

ELABORATION & VOCABULARY RETENTION

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WHAT IS ELABORATION?

- Elaboration is the "cognitive process in which learners embellish new information based on what they already know" (Ormrod, 2011, p. 193).
- The "elaboration theory" was originally developed for organizing and storing new information (Reigeluth, 1979).
 - Summary
 - Synthesis
 - Analogies
 - Cognitive Cues
- Students need to have a personal connection, experience, or background context with words to help them learn, understand, and apply words (Weinstein, Ridley, Dahl, & Weber, 1989).
- Elaboration strategies have been shown to correlate with academic achievement as measured by GPA (Griffin, MacKewn, Moser, & VanVuren, 2012).

PARTICIPANTS & SETTING

- Setting: private school
- Classroom: 2 AP Language classes, 3 English IV classes
- Timing: 20 minutes, 3 days
- Gender: 26 males, 28 females
- SES: N/A – tuition-based school, no free/reduced lunch
- Age: Range 16-18
- Ethnicity
 - Hispanic – 8
 - African American – 19
 - White – 10
 - Asian – 15
 - Other – 2
- Language: 39 native; 15 non-native

PROCESS

DAY ONE

- Students were presented with pre-assessment questions based on an unfamiliar reading passage.
- Students read passage and answer questions.

DAY TWO

- Students were provided vocabulary activities that required definitions or elaboration.
- Elaboration based on personal questions or background knowledge.

DAY THREE

- Students were presented with the same reading passage and assessment tool.
- Results were compared to the pre-assessment.

SAMPLE FROM PASSAGE:

Archaeological evidence suggests that Rapa Nui was first settled around 400 C.E. by Polynesians forced by the pressures of overpopulation in their native islands to cross many hundreds of miles of open ocean in search of new lands. With no maps or navigational aids to guide them, most expeditions disappeared without a trace, but happenstance brought one party of perhaps fifty people to the island they called Rapa Nui, formed by the propinquity of three active volcanoes and their lava. Fourteen miles long and seven miles wide, it was a place where trees, mostly palms, grew in abundance in the fertile soil, but where the island's animal life comprised mostly insects, worms, and spiders with no terrestrial mammals.

NOVEL TERMS

propinquity
rapacious
happenstance
insular
pellucid
precluding
educer
despoliation
parlous
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SAMPLE QUESTIONS

Why were three separate volcanoes able to form a single island?

A. The volcanoes erupted at the same moment.
 B. The three volcanoes were actually three separate eruptions of the same volcano.
 C. The three volcanoes were close to one another.
 D. The volcanoes were dormant and blocked sea water.

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ELABORATION AND CONTROL GROUPS

ELABORATION	CONTROL
<ul style="list-style-type: none"> 10 responses based on novel terms Form B – personal questions Form C – tertiary knowledge Form D - mix 	<ul style="list-style-type: none"> 10 responses based on novel terms Form A – dictionary <ul style="list-style-type: none"> Definitions Part of speech Origin

SAMPLE QUESTIONS

PERSONAL CONNECTIONS (FORM B)

- What is something that has been despoiled from you?
- Write two sentences about a time that you were rapacious.
- Who do you share propinquity with?
- Where have been that you found pellucid waters? Where would you go if you haven't been?

BACKGROUND KNOWLEDGE (FORM C)

- What Christmas stories are about rapacious characters?
- What American state might provide an insular location? Why?
- In your opinion, what type of transportation is the most parlous?
- What does the government preclude from teenagers?

SAMPLE RESPONSES

- Where could a person find pellucid waters? *They could go to the Carribean on out to some island in the Carribean Sea (sic).*
- When was the last time you were in a parlous situation? How did you feel? *The last time I was in a parlous situation was when I almost drowned at Schlitterbahn because I got swept up by the tide. I felt nervous and scared.*
- What American state might provide an insular location? *Colorado would provide an insular location because it is in the middle of the states with no access to the sea.*
- What Christmas stories are about rapacious characters? *A Christmas story about a rapacious character is the Christmas Carol.*

RESULTS

OVERALL STATISTICS				
Group	# Students	Pre Avg.	Post Avg.	Difference
Overall	54	5.9	6.5	10.2%
AP Language	21	7.0	7.6	8.6%
English IV	33	5.2	5.8	11.5%
Age 16	11	7.2	8.0	11.1%
Age 17	28	5.6	6.2	10.7%
Age 18	15	5.7	6.0	5.3%
Male	26	5.5	6.3	14.5%
Female	28	6.3	6.7	6.3%
Native English	39	6.1	6.8	11.5%
NonNative English	15	5.5	5.8	5.5%

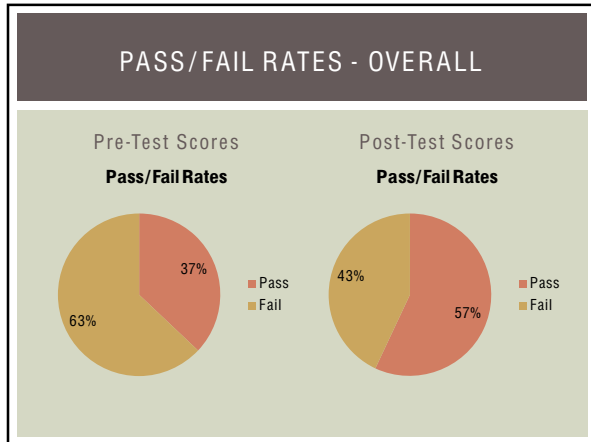
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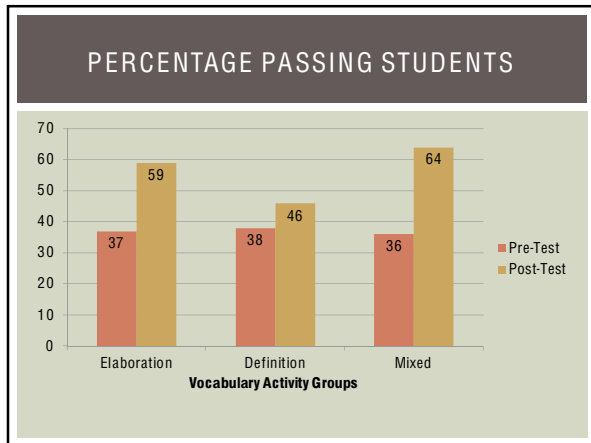
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OVERALL STATISTICS				
Group	# Students	Pre Avg.	Post Avg.	Difference
Hispanic	8	5.25	6.25	19.0%
African American	19	6.1	6.7	9.8%
White	10	6.8	7.1	4.4%
Asian	15	5.6	5.9	5.4%
Elaboration	27	5.8	6.5	12.1%
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- ### IMPLICATIONS
- Results do not disagree with research.
 - Small Sample
 - Assessment Fatigue
 - Memory needs attention and intent
 - Future Study: Administer 2nd Post-Test later
 - Will continue use with adjustments
 - Give immediate formative feedback to students
 - Discussion over written – limited knowledge, construction
 - Blend personal experiences with background knowledge

REVISED STEPS IMPLEMENTATION

- Select appropriately challenging reading passage prior to instruction.
- Select new terms from passage that will enhance comprehension.
- Prepare elaborative prompts and questions to discuss with students.
- Introduce students to new terms and definitions before reading the passage.
- Facilitate and monitor discussion—whole group or small groups—using the prepared prompts and questions.
- Read passage and point out words in context.

REFERENCES

Griffin, R., MacKewn, A., Moser, E., & VanVuren, K.W. (2012). Do learning and study skills affect academic performance? – An empirical investigation. *Contemporary Issues in Education Research*, 5 (2), pp. 109-114. Retrieved from <http://cluteonline.com/journals/index.php/CIER/article/view/6928/7003>

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