What Makes Children Read Fluently? Expert Consensus in Developing the KeBaL Model for Malaysian Preschools

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ABSTRACT

Reading skills developed during the preschool years provide an important foundation for later academic learning, with oral reading fluency (ORF) recognised as a key indicator of successful reading development. Despite its recognised importance, preschool teachers continue to face challenges in implementing systematic oral reading fluency instruction. This study aimed to develop the KeBaL Model (Model Strategi Pengajaran Kelancaran Bacaan Lisan Bahasa Melayu Prasekolah) by obtaining expert consensus on its proposed components and elements.

The study adopted the Design and Development Research (DDR) approach and reports the findings of Phase Two (Design and Development). A Focus Group Discussion (FGD) involving nine experts identified six key themes related to oral reading fluency instruction. These themes were synthesised and mapped to the Sequential–Iterative Model (SIM) and Direct Instruction (DI) to develop the proposed KeBaL Model. The proposed model was subsequently evaluated by 15 experts using the Fuzzy Delphi Method (FDM). Data were analysed using the established Fuzzy Delphi acceptance criteria: threshold value ($d \leq 0.20$), expert consensus ($\geq 70\%$), and defuzzification score ($A \geq 0.50$). The expert panel reached consensus on five learning objectives, three oral reading fluency elements (accuracy, reading rate, and prosody), seven reading content elements, seven teaching strategies, and three oral reading fluency assessment elements. One proposed reading content element, extensive reading, was rejected because it did not satisfy the established acceptance criteria. The accepted components and elements collectively form the KeBaL Model, a teaching strategies model that provides systematic guidance for planning, implementing, and assessing oral reading fluency instruction in Bahasa Melayu preschool classrooms. Future research should examine the classroom implementation and effectiveness of the KeBaL Model in improving children's oral reading fluency.

Keywords: Oral reading fluency; preschool education; KeBaL Model; Design and Development Research; Fuzzy Delphi Method; teaching strategies.

INTRODUCTION

Reading skills are among the most important competencies acquired during the preschool years because they enable children to participate successfully in classroom learning and prepare them for the increasing academic demands of primary education. As children progress through school, reading becomes the primary means of acquiring knowledge across learning areas. Recognising its importance, many countries have strengthened preschool curricula to ensure that children develop essential reading skills before entering formal schooling. In Malaysia, this commitment is reflected in the National Preschool Standard Curriculum (KSPK Revised 2017) and the Preschool Curriculum 2026 (KP2026), both of which emphasise the development of reading skills as a key learning outcome in preschool education.

Despite these curriculum initiatives, concerns regarding children's reading performance remain evident. International assessments continue to report that many children experience difficulties in acquiring adequate reading skills during the early years of schooling. Similar concerns have been reported in Malaysia, where studies consistently indicate that a considerable proportion of children enter primary school without mastering the expected reading skills. Jamian (2011) found that many pupils experienced difficulty understanding what they had read, while more recent studies reported that Year One pupils continued to struggle with reading and writing in Bahasa Melayu despite having attended preschool (Mat Husin & Wan Mohammad, 2023; Ali & Shaid, 2025). A case study involving 124 Year One pupils further revealed that only about 40% had mastered basic reading skills, whereas approximately 60% continued to experience difficulties in fundamental reading competencies based on the LINUS reading constructs (Salfarina & Nor Azwahanum, 2025). These findings highlight the need to strengthen reading instruction during the preschool years so that children are better prepared for formal schooling.

Among the different dimensions of reading, oral reading fluency (ORF) has received increasing attention because it reflects children's ability to read connected text accurately, at an appropriate rate, and with meaningful expression. Rather than referring simply to reading quickly, ORF involves the coordinated development of accuracy, reading rate, and prosody, enabling children to recognise words automatically while maintaining expressive and meaningful reading (Hasbrouck & Tindal, 2006; Hudson et al., 2011; Roe et al., 2019; Xin & Yunus, 2020). These three elements work together during oral reading and provide an important foundation for reading comprehension. According to Automaticity Theory, as word recognition becomes increasingly automatic, readers are able to devote greater cognitive resources to constructing meaning from text rather than decoding individual words (LaBerge & Samuels, 1974; Samuels, 2004). Consequently, ORF is widely recognised as an important indicator of successful reading development.

Research conducted in different educational contexts consistently demonstrates that children who read more fluently also tend to achieve better reading comprehension. Studies have reported significant relationships between reading accuracy, reading rate, prosody, and reading comprehension (Kim et al., 2021; Chung et al., 2021; Akan et al., 2023; Oliveira Meggiato et al., 2025). Similarly, meta-analytic evidence indicates that prosody contributes uniquely to reading comprehension beyond reading accuracy and reading rate alone (Wolters et al., 2020). These findings suggest that ORF should be viewed as a multidimensional construct that requires systematic instruction rather than incidental classroom practice.

Although the importance of ORF is widely recognised, translating research evidence into classroom practice remains a challenge. Malaysian studies have shown that preschool teachers often rely on personal teaching experience and available classroom resources when teaching reading, resulting in variations in instructional practices (Mahzan Arshad & Chee Sook Ching, 2013). Other studies have reported challenges related to limited instructional resources, inconsistent implementation of reading strategies, insufficient pedagogical knowledge, and the absence of systematic guidance for developing ORF (Jayaganes & Khairul Azhar, 2021; Intan Nur Syuhada & Zamri Mahamod, 2021; Nor Syazwanie et al., 2023; Low Jie Ying & Zamri Mahamod, 2024). Existing Malaysian research has also tended to examine individual instructional approaches, such as phonics instruction, repeated reading, instructional modules, songs, and technology-assisted learning, rather than integrating multiple evidence-based teaching strategies within a single teaching strategies model (Yahya Othman et al., 2012; Suraya Tarasat & Aisah Daud, 2013; Hanifah Sabin, 2020; Teoh Ci Xin & Melor Md. Yunus, 2020; Manisah Che Nawi, 2021; Thang Yin Fong, 2022).

Guided by these empirical findings, the proposed KeBaL Model integrates oral reading fluency elements, reading content, teaching strategies, and oral reading fluency assessment into a systematic model that can be implemented consistently by preschool teachers. In the KeBaL Model, Reading Content refers to the reading content prescribed in the National Preschool Standard Curriculum (KSPK Revised 2017) and the Preschool Curriculum 2026 (KP 2026), with prosody incorporated as an additional element based on expert consensus.

This paper reports the findings of Phase Two (Design and Development) of a Design and Development Research (DDR) study that aimed to develop the KeBaL Model (Model Strategi Pengajaran Kelancaran Bacaan Lisan Bahasa Melayu Prasekolah). The findings of the needs analysis provided the empirical foundation for Phase Two of the study, in which the KeBaL Model was designed and developed through a Focus Group Discussion (FGD)

and subsequently refined through expert consensus using the Fuzzy Delphi Method (FDM). Specifically, Phase Two sought to obtain expert consensus on the four components of the KeBaL Model: (i) Learning Objectives, (ii) Oral Reading Fluency and Reading Content, (iii) Teaching Strategies, and (iv) Oral Reading Fluency Assessment. The resulting KeBaL Model provides a structured teaching strategies model that supports preschool teachers in planning, implementing, and assessing oral reading fluency instruction in Bahasa Melayu preschool classrooms.

LITERATURE REVIEW

Oral Reading Fluency

Oral reading fluency (ORF) has become a central focus of reading research because it reflects children's ability to read connected text accurately, at an appropriate rate, and with meaningful expression. Rather than referring solely to reading speed, ORF is widely recognised as a multidimensional construct that integrates accuracy, reading rate, and prosody during oral reading to support successful reading performance (Hudson et al., 2011). Children who demonstrate higher levels of ORF are generally able to recognise words more automatically, read with greater expression, and process written text more efficiently, enabling them to focus on meaning rather than decoding individual words (Kim et al., 2021; Akan et al., 2023; Oliveira Meggiato et al., 2025).

The relationship between ORF and reading comprehension is well established in the literature. According to Automaticity Theory, fluent readers recognise words with minimal conscious effort, allowing greater cognitive resources to be allocated to comprehension (LaBerge & Samuels, 1974; Samuels, 2004). Consistent with this theoretical perspective, recent empirical studies have demonstrated that improvements in ORF are associated with better reading comprehension and overall reading achievement (Chung et al., 2021; Oliveira Meggiato et al., 2025). These findings suggest that systematic ORF instruction during the preschool years provides an important foundation for children's later reading success.

Collectively, the literature demonstrates that ORF is not merely an indicator of reading proficiency but also a critical instructional outcome that supports children's transition from learning to read towards reading to learn. Consequently, ORF provides an appropriate theoretical foundation for the development of the KeBaL Model, which aims to support systematic oral reading fluency instruction in Bahasa Melayu preschool classrooms.

Oral Reading Fluency Elements

The literature consistently identifies accuracy, reading rate, and prosody as the three essential elements of oral reading fluency. Although each element represents a distinct aspect of oral reading performance, they function interdependently during fluent reading and should therefore be developed simultaneously rather than in isolation (Hudson et al., 2011; Roe et al., 2019). Together, these elements enable children to read connected text accurately, efficiently, and expressively while supporting comprehension.

Accuracy refers to children's ability to recognise and pronounce words correctly during oral reading. Accurate word recognition forms the foundation of fluent reading because decoding errors interrupt reading continuity, reduce automaticity, and increase cognitive demands. Consequently, fewer cognitive resources remain available for comprehension (Ehri, 2020). Recent studies continue to identify reading accuracy as a significant predictor of overall reading achievement, particularly when it develops alongside automatic word recognition (Kim et al., 2021; Akan et al., 2023).

Reading rate refers to the efficiency with which children read connected text while maintaining accuracy. An appropriate reading rate reflects increasing automaticity in word recognition, whereas excessively slow reading often indicates continued reliance on conscious decoding. Conversely, reading too rapidly without adequate processing may also reduce comprehension. Contemporary studies therefore emphasise that fluency instruction should aim to develop an appropriate reading rate rather than reading speed alone (Rasinski et al., 2020; Chung et al., 2021).

The third element, prosody, refers to expressive oral reading characterised by appropriate intonation, phrasing, pausing, and stress. Prosodic reading reflects children's ability to interpret and communicate meaning through

spoken language and has increasingly been recognised as an important indicator of reading maturity. Recent empirical evidence indicates that children who demonstrate appropriate prosody generally achieve stronger reading comprehension because expressive reading reflects the successful integration of decoding, language processing, and meaning construction (Morrison & Wilcox, 2020; Wolters et al., 2020; Oliveira Meggiato et al., 2025).

Taken together, these findings support the view that oral reading fluency should be conceptualised as an integrated construct comprising three interrelated elements namely accuracy, reading rate, and prosody. These elements collectively form the foundation of oral reading fluency and therefore constitute the core oral reading fluency elements of the KeBaL Model.

Teaching Strategies

Research consistently shows that oral reading fluency is most effectively developed when children are provided with structured opportunities to read connected text repeatedly, receive appropriate instructional support, and engage in meaningful reading experiences. Rather than relying on a single teaching approach, recent studies recommend combining several evidence-based teaching strategies to accommodate children's diverse learning needs.

Among the most extensively researched strategies is Repeated Reading, which improves reading accuracy and automaticity through repeated exposure to the same text (Samuels, 2004; Rasinski et al., 2020). Assisted Reading, Read-Aloud, Paired Reading, and Shared Reading complement repeated reading by providing teacher modelling, peer interaction, guided practice, and immediate feedback that strengthen oral reading fluency (Lee & Szczerbinski, 2021; Steiner et al., 2021).

In recent years, increasing attention has also been given to Rhythmic Poetry and Technology-Assisted Reading. Rhythmic poetry supports expressive reading by encouraging children to practise rhythm, phrasing, intonation, and repeated oral reading while enhancing engagement and motivation (Milankov et al., 2021). Similarly, digital technologies provide additional opportunities for children to practise reading through audio-supported texts, interactive applications, and digital learning platforms that reinforce reading fluency beyond classroom instruction (Mize & Park, 2021; Ja'afar et al., 2021). Collectively, these studies support the integration of multiple teaching strategies in the KeBaL Model rather than reliance on a single instructional approach.

Reading Content

Reading Content is an important component of the KeBaL Model because it specifies the reading content to be taught during oral reading fluency instruction. In the Malaysian preschool context, Reading Content is aligned with the National Preschool Standard Curriculum (KSPK Revised 2017) and the Preschool Curriculum 2026 (KP2026). These curricula introduce reading progressively through word reading, phrase reading, simple sentence reading, phrase comprehension, sentence comprehension, and accurate oral reading.

During the development of the KeBaL Model, expert consensus further supported the inclusion of prosody as an additional reading content element to strengthen expressive and meaningful oral reading. Therefore, the Reading Content component of the KeBaL Model integrates curriculum-based reading content with expert recommendations, providing a systematic progression for Bahasa Melayu oral reading fluency instruction in preschool classrooms.

Oral Reading Fluency Assessment

Oral Reading Fluency Assessment is essential for monitoring children's reading progress and informing teachers' instructional decisions. The literature recommends that oral reading fluency should be assessed through accuracy, reading rate, and prosody, as these three assessment elements provide a more complete picture of children's oral reading performance (Hasbrouck & Tindal, 2006; Hudson et al., 2011; Rasinski et al., 2020).

Assessing accuracy enables teachers to identify word recognition difficulties, while reading rate provides information about the development of automaticity. Prosody assessment helps teachers observe whether children

read with appropriate expression, phrasing, pausing, and intonation. In the KeBaL Model, Oral Reading Fluency Assessment incorporates these three assessment elements to ensure that assessment is aligned with the oral reading fluency elements and teaching strategies implemented during instruction.

Collectively, the literature provides strong theoretical and empirical support for the importance of oral reading fluency, its core elements, evidence-based teaching strategies, curriculum-aligned reading content, and systematic assessment in preschool education. However, previous studies have primarily examined these aspects independently, with limited efforts to integrate them into a comprehensive teaching strategies model for Bahasa Melayu preschool classrooms. This gap highlights the need to develop the KeBaL Model, which systematically integrates these components through a structured design and development process. Accordingly, the following section describes the methodology adopted to design and develop the KeBaL Model using the Design and Development Research (DDR) approach.

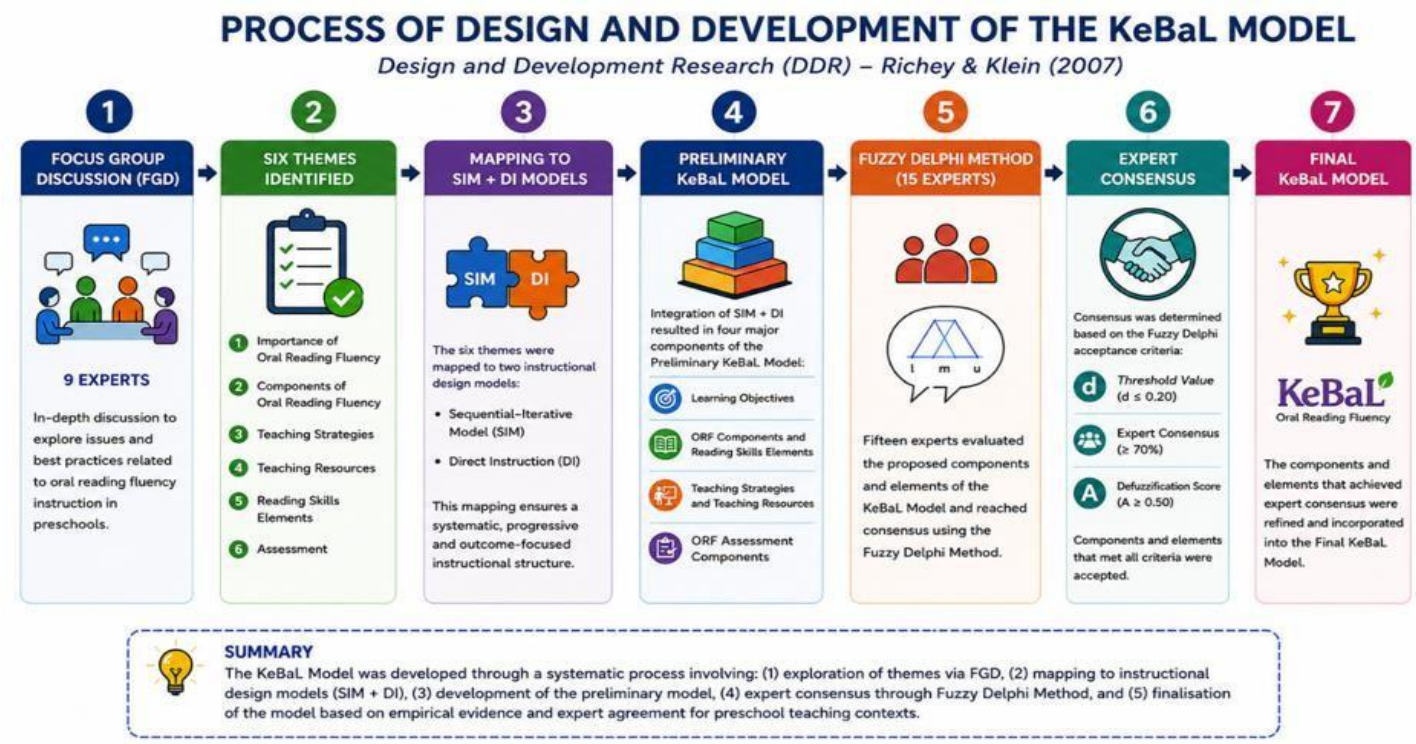
METHODOLOGY

Research Design

This study employed the Design and Development Research (DDR) approach proposed by Richey and Klein (2007) to develop the KeBaL Model (Model Strategi Pengajaran Kelancaran Bacaan Lisan Bahasa Melayu Prasekolah). The DDR approach was selected because it provides a systematic process for designing, developing, and evaluating educational models through iterative phases of research and development.

The overall study comprised three phases: Needs Analysis (Phase One), Design and Development (Phase Two), and Usability Evaluation (Phase Three), as illustrated in Figure 1. However, this paper reports only the findings of Phase Two, which focused on designing and developing the KeBaL Model through expert consensus on its proposed components and elements.

Figure 1. Design and Development Process of the KeBaL Model in Phase Two of the DDR Study



Participants

Phase Two involved two separate panels of experts, selected through purposive sampling based on their recognised expertise, academic qualifications, and professional experience in early childhood education, Bahasa Melayu literacy, curriculum development, and teacher education.

The first panel consisted of nine experts who participated in a Focus Group Discussion (FGD) to explore issues related to oral reading fluency instruction and to identify the key themes that informed the design and development of the KeBaL Model.

The second panel comprised fifteen experts who participated in the Fuzzy Delphi Method (FDM) to obtain expert consensus on the proposed components and elements of the KeBaL Model.

Research Procedure

The KeBaL Model was developed through a four step design and development procedure.

Step 1: A Focus Group Discussion (FGD) involving nine experts was conducted to explore issues related to oral reading fluency instruction in Malaysian preschools. The discussion generated six key themes: (i) the importance of oral reading fluency, (ii) oral reading fluency, (iii) teaching strategies, (iv) teaching resources, (v) reading content, and (vi) oral reading fluency assessment.

Step 2: The six themes were synthesised and mapped to two instructional design models, namely the Sequential Iterative Model (SIM) (Milano & Ullius, 1998) and Direct Instruction (DI) (Engelmann, 1968). This mapping process transformed the six themes into the four proposed components of the KeBaL Model: (i) Learning Objectives, (ii) Oral Reading Fluency and Reading Content, (iii) Teaching Strategies and Teaching Resources, and (iv) Oral Reading Fluency Assessment.

Step 3: Based on these four proposed components, the corresponding components and elements of the KeBaL Model were developed and subsequently evaluated by 15 experts using the Fuzzy Delphi Method (FDM) to obtain expert consensus.

Step 4: Expert consensus determined the final components and elements of the KeBaL Model. Only the proposed components and elements that met the established Fuzzy Delphi acceptance criteria (threshold value $d \leq 0.20$, expert consensus $\geq 70\%$, and defuzzification score $A \geq 0.50$) were included in the final model.

Data Analysis

Data from the Focus Group Discussion (FGD) were analysed using thematic analysis to identify the key themes related to oral reading fluency instruction in Malaysian preschools. The six themes were subsequently synthesised and mapped to the Sequential–Iterative Model (SIM) and Direct Instruction (DI) to develop the proposed components and elements of the KeBaL Model. These components and elements formed the basis for constructing the Fuzzy Delphi Method (FDM) instrument.

Data from the Fuzzy Delphi Method (FDM) were analysed using the established Fuzzy Delphi acceptance criteria: threshold value ($d \leq 0.20$), expert consensus ($\geq 70\%$), and defuzzification score ($A \geq 0.50$). The analysis was conducted to obtain expert consensus on the proposed components and elements of the KeBaL Model. Expert consensus determined the final components and elements of the KeBaL Model. Only the proposed components and elements that met all three acceptance criteria were included in the final model.

Following the design and development process, the proposed components and elements of the KeBaL Model were evaluated by an expert panel using the Fuzzy Delphi Method (FDM). The following section presents the expert consensus for each component and its corresponding elements, which collectively constitute the final KeBaL Model.

RESULT

Learning Objectives

The first component of the KeBaL Model comprises five proposed learning objectives. These learning objectives were evaluated by 15 experts using the Fuzzy Delphi Method (FDM) to obtain expert consensus. The results are presented in Table 1.

Table 1. Expert Consensus on the Learning Objectives of the KeBaL Model

Objective	**d**	**Consensus (%)**	**A**	**Decision**
Objective 1	0.060	100	0.940	Accepted
Objective 2	0.073	100	0.927	Accepted
Objective 3	0.093	93	0.916	Accepted
Objective 4	0.111	93	0.916	Accepted
Objective 5	0.076	100	0.920	Accepted

The results presented in Table 1 show that all five proposed learning objectives satisfied the established Fuzzy Delphi acceptance criteria. The threshold values ranged from 0.060 to 0.111, expert consensus ranged from 93% to 100%, and defuzzification scores ranged from 0.916 to 0.940. Consequently, all five learning objectives were accepted by the expert panel and incorporated into the KeBaL Model.

All five proposed learning objectives were accepted by the expert panel and incorporated into the KeBaL Model. The learning objectives provide guidance for teachers in planning oral reading fluency instruction, with emphasis on reading accuracy, reading rate, prosody, and oral reading fluency assessment.

Oral Reading Fluency Elements

The second component proposed for the KeBaL Model comprised three oral reading fluency elements: accuracy, reading rate, and prosody. These proposed elements were evaluated by 15 experts using the Fuzzy Delphi Method (FDM). The results are presented in Table 2.

Table 2 . Expert Consensus on the Oral Reading Fluency Elements

Component	Threshold (d)	Expert Consensus (%)	Defuzzification Score (A)	Decision	Rank
Accuracy	0.073	100	0.927	Accepted	1
Reading Rate	0.049	100	0.887	Accepted	2
Prosody	0.102	87	0.884	Accepted	3

All three proposed oral reading fluency elements satisfied the established Fuzzy Delphi acceptance criteria and were accepted by the expert panel. The accepted oral reading fluency elements were subsequently incorporated into the final KeBaL Model.

Reading Content

The third proposed component of the KeBaL Model focused on Reading Content. The proposed Reading Content comprised eight reading skills, which were evaluated by 15 experts using the Fuzzy Delphi Method (FDM). The results are presented in Table 3.

Table 3. Expert Consensus on the Proposed Reading Content

Reading Skills	Threshold (d)	Expert Consensus (%)	Defuzzification Score (A)	Decision	Rank
1. Read and understand phrases containing open and closed syllables	0.074	93	0.916	Accepted	1
2. Read phrases containing open and closed syllables	0.093	93	0.916	Accepted	2
3. Read simple sentences with correct pronunciation	0.093	93	0.911	Accepted	2
4. Read words containing open and closed syllables	0.111	87	0.898	Accepted	4
5. Read and understand simple sentences	0.138	87	0.891	Accepted	5

6. Read simple sentences containing open and closed syllables	0.138	87	0.891	Accepted	6
7. Read simple sentences using correct intonation, pausing, and expression	0.138	87	0.916	Accepted	6
8. Extensive Reading	0.331	33	0.644	Rejected	

Acceptance criteria: Threshold value (d) ≤ 0.20; Expert consensus ≥70%; Defuzzification score (A) ≥0.50.

The results presented in Table 3 show that seven of the eight proposed reading skills satisfied the established Fuzzy Delphi acceptance criteria. The threshold values ranged from 0.074 to 0.138, expert consensus ranged from 87% to 93%, and defuzzification scores ranged from 0.891 to 0.936.

Among the accepted reading skills, reading and understanding phrases containing open and closed syllables achieved the highest priority (A = 0.936). Reading phrases containing open and closed syllables and reading simple sentences with correct pronunciation shared the second highest priority (A = 0.916). The remaining accepted reading skills were also found to satisfy all three Fuzzy Delphi acceptance criteria.

One proposed reading skill, extensive reading, did not satisfy the established Fuzzy Delphi acceptance criteria and was therefore not included in the KeBaL Model.

Teaching Strategies

The fourth proposed component of the KeBaL Model comprised seven proposed teaching strategies. These proposed teaching strategies were evaluated by 15 experts using the Fuzzy Delphi Method (FDM). The results are presented in Table 4.

Table 4. Expert Consensus on the Proposed Teaching Strategies

Teaching Strategy	Threshold (d)	Expert Consensus (%)	Defuzzification Score (A)	Decision	Rank
Repeated Reading	0.068	100	0.933	Accepted	1
Read-Aloud	0.068	100	0.933	Accepted	1
Paired Reading	0.068	100	0.933	Accepted	1
Assisted Reading	0.073	100	0.927	Accepted	4
Rhythmic Poetry	0.076	100	0.920	Accepted	5
Shared Reading	0.093	93	0.916	Accepted	6
Technology-Assisted Reading	0.108	100	0.891	Accepted	7

Acceptance criteria: Threshold value (d) ≤ 0.20; Expert consensus ≥70%; Defuzzification score (A) ≥0.50.

The results presented in Table 4 show that all seven proposed teaching strategies satisfied the established Fuzzy Delphi acceptance criteria. The threshold values ranged from 0.068 to 0.108, expert consensus ranged from 93% to 100%, and defuzzification scores ranged from 0.891 to 0.933.

Repeated Reading and Read-Aloud achieved the highest priority (A = 0.933), followed by Paired Reading (A = 0.933), Assisted Reading (A = 0.927), Rhythmic Poetry (A = 0.920), Shared Reading (A = 0.916), and Technology-Assisted Reading (A = 0.891). All seven proposed teaching strategies fulfilled the established Fuzzy Delphi acceptance criteria and were accepted by the expert panel for inclusion in the KeBaL Model.

Repeated Reading, Read-Aloud, and Paired Reading recorded the highest defuzzification scores, followed by Assisted Reading, Rhythmic Poetry, Shared Reading, and Technology-Assisted Reading. All seven proposed teaching strategies satisfied the established Fuzzy Delphi acceptance criteria and were accepted by the expert panel for inclusion in the KeBaL Model.

Oral Reading Fluency Assessment

The fifth proposed component of the KeBaL Model focused on Oral Reading Fluency Assessment. The proposed assessment comprised three assessment components: accuracy, reading rate, and prosody. These assessment components were evaluated by 15 experts using the Fuzzy Delphi Method (FDM). The results are presented in Table 5.

Table 5: Expert Consensus on the Proposed Oral Reading Fluency Assessment

Assessment Component	Threshold (d)	Expert Consensus (%)	Defuzzification Score (A)	Decision	Rank
Accuracy	0.093	93	0.916	Accepted	1
Reading Rate	0.089	93	0.922	Accepted	2
Prosody	0.093	93	0.916	Accepted	3

Acceptance criteria: Threshold value (d) ≤ 0.20; Expert consensus ≥70%; Defuzzification score (A) ≥0.50.

Table 5 shows that all three proposed oral reading fluency assessment components met the established Fuzzy Delphi acceptance criteria. All three components achieved 93% expert consensus, with threshold values ranging from 0.089 to 0.093 and defuzzification scores ranging from 0.916 to 0.922. The expert panel accepted all three components for inclusion in the KeBaL Model.

DISCUSSION

Learning Objectives

The five Learning Objectives establish the educational direction of the KeBaL Model by defining what teachers are expected to achieve when implementing oral reading fluency instruction. Rather than focusing solely on improving children's reading performance, these learning objectives provide a systematic basis for planning instruction that integrates the teaching of accuracy, reading rate, prosody, and oral reading fluency assessment. This alignment reflects the principle that effective instruction begins with clearly defined learning outcomes, enabling teachers to organise teaching activities and assessment systematically.

The emphasis on explicit learning objectives is consistent with instructional design principles, which recognise learning objectives as an essential element for aligning teaching, learning activities, and assessment (Richey & Klein, 2007). In the context of preschool education, clearly defined learning objectives also support curriculum implementation by ensuring that classroom instruction remains aligned with the intended learning outcomes prescribed in KSPK (Revised 2017) and KP2026. By incorporating five clearly defined learning objectives, the KeBaL Model provides a structured direction for oral reading fluency instruction while maintaining consistency between curriculum expectations and classroom practice.

Oral Reading Fluency Elements

The acceptance of accuracy, reading rate, and prosody reinforces the view that oral reading fluency should be developed as an integrated construct rather than as separate reading abilities. Although each element represents a different aspect of reading performance, fluent oral reading depends on the interaction of accurate word recognition, efficient reading rate, and expressive reading. Focusing on only one element is unlikely to produce fluent readers because weaknesses in any one of these areas may disrupt overall reading performance and reduce children's ability to construct meaning from connected text.

This interpretation is consistent with Automaticity Theory (LaBerge & Samuels, 1974; Samuels, 2004), which explains that fluent reading develops as word recognition becomes increasingly automatic, allowing cognitive resources to be redirected towards comprehension. The present findings also support more recent studies reporting that balanced development across accuracy, reading rate, and prosody contributes to stronger reading comprehension and overall reading achievement (Kim et al., 2021; Akan et al., 2023; Oliveira Meggiato et al., 2025). Consequently, the KeBaL Model conceptualises oral reading fluency through these three interrelated

elements, providing teachers with a comprehensive basis for planning oral reading fluency instruction.

Reading Content

The accepted Reading Content reflects a progressive sequence of reading development that is consistent with the progression prescribed in KSPK (Revised 2017) and KP 2026. The sequence begins with reading words, progresses to phrases and simple sentences, and subsequently extends to reading comprehension and expressive reading. Such progression recognises that children develop reading ability gradually, with each stage providing the foundation for the next stage of learning. Organising Reading Content in this sequence enables teachers to introduce reading systematically according to children's developmental readiness.

An important finding of this study was the rejection of Extensive Reading as one of the proposed Reading Content elements. This suggests that experts considered extensive reading to be more appropriate after children had mastered the progressive sequence of Reading Content incorporated into the KeBaL Model. Rather than introducing more demanding reading experiences at the preschool level, the findings support the importance of strengthening essential reading skills before children progress to broader independent reading experiences. This progression is consistent with curriculum expectations and provides teachers with a clear sequence for organising oral reading fluency instruction.

Teaching Strategies

The acceptance of seven Teaching Strategies indicates that oral reading fluency is most effectively developed through a combination of complementary instructional approaches rather than reliance on a single teaching strategy. Each strategy contributes different forms of instructional support, including teacher modelling, repeated practice, collaborative learning, rhythmic reading, and technology-supported instruction. When implemented systematically, these strategies create multiple opportunities for children to practise oral reading fluency in meaningful classroom contexts.

This finding is consistent with previous studies showing that Repeated Reading, Read-Aloud, Paired Reading, Shared Reading, Assisted Reading, Rhythmic Poetry, and Technology-Assisted Reading each contribute to different aspects of reading development (Lee & Szczerbinski, 2021; Steiner et al., 2021; Milankov et al., 2021). However, previous studies have generally examined these strategies independently. The novelty of the KeBaL Model lies in integrating the seven evidence-based teaching strategies into a single teaching strategies model for oral reading fluency instruction. This integration enables teachers to select and combine appropriate strategies according to children's learning needs while maintaining a consistent instructional focus on oral reading fluency.

Oral Reading Fluency Assessment

The inclusion of Oral Reading Fluency Assessment alongside the instructional components strengthens the alignment between teaching and assessment within the KeBaL Model. Assessing accuracy, reading rate, and prosody ensures that children's reading performance is evaluated across all three oral reading fluency elements rather than relying on a single indicator of reading ability. Such alignment enables assessment to reflect the same instructional emphasis applied during classroom teaching.

This finding supports recommendations in the oral reading fluency literature that assessment should capture the multidimensional nature of fluent reading rather than focusing exclusively on reading speed or word recognition (Hudson et al., 2011; Roe et al., 2019). By aligning assessment with the three oral reading fluency elements, the KeBaL Model provides teachers with a systematic approach for monitoring children's progress and using assessment evidence to inform subsequent instruction.

CONCLUSION

This paper reported the findings of Phase Two of a Design and Development Research (DDR) study, which focused on the design and development of the KeBaL Model, a teaching strategies model for oral reading fluency in Bahasa Melayu preschool education. Through the Fuzzy Delphi Method (FDM), expert consensus was achieved on five Learning Objectives, three Oral Reading Fluency Elements, seven Reading Content elements,

seven Teaching Strategies, and three Oral Reading Fluency Assessment elements. One proposed Reading Content element, Extensive Reading, was excluded because it did not satisfy the established Fuzzy Delphi acceptance criteria.

The findings demonstrate that effective oral reading fluency instruction requires the integration of clearly defined learning objectives, balanced oral reading fluency elements, developmentally appropriate reading content, evidence-based teaching strategies, and aligned assessment. Unlike previous studies that focused on individual teaching approaches, the KeBaL Model integrates these components within a single teaching strategies model to support the planning, implementation, and assessment of oral reading fluency in Bahasa Melayu preschool classrooms.

This study contributes theoretically by extending the oral reading fluency literature through the integration of established reading theories with expert consensus. Methodologically, it demonstrates the application of Design and Development Research (DDR), Focus Group Discussion (FGD), and the Fuzzy Delphi Method (FDM) in developing and validating an educational model. Practically, the KeBaL Model provides preschool teachers with structured guidance for implementing oral reading fluency instruction and may also support curriculum enhancement and professional development initiatives in early literacy.

As this paper reports only the design and development phase of the study, the findings are limited to expert validation and do not provide evidence of classroom implementation or effectiveness. Future research should therefore evaluate the implementation and effectiveness of the KeBaL Model across different preschool settings and explore its adaptation to other educational contexts and languages.

The principal contribution of this study is the development of the KeBaL Model, which integrates learning objectives, oral reading fluency elements, reading content, teaching strategies, and assessment within a single teaching strategies model for oral reading fluency instruction in Bahasa Melayu preschool education. Unlike previous studies that have focused primarily on individual teaching strategies or isolated aspects of reading development, the KeBaL Model integrates five Learning Objectives, three Oral Reading Fluency Elements, Reading Content, seven Teaching Strategies, and Oral Reading Fluency Assessment within a coherent instructional model developed through a systematic Design and Development Research (DDR) process.

From a theoretical perspective, the study extends current understanding of oral reading fluency by integrating established theories with expert consensus into a structured teaching model. Methodologically, it demonstrates the application of DDR, Focus Group Discussion, and the Fuzzy Delphi Method in developing and validating an educational model. From a practical perspective, the KeBaL Model offers preschool teachers a structured and evidence-informed approach for planning, implementing, and assessing oral reading fluency instruction in Bahasa Melayu preschool classrooms. Future research should evaluate the effectiveness of the KeBaL Model through classroom implementation to determine its impact on children's oral reading fluency development

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Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

Ethical Approval

This study was conducted in accordance with the research ethics guidelines approved by the Universiti Pendidikan Sultan Idris (UPSI) (Approval No. 2024-0302-01).

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