

Evaluation of Teaching Methods to Improve Reading Performance of English Language Learners

Joyce M. Robinson // Robinson Education Consulting

ABSTRACT

This paper presents an evaluation of two reading methods, phonics-based instruction and whole language learning, for English Language Learners (ELLs) and discusses the learning theories, behaviorism and constructivism that are associated with each method, respectively. The study took place in a K-12 international school, with 110 Grade 1 subjects and 83 Grade 2 students. The author's earlier preliminary investigation of ELL reading teaching methods in the same international school, during the previous year, prompted this paper's follow-up analysis. At issue was a significant decrease in reading achievement of Grade 2 classes after changing the Grade 1 reading curriculum from a phonics-based approach to one of whole language learning. In the year following the whole language in reading classes, the phonics program returned. For purposes of this study, three Grade 1 classes were observed to observe reading achievement based on the different reading methods, including comparisons of whole language with two intensities of phonics instruction. The measurement of reading performance included standardized tests for reading achievement. Statistical analysis used t-tests and one-way ANOVA. The study found that students in Grade 1 profited significantly from having intensive phonics-based instruction as a major part of the reading program. Also, Grade 2 students with accommodating teaching methods in the early years of schooling can make important gains after significant setbacks.

INTRODUCTION

Controversy continues over the best methods for teaching reading English Language Learners (ELLs). Few studies have directly investigated the problem of what works for the fastest-growing student group in the nation, increasing 60% in the last decade compared to the general student population's 7% growth rate (Saunders & Marcelletti, 2013). Additionally, ELL reading performance has continued at lower levels than that of non-ELLs. The need for appropriate reading instruction for ELLs has continued, as historically, ELLs have scored lower than other groups, with the gap growing (Abedi & Ditel, 2004). Reading score averages of ELLs on the National Assessment of Educational Progress in 2017 were 37 points lower than those of non-ELLs (Aud, Wilkinson-Flicker, Kristapovich, Rathbun, Wang, & Zhang, 2013). ELL reading programs typically use similar teaching methods to those for non-ELLs, and this practice has been recommended by the Literacy Panel on Language-Minority Children and Youth (August & Shanahan, 2008), the National Reading Panel (2000), Chall (1983), Moats (2000) and Hempenstall (2014). ELLs are then, in effect, subject to whatever reading methods are chosen for the

reading curriculum for non-ELLs.

Although there is considerable research on teaching ELLs, little attention is paid to evidence for determining effective reading methods. Instead the focus is primarily on ancillary topics, such as classroom grouping, bilingual versus immersion classes, parental involvement and teacher's language of instruction (August & Shanahan, 2008; Braunworth & Franco, 2017; Lenters, 2004).

The two most widely used reading methods currently in reading classrooms for students, regardless of language background, are 1) phonics based, requiring explicit and systematic instruction of sound-symbol correspondences, expected to lead to eventual comprehension mastery and 2) whole language, using indirect learning by having students memorize whole words and figure out other words through immersion in texts, to experience one's own understanding and appreciation of written content.

In opposition to phonics-based teaching, whole language stresses that reading is a natural process and does not need direct instruction; it can be acquired much like the way children learn speech (Goodman, 1986). However, people are not hardwired for an alphabetic reading and writing system and therefore need special training (Daniels, 1996). Using indirect instruction in whole language, teachers are to serve more as coaches on the sidelines, guiding students by responding to their invitations for help (Reyes, 1992).

Problems for ELLs can intensify when a curriculum change is made from direct instruction of phonics to indirect teaching of whole language, without taking into consideration the special learning issues of students who come to school without well-developed English speaking skills. A change in teaching reading methods, from direct phonics instruction to a whole language approach presents a major challenge, with increased chances of negative consequences (Reyes, 1992; Robinson, Alangary, & Khaloui, 1993). Such a situation happened for students in the international school who took part in this paper's study.

Following up a preliminary investigation (Robinson, Alangary, & Kholoui, 1993) in a private, K-12 international school, this study further investigated the effects of teaching methods on reading performance that followed whole language and phonics teaching. The school's reading curriculum changed from using phonics instruction to one of whole language, causing concern because of weak results after testing students following whole language.

For the first time in the six-year history of the school, more than 40% of the Grade 2 students tested below grade level on routine second-grade English reading placement tests during the first week of school. Typically, in past years, under 10% of Grade 2 students fell into this problem area. Analyzing the results of the change from phonics instruction to whole language and then back again to phonics gives an opportunity to help evaluate effective reading teaching method for an ELL student population.

The administration of the school met with the Grade 1 and Grade 2 teams of teachers, along with support staff, to discuss ways to obtain more scientific evidence to evaluate reading teaching methods.

THEORETICAL FRAMEWORK OF READING METHODS

Two learning theories, behaviorism and constructivism, underlie phonics-based instruction and whole language learning, respectively. Examining their different main

principles helps to clarify the strategies for each of the reading methods under discussion.

The phonics-based method draws heavily from behaviorist theory, which focuses on observable behavior as its main objective, while essentially overlooking mental processing. Outward behavior changes because of environmental associations between stimuli and responses. Thorndike studied how people become conditioned to repeat verifiable actions automatically by what became known as stimulus-response theory (Salmoni, Schmidt, & Walter, 1984; Watson, 1924). Additionally, information can be transmitted from a knowledgeable source to one that is less informed. The work of Skinner (1953) on a system of rewards and punishments represents a main contribution to the behaviorist theory and led to practical applications for students to improve their school performance.

Applications of the behaviorist theory include the teacher's responsibility for planning and directing bottom-up reading instruction and providing a sequential skills development plan that moved from learning individual sounds to comprehending texts. Upon completing training and testing, teachers then would have observable evidence of student performance. Measurement includes the following: testing phonological awareness skills of blending, segmenting and manipulating language sounds, teaching letter-sound relationships, fluency, comprehension strategies, grammar, spelling and writing.

Constructivism essentially concentrates on actively constructing, or creating, knowledge; in this way, one makes one's own individual meaning from experiences. Cognitive processing benefits from immersion in whole learning experiences. Teachers act more like sideline coaches, available for help when needed, instead of being transmitters of knowledge. Several key contributors to constructivism include Piaget (1936) and Wadsworth (2004), who considered mental processing as most important. External behavior helps explain understanding what is going on in the mind. John Dewey, part of the Progressive movement of the early twentieth century, stressed child-centered, holistic language study and experiential learning (Graham, 1967). Vygotsky (1978) presented the idea of the need for social interaction experiences as key to "making meaning" for each individual learner.

Aligned with constructivism and spearheaded by Goodman (1986), whole language's classroom practices are based on the belief that reading is part of the natural learning of language as a whole. Much like speaking, then, reading does not require direct instruction, but essentially requires an immersion in rich reading opportunities. Teachers stress indirect learning, whole word immersion and a rejection of any strategies of the phonics instruction method of teaching reading (Goodman, 1986). Using a top-down approach, students immerse themselves in text, based on individual interests, to search for their own meanings. Learning indirectly, students need minimal instruction that is primarily on-demand from teachers. As coaches, teachers guide students by responding to invitations for help. Additionally, group learning and hands-on projects play an important role (Reyes, 1992).

Phonics-based and whole language instruction had swings back and forth in prominence since the early twentieth century, often called the "reading wars" (Chall, 1983). Phonics was favored as the reading method of the early colonialists, and not until the 1930s was it challenged significantly with the "Look-Say" whole word learning strategy that was attributed to Edmund Huey and advocated by John Dewey (Westcott, 2012). In the 1950s, phonics returned again because of lagging reading achievement, ushering in the popularity

of *Why Johnny Can't Read* (Flesch, 1955). By the 1980s, whole language became the established approach, continuing to battle with phonics for prominence until today.

The chart below presents a view of major contrasting strategies for phonics and whole language teaching of reading methods with their associated learning theories, behaviorism and constructivism, respectively.

Table 1. Characteristics of Behaviorism vs. Constructivism

Behaviorism	Constructivism
Phonics Instruction Strategies	Whole Language Learning Strategies
Teacher-centered	Student-centered & teacher as facilitator
Systematic teaching plan	Unregulated Learning
Direct Instruction	Indirect knowledge acquisition
Part to whole language skills study	Whole language to need-based skills study
Phonics teaching	Phonics skills through immersion in texts
Focus on learning product	Focus on learning process
Bottom-up skills teaching	Top-down skills learning
Norm referenced assessment	Process-oriented multi-assessments
Controlled texts for reading difficulty	Interest, not difficulty, for choosing text

For ELLs, it is important to note that whole language presents special problems, such as difficulty understanding linguistic differences and having little experience inviting a teacher to give help in learning when needed. Learning to read English then for ELLs becomes a challenge, as they do not have the English spoken language as a basis for benefitting successfully from immersion in texts (Delpit, 1988; Robinson, Alangary, & Khaloui, 1993). Other cultural differences exist, such as ELLs' likely expectations that the teacher is supposed to be taking charge of their learning. ELLs typically come from cultures that expect direct and explicit instruction, and asking for help may be uncomfortable for them. They also do not always have enough immersion time in English at home and in the community to develop models of correct English. Therefore, primarily listening activities are in school, being inadequate preparation for these students (Reyes, 1992).

It also becomes apparent that combining the two methods, as some have suggested, presents a situation in which one method will easily dominate, because of the conflicting differences in strategies and underlying principles (Moats, 2000).

METHOD

Subjects

For the first analysis, the study used 110 students, selected from the Grade 1 classes. Students had all passed admissions entrance requirements, including the Brigance Screening Test (1987), which were found to be reliable entrance indicators. The second group included the eighty-three Grade 2 students whose standardized test scores of the previous year were analyzed.

Measures

For the first analysis of the Grade 1 reading achievement, the Iowa Tests of Basic

Skills was used, Form J, measured achievement of the three sets of first grade scores. Grade 2 students took the Gates-MacGinitie Tests, Level B, Forms 1 and 2, to show their progress.

Procedures

Reading Achievement of the Grade 1, referred to as Group 1, Group 2 and Group 3, were observed for reading achievement differences.

Group 1. Subjects had an intensive phonics-based reading program, which used direct teaching of skills. Included were reading in basals and literature books, spelling, writing in various contexts. Teachers devoted at least 20 minutes of the 45-minute reading period to skills teaching each day, using the basal reading series, literature books or other adaptable materials. Discussions of the stories and activities followed the story reading that was either silent or oral. Students then developed writing and language skills in the remaining 45-minute language arts period.

Group 2. Subjects had a whole language program, which included primarily about 45 minutes reading aloud of stories by students or the teacher, who integrated discussions and drawings or other crafts projects. Teachers did not correct reading errors without students' requesting it. Also included in this time period were writing experiences, limited primarily to unevaluated free journal writing.

Group 3. An intensive phonics-based program for these subjects was comparable to that of Group 1, but added ten more minutes of direct skills instruction and practice.

A t-test was used to test the differences among the three groups of Grade 1's reading achievement on the Iowa Tests of Basic Skills. For Grade 2, graphs of reading progress and an analysis of variance indicated differences between the four testing times.

RESULTS

Experiment 1

The question or hypothesis for this study was: Do the reading methods, phonics, whole language and intensive phonics have significantly different effects on reading achievement?

Group 3 students receiving an intensive phonics-based reading method, which incorporated extended direct skills teaching, scored significantly higher than Group 2 (whole language) or Group 1 (students who were taught by phonics-based teaching but with less time on direct skills learning than Group 3). Table 2 gives a comparison of the means scores for each group in Grade 1.

Experiment 2

The second question is: Can incorporating direct skills instruction into a reading program cause significant gains for below-grade level as well as average and above-grade level students? Table 3 shows the results of the analysis of variance, noting significant differences between the Grade 2 groups of tests at $p = 0.00$. Results of the Gates-MacGinitie Reading Tests (Figure 1) (Figure 2) for second grade students show a steady improvement for almost all students from September - June.

CONCLUSIONS

These data for both studies support evidence that students who come from "linguistically different" backgrounds, such as the international school's ELL population, respond best to reading instruction that incorporates an intensive phonics program that includes directed teaching of skills. It also suggests that with appropriate teaching methods, students in the early years of schooling can make important gains after significant setbacks.

RECOMMENDATIONS

The data presented in this study adds to the body of research on the effectiveness of phonics for teaching reading to the ELL population in an international school. Considering the growing number of linguistically diverse students in the nation's schools, it is strongly recommended that this study will lead to further investigations of the best reading practices for teaching ELLs to add additional data to this important area.

Table 2. Iowa Test Scores: Grade 1

Teaching Area	Mean Score
Phonics-Based Approach (Including Direct Skills)	16.30
Whole Language	15.75
Intensive Phonics-Based Approach (Including Direct Skills)	19.00

Table 3. Analysis of Variance: Grade 2

Anova: Single-Factor						
<i>Summary</i>						
Groups	Count	Sum	Average	Variance		
Sept	88	200.90	2.28	1.36		
Dec	88	250.50	2.85	1.12		
Mar	88	292.50	3.32	1.24		
Jun	88	318.80	3.62	1.36		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	90.54	3.00	30.18	23.78	0.00	2.63
Within Groups	441.64	348.00	1.27			
Total	532.18	351.00				
Statistically significant at $p < 0.00$						

Figure 1. Graph of Gates-Macginitie Reading Test Results: Grade 2

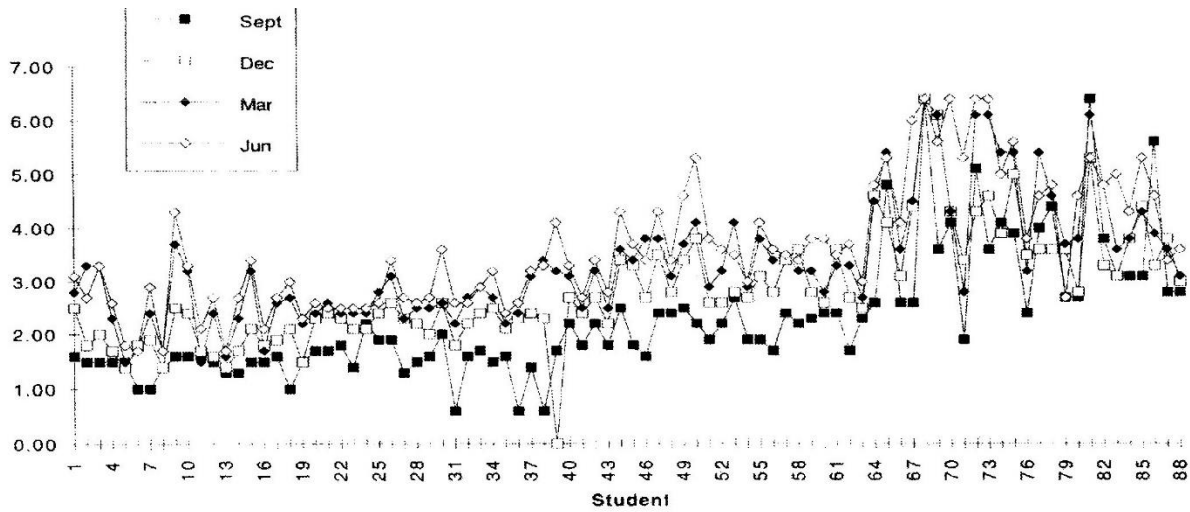
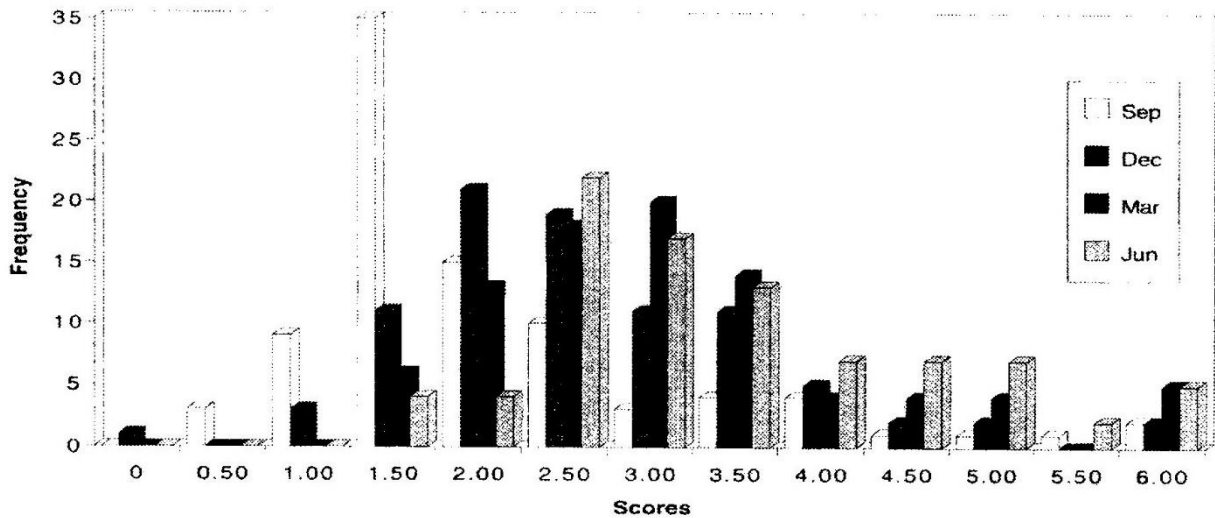


Figure 2. Histogram of Gates-Macginitie Grade 2 Scores from the Four Selected Months



REFERENCES

Abedi, J., & Dietel, R. (2004). *Challenges in the No Child Left Behind Act for English language learners*. Oakland, CA: University of California Press.

Adams, M. J. (1990). *Beginning to read: thinking and learning about print*. Cambridge, MA: M.I.T. Press.

Aud, S., Wilkinson-Flicker, S., Kristapovich, P., Rathbun, A., Wang, X., & Zhang, J. (2013). *The Condition of Education 2013*. Retrieved from <http://nces.ed.gov/pubsearch>

August, D., & Shanahan, P. (2008). *Developing Reading and Writing in Second-Language Learners*. London: Routledge.

- Braunworth, O. T., & Franco, Y. (2017). Reaching below level ELL's reading comprehension. *Journal of Practitioner Research*, 2(1), 1-4. Retrieved from <http://doi.org/10.5038/2379-9951.2.1.1048>
- Brigance Screening Test. (1987). North Billerica, MA: Curriculum Associates.
- Chall, J. S. (1983). *Learning to read: The great debate*. New York: McGraw-Hill.
- Cheung, A., & Slavin, E. (2005). Effective reading Programs for English language learners and other language-minority students. *Bilingual Research Journal*, 29(2), 241-267.
- Daniels, P. T. & Bright, W. (1996). *The World's Writing Systems*. Oxford, UK: Oxford University Press.
- Daniels, P. T., & Bright, W. (1996). *The World's Writing Systems*. Oxford, UK: Oxford University Press.
- Delpit, L. D. (1988). The silenced dialogue: power and pedagogy in educating other people's children. *Harvard Educational Review*, 58(3), 280-299.
- Dudley-Marley, C. (1996). Whole language, assumptions and ideology: a response to Groff. *Reading and Writing Quarterly*, 12(2), 227-236.
- Flesch, R. (1955). *Why Johnny can't read*. New York, NY: Harper & Brothers.
- Gates-MacGinitie Reading Tests. (1978). Chicago, IL: The Riverside Publishing Company.
- Goodman, K. (1986). *What's whole in whole language?* Portsmouth, NH: Heinemann.
- Graham, P.A. (1967). *Progressive Education from Arcady to Academe: A History of the Progressive Education Association, 1919-1955*. New York: Teachers College Press.
- Hempenstall, K. (2007). *Will education ever embrace empirical research?* Retrieved from <https://www.nifdi.org/docman/dr-kerry-hempenstall-s-referenced-documents/di-news-articles/348-will-education-ever-embrace-empirical-research-summer-2007/file.html>
- Hempenstall, K. (2014). What works? Evidence-based practice in education is complex. *Australian Journal of Learning Difficulties*, 19(2), 113-127.
- Iowa Tests of Basic Skills. (1985). Chicago, IL: The Riverside Publishing Company.
- Lenters, K. (2004). No half measures: Reading instruction for young second-language learners. *The Reading Teacher*, 58(4), 328-336.
- Moats, L. (2000). *Whole language lives on: The illusion of "balanced reading" instruction*. Washington, DC: Thomas B. Fordham Foundation.
- Moats, L. (2011). *Whole-Language High Jinks*. Washington, DC: Thomas B. Fordham Foundation.
- Moll, L. (2014). *L. S. Vygotsky and education*. New York, NY: Routledge.
- National Assessment of Educational Progress. (2018). Reading Assessment. Retrieved from <http://nces.ed.gov/nationsreportcard/reading>
- National Reading Panel. (2000). *Report of the National Reading Panel: Teaching Children to Read*. Bethesda, MD: National Institute of Child Health and Human Development.
- Piaget, J. (1936). *Origins of intelligence in the child*. London: Routledge & Kegan Paul.
- Reyes, M. (1992). Challenging venerable assumptions: Instruction for linguistically different students. *Harvard Educational Review*, 62(4), 427-447.
- Robinson, J., Alangary, M., & Khaloui, J. (1993). *Effects of a skill development plan on*

- elementary bilingual students' reading performance*. Paper presented at the annual conference of the Eastern Educational Research Association, Clearwater Beach, FL.
- Salmoni, A. W., Schmidt, R. A., & Walter, C. B. (1984). Knowledge of results and motor learning: A review and critical reappraisal. *Psychological Bulletin*, *95*(3), 355-338. Retrieved from <http://dx.doi.org/10.1037/0033-2909.95.3.355>
- Saunders, W. M., & Marcelletti, D. J. (2013). The gap that can't go away: The catch-22 of reclassification in monitoring the progress of English learners. *Educational Evaluation and Policy Analysis*, *35*(2), 139-156.
- Skinner, B. F. (1953). *Science and Human Behavior*. New York: Simon & Schuster.
- Stahl, S. A., & Miller, P. D. (1989). Whole language and language experience approaches for beginning reading: A qualitative research synthesis. *Review of Educational Research*, *59*(1), 87-116.
- Vygotsky, L. S. (1978). Interaction between Learning and Development. In M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (Eds.), *Mind and Society: The Development of Higher Psychological Processes* (pp. 79-91). Cambridge, MA: Harvard University Press.
- Wadsworth, B. J. (2004). *Piaget's theory of cognition and affective development: Foundations of constructivism*. Boston: Pearson.
- Watson, J. B. (1924). *Behaviorism*. New York: Norton.
- Westcott, K. (2012, June). *Five things about phonics*. Retrieved from <http://www.bbc.co.uk/news/magazine-18493436>