

# Impact of 3Ls on Reading Comprehension

## INTRODUCTION

3Ls is set of processes and tools educators can use to engage English Language Learners. (Cucchiara, 2019) Implemented in multiple districts. Framed motivation is building background knowledge. Word play is vocabulary development. Limited research with only a handful of studies. 2 or 3 Independent Variables for Study. Word Play pulls from increasingly challenging texts and promotes use of academic language in writing. Teachers guide students to uncover and comprehend shades of meaning and nuances of vocabulary. Strategic use of cognates and visuals for domain-specific words and activities like Talk it Out, Act it Out, and Draw It. Framed Motivation opens the lesson and creates opportunities to motivate students by connecting them to the theme or topic being explored.

## METHOD

We randomly assigned 30 newcomer ELL students from a high school near Middle Tennessee State University. A pre and post-test will be given using the Gates Macginitie Reading Test(GMRT 4). The experiment uses between design group (control and intervention). The independent variables are vocabulary and background knowledge, while the dependent variable is reading comprehension. The examiner provided the 3Ls intervention to the group of newcomers for 40 minutes a session, 80 minutes a week for 9 weeks totaling 720 minutes. To ensure fidelity, the researcher will act as the examiner using scripting and lesson plans. An independent t-test will be done to compare the intervention and control group. The three research questions are: does the Ls have an impact on reading comprehension, how does the 3Ls affect vocabulary and background knowledge, and what is the perception of 3Ls?

## RESULTS/LITERATURE REVIEW

There is a need for instruction of those vocabulary items that are read as part of the lesson by introducing them the items orally( Brett, Rothlein, & Hurley, 1996) Incidental learning of vocabulary through listening, other reading instruction, and storybook readings improve reading comprehension.(Dickinson & Smith,1994;Senechal,1997) Many mental processes are active when readers read and understand text. Readers draw on their knowledge of language to create sentences out of word sequences. They access their background knowledge to construct meaning from the text. NRP, 2000)

## LITERATURE REVIEW, CONTINUED

Knowledge is represented as an associative net, the nodes of which are concepts or propositions.2 The nodes in this net are interconnected. Text comprehension, from the perspective of the CI model, is highly interactive. Processes at many different levels interact—the perceptual processes involved in reading or listening, syntactic and semantic analyses, knowledge integration, as well as reasoning processes whenever they are necessary. (Kintsch, 2005). Text bases combine two sources of information: the text itself and knowledge—knowledge about language as well as knowledge about the world. (Kintsch, 1988). DIME model is subsumed within the SVR framework, where word reading represents the de-coding component, and background knowledge and vocabulary represent the linguistic component. In a path analysis involving 177 ninth grade students with a wide range of reading ability, Cromley and Azevedo (2007) reported that vocabulary and background knowledge had a direct influence on comprehension and influenced comprehension indirectly by mediating inference-making (a) the use of non-textualized materials for the assessment of component skills in younger children (e.g.,Oakhill & Cain, 2012; Paris & Paris, 2003; van den Broeket al.,2005) and adults (e.g.,Gernsbacher, Varner, & Faust, 1990);(b) the highlighted importance of inference to comprehension performance during testing; (c) the overwhelming importance of vocabulary and background knowledge; (d) the diminished importance of decoding among students with at least adequate decoding skills; and (e) the significant relationship between knowledge and vocabulary to understanding narrative texts, not just informational texts.

## CONCLUSIONS

Prior research does not indicate statistically significant results (Boyet Jeff, & Olivares-Hansen Kerry, 2019). A replication study will be conducted using recommendation: from prior researchers such as using the newcomer population as the sample. Prior research also has an education focused literature This future study will use studies from the field of literacy in the review of literature This study will also provide direct intervention rather than pulling county data from standardized testing. Furthermore, this future study attempts to improve on study design by using pre/post testing, random assignment, and control/intervention grouping.

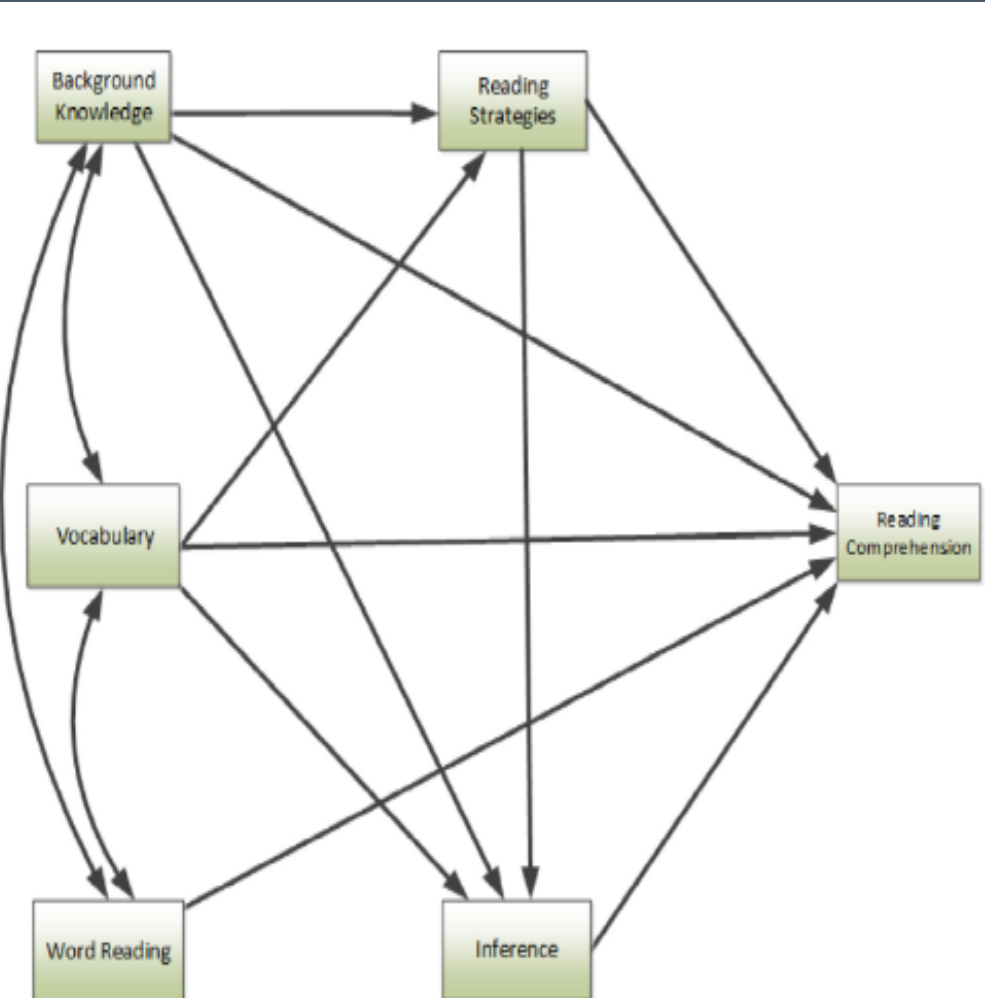
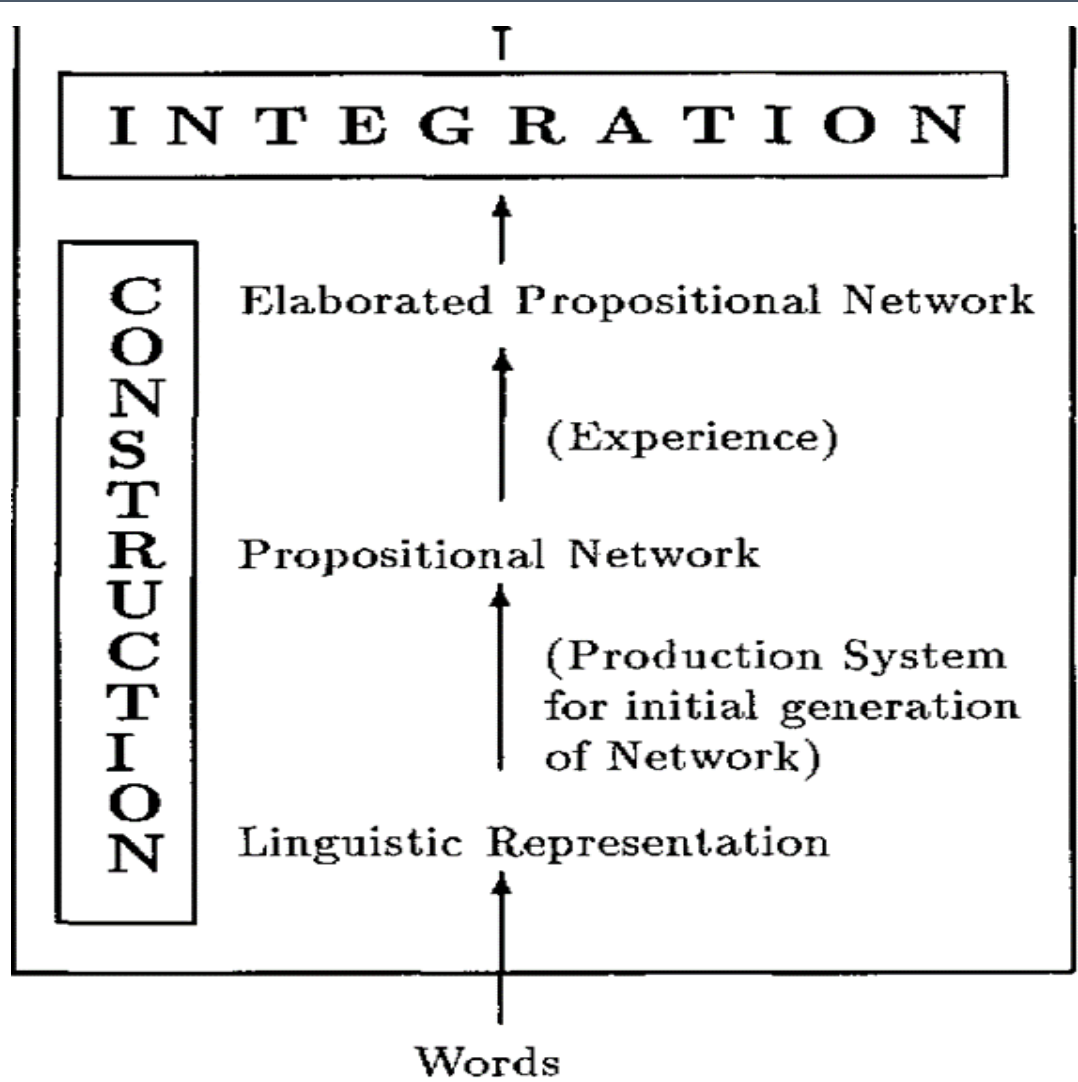
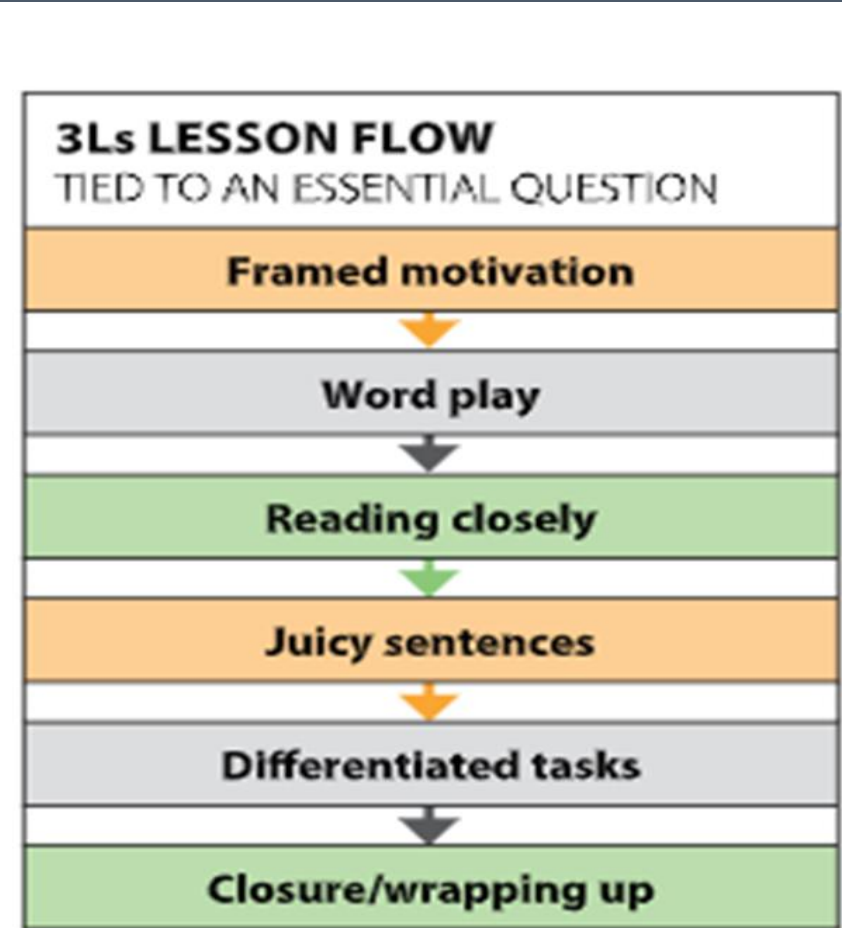


Fig 1. 3Ls Structure      Fig 2. CI model      Fig 3. DIME Model

Table 1. Note. From Ahmed, Y., Francis, D. J., York, M., Fletcher, J. M., Barnes, M., & Kulesz, P. (2016)

Correlations among observed and composite measures from Model 1.

|                                                         | BK   | GMRT-V | WORD | BRI (N) | RSS  | GMPC |
|---------------------------------------------------------|------|--------|------|---------|------|------|
| Grade 7 (below diagonal) and Grade 8 (above diagonal)   |      |        |      |         |      |      |
| BK                                                      | 1.00 | .59    | .31  | .31     | -.07 | .42  |
| GMRT-V                                                  | .52  | 1.00   | .36  | .42     | -.15 | .55  |
| WORD                                                    | .22  | .41    | 1.00 | .17     | -.10 | .30  |
| BRI (N)                                                 | .35  | .41    | .26  | 1.00    | -.03 | .37  |
| RSS                                                     | -.02 | -.04   | .06  | .02     | 1.00 | .02  |
| GMPC                                                    | .48  | .61    | .33  | .44     | .18  | 1.00 |
| Grade 9 (below diagonal) and Grade 10 (above diagonal)  |      |        |      |         |      |      |
| BK                                                      | 1.00 | 0.60   | .34  | .32     | -.03 | .55  |
| GMRT-V                                                  | .62  | 1.00   | .40  | .40     | .01  | .72  |
| WORD                                                    | .24  | .32    | 1.00 | .19     | .04  | .43  |
| BRI (N)                                                 | .38  | .43    | .18  | 1.00    | -.08 | .45  |
| RSS                                                     | .06  | -.01   | .08  | .08     | 1.00 | -.05 |
| GMPC                                                    | .48  | .72    | .30  | .36     | -.04 | 1.00 |
| Grade 11 (below diagonal) and Grade 12 (above diagonal) |      |        |      |         |      |      |
| BK                                                      | 1.00 | .70    | .37  | .29     | -.11 | .54  |
| GMRT-V                                                  | .61  | 1.00   | .42  | .34     | -.12 | .74  |
| WORD                                                    | .36  | .51    | 1.00 | .26     | -.19 | .36  |
| BRI (N)                                                 | .41  | .33    | .24  | 1.00    | -.13 | .40  |
| RSS                                                     | -.17 | -.11   | -.01 | -.02    | 1.00 | -.03 |
| GMPC                                                    | .44  | .65    | .46  | .39     | .01  | 1.00 |

Note: Correlations below .08 are not significant at  $p < 0.05$ . BK = composite of Gates–MacGinitie World Knowledge (grades 7–9 form, and grades 10–12 form); BRI (N) = Bridge-It (Near Condition); GMPC = Gates–MacGinitie Passage Comprehension (Lexile); GMRT-V = Gates–MacGinitie Reading Tests–Vocabulary Subtest; RSS = composite of Evaluation, Help, Pragmatics and Regulation subscales of the Contextualized Reading Strategies Survey; WORD = composite of Woodcock–Johnson Letter Word Identification, Test of Word Reading Efficiency Sight Word and Phonemic Decoding Subtests.

Table 2. Note. Boyet Jeff, & Olivares-Hansen Kerry(2019)

ANCOVA Comparing 2018 WIDA ACCESS Subscores by School using 2017 WIDA ACCESS

Subscores as a Covariate

| WIDA ACCESS 2018 Subscores | 3 Ls Least Sq. $M(SD)$ | Non-3 Ls Least Sq. $M(SD)$ | df | SS     | F     | p    |
|----------------------------|------------------------|----------------------------|----|--------|-------|------|
| Listening                  | 3.65 (.03)             | 3.65 (.03)                 | 1  | 1.1900 | 1.210 | .27  |
| Reading                    | 2.89 (.03)             | 2.99 (.02)                 | 1  | 0.0100 | 0.010 | .91  |
| Speaking                   | 2.38 (.02)             | 2.39 (.02)                 | 1  | 2.3500 | 7.210 | .01* |
| Writing                    | 3.16 (.02)             | 3.29 (.02)                 | 1  | 0.0004 | 0.001 | .97  |
| Comprehension              | 3.13 (.03)             | 3.19 (.02)                 | 1  | 1.2200 | 1.710 | .19  |
| Oral Proficiency           | 2.86 (.02)             | 2.86 (.02)                 | 1  | 0.0950 | 3.000 | .08  |
| Literacy Proficiency       | 3.00 (.02)             | 3.12 (.02)                 | 1  | 0.1900 | 0.540 | .46  |
| Composite Overall          | 2.95 (.02)             | 3.01 (.01)                 | 1  | 0.1600 | 0.650 | .42  |

\* $p < .05$



# References

- Ahmed, Y., Francis, D. J., York, M., Fletcher, J. M., Barnes, M., & Kulesz, P. (2016). Validation of the direct and inferential mediation (DIME) model of reading comprehension in grades 7 through 12. *Contemporary Educational Psychology*, 44–45, 68–82. <https://doi.org/10.1016/j.cedpsych.2016.02.002>
- Boyet Jeff, & Olivares-Hansen Kerry. (2019). Microsoft Word - The Effects of the 3 Ls on High School SIFE Students' Language Learning Outcomes - doctoral dissertation.docx - zEvaB.
- Braze, D., Katz, L., Magnuson, J. S., Mencl, W. E., Tabor, W., van Dyke, J. A., Gong, T., Johns, C. L., & Shankweiler, D. P. (2016a). Vocabulary does not complicate the simple view of reading. *Reading and Writing*, 29(3), 435–451. <https://doi.org/10.1007/s11145-015-9608-6>
- Brett, A., Rothlein, L., & Hurley, M. (1996). Vocabulary acquisition from listening to stories and explanations of target words. *Elementary School Journal*, 96, 415-422.
- Coyne, M. D., Betsy McCoach, D., Loftus, S., Zipoli, R., Ruby, M., Crevecoeur, Y. C., & Kapp, S. (2010). Direct and extended vocabulary instruction in Kindergarten: Investigating transfer effects. *Journal of Research on Educational Effectiveness*, 3(2), 93–120. <https://doi.org/10.1080/19345741003592410>
- Cucchiara, M. (2019). *Language of Learning*.
- Dickinson, D.K., & Smith, M.W. (1994). Long-term effects of preschool teachers' book readings on low-income children's vocabulary and story comprehension. *Reading Research Quarterly*, 29, 104-122
- Kintsch, W. (1988). The Role of Knowledge in Discourse Comprehension: A Construction-Integration Model. In *Psychological Review* (Vol. 95, Issue 2).
- Kintsch, W. (2005). An Overview of Top-Down and Bottom-Up Effects in Comprehension: The CI Perspective. In *DISCOURSE PROCESSES* (Vol. 39, Issue 3).
- Proctor, C. P., Silverman, R. D., Harring, J. R., & Montecillo, C. (2012). The role of vocabulary depth in predicting reading comprehension among English monolingual and Spanish-English bilingual children in elementary school. *Reading and Writing*, 25(7), 1635–1664. <https://doi.org/10.1007/s11145-011-9336-5>
- Stanovich, K. (2000). *Progress in understanding reading: Scientific foundations and new frontiers*. New York: Guilford Press.
- Veldman, S. L. C., Chin A Paw, M. J. M., & Altenburg, T. M. (2021). Physical activity and prospective associations with indicators of health and development in children aged <5 years: a systematic review. *International Journal of Behavioral Nutrition and Physical Activity*, 18(1). <https://doi.org/10.1186/s12966-020-01072-w>