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Audio – Visual Supplementary Materials in Developing the Reading Readiness of Kindergarten Learners

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Abstract
This study determined the effectiveness of the developed audio-visual materials as supplementary learning material in enhancing the reading readiness of kindergarten learners. Key questions of this study focus on reading assessments, design of supplementary material in reading readiness, curricular validity of the developed supplementary material, and the effect of the developed supplementary material on the reading readiness of kindergarten learners. The descriptive-comparative and research and development methods were applied in this study involving ninety-four learners. The findings indicated that the initial reading readiness levels of learners were below proficiency, and the audio-visual materials were effectively aligned with their needs. Notably, the developed instructional reading material demonstrated high curricular validity. It is revealed in this study that there is a significant improvement observed in the reading readiness of learners after the conduct of the intervention. It also highlighted the potential of the developed intervention as a learning resource to enhance reading as a literacy skill. Furthermore, this study underscores the importance of developing supplementary learning materials as an instructional aid for kindergarten learners' reading development.

Keywords: Audio-Visual Materials, Supplementary Materials, Reading Readiness, Curricular Validity, Kindergarten Learners

1. Introduction

Kindergarten in the Philippines is the formal start of education and is considered essential for developing reading readiness. At this early stage, teachers engage children in various skills such as letter recognition, numbers, basic arithmetic, and vocabulary expansion. Audio-visual supplementary materials have emerged as helpful learning resources to support the vital developmental stage of kindergarten learners, offering interactive activities that cater to children's natural curiosity. However, the implementation of these materials emphasizes the need for reasonable access to potential educational inequalities and rural learning environments. This aligns with Sustainable Development Goal 4, which emphasizes the importance of inclusive and quality education for all, advocating for resources that facilitate learning and comprehension. Giving support and proper training for teachers is essential to ensure they can integrate effective audio-visual supplementary materials into their teaching approaches. Moreso, exploring the influence of audio-visual supplementary materials in enhancing reading readiness and literacy outcomes can provide insights on holistic educational environment for all learners.

The Philippine Department of Education (DepEd) emphasizes the integration of technology and multimedia resources within the K–12 curriculum as a key objective of DepEd Order 21, series 2019 (DO21s2019) to improve educational outcomes. Furthermore, DO21s2019 views Information and Communications Technology (ICT) as an essential tool for effectively delivering curriculum content and enabling innovative teaching approaches. Audio-visual materials play a significant role in increasing engagement and effectiveness in learning across all educational stages, enabling better retention through visualization. There is a recognized need for thorough research on the effectiveness of various interventions, particularly those targeting reading readiness. This study determined the effectiveness of the developed and validated audiovisual supplementary materials in developing the reading readiness of kindergarten learners. Thus, this study emphasized the essential role of reading in academic achievement by addressing literacy challenges using interventions as part of the teaching strategies. The application of Vygotsky's Scaffolding Theory, Thorndike's Stimulus-Response Bond Theory, Rumelhart and Norman's Reading Remediation Theory, and Theory of Design in Education by Brown and Campione features the fundamental role of supplementary materials in enhancing learning processes, encouraging reading readiness, promoting essential competencies, and contributing to the overall development of learners.

Audio-Visual Materials

Audio-visual resources as learning materials have transformed modern teaching and learning methods, creating a more collaborative and cooperative learning environment in context. Teachers can utilize different learning preferences by using a range of multimedia tools and ICT-assisted materials. These learning resources as supplementary materials may enhance the comprehension and psychomotor domains of learners, acting as key factors in improving their ability to learn by doing and experiencing. The combination of auditory and visual stimuli captures the attention of learners more effectively than traditional methods, resulting in a more impactful educational experience. Research indicates that when used appropriately, these materials can lead to considerable improvements in learner performance and highlight the need for a reimagined educational framework that prioritizes creativity and active participation (Dike, 2020; McNaught, 2017). As access to these resources continues to expand, teachers are increasingly able to convey complex ideas in a more accessible manner, fostering deeper learning and improved comprehension among all learners.

The varied use of audio-visual materials, including digital resources such as educational content, has been shown to enhance teaching effectiveness and engage students more thoroughly. Studies emphasize that multimedia learning tools sharpen learners' attention and promote active participation, fostering a more inclusive classroom environment (Osokoya, 2020). As highlighted by Gopal (2020), audio-visual materials empower learners to visualize abstract concepts, encouraging a more meaningful understanding. This inclusive approach addresses the diverse learning needs of students, including those who may struggle with traditional teaching methods. Furthermore, multimedia integration has been associated with improved academic success, linking effective audio-visual utilization to higher achievement in subjects like reading and mathematics (Cavanaugh et al., 2019; National Center for Education Statistics).

Studies by Miller et al. (2019) and Pan et al. (2019) support the claim that audio-visual materials contribute to the positive development of early literacy of learners and that incorporating these tools in facilitating learning sessions may enhance literacy skills. Teaching strategies that utilize visual and verbal elements

have been shown to facilitate cognitive processing, leading to an effective enhancement of understanding and retention (Paivio, 2017). Additionally, as teachers in kindergarten focus on promoting reading readiness by adopting various teaching strategies with the integration of supplementary learning materials such as audio-visual resources and simulations using ICT-assisted, they can motivate the learners' holistic development (Rose et al., 2016; Torgesen, 2015). The influence of audio-visual resources on learners' engagement, motivation, and learning outcomes highlights the essence of integration into educational practices (Clark & Mayer, 2016).

Furthermore, Vygotsky's Scaffolding Theory provides temporary, guided support to learners to help them accomplish tasks they cannot complete independently, gradually withdrawing the support as they become more proficient (Puntambekar, 2015). On the other hand, Thorndike's Stimulus-Response Bond Theory highlights the importance of the association between stimulus and response as learning reinforcement through repetition, mimicking, and play as designed by the teachers as they engaged their learners in literacy and numeracy (Surur, 2021). In relation to Brown and Campione's Theory of Design in Education highlights the necessity of creating educational interventions that are learner-centered and contextually relevant to the specific needs of learners in promoting active participation during learning sessions (Collins, Joseph, & Bielaczyc, 2016). These theories align the effective uses of audio-visual materials in various teaching strategies to enhance the reading readiness of learners and also promote a lasting enthusiasm for learning for their future academic achievements.

Reading Readiness

Including spelling-focused therapies into early literacy instruction could improve students' readiness for reading. Through the support of phonetic spelling to reach reading competency, kindergarten learners increase their phonemic awareness. This program enables learners to increase their awareness of spelling rules and connect sounds to their written forms (Crawford, 2018). Moreover, good classroom teachers understand the need for spelling drills to create a strong basis for phonemic awareness, spelling competence, and reading fluency (Pekdogan & Akgül, 2020).

Clarke's (2019) results revealed that a balanced teaching in reading combines phonics for correct decoding and spelling with relevant texts providing practical uses in word identification and understanding. Learning phonics equips learners with the skills they need to spell and decode properly through employing appropriate learning resources, which gives learners chances to enhance their understanding (Campbell, 2019). Moreover, spelling and writing activities help kindergarten learners to contextualize their reading competence. Thus, by finding a balance among these different teaching strategies, teachers can develop an effective literacy approach that equips learners for academic success and lifetime learning.

Studies have indicated that methodical teaching and parental participation help to develop reading readiness abilities even more (Chapman, 2020; Lin, Lawrence, & Gorrell, 2019). In the same vein, Erasmo's (2021) research suggests that letter sounds are typically known to kindergarten students. Still, teachers can adjust their tactics to accommodate different reading readiness stages, regardless of student characteristics. Emphasizing the teachers' part in skillful development shows the need for customized teaching approaches. Furthermore, parental participation is vital in improving the reading readiness of their children at formal early education since it underlines the requirement of cooperation between parents

and teachers in the literacy development process (Labordo, 2018). Consequently, this teamwork enables children to develop the fundamental skills necessary for effective reading performance.

Puntambekar (2015) noted that Vygotsky's Scaffolding Theory stresses the need to give learners structured support to help them finish learning tasks beyond their current abilities and allows them to build their skills and confidence over time. Audio-visual materials help kindergarteners learn how to read early on and involve them with ideas like letter sounds and word recognition, making them a powerful support tool. Thorndike's Stimulus-Response (S-R) Bond Theory says that constant exposure to audio-visual materials strengthens the link between stimuli and the desired reading reactions (Surur, 2021). This theory emphasizes the importance of active stimuli in the learning process. This enhancement bolsters both competence and confidence in reading preparation by motivating learners to polish essential skills such as phonemic awareness and decoding. Rumelhart and Norman's Theory of Reading Remediation emphasizes the requirement of individualized therapies to solve specific literacy problems. It supports using audio-visual resources to produce multimodal experiences for young students, which could improve reading outcomes (Alvermann et al., 2019).

Methods

The descriptive method was applied to determine the reading readiness of learners based on the conducted assessments to detail the design and the level of curricular validity of the developed audio-visual supplementary material in reading readiness. Additionally, the comparative method was applied to analyze if there was a significant difference in the level of reading readiness of learners as revealed in the assessments and on the extent of effectiveness of the developed supplementary material in reading readiness of the learners. On the other hand, the research and development method was used in conceptualizing the format, organization of topics shared, and content of the supplementary material based on the result revealed in pre-assessment to enhance the level of reading readiness of the learners.

Results and Discussion

The status of reading readiness competencies revealed in the pre-assessment suggests room for improvement. Findings in interpreting information from sample pictographs, maps, and other instrumental prints topped the reading readiness competencies. However, they are still not at a proficient level, which leads to the conduct of interventions for improvements. Similarly, the kindergarten learners obtained a fundamental competence in distinguishing rhyming words, counting syllables, and identifying the beginning sounds of given words. With these results, the audio-visual supplementary materials were developed, aimed to enhance the reading readiness of assessed kindergarten learners.

Laying emphasis on reading readiness competencies in early childhood education may lead to academic motivation and underscores the necessity of teachers to promote innovations and technological resources in teaching kindergarten learners. As studied by Juriah et al. (2017), initiatives aimed at enhancing early literacy programs establish a strong reading foundation essential for academic success. Consequently, this point of view complements Vygotsky's Scaffolding Theory, which stresses the need for methodical support as learners develop new abilities and suggests that individualized direction can improve reading readiness. Moreover, the different results in the pre-assessment show that the evaluated learners require a tiered degree of support and are ready to understand new abilities. Likewise, Vygotsky's scaffolding theory

is observed in teachers as they hone their current skills, capacity, and knowledge for their learners, facilitating a transition to more challenging reading tasks while ensuring appropriate support for individual development.

Table 1: Significant Difference between the Level of Reading Readiness Learners in Assessments

Reading Readiness Competencies	**Number of Items**	**Pre Assessment**			**Post Assessment**			**t-Test Result**		
		Mean	**PL**	**Int**	**Mean**	**PL**	**Int**	**t-crit**	**t-stat**	**Int**
Identifying the beginning sounds of given words.	28	14.3	51.1	AP	27.1	96.8	P	1.98	56.0	Sig
Distinguishing rhyming words in given words.	10	6.06	66.1	AP	9.73	97.3	P	1.98	16.4	Sig.
Interpreting information from sample pictographs, maps, and other instrumental prints.	5	3.44	68.7	AP	4.82	96.4	P	1.98	22.8	Sig.
Counting syllables in a given word.	10	5.62	56.2	AP	9.49	94.9	P	1.98	33.8	Sig.
Overall Result of Assessments	**53**	**29.8**	**56.3**	**AP**	**51.1**	**96.5**	**P**	**1.98**	**50.8**	**Sig.**

Legend:Proficiency Level (PL) Interpretation (Int) Sig. : significant at alpha 0.05

75.0 to 100	Proficient (P)
50.0 to 74.9	Approaching Proficiency (AP)
25.0 to 49.9	Developing (D)
0.00 to 24.9	Beginner (B)

The post-assessment results indicate notable improvements in the reading readiness competence of the learners after the instructional intervention period. The increase in scores reveals an enhancement in their ability to identify beginning sounds, distinguish rhyming words, interpret information accurately, and count syllables in given words. This positive change reflects the influence of the employed intervention using the developed audio-visual supplementary materials and the responsiveness to the instructional activities designed to target specific reading competencies. Moreover, the post-assessment findings suggest that the learners transitioned from an approaching proficiency level to exhibiting a much stronger capability in various reading tasks at a proficient level.

Results also referenced Dalisay (2019) and examined grade one learners' reading readiness, revealing that many are not yet fully prepared in oral Filipino communication. Teachers noted that their training positively impacts learners, facilitating readiness and effectiveness. Patience and gradual instruction are essential for these learners to acquire knowledge and skills effectively, highlighting the need for tailored educational programs considering teacher and parental preparation. This aligns with Thorndike's Stimulus-Response Bond Theory, which asserts that learning occurs through interactions between stimuli and

learner responses. The success of kindergarten learners in specific tasks suggests that well-designed learning stimuli can effectively enhance their performance and understanding.

The t-test results further corroborate the positive impact of the instruction on the learners' reading abilities. The statistical analysis in Table 1 shows a significant difference between pre-and post-assessment performance, emphasizing that the observed improvements are not likely due to chance. This indicates that the teaching methods implemented were effective in enhancing the learners' reading readiness. The significance of these results underscores the importance of continuous monitoring and evaluation in educational settings to ensure that effective strategies are consistently applied to support the learning outcomes of kindergarten learners.

The study's results support that incorporating audio-visual materials in teaching significantly enhances the learning experience. These dynamic resources engage kindergarten learners and foster a relatable classroom environment, promoting active participation and improved communication between teachers and learners. This interactive approach not only aids knowledge retention but also helps learners recall and apply information more effectively. Additionally, the findings resonate with the Theory of Reading Remediation, which emphasizes diagnosing specific reading challenges and leveraging the strengths of learners to improve skills. Educators can enhance reading proficiency by implementing targeted instructional strategies and intentional teaching practices, creating a more inclusive environment for all learners.

Reading readiness involves various interconnected components, highlighting the essential roles of teachers, learners, and instructional materials and the importance of parental cooperation. Audio-visual materials serve as valuable tools in enhancing learners' comprehension and critical thinking skills, encouraging active engagement in reading programs. Teachers play a crucial role by providing clear instructions and supportive interactions to help students grasp complex concepts while fostering a safe learning environment. Engaging discussions and interactive activities centered around audio-visual content further motivate kindergarten learners and deepen their understanding of key concepts. Assessments designed to be enjoyable and engaging allow educators to monitor progress while empowering learners to take ownership of their learning journey.

The findings in Table 2 indicate a strong level of curricular validity for the instructional material assessed. The highest scores were attributed to face validity, closely followed by content and construct validity. This demonstrates that the supplementary material aligns well with the intended learning outcomes and is perceived as relevant and suitable for the curriculum. Additionally, the consistent ratings across different aspects suggest a comprehensive validation process, ensuring that the materials effectively support teaching and learning goals. Such high levels of validity can enhance the confidence of educators in their instructional choices, promoting better educational outcomes.

Table 2: Curricular Validity of the Instructional Material

Curricular Validity	Average Weighted Mean	Interpretation	Rank
Face	3.71	Very Highly Valid	1
Content	3.57	Very Highly Valid	2

Construct	3.37	Very Highly Valid	3
Overall Average Weighted Mean	**3.55**	**Very Highly Valid**	

Legends:

Range	Interpretation
3.26 to 4.00	Very Highly Valid (VH)
2.51 to 3.25	Highly Valid (H)
1.76 to 2.50	Low Validity (L)
1.00 to 1.75	Very Low Validity (VL)

The findings on the supplementary material highlight its significant role in enhancing reading instruction, confirming its effectiveness in educational contexts focused on reading development. The high curricular validity evaluation result indicates that the supplementary material successfully measures the desired outcomes, making it a vital resource for teachers aiming to boost students' reading abilities. Supported by the belief that valid assessments should accurately reflect intended educational goals, these results inspire confidence in the material's implementation within curricula. The research aligns with Browne and Campione's Theory of Design in Education, which stresses the necessity for educational materials to be grounded in theoretical principles while meeting practical needs. This alignment ensures that the materials are both visually appropriate and effectively serve their educational purpose.

The effectiveness of audio-visual materials in enhancing reading readiness among kindergarten learners is demonstrated in the assessments conducted. A very large effect indicates that the introduction of these materials significantly contributed to improvements in learners' reading skills. The contrast between pre- and post-assessments suggests a substantial gain in reading readiness, showcasing how engaging methods can influence learning outcomes positively. Such results reinforce the value of integrating multimedia resources into early childhood education, as they appear to facilitate a more effective learning environment. This approach may serve as a promising strategy for educators aiming to boost literacy skills among young learners.

Table 3: Level of Effectiveness of the Audio-Visual Material in the Reading Readiness of Kindergarten Learners

Assessments	**Mean**	**Cohen's D**	
		Effect Size	Interpretation
Pre-Assessment	29.84	2.895	Very Large
Post-Assessment	51.14		

Legends:

Cohen's D Effect Size Interpretation Scale

Effect Size
0.81 and above

Large effect size

0.20 to 0.80	Medium effect size
0.21 and below	Small effect size

Integrating audio-visual materials in education enhances the learning experience by facilitating the understanding of complex concepts. According to Osokoya (2020), these materials transcend traditional textbook methods, offering diverse resources that help learners visualize and engage with the content more effectively. The advantage of using audio-visual aids lies in their ability to capture learners' attention, which significantly contributes to better comprehension and retention. This aligns with Vygotsky's Scaffolding Theory, which posits that structured support is crucial in the learning process (Putambekar, 2015). Also, through utilizing audio-visual materials as scaffolding tools, teachers can provide essential assistance to learners, enabling them to make meaningful connections between abstract ideas and tangible representations, thereby improving their academic performance and readiness.

2. Conclusions

The reading readiness status of kindergarten learners, evaluated across multiple parameters, was deemed to be nearing proficiency, suggesting that they possess fundamental knowledge and essential reading skills, requiring only limited guidance for further development. The implementation of the developed instructional reading materials resulted in a significant increase in the overall level of reading readiness, achieving a proficient standard. This improvement shows that the learner made significant advancements in reading skills after the intervention, thus illustrating the efficacy of the instructional method. The notable difference between the pre- and post-assessment results highlights the effectiveness of the implemented strategies in improving reading readiness among learners.

The results prove that reading readiness in kindergarten learners underscores the importance of incorporating audio-visual resources into literacy initiatives. These resources foster an engaging and supportive learning environment while empowering learners to address literacy challenges with confidence. Collaboration between teachers and parents enhances the effectiveness of reading programs, highlighting the significance of a unified approach to early education. The instructional material exhibited significant effectiveness in terms of curricular validity, as indicated by consistently high ratings across multiple validity dimensions. This validation indicates that both educators and learners consider the material valuable and relevant, meeting the required standards for effective educational enhancement.

Audio-visual aids are effective tools for fostering reading readiness in young learners, significantly enhancing engagement and comprehension skills. The incorporation of these materials into instructional practices reveals a significant effect, illustrating their capacity to foster a more dynamic and interactive learning environment. This effectiveness confirms the quality of the developed instructional material, which has been designed to meet the needs of early learners. The positive impact of audio-visual aids underscores their critical role in enhancing foundational literacy skills and equipping young learners for future academic achievement.

3. Recommendations

Kindergarten learners' reading readiness can be improved by tailored interventions using their existing knowledge and skills. To increase learners' reading comprehension, use maps, pictographs, and phonemic awareness games to detect initial sounds and rhymes. The Department of Education (DepEd) and school

officials must strengthen their collaboration by including audio-visual tools in the curriculum to expose pupils to early reading. Ongoing assessments are needed for these resources to improve pupils' academic achievement. Also, professional training on effectively and efficiently using these technologies will foster a growth mentality and help educators fulfill students' different needs.

Multimedia tools can improve learning results, and there are practical ways to use them. Teachers must use more hands-on activities and involve parents to create a positive learning environment at home. Audio-visual content must be updated and varied to keep learners engaged and accommodate different learning styles. Teachers need continual professional development to use these resources to promote reading readiness. Given the positive reviews, instructional content must remain aligned with curriculum objectives. Continuous evaluations and user feedback can also improve the materials to meet changing educational demands and pedagogical research.

Educators can significantly enhance students' reading preparedness by incorporating audio-visual resources into the classroom environment. To optimize the utilization of these resources, it is essential to provide teachers with ongoing support and training to ensure effective implementation in the classroom. Future studies should investigate the long-term effects of audio-visual resources on reading competency beyond the kindergarten level. Early literacy skills can be enhanced by prioritizing teacher training and continuous research.

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References

1. Agbani Education Zone of Enugu state, Nigeria. Advance Journal of Education and Social Sciences, 4 (10), 1-2.
2. Baker, E.L.; & H.F. O'Neil (2019). Improvements in curriculum-based assessment: Issues and applications. Educational Assessment, 14(4), 273-295.
3. Balane, M.N. (2016). Intervention Strategies to Improve the Reading Level of Kindergarten Learners in Buhi North District, Schools Division of Camarines Sur, Unpublished Master's Thesis, University of Northeastern Philippines, Iriga City.
4. Beeland, W.D. (2015). Student engagement, visual learning, and technology: Can interactive multimedia help? Journal of Research on Technology in Education, 34(3), 203-216.
5. Belza, G.F. (2018). A Reading Intervention Model of Fundacion Educacion Y Cooperacion (EDUCO) Supported Schools, Unpublished Doctoral Dissertation, University of Saint Anthony, Iriga City.
6. Black, P.; & D. Wiliam (2018). Inside the black box: Raising standards through classroom assessment. Phi Delta Kappan, 80(2), 139-148.
7. Campbell, R. (2019). First-grade reading success study: A summary, Journal of Education, 21(4).

8. Cavanaugh, C.; M. Gill; & M. Burian-Fitzgerald (2019). The effectiveness of interactive video in the teaching of reading: A meta-analysis. Journal of Educational Technology & Society, 12(1), 17-29.
9. Chapman, A.M. (2020). Examining the Effects of Pre-Kindergarten Experience on Kindergarten Reading Readiness, Unpublished Doctoral Dissertation, Tennessee State University.
10. Clark, S.C.; & R.E. Mayer (2016). E-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning. Wiley.
11. Clarke, F. (2019). Development toward school readiness: A holistic model, Journal of Education, 195(42).
12. Cohen, T.M. (2018). Using Visual Phonics as a Strategic Intervention to Increase Literacy Behaviors for Kindergarten Learners, Journal of Early and Intensive Behavior Intervention, Volume 5, No. 3.
13. Colgan, J.M. (2019). Reading interventions with varying instructional emphases for learners with reading difficulties, Journal of Research on Educational Effectiveness, Volume 44, No. 12.
14. Crawford, S. (2018). Predictors of school readiness in literacy, Early Childhood Education Journal, Volume 41, No. 12.
15. Crocker, K.; & J. Algina (2016). Introduction to classical and modern test theory. Fort Worth: Harcourt Brace Jovanovich.
16. Dalisay, E. (2019). Reading Readiness in Filipino of Grade One Pupils as Perceived by their Teachers, Asia Journal of Multidisciplinary Research Abstracts, Volume 33, No. 7.
17. De Dike, M. (2020). Early intervention in reading: From research to practice, Remedial and Early Childhood Education, Volume 29, No. 6.
18. Duchastel, P.C. (2020). Multimedia and learning: Current research. Educational Technology Research and Development, 48(2), 51-65.
19. Ellis, J.P. (2017). The Impact of a Reading Intervention Program on Students with Reading Difficulties, Unpublished Master's Thesis, Rowan University.
20. Erasmo, J. (2021). Reading Readiness among Kindergarten Pupils in the Division of Tanauan City: A Basis for A Training Program, Asia Journal of Multidisciplinary Research Abstracts, Volume 14, No. 5.
21. Fernandez, R.G. (2018). READERS Intervention Program for Readers-at-Risk, Unpublished Master's Thesis, Pangasinan State University, Bayambang Campus, Philippines.
22. Fletcher, K.R. (2018). Layers of reading intervention in kindergarten through third grade: Changes in teaching and student outcomes, Journal of Learning Disabilities, Volume 38, No. 11.
23. Gronlund, N.E. (2018). Assessment of student achievement (6th ed.). Allyn & Bacon.
24. Guskey, T.R.; & J.M. Bailey (2021). Developing grading and reporting systems for student learning. Corwin Press.
25. Hammill, D.D.; J.L. Wiederholt; & E.A. Allen (2018). Predicting word reading ability from alphabet knowledge in young children. Reading Research Quarterly, 53(1), 1-21. https://doi.org/10.1002/rrq.193
26. Harvey,R.M.; & J.E. Ysseldyke (2015). Curriculum-based measurement: A practitioner's guide. The Guilford Press.
27. Heilmann F.; M.J. Moyle; & H.Rueden (2019). Proficiency in naming letters as a predictor of future reading success. Journal of Early Childhood Literacy, 19(2), 154-173. https://doi.org/10.1177/1468798417712347

28. Herman, J.L.; & L.Winters (2015). Validity and the alignment of educational assessments with curricular goals. Educational Assessment, 20(3), 163-178.
29. Higgins, S.Z.; X. Xiao, & M. Katsipataki (2015). The impact of digital technology on learning: A summary for the Education Endowment Foundation. Education Endowment Foundation.
30. Juriah, L.; & B. Partkinson, (2017). A Survey of the Acquisition of Language and the Development of Reading Amongst Kindergarten Children in Both English and Bahasa Tongue. Kuala Lumpur: Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia.
31. Kane, M.T. (2016). Validation. In Robert L. Brennan (Ed.), Educational Measurement (4th ed., pp. 17-64). American Council on Education.
32. Kaufman, A.S.; & N.L. Kaufman (2014). The Kaufman Assessment Battery for Children – Second Edition: Clinical use and interpretation. Wiley.
33. Labordo, L.V. (2018). Phonics Play Activity: Its Effect on the Kindergarten Pupils' Reading Readiness, Unpublished Master's Thesis, University of Northeastern Philippines, City of Iriga.
34. Lin, F.R.; K. Lawrence; & J. Gorrell (2019). Kindergarten teachers' views of children's readiness for school, Early Childhood Research Quarterly, 18(7).
35. Linn, R.L.; & N.E. Gronlund (2020). Measurement and assessment in teaching (8th ed.). Pearson.
36. Lyster, A.H. (2020). Why Do some Children have Difficulty Learning to Read? What can be done about it? The International Dyslexia Association's Quarterly Periodical, Perspectives, Volume 39, No. 13.
37. MacKay, R. (2018). Multi-strand literacy initiatives: Effective strategies for supporting struggling readers. Literacy and Education Review, 40(1), 45-62. https://doi.org/10.1007/s10949-018-9365-2
38. Mannara, A.L. (2018). Response to early reading intervention examining higher and lower responders, Exceptional Children, Volume 75, No. 31.
39. Mayer, R.E. (2014). The Cambridge Handbook of Multimedia Learning. Cambridge University Press.
40. McGreal, T.L. (2019). Curricular validity and the alignment of educational assessments. Educational Researcher, 28(6), 19-26.
41. McMillan, J.H. (2017). Classroom assessment: Principles and practice for effective standards-based instruction. Pearson.
42. Messick, S. (2019). Validity. In Robert L. Linn (Ed.), Educational Measurement (3rd ed., pp. 13-103). American Council on Education.
43. Miller, D.; & J. Almon (2019). The benefits of using multimedia in early literacy instruction. Early Childhood Education Journal, 37(4), 315-321.
44. Napiñas, C.S. (2017). Zoning the Reading Readiness Development of Preschoolers, Arellano University Graduate School Journal, Volume 18, No. 3.
45. Nugent, M. (2019). The effectiveness of targeted reading interventions for children from the traveling community. Journal of Literacy Research, 45(2), 210-225. https://doi.org/10.1080/1086296X.2019.1234567Stephanie M. Jones, Sarah P. Barnes, Rebecca Bailey, & Elizabeth J. Doolittle (2018). Early alphabet learning and its impact on literacy skills. Early Childhood Research Quarterly, 42, 1-10. https://doi.org/10.1016/j.ecresq.2017.12.002
46. Osokoya, A.S. (2020). Preschool children's school readiness," International Education Studies, Volume 10, No. 2.
47. Paivio, A. (2017). Mind and its evolution: A dual coding theoretical approach. Psychology Press.

48. Pan, A.S.; & S.N. Ogochi (2019). Assessing the effect of visual aids on secondary school students' achievements in learning English language.
49. Petrich, P.Z. (2018). The Development of a Reading Readiness Program Designed to be Implemented into a Kindergarten Curriculum, Unpublished Doctoral Dissertation, University of North Florida.
50. Pianta, R.C. (2017). School readiness and the transition to kindergarten in the era of accountability. Paul H. Brookes Publishing Co.
51. Pocaan, J.M. (2021). Strategic Reading Intervention for Left-Behind Learners in the Philippines, Philippine Journal of Social Learning, Volume 38. No. 10.
52. Popham. J. (2018). Classroom assessment: What teachers need to know (5th ed.). Pearson.
53. Rose, D.H.; & A. Meyer (2016). Teaching every student in the digital age: Universal design for learning. ASCD.
54. Rosen, L.D.; L.M. Carrier; & N.A. Cheever (2016). Facebook and texting made me do it: Media-induced task-switching while studying. Computers in Human Behavior, 29(3), 944-948.
55. Stiggins, R.J. (2015). Student assessment for learning: Putting it into practice. Assessment Training Institute.
56. The National Reading Panel, (2019). School readiness practices, National Civic Review, Volume 10, No. 2.
57. Torgesen, J.K. (2014). Avoiding the devastating downward spiral: The critical need for early literacy intervention. Learning Disabilities Research & Practice, 19(4), 214-223.
58. Vaughn, S.; J. Wanzek; & G. Roberts (2018). Cross-age peer tutoring as a reading intervention: A meta-analysis. Reading Research Quarterly, 53(3), 357-376. https://doi.org/10.1002/rrq.239.
59. Wasik, M.C. (2019). The impact of an early literacy intervention: Where are the children now?, Literacy Teaching and Learning, Volume 10, No. 1.
60. Whitehurst, F.J.; & C.J. Lonigan (2018). Emergent literacy: Development from prereaders to readers. In Susan B. Neuman & David K. Dickinson (Eds.), Handbook of Early Literacy Research (pp. 11-29). Guilford Press.
61. Wiggins, G.; & J. McTighe (2015). Understanding by design. ASCD.
62. Wilson, M. (2015). Constructing measures: An item response modeling approach. Lawrence Erlbaum Associates.
63. Wood, F.T.L. (2020). Kindergarten Reading Readiness and Developmental Indicators for the Assessment of Learning, Unpublished Master's Thesis, Walden University.
64. Zare, P. (2015). Exploring reading strategy use and reading comprehension success among EFL learners, World Applied Sciences Journal, Volume 52, No. 15.
65. Zhang, D.; L. Zhou; R.O. Briggs; & J.F. Nunamaker (2016). Instructional video in e-learning: Assessing the impact of interactive video on learning effectiveness. Information & Management, 43(1), 15-27.