total	68	67.87	13.34
Post-test on Concepts and Attributes of Epic (Score given is % correct)	Treatment	33	75.57	12.34
	Control	35	72.32	14.48
	Total	68	73.90	13.48
Final Test on Shakespearean Tragedy (Score given is raw score)	Treatment	33	12.00	4.39
	Control	34	10.68	4.00
	Total	67	11.33	4.22
Final Test on Epics (Score given is raw score)	Treatment	31	13.61	3.90
	Control	35	12.46	4.49
	Total	66	13.00	4.23
Production Response: Epic (Score given is raw score)	Treatment	32	6.19	2.01
	Control	30	6.13	2.05
	Total	62	6.16	2.01

Table 7

Analysis of Variance Table for Part II of the Study (Shakespearean Tragedy and Epic Units)

Source		<i>df</i>	<i>F</i>	η^2	<i>p</i>
Post-test on Concepts and Attributes of Shakespearean Tragedy	Group	1	0.01	.00	.93
	Error	66	(180.52)		
Post-test on Concepts and Attributes of Epics	Group	1	0.98	.02	.33
	Error	66	(181.88)		
Final Test on Shakespearean Tragedy	Group	1	1.67	.03	.20
	Error	65	(17.59)		
Final Test on Epics	Group	1	1.23	.02	.27
	Error	64	(17.81)		
Production Response: Epics	Group	1	0.01	.00	.92
	Error	60	(4.11)		

Note. Values enclosed in parentheses represent mean square errors.

**p* < .05

Because interaction with the MAZE was the intervention in this study, we decided to pursue analyses to determine whether an increase in MAZE interactions produced an effect on student performance on the dependent variables. Students were sorted into two groups for purpose of this analysis: those who completed zero to three of the possible four mazes were assigned to one group while those who completed all the mazes were assigned to the second group. In some cases, students took the MAZE more than once, resulting in up to ten interactions with the MAZE activity. Although sorting the students along these lines resulted in uneven groups, logically such sorting makes sense as a pre-cursor to analyzing the effect of interactions with the

MAZE activity. Further analysis using this line of inquiry revealed a significant effect on performance on the Epic Post-test for the number of times students in the Treatment Group interacted with the MAZE, $F(1,31) = 9.37, p < .01$. The number of encounters with the maze accounted for 23% of the variability in scores on the Epic Post-test (See Table 8). There was not a significant effect on performance on any of the measures for the number of times students in the Control Group interacted with the MAZE, $F(1,33) = 1.57, p > .05$.

Table 8

Descriptive Statistics for Student Performance in Part II Divided by Number of Interactions with Mazes: Treatment Group

Group	n	M	SD
Fewer than 3 Interactions	7	64.29	16.81
3 or More Interactions	26	78.61	9.04

Table 9

Analysis of Variance Table for Part II of the Study Split By Number of Interactions with MAZE: Treatment Group

Source		df	F	η^2	p
Post-test on Concepts and Attributes of Epics	Group	1	9.37	.23	.01
	Error	31	(120.68)		
Final Test on Epics	Group	1	2.62	.08	.12
	Error	29	(14.40)		
Production Response: Epics	Group	1	1.80	.06	.19
	Error	30	(3.93)		

Note. Values enclosed in parentheses represent mean square errors.

* $p < .05$

In addition, there was not a significant interaction effect between the number of encounters with the MAZE and treatment condition $F(1, 68) = 0.62, p > .05$.

Discussion

This study advances our understanding of how the MAZE affects student learning. Part I of the study suggests that the simple act of completing mazes without receiving any feedback does not positively affect student ability to identify or apply concepts in language arts. Part II of the study begins to offer some insights into the type of feedback that is most effective in promoting students' ability to identify and apply concepts in language arts. It should be noted, however, that although more frequent interactions with concept MAZEs are correlated with better performance on one of the post test measures, this improvement in performance does not generalize to the other measures. Also, although the difference in performance is statistically significant, it is not overwhelming. This study provides information that will be useful in identifying areas for future research.

This study highlights the need to refine MAZE tasks to be sure that they are reinforcing the concepts and attributes the teacher has decided are most significant for each unit. One of the insights gleaned from this study is the realization that concept-based MAZE activities might be improved by changing the format in such a way that students interact more with the actual concepts and attributes being studied as opposed to examples of those concepts. In the current study, MAZE activities required students to select from a list of possible answer choices—examples of concepts and attributes being studied—to fill in missing words. Although this activity does require interaction with the concepts and attributes being studied, the interaction is secondary in nature. An improvement on the MAZE activities suggested by this study is to highlight words and phrases in the text (examples of the concepts and attributes being studied)

and then have students select from a list the actual concept or attribute being portrayed by the highlighted section of text. This modification in MAZE structure will help ensure that students interact directly with the concepts and attributes being studied and reduce the potential for them to focus too much attention on the examples to the detriment of their learning the more important concepts and attributes. This new MAZE structure needs to be studied empirically.

An additional area for further exploration involves the degree to which interaction with MAZE activities, which require relatively low level cognitive processes, promotes improvement in low level cognitive processes as opposed to improvement in higher level, more cognitively demanding tasks. Although students in this study did, indeed, improve their performance on tasks that required them to identify concepts and attributes, there was no improvement on tasks that necessitated application of concepts and attributes in a novel situation. If the goal of instruction is to improve students' ability to perform on cognitively-demanding tasks, then additional structures that would reinforce such learning should also be included in future studies.

Materials used during Parts I and II of this study

Process Used to Create Mazes for the Study

Constructing a Concept-based Maze:

1. Begin with a Word Document of the first couple pages of the chapter the students will be reading in class that day—a reading assignment they have not yet read.
2. Go through the passage, selecting words related to attributes of the concept being covered in the unit (e.g., *character, setting, or theme* in the unit on Prose Narrative). Highlight these words using the “Insert Comment” command. Where the comment space appears, type in first the word you selected from the text and then three distracters (one near, one far, one in between).
3. Once you have 10 words selected (and four possible responses noted for each one in the comment space), select a random pattern for distributing the ‘correct’ answer as well as the distracters. Go through the maze item by item, replacing the selected word with ___ and then a set of possible answers (e.g., *a. for, b. pigs, c. wriggle, d. when*).

For example, before I began to create mazes, I randomly selected 20 combinations of “1, 2, 3, 4” to use as a key when I was making my mazes. This gave me a list like:

- | | | |
|---------------|---------------|---------------------|
| 1. 3, 4, 2, 1 | 5. 1, 4, 2, 3 | 9. 1, 2, 4, 3 |
| 2. 2, 3, 4, 1 | 6. 2, 1, 3, 4 | 10. 3, 2, 1, 4 |
| 3. 4, 2, 3, 1 | 7. 1, 3, 4, 2 | 11. 3, 4, 2, 1 |
| 4. 4, 2, 1, 3 | 8. 2, 1, 3, 4 | 12. 3, 1, 4, 2 etc. |

Then, as I was rearranging my possible ‘answer choices’ for each question, I simply used the pre-made key to tell me which of my selections to list first, second, etc. I used variations of the same 20 random combinations to make multiple mazes. For example, Maze 1 was created using the first ten combinations, Maze 2 was created using the last ten combinations, Maze 4 was created using only the odd numbered combinations, etc.

Constructing a Random Maze (only used during Part I of the study)

1. Begin with the same reading passage as in the Concept Maze, but instead of selecting particular concept words, select every nth word, ignoring articles (*a, an, the*).
2. Follow Steps 2 and 3 above, using the same random pattern for distributing the ‘correct’ answer as well as the distracter as you did in constructing the Concept Maze.

Figure 1:

Random (Control) MAZE #1 of 8 from Part I of the study

Name: Date: Feb. 18, 2003 Period:
Maze #1
Above the South Col, up in the Death Zone, survival is to ^{1.} ____ (a. a not very, b. quite a, c. some, d. no) small degree a race against the clock. Upon setting out from ^{2.} ____ (a. home, b. Camp Four, c. the mountain, d. Base Camp) on May 10, each client carried two 6.6 pound ^{3.} ____ (a. weight, b. glass, c. water, d. oxygen) bottles and would pick up a third bottle on the South Summit ^{4.} ____ (a. from, B. near, c. through, d. around) a cache to be stocked by Sherpas. At a conservative flow ^{5.} ____ (a. temperature, b. rate, c. consistency, d. zone) of two liters per

minute, each bottle would last ^{6.} ____ (a. through, b. above, c. around, d. between) five and six hours. By 4:00 or 5:00 P.M., everyone’s gas would be ^{7.} ____ (a. breathable, b. gone, c. full, d. disposed). Depending on each person’s acclimatization and physiological make-up, we ^{8.} ____ (a. might, b. should, c. would, d. will) still be able to function above the south Col-but ^{9.} ____ (a. painfully, b. very, c. not, d. quite) well, and not for long. We would instantly become more ^{10.} ____ (a. vulnerable, b. fragile, c. immune, d. likely) to HAPE, HACE, hypothermia, impaired judgment, and frostbite. The risk of dying would skyrocket.

- 1. 6.
- 2. 7.
- 3. 8.
- 4. 9.
- 5. 10.

Total score: ____

Figure 2:
Concept (Treatment) MAZE #1 of 8 from Part I of the study

Name:
 Date: Feb. 18, 2003
 Period:

Maze #1

Above the South Col, up in the ^{1.} ____ (a. dramatic scenery, b. snow, c. mountain, d. Death Zone), survival is to nosmall degree a race against the clock. Upon setting out from ^{2.} ____ (a. home, b. Camp Four, c. the mountain, d. Base Camp) on May 10, each ^{3.} ____ (a. woman, b. South African, c. guide, d. client) carried two 6.6 pound ^{4.} ____ (a. oxygen, b. weight, c. glass, d. water) bottles and would pick up a third bottle on the South Summit from a cache to be stocked by ^{5.} ____ (a. the guides themselves, b. Sherpas, c. helicopter, d. previous expeditions). At a conservative flow rate of two liters per minute, each bottle would last between five and six ^{6.} ____ (a. minutes, b. miles, c. days, d. hours). By 4:00 or 5:00 P.M., ^{7.} ____ (a. my, b. everyone’s, c. the guides’, d. the Sherpas’) gas would be gone. Depending on each person’s acclimatization and physiological make-up, we would still be able to function above the south Col-but not well, and not for long. We would instantly become more vulnerable to HAPE, ^{8.} ____ (a. HALE, b. HICA, c. HACE, d. HICCUPS), hypothermia, impaired judgment, and ^{9.} ____ (a. snow, b. frostbite, c. falling down, d. shivering). The risk of ^{10.} ____ (a. dying, b. getting sick, c. falling down, d. returning) would skyrocket.

- 1. 6.
- 2. 7.

3.	8.	Total score: _____
4.	9.	
5.	10.	

Figure 3:
Pre-Test used to measure student prior knowledge of Prose Narrative Concept and Attributes

Name: _____ Date: _____ Period: _____																				
<u>Pre-Test on Concept and Attributes of Prose Narrative</u>																				
<u>List the following words in the appropriate attribute column:</u>																				
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-bottom: 1px solid black;">• Nepal</td> <td style="border-bottom: 1px solid black;">• Jon Krakauer</td> <td style="border-bottom: 1px solid black;">• Mt. Everest</td> <td style="border-bottom: 1px solid black;">• foreshadowing</td> </tr> <tr> <td style="border-bottom: 1px solid black;">• dangerous storm</td> <td style="border-bottom: 1px solid black;">• 1996</td> <td style="border-bottom: 1px solid black;">• sherpas</td> <td style="border-bottom: 1px solid black;">• high altitude</td> </tr> <tr> <td style="border-bottom: 1px solid black;">• man vs. nature</td> <td style="border-bottom: 1px solid black;">• flashbacks</td> <td style="border-bottom: 1px solid black;">• Sandy Hill Pittman</td> <td style="border-bottom: 1px solid black;">• the Icefall</td> </tr> <tr> <td style="border-bottom: 1px solid black;">• small town America</td> <td style="border-bottom: 1px solid black;">• a poor farmer</td> <td style="border-bottom: 1px solid black;">• growing up can be painful</td> <td></td> </tr> <tr> <td colspan="4" style="border-bottom: 1px solid black;">• a person’s perspective influences his/her perception of “the truth”</td> </tr> </table>	• Nepal	• Jon Krakauer	• Mt. Everest	• foreshadowing	• dangerous storm	• 1996	• sherpas	• high altitude	• man vs. nature	• flashbacks	• Sandy Hill Pittman	• the Icefall	• small town America	• a poor farmer	• growing up can be painful		• a person’s perspective influences his/her perception of “the truth”			
• Nepal	• Jon Krakauer	• Mt. Everest	• foreshadowing																	
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• man vs. nature	• flashbacks	• Sandy Hill Pittman	• the Icefall																	
• small town America	• a poor farmer	• growing up can be painful																		
• a person’s perspective influences his/her perception of “the truth”																				
<u>Character</u> _____																				
<u>Setting</u> _____																				
<u>Theme</u> _____																				
<u>Plot pattern</u> _____																				

Figure 4:
Final Assessment used for Prose Narrative Unit (we followed the same outline for the Shakespearean Tragedy and Epic Poetry final assessments as well).

Final Assessment for Prose Narrative Unit

Part I: Reiteration and Summarization

1. Describe the setting in “Before the End of Summer.” (2 pts)
2. List 2 characters from Into Thin Air and explain why they were important in the narrative. (4 pts total)
 - a.
 - b.

Part II: Illustration

For each of the questions below, write a short (4-5 sentence) response that shows you remember specific examples from the narratives we read.

3. Select a theme from “Before the End of Summer”. First, explain what the theme is, then show how the author develops this theme in his narrative by giving at least 3 specific examples which illustrate the theme. (4 pts)

Part III: Prediction, Evaluation, and Explanation

For each of the questions below, write a short (5-8 sentence) response that shows you remember specific examples from the narratives we read.

4. How do you think Jon Krakauer might have changed the way he wrote Into Thin Air if Rob Hall hadn't died? Do you think, for example, that he would have presented certain other characters differently? Be specific! (4 pts)
5. Explain the ways in which the prose narrative YOU wrote is a good example of a prose narrative. Be sure to refer to the specific attributes of prose narratives in your answer. (5 pts)

Figure 5:
Scoring Guide used to score final assessment for Prose Narrative Unit

SCORING GUIDE
Final Assessment for Prose Narrative Unit

Part I: Reiteration and Summarization

1. Describe the setting in "Before the End of Summer." (2 pts)
Give 1 point for place, 1 point for time. Possible answers, "early 1900's on a farm... in the country"
2. List 2 characters from Into Thin Air and explain why they were important in the narrative. (4 pts total)
Give 1 point for each character, and one point for why he/she was important.

Part II: Illustration

3. Select a theme from "Before the End of Summer". First, explain what the theme is, then show how the author develops this theme in his narrative by giving at least 3 specific examples which illustrate the theme. (4 pts)
Give 1 point for an appropriate theme identified, and one point for each example which illustrates the theme.

Part III: Prediction, Evaluation, and Explanation

4. How do you think Jon Krakauer might have changed the way he wrote Into Thin Air if Rob Hall hadn't died? Do you think, for example, that he would have presented certain other characters differently? Be specific! (4 pts)

Points	Characteristics of Answer
4	Provides a plausible prediction of how the author might have changed his story, illustrating understanding of Rob Hall's role in the story for Krakauer. For example, a student might predict that Krakauer might not have been affected so deeply if a man he obviously admired and trusted so much hadn't died. A student might predict that if Rob hadn't died, Krakauer might have put more blame on Scott Fischer and his more reckless style of leadership.
3	Provides a prediction of how the author might have changed his story, but the prediction does not show the same depth of understanding of Rob Hall's role in the story for Krakauer. For example, a student might predict that Krakauer might have spent less time talking about Rob Hall earlier on in the story.
2	Provides a weak prediction of how the author might have changed his story which shows little or no understanding of Rob Hall's role in the story for Krakauer. For example, a student might predict that Krakauer would have written a shorter story (since he wouldn't have had to include the long chapter in which Hall died) if Hall had survived.
1	Provides almost no prediction of how the author might have changed his story. For example, a student might write that Krakauer might change the story by not writing about Rob Hall's death.
0	No prediction evident. For example, student might write, "I don't know."

5. Explain the ways in which the prose narrative YOU wrote is a good example of a prose narrative. Be sure to refer to the specific attributes of prose narratives in your answer. (5 pts)

Points	Characteristics of Answer
--------	---------------------------

5	Answer refers to all five attributes of prose narrative.
4	Answer refers to four attributes of prose narrative.
3	Answer refers to three attributes of prose narrative.
2	Answer refers to two attributes of prose narrative.
1	Answer refers to one attribute of prose narrative.
0	No explanation evident. For example, student might write, “I don’t know.”

Five attributes of a Prose Narrative include: *setting* (time and place); plot *follows a pattern* (either starts slowly and moves towards a climax, then a short period of resolution or begins with a dramatic moment, then moves back in time to explain the events leading up to that dramatic climax, before coming to resolution at the end); *characters* play a central role in the story; *theme* (author delivers a message/moral of some sort); *tells a story*.

Figure 6:
Final Assessment for Shakespearean Tragedy Unit

Final Assessment for Shakespearean Tragedy Unit

Part I: Reiteration and Summarization

1. Describe two socio-historic conditions important in *Romeo and Juliet*. (2 pts)
 - a.
 - b.
2. List 2 stylized characters from *Romeo and Juliet*, and tell what role they play in the story. (4 pts total)
 - a.
 - b.

Part II: Illustration

For each of the questions below, write a short (4-5 sentence) response that shows you remember specific examples from the Shakespearean Tragedy we read.

3. Select an example of betrayal from *Romeo and Juliet*. First, explain what the act of betrayal is, then show how this particular example of betrayal helps lead to the downfall of the main characters in the play and the tragic ending that results. Be sure to refer to at least three ways in which the betrayal led to a tragic outcome. (4 pts)

Part III: Prediction, Evaluation, and Explanation

For each of the questions below, write a short (5-8 sentence) response that shows you remember specific examples from the narratives we read.

4. How do you think the outcome of the play might have been different if the role of fate was not included? Do you think, for example, that the play would have ended in such tragedy if Shakespeare didn’t include fate? Be specific! (4 pts)
5. Explain the ways in which *Romeo and Juliet* is a good example of a Shakespearean Tragedy. Be sure to refer to the specific attributes of Shakespearean Tragedies in your answer. (5 pts)

Figure 7
Scoring Guide Used to Score Final Assessment for Shakespearean Tragedy Unit

SCORING GUIDE

Final Assessment for Shakespearean Tragedy Unit

Part I: Reiteration and Summarization

1. Describe two socio-historic conditions important in *Romeo and Juliet*. (2 pts)

Give one point for each socio-historic condition listed. Possible answers include: arranged marriages, religion important in daily life, easy access to poison, sword fights, family feuds, etc.

2. List 2 stylized characters from *Romeo and Juliet*, and tell what role they play in the story. (4 pts total)
 Give one point for each character. Possible answers include: Romeo/Juliet = hero; nurse/Lady Capulet = foils; Benvolio/Mercutio = foils; Peter/the Nurse = foils, Tybalt = the villain, etc.

Part II: Illustration

For each of the questions below, write a short (4-5 sentence) response that shows you remember specific examples from the Shakespearean Tragedy we read.

3. Select an example of betrayal from *Romeo and Juliet*. First, explain what the act of betrayal is, then show how this particular example of betrayal helps lead to the downfall of the main characters in the play and the tragic ending that results. Be sure to refer to at least three ways in which the betrayal led to a tragic outcome. (4 pts)

Give one point for a clear example of a betrayal (e.g., Romeo and Juliet not telling their parents about their marriage; the nurse changing her mind about Romeo; Romeo killing Tybalt, the Friar not telling the families, etc.). Give one point each for three ways the betrayal led to a tragic outcome.

Part III: Prediction, Evaluation, and Explanation

For each of the questions below, write a short (5-8 sentence) response that shows you remember specific examples from the narratives we read.

4. How do you think the outcome of the play might have been different if the role of fate was not included? Do you think, for example, that the play would have ended in such tragedy if Shakespeare didn't include fate? Be specific! (4 pts)

Points	Characteristics of Answer
4	Provides a plausible prediction of how the author might have changed his play, illustrating understanding of fate's role in the story.
3	Provides a prediction of how the author might have changed his story, but the prediction does not show the same depth of understanding of fate's role in the story.
2	Provides a weak prediction of how the author might have changed his story which shows little or no understanding of fate's role in the story.
1	Provides almost no prediction of how the author might have changed his story.
0	No prediction evident. For example, student might write, "I don't know."

5. Explain the ways in which *Romeo and Juliet* is a good example of a Shakespearean Tragedy. Be sure to refer to the specific attributes of Shakespearean Tragedies in your answer. (5 pts)

Points	Characteristics of Answer
5	Answer refers to all five attributes of Shakespearean tragedy.
4	Answer refers to four attributes of Shakespearean tragedy.
3	Answer refers to three attributes of Shakespearean tragedy.
2	Answer refers to two attributes of Shakespearean tragedy.
1	Answer refers to one attribute of Shakespearean tragedy.
0	No explanation evident. For example, student might write, "I don't know."

Five attributes of Shakespearean tragedy include: *socio-historic conditions* (linked to time and place); *betrayal* leads to a tragic end; *fate* plays a role in leading to the tragic end; *stylized characters* such as hero, villain, fool; hero meets a tragic end with his/her *downfall* by the end of the play.

Figure 8:
Final Assessment for Epic Poetry Unit

Final Assessment for Epic Poetry Unit

Part I: Reiteration and Summarization

1. Describe two ways in which the setting of *The Odyssey* is larger than life. (2 pts)
 - a.
 - b.
2. List 2 gods/goddesses from *The Odyssey*, and tell what role they play in the story. (4 pts total)
 - a.
 - b.

Part II: Illustration

For the question below, write a short (4-5 sentence) response that shows you remember specific examples from the epic poem we read.

3. Select an example of Odysseus fulfilling the role of epic hero in *The Odyssey*. First, explain what he does that makes him heroic; then, show how this particular example of heroism helps make the story more of an epic. Be sure to refer to at least three ways in which what he did was heroic. (4 pts)

Part III: Prediction, Evaluation, and Explanation

For each of the questions below, write a short (5-8 sentence) response that shows you remember specific examples from the epic poem we read.

4. What role do the trials and obstacles Odysseus encounters play in the poem? Do you think, for example, that the poem would have been significantly different without the story of the Cyclops? Be specific! (4 pts)
5. Explain the ways in which *The Odyssey* is a good example of an Epic Poem. Be sure to refer to the specific attributes of Epic Poetry in your answer. (5 pts)

Figure 9:
Scoring Guide Used to Score Final Assessment for Epic Poetry Unit

SCORING GUIDE
Final Assessment for Epic Poetry Unit

Part I: Reiteration and Summarization

1. Describe two ways in which the setting of *The Odyssey* is larger than life. (2 pts)
Answer might refer to gods/goddesses, strange monsters, the fact that the story took place on the vast ocean over a period of 20 years, etc. Give one point for each correct answer.
2. List 2 gods/goddesses from *The Odyssey*, and tell what role they play in the story. (4 pts total)
Answer might include Zeus (king of gods, sent down a thunder bolt to sink the ship), Athena (helps Odysseus from time to time), Poseidon (god of the sea), Apollo/Helios (Odysseus's men killed his herds, which led to disaster), Calypso (held Odysseus captive). Give one point for each correct answer.

Part II: Illustration

For the question below, write a short (4-5 sentence) response that shows you remember specific examples from the epic poem we read.

3. Select an example of Odysseus fulfilling the role of epic hero in *The Odyssey*. First, explain what he does that makes him heroic; then, show how this particular example of heroism helps make the story more of an epic. Be sure to refer to at least three ways in which what he did was heroic. (4 pts)

Give one point for a description of what he did, plus one point for each of three ways his action was heroic. Answers might include: Odysseus defeated the Cyclops. In doing so, he proved his heroism by outwitting the monster, saving his men, demonstrating his courage, never losing faith in himself, etc.

Part III: Prediction, Evaluation, and Explanation

For each of the questions below, write a short (5-8 sentence) response that shows you remember specific examples from the epic poem we read.

4. What role do the trials and obstacles Odysseus encounters play in the poem? Do you think, for example, that the poem would have been significantly different without the story of the Cyclops? Be specific! (4 pts)

Points	Characteristics of Answer
4	Provides a thorough explanation of the role of trials and obstacles in the poem.
3	Provides an explanation of the role of trials and obstacles in the poem, but the explanation does not show the same depth of understanding of the role of trials/obstacles in the story.
2	Provides a weak explanation of the role of trials and obstacles in the poem which shows little or no understanding of their role in the story.
1	Provides almost no explanation of the role of trials and obstacles in the poem
0	No explanation is evident. For example, student might write, "I don't know."

5. Explain the ways in which *The Odyssey* is a good example of an Epic Poem. Be sure to refer to the specific attributes of Epic Poetry in your answer. (5 pts)

Points	Characteristics of Answer
5	Answer refers to all five attributes of epic poetry.
4	Answer refers to four attributes of epic poetry.
3	Answer refers to three attributes of epic poetry.
2	Answer refers to two attributes of epic poetry.
1	Answer refers to one attribute of epic poetry.
0	No explanation evident. For example, student might write, "I don't know."

Five attributes of epic poetry include: *setting* is huge; *hero* narrates the story and is brave and clever, with super-human qualities; a *journey* is part of the story; the hero must overcome *trials/obstacles*; there are *gods and goddesses*.

Figure 10:

Student Journal Prompt used after the Prose Narrative Unit

Reflection/Prediction

1. Think back over the past few months since we started studying prose narratives.
 - How well you think you learned the material?
 - What makes you say that?
 - What was hard for you in this unit? Why?
 - What do you consider your greatest success or successes? Why?
2. We're about to start a new unit on Shakespearean Tragedies.
 - How do you think you'll do in our next unit?
 - What makes you say that?

- What do you think will be the hardest part for you? Why?
- What will you consider “success” on this next unit? Why?

Figure 11:

Teacher Reflection Prompt used after the Prose Narrative Unit

1. In general, how did your students do on the prose narrative unit?
2. Now, thinking specifically of the students you identified earlier as *high, middle, and low*, (3rd period = Student #1, Student #2, Student #3, Student #4, Student #5, and Student #6) (6th period = Student #7, Student #8, Student #9, Student #10, Student #11, and Student #12) (7th period = Student #13, Student #14, Student #15, Student #16, Student #17, and Student #18)...
 - How did each of them do on the prose narrative unit?
 - Explain your reasons for your evaluation of how each did.
 - What were the biggest challenges in the unit for each of them? Why?
 - What do you consider the greatest successes in the unit for each of them? Why?
3. Again, thinking specifically of the students you identified earlier...
 - How do you think each of them will do on the Shakespearean tragedy unit?
 - Explain your reasons.
 - What will you consider “success” for this student in the coming unit? Why?
 - What do you expect to be challenging for this student in the coming unit? Why?
4. Using your class rosters, once again rank-order your students in 3rd, 6th, and 7th. The criterion to use is your ‘gut feel’ of how easy (or difficult) you think students will find the material you are trying to teach them. (1 = will find it easy; 23 = will struggle a great deal, etc.) Don’t look back at your original rankings. We’re interested in seeing if your perceptions have changed at all over time (we’ll probably ask you to do this at least once more before the school year is over).

Figure 12:

Teacher Reflection, completed after the Prose Narrative Unit

1. I think the students did very well on the prose narrative unit overall. The prose narrative unit involved a lengthy piece, something that the students were not used to and a piece that as a teacher I was not used to. It was the first time for both of us, putting the students at more of a disadvantage. The unit was forced into a short amount of time and the students were not able to focus on any one activity. They spent the most amount of time reading with the character activity and quote activity being secondary. Comparatively time spent on the concept of prose narratives and its attributes was almost nothing. If I had the unit to do over I would spend more time on the concepts and attributes, introducing them using short stories or otherwise prior to a long work.

With the limitations of the unit in mind, I think the students dealt well with the unit. They seemed to enjoy reading a book and even did dances for every 100 pages they completed. Overall they preferred reading as a class with the tape provided. Much of the reading was done outside of class and the students dealt well with the homework aspect. They seemed to have difficulty with the quote sheet and were unable to generalize the quote to the chapter it had been assigned. I then question their understanding of the quote or the text or both. The character sheet was helpful and limiting. While they were able to keep track of the character that they were assigned, they were continually in need of reminders about the rest of the characters.

The other activities in the unit were mediocre compared to *Into Thin Air*. The students were seriously burnt out after the long book and had a hard time with writing their own prose narrative. Many of them,

just didn't do it or did it poorly. In addition the students read one short fiction work. It was not well liked, but the students did do pretty well in identifying the attributes assigned to prose narratives.

2. 3rd - Student #1 - Student #1 did fairly well on the unit. He consistently participated orally in class and was able to answer comprehension type questions. I'm 99% sure that he read all of the selections required. While I expected more of him on the quote sheet, his character sheet was better than 90% of the class. The biggest challenge for Student #1 was not sinking to the level of his fellow classmates and not appearing to be the "smarty" in the class. For Student #1, I think the greatest success was not being bored everyday for 45 minutes while we brought the rest of the class up to speed.

Student #2 - Student #2 also did well on the unit as she does on most activities. Her quote sheet and character sheet were models for other classes and although she seldom participated orally, she shared with me individually her impression of her character and the rest of the text. She also worked very hard on her own prose narrative turning in a wonderful paper, one that met CIM standards. Her greatest success was staying interested while moving at the same pace as the rest of the class.

Student #3 - I'm fairly sure that Student #3 read less than 20 percent of the required reading and understood even less than that. Student #3 struggled inside of class as well as out and even blew out of class one day. He turned in half of what was expected for the personal narrative and then wondered why he didn't earn a C or above in the class. I think his greatest success was staying in class while struggling with peer issues.

Student #4 - Student #4 is one of the few people in my classes that genuinely enjoyed all of the reading. Although he is identified for reading and writing, he did well on all aspects of the unit. I think his greatest success is reading the required selections and staying on top of his work, even though much of the unit had deadlines that did not come for weeks. Students were expected to maintain their own schedule and turn in work at the end.

Student #5 - Student #5 is also an identified student with serious organization problems. He did an average job on the unit, even while doing all of his work at the last minute. Without having immediate deadlines left him at a disadvantage. He did all of his work at the last minute and did not do well on it compared to the rest of the class, but did okay for him. His greatest success was sticking with the reading and understanding maybe 75% of it. His personal narrative lacked parts due to organizational issues and in the end he did not turn a narrative in.

Student #6 - Student #6 did an average job on the unit, her personal narrative averaged the reading deficiencies. She was very bored and I'm not sure she understood much of what was going on, with the exception of her character. She was able to focus in and work to understand the more limited part of the text. Her personal narrative was complete and that may be her greatest success.

- 6th - Student #7 - Student #7 did well on his unit, but was able to put off all of the work including much of the reading until the last minutes. He was completely unchallenged by this unit and may have felt that everything was reduced to the lowest common denominator. His greatest success was completing all the work at the last minute and excelling at it. Even passing CIM standards on his personal narrative.

Student #8 - Student #8 did terrible on this unit; she had an excessive amount of absences. Her absences were not the entire problem as she did not like the material and used that as an excuse to not do any work. She completed next to nothing and couldn't wait for the trimester to be over.

Student #9 - Student #9 did average on the unit and felt like his ability to read some of the book if not all of the required reading was a huge accomplishment. I was proud of his work, and his personal narrative. Unfortunately for Student #9, in his peer group is not very accepting of academic success, so praise or A's aren't his expectations. I think his greatest success was showing me his potential without alienating his peer group.

Student #10 - Student #10 always does well on her work, but she remains an average student. She did almost all of the required work and reading with the exception of the character sheet. She wrote her personal narrative and did an average job. I think her greatest success was completing the reading of Into Thin Air and staying on course.

Student #11 - Student #11 was a huge surprise for me in this unit. I have doubts about how much reading she did and understood, but she turned in all of her work and completed her narrative in good form. I am impressed with her level of work and understanding. I think her greatest achievement is that she completed an entire unit and did well on it.

Student #12 - Student #12 really struggled with the prose narrative unit. He did little to no reading outside of class. He completed little to none of the required work and did not turn in a narrative. His greatest success was being able to stay in class and understand what little of the book that he did.

7th- Student #13- Student #13 did not do as well on this unit as expected. She had numerous absences and although she turned in a personal narrative, it was only half-complete. She understood what she did read and did average on the work that she did turn in. I think her greatest success was coming out as well as she did with the number of absences she had.

Student #14 - Student #14 did very well on this unit. She did complete work, helped motivate the rest of the class, understood inside comments in *Into Thin Air* and did very well on her personal narrative. Her greatest success was coming out within the class as a leader.

Student #15 - Student #15 did terrible on this unit; he despised the book and the writing assignment. He did very little of the required work and did not turn in a personal narrative. His greatest success was not sleeping in class, which is punishable with detention equal to the minutes of sleep.

Student #16 - Student #16 also did horribly on this unit. She did some of the work associated with *Into Thin Air*, but did not turn in her personal narrative. She reported completing the reading, but there are no assurances. She had many absences during this unit and was never able to fully recover. Her greatest success was turning in the work that she did.

Student #17 - Student #17 moved to Mexico for six weeks in the middle of the term. It was unclear whether or not she would return, but she did. Upon her return she turned in almost all of the work required for the unit. She also turned in a prose narrative, but it was below average.

Student #18 - Student #18 did average work on the prose narrative unit. I was pleasantly surprised. Her classmates or her disability not at all pulled her down a level. She turned in a prose narrative and received an average grade. Her greatest success was being an average student on this unit without modifications.

3. Student #1 - I think will do well on the Shakespeare unit. He will understand much of what we read and be willing to put in the work necessary to achieve the grade he expects. He will be successful if he can show understanding in the study guides and do well on the final task. I expect that the slow moving unit will be challenging for him because he may be bored.

Student #2 - Student #2 will do very well on this unit. She will understand much, if not all of what we read. She will be willing to put forth the effort necessary to understand and earn an "A" on the unit. She will be successful by earning an "A" on her project and final as well as the study guides. The slow pace of her class may challenge her.

Student #3 - Student #3 will not do very well on this unit, he will become frustrated and then give up on the language and necessary comprehension. He will be successful if he completes the reading, reads orally in class, and completes the study guide. He will be most challenged by the language of Shakespeare.

Student #4 - Student #4 will do average work and will understand about 50% of the text of *Romeo and Juliet*. He will do the work necessary to understand as much as he can. He will be successful by turning in all of his work and earning average grades. He will be most challenged by the language due to his disability linked to comprehension and writing.

Student #5 - Student #5 will not do well on this unit. The reading and work will be too difficult for him and his disability. He will work diligently and with a study skills class, he may be able to complete everything necessary for a decent grade. He will be successful by turning in all of his work including the project. The reading and the project will challenge him.

Student #6 - Student #6 will do well on the project based on interest levels. She will be successful if she reads aloud in class and understands 60% of the reading. She will be challenged by the language, but will be able to overcome this with the help of study guides.

6th: Student #7- Student #7 will do well on this unit. He will have no problem understanding the text, or its literary elements. He will be successful by attending school regularly and turning in assignments regularly, in the end turning in 100% of his work. The material will challenge him because of his dislike for it and the slow pace of the class.

Student #8 - Student #8 will do wonderfully in this unit. She is highly motivated by the materials and will be a model for reading aloud. She will be successful if she can turn in work and maintain her attendance throughout the unit. She will be challenged by the slow pace and inability to move forward or read aloud all the time.

Student #9 - Student #9 will have an average performance in this unit. He will understand and read aloud, but pretend not to understand. He will be successful if he can show his understanding on the study guides and in front of his peer group. The project and procrastination will challenge him.

Student #10 - Student #10 will be successful in the unit, as she has read much of Shakespeare's works before. She will be successful if she can stay with the class and do the work required. The pace of the class and the oral reading will challenge her.

Student #11 - Student #11 will make it through the unit and she will be successful by asking for help when she needs it. She will find the language and reading difficult to comprehend making study guides difficult as well. She will be reluctant to read orally, but will probably achieve average grades.

Student #12 - Student #12 will have a very difficult time with Shakespeare. Because he will understand very little, he will be bored and restless in class. He will be successful if he can identify things that he needs help on and seek assistance. He will be seriously challenged by the language and comprehension.

7th: Student #13- Student #13 will do well in this unit as long as she can maintain her attendance. She will comprehend much of what we read and be able to read orally. She will also be a resource for the rest of the class. She will be challenged by the amount of work and the organization needed to keep work and her project going at the same time.

Student #14 - Student #14 will do very well on this unit as she is highly motivated by grades and the material. She will also be a great oral reader and model for other students. She may be challenged by some of the literary elements, but should be above average in her work product.

Student #15 - Student #15 will do an average job on this unit. After a disastrous winter term, he has a new motivation to do well regardless of his interest level. He will understand the language and text if he reads it and will complete the work that is required for a passing grade. He will be successful if he slows down his oral reading and provides an oral reading model for other students. He will be challenged to stay motivated with material that he may not have innate interest in.

Student #16 – Student #16 will do a great job on this unit if she can stay healthy and keep steady attendance. She will be motivated to read in class and do her work by the material and her peers. She will be successful if she completes all of her work and the project. She will be challenged by the language, like most of her peers, but should be able to figure things out for an above average performance.

Student #17 - Student #17 will struggle with this unit for two reasons. She has attendance problems and her first language is Spanish. She is fluent in English both spoken and written, but not in Shakespearean English. She will be successful if she can earn a passing grade on this unit and complete most of the work.

Student #18 - Student #18 will do an average job on this unit. She will struggle with the written requirements of this unit as her disability is linked to word visualization and spelling. She makes up for disability in other areas, but is not a strong oral reader. She will be able to comprehend based on hearing others reading aloud. She will be successful if she can generalize the language and the text to create a project and complete study guides.

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