

# Play-to-Read in 30 Days: Helping Readers At-Risk within the Response to Intervention (RTI) Framework

Lorna B. Yan

Department of Education, Ateneo De Manila University, Quezon City, Philippines

Email: lbyan.jca.edu.ph

**Abstract**—The study investigated the experiences, responses, and reading achievements of at-risk kindergarten readers of Jubilee Christian Academy in Quezon City, Philippines to a reading intervention program delivered within the Tier 2 of the Response to Intervention (RTI) model. The key elements of an effective reading instruction as determined by the National Reading Panel were used as the core components of the play-based reading intervention program: phonemic awareness, listening comprehension, vocabulary, phonics, and fluency. To implement properly the complexities of the RTI approach, the RTI Guiding Principles for Education in the implementation of the intervention program under the Tier 2 framework was utilized. The intervention conducted on the participants of the program appeared to have worked. They responded adequately to the 30-day Tier 2 instruction as shown in their reading behavior and gain scores in phonemic awareness, phonics, and fluency.

**Index Terms**—Response to Intervention (RTI), at-risk readers, Tier 2, reading intervention, kindergarten

## I. INTRODUCTION

Empirical evidence supports the need for early academic intervention for students at risk for reading failure to ensure academic success in later grades [1]-[3]. Reference [4] also suggests there is an advantage to starting reading intervention right from the beginning of the kindergarten school year as a way of ensuring strong performance in key early literacy skills before first grade. This highlights the need for targeted and explicit literacy intervention at the preschool level, the critical window for learning to read.

The Response to Intervention potentially offers an ideal solution to meet the needs of at-risk and struggling readers [5]-[7] but there is a great deal of variability in reading instruction in the tiers of the RTI framework. Regular education teachers are asked to utilize scientifically-based practices to provide reading instruction in all its three tiers but the research base that helps schools determine which models or combination of models are most effective especially in Tier 2 is woefully thin. If RTI is to be implemented effectively, selecting or

designing an intervention model is vital. Further research on instructional models documented to be effective will greatly help teachers in implementing the RTI framework [8].

The researcher's background in relation to at-risk readers challenged her to provide her own students with balanced literacy intervention using the key elements of an effective reading instruction determined by the National Reading Panel [9] as the core components: phonemic awareness, listening comprehension, vocabulary, phonics, and fluency. The researcher called the program *Alterra Play-to-Read in 30 Days*, from the word *alter*, to highlight the changes and adjustments she made. These include the differentiated instruction practices needed to address the need of the at-risk readers and the use of research-based practices in literacy instruction such as the explicit and systematic synthetic phonics and activities that are tailored to incorporate the physical activities young learners often crave, their strong inclination on experiential learning [10], their need to practice emerging literacy through play, and their need for group dynamics [11] to engage with reading. The program is designed for 30-day sessions with one-hour per session done three times a week.

This research study focuses on determining the effectiveness of the *Alterra Play-to-Read in 30 Days* instructional model delivered to at-risk kindergarten readers by identifying the students' responses in the Tier 2 of the Response to Intervention model.

## II. LITERATURE REVIEW

### A. *Preschool Early Interventions*

The early intervention literature suggests there is a difference in opinion when thinking about preschool literacy intervention. First in contention is when academic intervention should begin. Many young students enter kindergarten lacking readiness skills necessary for successful adjustment to school. Readiness skills are considered the important prerequisite skills students need to master to succeed academically in later grades [12]. It is not surprising, then, that addressing specific readiness skills often receive a higher priority than teaching academic skills, especially early in the kindergarten school year. Second, preschool children

have not yet expressed evidence of reading and writing difficulty, because they are pre-readers [13]. Amount of instability in literacy foundation is not substantial enough to merit comprehensive preschool intervention programs.

In contrast with these perceptions, reference [14] points out that many researchers recognize the urgency of improving literacy instruction in early childhood and have long since developed intervention programs designed to improve preschool classroom environments in support of young children's emergent literacy. The power of specific literacy interventions among preschool and kindergarten children was noted on recognizing and writing letters and connecting letters to sounds. More recent interventions incorporate strategies that have been shown to be effective at promoting children's emergent literacy development. These include fostering children's understanding of print concepts, infusing classrooms with clustered print materials to provoke sustained interaction with print [15], providing opportunities for children to experiment with writing [16], reading aloud to children in an interactive style [17], involving children in activities that promote children's phonological skill development [18], and redesigning dramatic play areas to provide opportunities for authentic engagement with print [19]. Play in literacy enhanced preschool environments positively influenced children's understanding and creation of narratives, production of oral language, and emergent writing [20].

The review has greatly clarified what needs to be taught in early childhood to provide a foundation for becoming a successful reader. The Report of the National Reading Panel: Teaching Children to Read [21] determined that research-based explicit and systematic instruction in the critical components of reading is effective in teaching children to read especially those at-risk. The five components identified are phonemic awareness, phonics, fluency, vocabulary, and comprehension. Intervention programs require direct, explicit, and systematic teaching of these skills in small group setup. Synthetic phonics is an example of a systematic approach in teaching reading and is associated with better progress in reading accuracy. Synthetic phonics gives children the skills to read the words, the clear cut foundation in interacting with a text and making sense of what it says.

#### B. Response to Intervention

Recent efforts to develop alternative identification and intervention models for students at-risk in reading have led to models such as response to intervention (RTI).

The acknowledgement that generally effective literacy programs do not accommodate the learning needs of all students has led to a strong interest in a multi-level approach [22]. Reference [23] emphasizes that concerns over the early identification and intervention for children experiencing difficulties in reading have led to the development of a preventive approach to reading instruction. This approach measures the child's progress within multiple tiers of reading instruction and provides support and interventions beginning in general education and moving to special education depending on the child's

response to the interventions. These models are more preferred than traditional service delivery models because they may provide services sooner than special education [24]. Special education may move away from an identification process that moves away from focusing primarily on problems within the learner to instead focusing on increasing student achievement by increasing the overall instructional process for all students. The IQ-score achievement discrepancy model in the identification of learning disabilities lacks coverage and requires too much time for children to exhibit discrepancies and carries no implication for instruction [25]. The multi-tiered model of RTI potentially negates each of these problems by capturing all children who are not learning, allowing implementation of the model early in a child's school career, and having a direct, low-inference connection to instruction [26], [27].

With the Response to Intervention, the path to reading success is littered with grand plans and silver bullet solutions. The Philippine educational system, however, has not been very quick to jump into one of the most notable educational buzzwords today. RTI has not received widespread adoptions in Philippine schools as an intervention method for students experiencing difficulties in learning to read or identifying children with special education needs.

Nonetheless, majority of the reviewed studies on RTI conducted outside the country affirm that at-risk students benefit from early and intensive interventions offered in the three-tiered approach to literacy instruction.

### III. RESEARCH METHODS AND DESIGN

#### A. Research Design

This qualitative case study is both exploratory and multiple. It is exploratory in that it sought to examine the responses of kindergarten at-risk readers to better understand and interpret their experiences in the Alterra Play-to-Read in 30 Days using the Response to Intervention approach. This is also a multiple case study since it explored the responses to Alterra of four subjects who were at-risk kindergarten readers.

The case study methodology allowed the researcher to triangulate data from a variety of data sources collected through interviews, observations, and artifacts to create a more complete understanding of the phenomenon. This ensured that the issue was not explored through one lens, but rather a variety of lenses.

#### B. Research Instruments

The following instruments were used before and / or after the intervention program to check the students' literacy interests, attitudes and abilities, and their progress and responses to the program.

1. The Dynamic Indicators of Basic Early Literacy Skills (DIBELS) Next Benchmark Assessment for Kindergarten is a set of procedures and measures for assessing the acquisition of early literacy and early reading skills. The benchmark goals are criterion-referenced: (1) first sound fluency, (2) letter naming

- fluency, (3) phoneme segmentation fluency, and (4) nonsense word fluency [28].
2. The researcher-made vocabulary and listening comprehension tests, which were pilot-tested for reliability and checked for validity by experts, were used as pre-test and post-test to determine the subjects' levels in these reading skills. The 36-item vocabulary test is definitional in nature. It measures single-word oral vocabulary and assesses both surface and deep vocabulary knowledge. The listening comprehension test measures literacy ability in the area of comprehension. It consists of 2 passages read by the teacher and 10-item questions about the stories listened to.
  3. A survey on students' perceptions and assessments on the components of the Alterra program was also given to the subjects at the end of the intervention program to provide the researcher an interacting component that provides an enhanced understanding of the students' responses to the program. The researcher arbitrarily devised a scale to interpret the extent of the subjects' attitude or response to the components of Alterra: 76-100 (Very happy), 51-75 (Slightly happy), 26-10 (Slightly sad), and 1-25 (Very sad).
  4. Interviews were a primary means of data collection for this study. In order to achieve a complete understanding of the experiences of the interviewees, the researcher used open-ended focused interview prompts and provided probing questions wherever necessary to allow for various perspectives to emerge. Teacher interviews were conducted at the initial phase of the implementation of the Alterra Program to gather baseline information about the subjects and why they were referred for DIBELS Assessment. Moreover, Coordinator interview was also conducted to gather information on the responses of the subjects to the Tier 2 intervention program.
  5. A list of questions in the form of a parent information survey was utilized in gathering baseline information from parents on their child's interests, family reading habits, and background information that may be necessary for intervention. Individual interviews with parents were also conducted at the end of the program to gather data on the parents' observations on their child's reading skill and attitude during and after the Alterra program.
  6. Student-guided conversations were conducted among the four participants after the program. The researcher collected information regarding the insights that students had regarding the intervention provided to them during small group instruction. To engage the students in conversations, the researcher asked open-ended interview prompts.
  7. Progress monitoring tools were used to collect vital information to determine how the students responded to the intervention process. These tools came from the curriculum-based measurement (CBM) tradition, where the test items are related to the actual curriculum that the child is being taught [29]. The

individual word reading tasks were given to the students after each lesson to regularly check and monitor the progress of the students' blending and decoding skills. The running records [30] provided the researcher with evidence of what the child is able to read, ready to learn, and learning over a period of time. They contained copies of texts called Little Readers in the Alterra curriculum and were read by the students, while the teacher marked observations and miscues.

8. Double-entry notes were used to take detailed observations and reflections that provided the researcher data from which to look for patterns and ideas. The notes specifically indicated when a child began blending words and reading short phrases and sentences.

### *C. Research Subjects*

The subjects of this study were students who came from the kindergarten general education classroom, what is deemed as the Tier 1 of Jubilee Christian Academy's Response to Intervention. Out of the 98 kindergarten students of Jubilee in the general education setting or Tier 1 of school year 2013-2014, seven students were initially identified as having potential reading problems. After the DIBELS screening, four were identified as subjects of this study. Actual subjects' names have been replaced with pseudonyms.

One student, Glenn, a male, got a DIBELS composite score of 72, the lowest among those tested, which indicated his need for intensive support in reading. He scored 9 points below the cut-off point for risk in first sound fluency (FSF) and phoneme segmentation fluency (PSF), and zero in correct letter sound (CLS) and whole words read (WWR). As reported by his teacher, Glenn had minimal knowledge of letter-to-sound correspondence and had difficulty blending sounds in the first quarter of his kindergarten year. Most of the time, he would just face the wall, mumble sounds, and play during individual reading time in class.

A second student, Daven, also a male, started going to Jubilee in Nursery. He speaks both in English and in Filipino. His composite pre-test scores in DIBELS Benchmark Assessment was 101 which indicated his need for intensive support in reading. He got zero in two DIBELS components: correct letter sound (CLS) and whole words read (WWR). His first sound fluency score (FSF) was 10 points below the cut-off point for risk. His teacher also indicated that Daven had a blending problem. He knew the letter sounds but could not blend them. He would simply guess reading words presented to him based on the first letter. His difficulty was compounded by Daven's on-task, off-task behavior. He lacked focus in class and would not listen and participate in most activities.

The third student, Julia, a female, started attending Jubilee in the Nursery level. Her DIBELS pre-test composite score indicated her "likely to need strategic support" in reading. Of the 6 DIBELS components pre-tested, it was only in nonsense word fluency - correct letter sound component - that she got a score below the

cut-off point for risk. This meant that Julia did not hit the benchmark but was not at the rock bottom. However, her teacher noted that Julia struggled a lot in her reading class in both areas of word recognition and listening comprehension. Her phonemic awareness was so poor that she could not match letters and sounds. Questions also had to be repeated several times before she would respond. Even if Julia listened intently in class, she still would not know what to do, especially in tests.

The fourth student, Brianna, a female, had difficulty focusing on a task at hand. Her composite pretest scores in DIBELS Benchmark Assessment was 95 indicating her need for intensive support in reading. She got zero in three out of five DIBELS components tested: phoneme segmentation fluency (PSF), correct letter sound (CLS) and whole words read (WWR). Her teacher indicated that Brianna had a blending problem. She knew the sounds of the letters but would just guess the CVC words the teacher would ask her to read. The teacher’s concern was compounded with Brianna’s relatively short attention span. She loved to talk with others in class during class time and would stand and do whatever she would wish.

#### IV. DATA ANALYSIS AND DISCUSSION

Two types of responses were drawn from the data collected from the four case studies: affective and cognitive responses.

Data analysis of student guided conversations and interviews of the subjects’ teachers and parents revealed students’ positive affective response toward the components and the program in general. The subjects have noted great satisfaction in the inclusion of fun and play in the activities. Likewise, their satisfaction ratings of the Alterra components indicated that they were “very happy” in their participation to the program. Even when the students exhibited frustration levels in certain activities, they were still generally satisfied and showed excitement and enthusiasm throughout the program.

The overall remarkable feedback of the subjects to the Alterra program appeared to have helped them make positive cognitive responses to the program. The students showed substantial gains in the areas of early literacy skills such as first sound fluency, phoneme segmentation fluency, correct letter sound, and whole word read based on their DIBELS Benchmark Assessment post-tests. Fig. 1 shows the subjects’ gain scores in these early literacy skills.

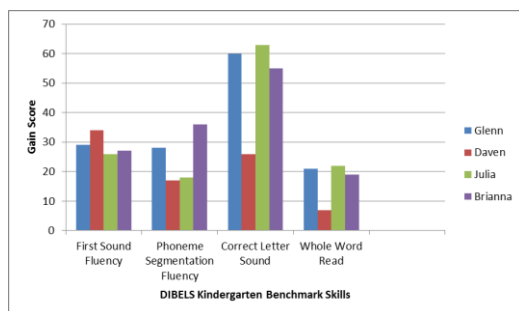


Figure 1. Subjects’ DIBELS gain scores

Based on their DIBELS pre-test, only Julia was able to read a single word and the rest got zero. Their post-test showed an average of 17.25 gain scores among the four subjects. They also showed considerable gain scores in word reading and reading fluency based on their word reading and running records for fluency. The six-periodic monitoring data showed a 42 to 88 percent range of accuracy among the subjects with Brianna getting the highest score and Daven the lowest. Fig. 2 shows the subjects’ average percentages of accuracy in their word reading and fluency tests.

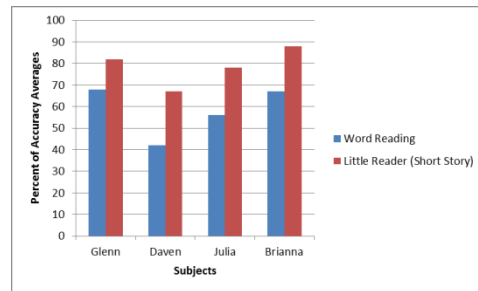


Figure 2. Word reading and fluency average scores

All the subjects had higher percentage of accuracy in reading short stories (Little Reader) than in word reading because the Little Readers were only read once it was established that the students were fluent in reading the individual words related to the lessons. However, the vocabulary progress of the subjects was minimal and insignificant. Their listening comprehension gain was also generally non-existent. The students failed to establish a significant pattern of improvement in these two areas. Fig. 3 shows the vocabulary and comprehension gain scores of the subjects.



Figure 3. Subjects’ vocabulary and comprehension gain scores

The accelerated reading achievement in early literacy skills and reading fluency of the subjects validates research findings on the use of systematic and explicit instruction in phonics, specifically the application of synthetic phonics. Reference [31] states that the underlying premise of explicit instruction is twofold: to expedite intervention and to formalize or structure opportunities to develop key skills. This means that at-risk children, particularly those experiencing significant developmental difficulties, attain improved outcomes from participating in instruction done explicitly and systematically [32], [33].

The data also support researchers’ findings on the effect of explicit and systematic synthetic phonics to

comprehension. According to Purewal [34] and Bowey [35], synthetic phonics and training in strategies for searching for familiar letter patterns may be the optimal form of remediation for at-risk readers but this does not necessarily mean that these effects will improve reading comprehension.

## V. CONCLUSION

The intervention conducted on the four participants of the Alterra Play-to Read in 30 Days Intervention Program appeared to have worked. These participants responded adequately to the Tier 2 instruction as shown in their reading behavior and gain scores in phonemic awareness, phonics, and fluency.

In terms of the students' affective response to the program, a pattern of behavior was noted among the subjects. As observed by the teacher-researcher and as validated by the at-risk readers themselves, the subjects found the intervention program fun and engaging. Their enjoyable experiences with Alterra were due to the activities done in playful manner, the variety of materials used, and the fun engagement they had with other children.

These responses were confirmed by the readers' parents and teachers. The behavior changes noted generally by the parents were on their children's growing confidence and emerging love for reading which were further affirmed by the teachers. The teachers noticed that during and after the program, the at-risk readers participated more actively in their respective reading classes. Their growing interest, independence, and confidence in reading were also perceived because the time spent with them in one-to-one sessions became less and their reading grades in the general education setting also improved.

An essential component of an RTI model is that it must be demonstrated that changes in behavior produced by an intervention are reliable changes and are not due to chance or extraneous factors [36]. As a metric to quantify the extent to which changes in the students' behavior are reliable, the at-risk readers' amount of change from baseline to post-intervention levels of performance was measured. Although there were no notable gains in vocabulary and listening comprehension, the subjects showed substantial gains in word reading and reading fluency based on their word reading and running records. They also showed improvements in the areas of early literacy skills such as first sound fluency, phoneme segmentation fluency, correct letter sound, and whole word read based on their DIBELS Benchmark Assessment post-tests. Simply doing a visual inspection of the individual participants' graphed data of these skills from baseline to intervention phase suggests a meaningful effect produced by the intervention. The DIBELS Benchmark Assessment result, where all the subjects moved from likely to need intensive support to likely to need core support, also confirms the behavior change was remarkable.

The at-risk readers' adequate responses to the program allowed them to function well within the rest of the

school year in the general education setting, the kindergarten level where they were at. There was no non-responder among the subjects who needed more intensive intervention as part of Tier 3 of the Response to Intervention framework. In Tier 3, students receive individualized, intensive interventions that target the students' skill deficits for the remediation of existing problems and the prevention of more severe problems.

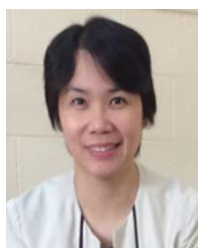
It is highly recommended that schools should identify at-risk readers in the beginning year of the kindergarten level and offer an intervention as soon as it is clear they lag behind in the development of early literacy skills. In conducting interventions for at-risk kindergarten readers, focus initially on the foundational literacy skills such as phonemic awareness, phonics, and fluency. Vocabulary and comprehension can be taught as soon as the at-risk readers already attained considerable gain scores in the early literacy skills. Moreover, play should be incorporated in intervention activities for at-risk kindergarten readers. Providing them a fun, dynamic, and interactive learning environment helps in building their self-confidence in reading. Finally, in implementing RTI, instructional models or guidelines used must be prescribed or supported by research and should reflect the emphasis on optimizing instruction for students who are struggling with language and literacy. Such instructional infrastructures should assist educators to better understand the complexities of the RTI approach for optimal results

## REFERENCES

- [1] C. E. Snow, S. Burns, and P. Griffin, *Preventing Reading Difficulties in Young Children*, Washington, DC: National Academy Press, 1998.
- [2] S. D. Green, R. Peterson, and J. Lewis, "Language and literacy promotion in early childhood settings: A survey of center-based practices," in *Handbook of Early Literacy Research*, 2006, vol. 29, pp. 27-40.
- [3] M. Chatterji, "Reading achievement gaps, correlates, and moderators of early reading achievement: Evidence from the early childhood longitudinal study (ECLS) kindergarten to first grade sample," *Journal of Educational Psychology*, vol. 98, no. 3, pp. 489-507, 2006.
- [4] N. L. Cook, A. Kretlow, and S. Helf, "Supplemental reading help for kindergarten students: How early should you start?" *Preventing School Failure*, vol. 54, no. 3, pp. 137-144, 2010.
- [5] D. L. Speece and C. Y. Walker, "What are the issues in response to intervention research?" in *Evidence-based Reading Practices for Response to Intervention*, D. Haager, J. Klingner, and S. Vaughn, Baltimore, MD: Brooks Publishing, 2007.
- [6] F. R. Vellutino, D. M. Scanlon, H. Zhang, and C. Schatschneider, "Using response to kindergarten and first grade intervention to identify children at-risk for long-term reading difficulties," *Reading and Writing: An Interdisciplinary Journal*, vol. 21, pp. 437-480, 2008.
- [7] *Response to Intervention: Guiding Principles for Educators*, International Reading Association (IRA), Newark, Delaware, U.S.A., 2010.
- [8] R. L. Allington, *What Really Matters in Response to Intervention: Research-Based Designs*, Canada: Pearson Education, 2009.
- [9] *A Report of the National Reading Panel: Teaching Children to Read*, National Reading Panel, National Institute for Child Health and Human Development, Washington, DC, 2000.
- [10] N. C. Geigert and C. T. Hammett, *Read! Move! Learn! Active Stories for Active Learning*, Beltsville, MD, USA: Gryphon House, 2007.



- [11] R. Pica, *A Running Start: How Play, Physical Activity and Free Time Create a Successful Child*, Philadelphia, USA: Perseus Books Group, 2006.
- [12] S. Vaughn, J. Wanzek, P. Cirino, J. Wexler, C. Denton, and J. Fletcher, "The relative effects of group size on reading progress of older students with reading difficulties," *Reading and Writing: An Interdisciplinary Journal*, vol. 23, no. 8, pp. 931-956, 2010.
- [13] R. E. O'Connor and P. Vadassy, *Handbook of Reading Interventions*, New York, USA: The Guilford Press, 2011.
- [14] A. McGill-Franzen and R. L. Allington, *Handbook of Reading Disability Research*, New York, NY: Routledge, 2010.
- [15] S. B. Neuman and K. Roskos, "Play, print, and purpose: Enriching play environment for literacy development," *The Reading Teacher*, vol. 44, no. 3, pp. 214-221, 1997.
- [16] G. J. Whitehurst and C. Lonigan, "Child development and emergent literacy," *Child Development*, vol. 68, pp. 848-872, 1998.
- [17] N. C. Geigert and C. T. Hammett, *Read! Move! Learn! Active Stories for Active Learning*, Beltsville, MD, USA: Gryphon House, 2007.
- [18] C. E. Snow, S. Burns, and P. Griffin, *Preventing Reading Difficulties in Young Children*, Washington, DC: National Academy Press, 1998.
- [19] S. B. Neuman and K. Roskos, "Play, print, and purpose: Enriching play environment for literacy development," *The Reading Teacher*, vol. 44, no. 3, pp. 214-221, 1997.
- [20] A. McGill-Franzen and R. L. Allington, *Handbook of Reading Disability Research*, New York, NY: Routledge, 2010.
- [21] *A Report of the National Reading Panel: Teaching Children to Read*, National Reading Panel, National Institute for Child Health and Human Development, Washington, DC, 2000.
- [22] D. Haager, J. Klingner, and S. Vaughn, *Evidence-based Reading Practices for Response to Intervention*, Baltimore, MD: Brooks Publishing, 2007.
- [23] V. Zelenka, *A Case Study of Literacy Instruction Delivered to Kindergarten Struggling Readers within the Response to Intervention Model in Three Classroom Settings*, ProQuest Dissertation Publishing, 2010.
- [24] S. Vaughn, J. Wanzek, P. Cirino, J. Wexler, C. Denton, and J. Fletcher, "The relative effects of group size on reading progress of older students with reading difficulties," *Reading and Writing: An Interdisciplinary Journal*, vol. 23, no. 8, pp. 931-956, 2010.
- [25] S. Vaughn, S. Linan-Thompson, and P. Hickman, "Response to intervention as a means of identifying students with reading/learning disabilities," *Exceptional Children*, vol. 69, pp. 391-409, 2003.
- [26] M. K. Burns, "Response-to-Intervention research: Is the sum of the parts as great as the whole?" *Perspectives on Language and Literacy*, vol. 36, no. 2, pp. 13-15, 2010.
- [27] D. L. Speece and C. Y. Walker, "What are the issues in response to intervention research?" in *Evidence-based Reading Practices for Response to Intervention*, D. Haager, J. Klingner, and S. Vaughn, Baltimore, MD: Brooks Publishing, 2007.
- [28] R. H. Good and R. A. Kaminski. (2011). DIBELS Next Kindergarten / Benchmark Assessment. Dynamic Measurement Group, Inc. Available: <https://dibels.org/dibelsnext.html>
- [29] J. B. Hale. (2008). Response to intervention: Guidelines for parents and practitioners. [Online]. Available: <http://www.wrightslaw.com/idea/art/rti.hale.pdf>
- [30] M. M. Clay, *An Observation Survey of Early Literacy Achievement*, Portsmouth, NH: Heinemann, 1993.
- [31] L. M. Justice, S. Chow, C. Capellini, and S. Colton, "Emergent literacy intervention for vulnerable preschoolers: Relative effects of two approaches," *American Journal of Speech-Language Pathology*, no. 12, pp. 320-332, 2003.
- [32] A. van Kleeck and J. V. Woude, "Book sharing with preschoolers with language delays," in *On Reading to Children: Parents and Teachers*, A. van Kleeck, S. A. Stahl, and E. Bauer, Eds., Mahwah, NJ: Erlbaum, 2003, pp. 58-92.
- [33] S. Vaughn, J. Wanzek, and C. S. Murray, *Intensive Interventions for Students Struggling in Reading and Mathematics*, Texas, US: Center on Instruction, Florida Center for Reading Research, 2012.
- [34] S. Purewal, "Synthetic phonics and the literacy development of second language young learners," *ESOL Scotland*, 2008.
- [35] J. A. Bowey, "Need for systematic synthetic phonics teaching within the early reading curriculum," *Australian Psychologist*, vol. 41, no. 2, pp. 79-84, 2006.
- [36] F. M. Gresham, "Responsiveness to intervention: An alternative approach to learning disabilities," in *Identification of Learning Disabilities: Research to Practice*, R. Bradley, L. Danielson, and D. Hallahan, Eds., Mahwah, NJ: Lawrence Erlbaum, 2002, pp. 467-519.



**Lorna B. Yan** was born in Cagayan, Philippines in 1969. She earned her Master in Education degree major in reading education at the Ateneo de Manila University, Philippines. She has more than twenty years of extensive experience as a teacher and academic leader from preschool to high school. She is currently the Elementary Principal of Jubilee Christian Academy, a Filipino-Chinese school, in Quezon City, Philippines. Her current research interests are in the areas of school quality assurance and utilizing market-driving strategies and innovation in growing school enrolment.