

**“What else might this be called?”:
Exploring educators' experiences with
the Early Years Toolbox Vocab Task in
culturally and linguistically diverse
early childhood education and care
settings**

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digital technology, early childhood education and care (ECEC), early years toolbox (EYT), ecological model educators' perceptions, English as an additional language, language assessment, sociocultural perspective, teaching and learning, Vocab Task

Declaration

This thesis is the result of my own work and includes nothing that is the outcome of work done in collaboration except where specifically indicated in the text.

This work has not previously been submitted for a degree or diploma at any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

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Abstract

This thesis explores the Vocab Task, part of the assessment tool, the Early Years Toolbox, and its implementation in culturally and linguistically diverse early childhood education and care (ECEC) settings in Australia. It investigates educators' perceptions of the task's effectiveness, its role in understanding children's oral English development, and how their pedagogical practice is informed. The literature review highlights the evolving role of digital technologies in ECEC, the need for culturally responsive assessments, and inclusive learning environments. It also underscores the opportunities and challenges associated with technology use, such as improving communication with families, extending children's play experiences, and addressing equity issues and potential disconnections between home and ECEC learning environments. Sociolinguistic theories of Halliday and Vygotsky, emphasising the significance of language in social interactions and the interplay between thought and language, along with Bronfenbrenner's ecological model, highlighting the impacts of various environmental factors on children's learning and development, provide the theoretical framework of this study. Qualitative methods were used, involving semi structured interviews with seven educators from different areas of Australia. Thematic analysis revealed three main themes: factors contributing to score variations, including children's first language, life experiences, and images shown; educators' views on implementation, test procedures, and potential improvements; and reflections on supporting oral language development through various intentional teaching strategies. Findings suggest the Vocab Task is useful for monitoring expressive English vocabulary but has limitations for children with English as an Additional Language (EAL). Continuous refinements

combined with other comprehensive assessment methods are needed for the future of language assessment in ECEC.

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Table of Contents

Key Words	ii
Declaration.....	iii
Abstract.....	iv
Acknowledgements	vi
Table of Contents	viii
List of Figures.....	xii
List of Tables	xii
List of Abbreviations	xiii
Chapter 1. Introduction	1
Introducing the Early Years Toolbox: A Novel Solution to Measure Children’s Learning Outcomes in the Early Years.....	3
What Is the Early Years Toolbox Expressive Vocabulary Task and How Is It Implemented? ..	4
Early Years Toolbox Expressive Vocabulary Task Today and Educators’ Critical Reflection in the Context of the Approved National Early Learning Framework.....	6
Chapter 2. Literature Review	11
Vocabulary and Conceptual Development in the Early Years.....	11
Digital Technology in the Early Years: Opportunities and Challenges	14
Ideologies and Affordances of Language Assessment in ECEC: Play and School Readiness and What These Mean for Children From EAL Backgrounds.....	19
Navigating Pedagogical Discourses: A Dual Pathway for Language Assessment in ECEC	19
Treading Water: Early Language Assessment for Children From EAL Backgrounds	21
Conclusion.....	28
Chapter 3. Theoretical Framework.....	29

Language Development in the Early Years: Meaning-Making From Sociocultural Perspectives	29
Nature, Nurture, or Both? Bronfenbrenner’s Ecological Model Approach on Children’s Learning and Development	34
Conclusion.....	37
Chapter 4. Methodology	39
Research Questions	39
Research Rationale.....	39
Qualitative Research Design	40
Semistructured Interviews.....	42
Participant Table	43
Interview Questions.....	43
Data Analysis	45
Ethics Arrangements	47
Chapter 5. Findings	48
Theme 1: Educators’ Perceptions of Variations in Children’s Vocab Task Scores.....	50
Children’s First Language Other Than English	50
Children’s Life Experiences.....	52
Images Shown in the Vocab Task.....	54
Theme 2: Educators’ Perceptions of the General Use of the Vocab Task	57
Test Procedures and Child: Educator Engagement.....	57
Vocab Task Suggestions for Changes.....	60
Effectiveness of the Vocab Task in Assessing Children’s English Vocabulary Knowledge	61

Theme 3: Educators’ Perceptions of Ways to Support Children’s Oral English Language Development	64
Capturing the Depth of Children's Vocabulary Knowledge	64
Child–Educator Interactions.....	65
Educators’ Pedagogical Philosophy	68
Intentional Teaching and Pedagogical Strategies in ECEC	69
Conclusion.....	73
Chapter 6. Discussion	74
Research Question 1: What Are Educators’ Perceptions of the Vocabulary Task?.....	74
Research Question 2: How Do Educators Perceive the Vocab Task Score’s Representation of Children's Oral Language Development?	76
Research Question 3: How Do Educators Use the Vocab Task Scores to Inform Their Teaching, Particularly for Children For Whom English Is An Additional Language	79
Summary of Findings	81
Implications for Future Research and Implementation of the Vocabulary Task	84
Implications for Improving the Design of the Vocab Task	84
Implications for Practice	86
Chapter 7. Conclusion	89
References	92
Appendices.....	115
Appendix A. More Example Screenshots of the “Vocab” Task of the EYT	116
Appendix B. Interview Questions	120
Appendix C. The University of Sydney Human Research Ethics Committee Project Approval	122
Appendix D. The University of Sydney Human Research Ethics Committee Project Ethics Modification Approval.....	124

Appendix E. Organisational Consent	125
Appendix F. Letter of Invitation	127
Appendix G. Participant Information Statement.....	128
Appendix H. Participant Consent Form	132
Appendix I. Example Spreadsheet Table Used for Thematic Analysis	134

List of Figures

Figure 1 <i>Final Thematic Map</i>	49
Figure 2 <i>Fountain Picture in the Vocab Task</i>	53
Figure 3 <i>Picture of a Child Sweating in the Vocab Task</i>	55
Figure 4 <i>The Calendar Picture in the Vocab Task</i>	56
Figure A1 <i>The Vocab Task Homepage</i>	116
Figure A2 <i>The Sunflower Picture in the Vocab Task</i>	117
Figure A3 <i>The Toothbrush Picture in the Vocab Task</i>	118
Figure A4 <i>The Game Over Page in the Vocab Task</i>	119
Figure I <i>Example Spreadsheet Table for How Each Theme is Broken Down</i>	134

List of Tables

Table 1 <i>Participants' Qualifications and Base Early Childhood Education and Care (ECEC) Service Locations</i>	43
Table 2 <i>Mapping of the Interview Questions Relating to Each of the Research Questions</i>	44

List of Abbreviations

AEDC	Australian Early Development Census
AGDE	Australian Government Department of Education
DEEWR	Department of Education, Employment and Workplace Relations
EAL	English as an additional language
ECEC	Early childhood education and care
EOWPVT	Expressive One-Word Picture Vocabulary Test
EYLF V2.0	Early Years Learning Framework for Australia V2.0
EYT	Early Years Toolbox
HREC	Human Research Ethics Committee
LBOTE	Language background other than English
MKO	More knowledgeable others
NOM	Net overseas migration
NSW	New South Wales
OECD	Organisation for Economic Co-operation and Development
PIS	Programme for International Student Assessment
SFL	Systematic functional linguistics

Chapter 1.

Introduction

Australia is known for its cultural diversity, with more than 300 languages spoken across communities and households over a 5-year period (Australian Bureau of Statistics, 2017, 2022). Net overseas migration (NOM) has consistently accounted for over 60% of annual growth since 2006 (Simon-Davies, 2018). More than 23% of children aged from 0 to 14 years have parents born outside Australia, with another 16% having one parent born overseas (Australian Institute of Health and Welfare, 2022). Early childhood education and care (ECEC) settings have seen a similar trend, with a steadily increasing number of children from various cultural and linguistic backgrounds peaking in 2021. More than 26% of children in the early years are classified as having an English as an additional language (EAL) background (Australian Early Development Census [AEDC], 2021).

The latest AEDC data and research demonstrate that children from EAL backgrounds are more likely to find themselves lagging behind their peers in key learning domains such as language and cognitive skills, which is potentially attributed to the early-stage differences in speaking and listening skills (AEDC, 2021; Taggart et al., 2015). Furthermore, when these data are overlaid with the developmental domain data available, a seemingly concerning trend is indicated: The developmental gap between monolingual English-speaking children and those from language backgrounds other than English (LBOTE) has been decreasing over the years. Specifically, the difference in development was as high as 10% in 2009, although it has reduced to just over 6% in 2021 (AEDC, 2021). However, it is important to note that children from EAL backgrounds are still generally less likely to be developmentally on track across all five domains

compared to their peers with English-only backgrounds (AEDC, 2021; Rajwani et al., 2021). Proficiency in English is another key determining factor in relation to developmental vulnerability, particularly for children who experience vulnerability in two or more domains. Interestingly, the data demonstrate that English language proficiency is a limiting factor not only for children from EAL backgrounds in terms of early learning and development, but also for any child whose English language is not at a proficient level (AEDC, 2021).

The positive is that children from EAL backgrounds have shown a small yet continued decrease over the years in developmental vulnerability in learning domains such as social competence compared to their monolingual peers, despite remaining more than twice as likely to underperform in the communication domain (AEDC, 2021). Nevertheless, children with a monolingual English background have seen an increase in vulnerability at a slightly higher rate in language and cognitive domain at 0.8%. That said, comparing this cohort with children from EAL backgrounds shows a consistently higher percentage of developmentally on-track children across all learning domains (AEDC, 2021).

These findings are significant because the first 5 years of a child's life are fundamental for the development of their identity, sense of belonging, and early socialisation (Department of Education, Employment and Workplace Relations [DEEWR], 2009; Rajwani et al., 2021). In particular, the years prior to formal schooling are the most important in a child's life and can be predictive of their future educational attainment and progress (Duff et al., 2015; Hart & Risley, 1995). Thus, the provision of high-quality ECEC and culturally responsive teaching strategies becomes crucial, potentially having lasting influences on culturally and linguistically diverse children's academic and social outcomes. To address this, the first step should be to understand

children's varying linguistic and cultural capabilities that play a key role in identifying barriers and providing targeted support (Duff et al., 2015; Hart & Risley, 1995; Taggart et al., 2015).

Introducing the Early Years Toolbox: A Novel Solution to Measure Children's Learning

Outcomes in the Early Years

Recognising the broader need to address developmental vulnerabilities through targeted interventions in early childhood is important. With that in mind, the Early Years Toolbox (EYT), a digital assessment toolkit, was piloted among several ECEC services in late 2017. The EYT was jointly created by a team of researchers from the University of Wollongong and the University of Oxford for use by early childhood educators (EYT, n.d.). It is widely acknowledged that educators are among those who can influence children's learning outcomes. Furthermore, assessment of children's learning plays a critical role in educators' effective planning to support their future growth (DEEWR, 2009; EYT, n.d.; Howard et al., 2021; NICHD Early Child Care Research Network, 2002; Tayler et al., 2016).

With the EYT, educators can collect tangible data about the selected learning domains that research has shown can potentially predict children's achievements later in life, such as in early literacy and numeracy (Howard & Melhuish, 2017). The EYT assessments claim to utilise well-established and extensively tested measures, which have been refined and enhanced through over 20 years of research experience working with young children (EYT, n.d.; Howard & Melhuish, 2017). The complexity of teaching in an ECEC setting—for instance, with educators holding various qualifications and maintaining the supervision requirement and teacher–child ratios stipulated by the relevant laws and regulations—also means that a reliable assessment solution would be more desirable. At the same time, it should be readily available and intuitive for ECEC educators to administer on the floor (Howard et al., 2021).

By definition, the EYT is a series of child-level iPad applications designed to assess the progress of children aged 3 to 5 years in expressive language, numeracy, executive function, and social–emotional development. Unlike many other existing assessment tools that require comprehensive research training and are often not cost effective, the easy-to-use EYT aims to break these barriers by significantly reducing administration time, yielding brief and actionable data to inform better, and potentially instigating changes in educators’ day-to-day teaching practices (Howard & Melhuish, 2017; Manning et al., 2017). Over the years, the validity, reliability, and viability of each application has been gradually tested to ensure a higher level of integrity is maintained (Howard et al., 2021).

At the time of this research, more than 600 ECEC services, affiliated with various partner organisations in Australia, have participated in the EYT assessment cycles. As a result, more than 12,000 children in Australia have experienced the EYT (EYT, n.d.). The scheduling of EYT cycles strategically aligns with the periods of children’s formative and summative assessments, typically conducted in January, June, and November each year. Partner organisations are granted the flexibility to establish their own protocols for selecting educators to carry out these assessments and to decide on their preferred methods for implementing the cycles (EYT, n.d.). Despite being launched across more than fifty countries and five continents, with multiple language supports added, the EYT has predominately been administered in Standard Australian English in most ECEC settings in Australia, including the language-specific assessment application, the Vocab Task (Howard & Melhuish, 2017; Howard et al., 2021).

What Is the Early Years Toolbox Expressive Vocabulary Task and How Is It Implemented?

It is widely acknowledged that young children’s vocabulary lays a foundation for their literacy acquisition such as reading and writing skills later at school (Freebody & Luke, 1990;

Hovsepian, 2017; Taggart et al., 2015). The Vocab Task is therefore designed to gauge where children aged from 3 to 5 years are at each developmental stage, regarding their expressive vocabulary knowledge in Standard Australian English. The Vocab Task, as one of the five applications within the EYT, focuses on measuring children's expressive English language development. Its purpose is to provide reliable data for educators on how well children can articulate and name images shown on screen that are randomly selected from a set of 68 images within the app (Howard & Melhuish, 2017). The images were created and illustrated by a team of designers and cartoonists and are intended to be age-appropriate for children aged between 3 and 5 years (EYT, n.d.). Screenshots of some of these images are included throughout this thesis and in Appendix A for context.

During each Vocab Task assessment, educators mark children's articulation of images as either "correct" or "incorrect". When an incorrect answer is produced, the educators prompt children by asking, "What else might this be called?" until the child can articulate the word, or if unable to do so, an incorrect entry is recorded (EYT, n.d.; Howard & Melhuish, 2017). Once the sixth incorrect entry is recorded, the assessment concludes and is marked as complete. This rule is implemented to avoid frustration caused by difficult items after a series of incorrect responses is detected. Based on the child's overall number of accurate articulations of the images, an indicative score is calculated that may include a child performance chart or not, depending on the user setting, and is displayed on the final assessment screen (EYT, n.d.; Howard & Melhuish, 2017). Therefore, the length of each assessment may vary depending on each child's performance, typically lasting approximately 5 minutes and no longer than 15 minutes per child. After each assessment, there are options for the scores to be filtered by item data and sent to specified email addresses or captured in an individual organisation's database. Only nominated

users, typically educators administering the task and the ECEC service leadership team, have access to the aggregated data for the purposes of trend tracking and data analysis, and there are also online training modules and analysis tools available on the EYT official website designed to support access for individuals like educators who are best positioned to influence and shape children's developmental trajectories (EYT, n.d.; Howard & Melhuish, 2017).

Since the Vocab Task's initial release, according to the version history log in the App Store for iPad, the developer, the University of Wollongong, has made 25 updates to the Vocab Task up to November 2023. These updates range from compatibility updates, database management support and accessibility, and incorporating more languages such as Korean, Norwegian, and Turkish to adding new prompts such as verbs and other commonly mispronounced items to increase the age and ability range assessed. Looking ahead to the subsequent chapters of this thesis, it is crucial to acknowledge that not every educator or teacher, including those directly involved, may fully grasp or experience the entirety of these updates. Therefore, their insights primarily reflect their personal experiences and interactions with the evolving Vocab Task.

Early Years Toolbox Expressive Vocabulary Task Today and Educators' Critical Reflection in the Context of the Approved National Early Learning Framework

It has been more than six years since the Vocab Task and the EYT were first made available for preschools and early learning organisations both domestically and internationally. While version updates have occurred, what is yet to be discovered is educators' perceptions of the task and if and how their teaching practices have changed following its implementation (Dawson et al., 2020). This is important considering that the AEDC data collection indicates the percentage of children from EAL backgrounds not proficient in Standard Australian English is

more than 5% higher than their monolingual counterparts in their first year at school (AEDC, 2021).

As an early childhood educator, engaging in ongoing critical reflection on my teaching practice is a key aspect of my professional identity (Australian Government Department of Education [AGDE], 2022; Brookfield, 2017; DEEWR, 2009). Being involved firsthand in the initiation and implementation phase of the Vocab Task and the EYT and seeing how children performed on the tasks prompted me to deeply reflect on the way children's progress is being monitored and assessed in ECEC settings, as well as how children develop their oral language skills within their learning environments.

This self-reflection aligns with what Brookfield (2017) described as the “autobiographical lens” of a critically reflective teacher (van der Boom, 2022). This means that the teacher actively learns from their prior experiences in an attempt to be more in tune with the paradigmatic assumptions and ways of working in educational settings (Brookfield, 2017). This lens allows me to reflect on the assessment and evaluation part, which largely contributes to responsive teaching strategies in the planning cycle (Brookfield, 2017; van der Boom, 2022). Nevertheless, to me, the discourse of measuring children's language ability solely through decontextualised vocabulary at a young age appears to diverge from the holistic approach to curriculum and assessment that the Early Years Learning Framework—a key policy document for ECEC that guides educators in planning, implementing, and evaluating children's development in the early years nationally—promotes and advocates for (AGDE, 2022; DEEWR, 2009).

Further, despite the recognition in the framework of the importance of children's home language development, Standard Australian English is the primary language assessed during the

current EYT implementation stage in Australia. This aspect warrants careful consideration for educators as it may influence the assessment procedures and results for many children (AGDE, 2022). In less favourable scenarios, it could potentially lead to an underestimation of children's actual linguistic and communication skills.

Taking a closer look at the latest *Belonging, Being and Becoming: The Early Years Learning Framework for Australia V2.0* (EYLF V2.0) published in 2022, an additional layer to the "Practices" section is "cultural responsiveness". This added aspect indicates that the approved national early learning framework recognises the increasing need for ECEC educators to take action in building their professional capability to respect and celebrate the different ways of knowing, doing, and being of culturally and linguistically diverse children and families (AGDE, 2022). Further, the EYLF V2.0 highlights that while early childhood educators need to design educational programs and regularly assess children's capability in specific aspects of learning and development, they should pay equal attention to valuing children as unique individuals whose capabilities are not segregated but rather integrated and interconnected (AGDE, 2022; Arthur, 2020; DEEWR, 2009).

In terms of assessment for learning in an ECEC setting, a child is first a social being shaped by the different life experiences and "systems" in their environment (Bronfenbrenner, 1986, 2009; Xu & Liu, 2021). The "Assessment" section in the EYLF V2.0 (2023) reads:

Educators understand the importance of including children's voices and contributions to assessment. Assessment strategies that are inclusive, culturally and linguistically relevant, and responsive to the physical, emotional, social, intellectual and regulatory capabilities of each child will acknowledge each child's abilities, strengths and competencies. (p. 25)

It is therefore clear that, the EYLF V2.0 emphasises, for educators, the significance of understanding inclusive assessment strategies and the notion that children's learning is not merely influenced by one single factor. Educators also proactively contribute to shaping their development and the experience they partake in (Bronfenbrenner, 2009). The dynamic nature of children's early language development reaffirms the importance of adaptability and inclusivity of a vocabulary assessment tool like the Vocab Task (Xu & Liu, 2021).

To shed more light on the issues outlined above, this research aimed to explore the perspectives of educators who work in culturally and linguistically diverse ECEC settings on the effectiveness of the EYT's Vocab Task, as this assessment tool was originally designed to collect quantitative information on children's expressive vocabulary knowledge in Standard Australian English as a type of Expressive One-Word Picture Vocabulary Test (EOWPVT; Dionysios et al., 2010). Further, it aimed to investigate if, and how, educators' teaching practices have adapted to meet children's varying linguistic needs as a result of the implementation of the EYT Vocab Task. The research questions are framed as three sections to reflect the above.

The first question sought to identify educators' perceptions of the Vocab Task:

1. What are educators' perceptions of the Vocab Task?

The second question is related to how the Vocab Task frames children's oral language development, according to educators' experiences:

2. How do educators perceive the Vocab Task scores as a representation of children's oral language development?

The third question progresses to focusing on educators' teaching practices in a culturally and linguistically diverse ECEC setting:

3. How do educators use the Vocab Task scores to inform their teaching, particularly for children for whom English is an Additional Language?

Before proceeding, it is also worth clarifying that within the scope of this research, the word “educator” is employed in a more comprehensive and inclusive manner throughout the remainder of the thesis, rather than referring to both educators and teachers separately. This term encompasses not only ECEC practitioners holding diploma-level qualifications, commonly known as early childhood educators, but also those who possess a bachelor’s degree or higher, commonly referred as early childhood teachers in the Australian ECEC sector. Additionally, it is essential to highlight that the term "dialect" is not a focus of this study, and therefore, the term “EAL” is employed throughout the thesis instead. While the concept of dialect is closely related to variations of languages, it often carries connotations associated with Aboriginal and Torres Strait Islander children in the Australian context and the term “EAL/D” can be varied in its definition from the lens of ECEC (Dobinson & Buchori, 2016; Veliz et al., 2023). To maintain a clear and targeted focus on the specific group of children from EAL backgrounds, as aligned with the research questions and the overall scope of this thesis, the decision was made to omit the term "dialect" from the discussions.

Chapter 2.

Literature Review

This literature chapter begins by discussing the inter-relationship between vocabulary and conceptual development among children in the early years, highlighting the distinctive trajectories of children from EAL backgrounds. It then examines the opportunities and challenges associated with using digital technology in ECEC, particularly in the context of early language assessment. The review further explores the ideologies and affordances of language assessment in ECEC, which evaluates the differing approaches of social pedagogy and readiness for school and their implications for children from EAL backgrounds. Lastly, it aims to provide a comprehensive understanding of various language assessment practices by critically examining the contemporary literature on vocabulary assessments, catering to children of all backgrounds, and their design and implementation in ECEC settings.

Vocabulary and Conceptual Development in the Early Years

Vocabulary development is a cornerstone of language acquisition, and it plays a pivotal role in shaping future reading comprehension and academic achievement (Hammer et al., 2014; Storch & Whitehurst, 2002). Typically, the vocabulary development process among young children follows a predictable path, characterised by a rapid surge in word acquisition, commonly known as the vocabulary spurt (Goldfield & Reznick, 1990). This surge in vocabulary development is often observed between 18 and 24 months of age, which is generally marked as a significant milestone in their language development (Ganger & Brent, 2004). That said, it is essential to acknowledge that the pace and extent of vocabulary development can vary significantly among children, influenced by a range of factors, including language exposure,

socioeconomic status, as well as their cultural and linguistic background (Hart & Risley, 1995; Hoff, 2013; Pace et al., 2017).

Studies focusing on vocabulary development of children from language-minority households have consistently revealed that these children from EAL backgrounds may manifest distinct vocabulary development trajectories compared to their monolingual English-speaking peers (Hammer et al., 2014; Hoff et al., 2012; Mancilla-Martinez & Lesaux, 2011). This also means that children from EAL backgrounds often commence their school journey with smaller English vocabularies due to limited exposure to English in their home environments.

Nevertheless, it is imperative to recognise that these children possess a rich set of knowledge in their home language and culture, which serves as a valuable asset for their overall language development (Cummins, 2001; Hoff, 2013). In other words, what literature suggests is a need for a diversified approach when evaluating the language abilities of children from EAL backgrounds, considering the total vocabulary size across all languages a child speaks rather than solely focusing on English proficiency (Bedore et al., 2005; Pearson et al., 1993). Notably, vocabulary development is also closely linked to conceptual development and knowledge acquisition about the world surrounding children individually. As children learn new words, they simultaneously acquire the underlying concepts and categories that these words represent (Neuman & Dwyer, 2009; Yoshida & Smith, 2005). This relationship between vocabulary and conceptual development is reciprocal in nature, with conceptual knowledge in return supporting word learning and vice versa. For instance, a study conducted by Wagner, Dobkins, and Barner in the domain of colour suggests that children's ability to abstract colour as a relevant dimension facilitates their learning of colour terms while simultaneously, the process of acquiring colour word meanings scaffolds the refinement of their conceptual colour categories (Booth, 2009;

Wagner et al., 2013). This interdependence between vocabulary and conceptual development has been well-established in past literature, with numerous other studies demonstrating the close associations between children's word knowledge and their conceptual understanding (Gelman & Kalish, 2006; Gopnik & Meltzoff, 1992).

The intersections between vocabulary and conceptual development have significant theoretical and practical implications for children from EAL backgrounds, who may have various cultural experiences and exposure to concepts compared to their monolingual English-speaking classmates (Hammer et al., 2014; Quiroz et al., 2010). It then becomes crucial for educators to recognise and value the diverse knowledge and experiences that children from EAL backgrounds bring to the learning environment, using them as a foundation for further vocabulary and conceptual growth (Espinosa, 2005; Gonzalez et al., 2005). That is, educators can effectively support linguistic and conceptual knowledge development in all children, regardless of their language background, by creating rich, meaningful language experiences and explicitly teaching vocabulary in context (Gillanders et al., 2014; Neuman & Dwyer, 2009). Moreover, a child's community's cultural and linguistic practices influence the types of words and concepts they are exposed to, influencing their vocabulary development in various ways (Gutiérrez & Rogoff, 2003; Ochs & Schieffelin, 2011). Drawing upon Vygotsky's sociocultural theory, the sociocultural context plays a significant role in shaping children's vocabulary and conceptual development and language development is regarded as a socially mediated process where children acquire language through interactions with the More Knowledgeable Others (MKO), such as their parents, caregivers or educators in the ECEC settings (Vygotskii & Cole, 1978). These social interactions can provide children with opportunities to engage in meaningful

language exchanges, which then play a key part in facilitating the acquisition of new words and concepts (Bruner, 1983; Rogoff, 2023).

In summary, vocabulary development is vital to language acquisition in children's early years, closely intertwined with conceptual development and knowledge about the world. While children from EAL backgrounds may exhibit variant vocabulary development trajectories compared to their monolingual counterparts, it is crucial to recognise the valuable linguistic and cultural resources they bring to the learning environment. One of the most effective ways educators can support the vocabulary and conceptual development of all children is by implementing culturally and linguistically responsive practices and providing language experiences in learning activities that can lead them to future academic success at school. In the next section, opportunities and affordances in relation to digital technologies in the lives of children in modern society will be presented and discussed.

Digital Technology in the Early Years: Opportunities and Challenges

Over the past decades, there has been an exponential increase in the use of digital technology in ECEC settings, with researchers in both early childhood and the broader education sector debating its affordances and challenges when implementing it with young children (Edwards, 2016; Mantilla & Edwards, 2019; Stratigos & Fenech, 2021; Zabatiero et al., 2018). The term “digital technologies” in the context of this thesis refers to any resources or materials in digital formats as well as digital tools and devices. The resources and materials can be online content or applications tailored for children, while the tools and devices can be any type of screen-based technology such as computers, tablets, interactive screens, and non screen-based screens like cameras (Mantilla & Edwards, 2019; Zabatiero et al., 2018).

Today, in countries like Australia, most children are growing up with access to various technological devices, with parents and carers becoming increasingly digitally literate (Mantilla & Edwards, 2019; Undheim, 2022; Zabatiero et al., 2018). The 2017 National Child Health Poll (Royal Children's Hospital Melbourne, 2017), a survey concerning screen-based device usage in Australian households, found that one third of children aged between birth and 5 years have their own technology gadgets, and the average screen time varies from 14 hr per week to 26 hr per week depending on their age (Mantilla & Edwards, 2019; Zabatiero et al., 2018).

When devices such as smartphones and tablets are the norm in many children's everyday lives, it is imperative to think critically in terms of the ways children engage with technology, the role they play during the process, and the implications of these interactions on teaching and learning (Edwards, 2016; Zabatiero et al., 2018). Despite most children's familiarity with technology, researchers caution that ideally, children aged 5 years and younger should always be proximally accompanied and guided by educators in ECEC settings when using technology (Undheim, 2022). Moreover, it is crucial that the technology used by educators does not reduce children to data points or overlook their individual capabilities and contributions to their learning and development. Regardless of the purpose of technology use, be it for assessments or observations, educators should always consider the risk of children being subjects in rather than active participants of and contributors to their own learning. This constitutes one of the fundamental values in alignment with the *United Nations Convention on the Rights of the Child* (1998; see also Undheim, 2022).

In some studies, incorporating technology into ECEC settings has mostly been perceived as a welcoming addition to educators' pedagogical repertoire. Educators' positive dispositions towards this addition can facilitate the implementation of technology as a viable curriculum

option in their teaching (Undheim, 2022). Notably, educators often feel confident and competent in using technology in their lives outside work, and many of them acknowledge the proliferation of technology these days among young children and recognise that digital citizenship is an important skill for them to master in the 21st century (Zabatiero et al., 2018). A survey conducted by Early Childhood Australia in 2017 on Australian ECEC sector adults' views on young children and technology highlighted that educators feel certain technology has pedagogical benefits in terms of potential teaching and learning opportunities, as well as promoting two-way communication between them and families (Mantilla & Edwards, 2019; Zabatiero et al., 2018). Particularly, technological applications that are open ended, interactive, and multimodal have been identified as highly effective. These applications provide opportunities for children to engage in communication, create and investigate meaningful products, and improve their real-life play experiences (Samuelsson, 2023; Undheim, 2022; Zabatiero et al., 2018).

On the other hand, the literature further explores the challenges educators may face using technology in ECEC, indicating that some of the affordances of technology mentioned earlier also turn into barriers. For instance, some educators may identify instances where their own reluctance towards technology in the early years can hinder their uptake of technology in their teaching practices (Stratigos & Fenech, 2021). This issue is viewed as highly complex, attributed to an interplay of educators' previous pedagogical understanding of technology in ECEC and the professional development and ongoing training support received on this topic (Stratigos & Fenech, 2021; Undheim, 2022). Further, questions of equity and accessibility are commonly raised, as it should not be assumed that all children and families have the same level of digital literacy (Stratigos & Fenech, 2021; Zabatiero et al., 2018). Last, educators have expressed

concerns about a disconnect between their own ECEC experiences and the current interaction of children with digital technologies at home. Such limited insight into children's lives outside ECEC can lead to miscommunications and create barriers to effectively supporting children's learning across all learning environments (Undheim, 2022).

Gaps have been identified and discussed in this area of research concerning incorporating technology into ECEC teaching practice. First, there is an increasing need for research focusing on the social aspects of interactions between educators and children when technology is used in play-based learning—for example, children's voices and moment-by-moment actions (Undheim, 2022; Zabatiero et al., 2018). Second, researchers are calling for the establishment of evaluation frameworks and targeted guidelines on how technology can be best positioned in a strength-based approach to document, facilitate, and extend children's learning (Mantilla & Edwards, 2019; Undheim, 2022). Third, given the popularity of modern technologies across ECEC settings, it has become necessary to review the possibilities of bridging the gaps between digital play and traditional play. This means that the understandings of play in traditional ECEC curriculum should also consider the use of technology celebrating children's creative agency, rather than viewing it as merely passive screen play that encourages them just to sit somewhere quietly and passively engage with it (Stratigos & Fenech, 2021; Undheim, 2022; Zabatiero et al., 2018). This also ties in closely with professional learning that emphasises the value of technology in ECEC as an active learning and engagement tool instead of something for passive consumption. This means that educators nowadays are expected to make continuous efforts to develop relevant skills and knowledge and to meaningfully integrate ever-changing digital technology into the ECEC curriculum (Zabatiero et al., 2018). The focus of such learning should also be on bridging the gaps between evolving technology as an interactive learning resource and

contemporary ECEC teaching practices, ensuring that children benefit from holistic ECEC programs and curriculum that foster the development of their cognitive, socioemotional, and language skills (Mantilla & Edwards, 2019; Papadopoulou et al., 2014; Stratigos & Fenech, 2021; Zabatiero et al., 2018).

In conclusion, the use of digital technology in ECEC settings offers great potential for enriching children's learning experiences; however, it requires thoughtful consideration to ensure it complements traditional play-based pedagogy (Undheim, 2022). Embracing both digital and traditional forms of play seems to best prepare children for their future learning. Nevertheless, educators ultimately must be aware of balancing the benefits of digital technology with its challenges, intentionally guiding children to become active, capable learners and digital citizens (Zabatiero et al., 2018). Professional learning and research into best practices are equally crucial for incorporating technology in ways that respect children's rights and reflect their home learning environments (Stratigos & Fenech, 2021; Undheim, 2022).

As more research emerges about the critical nature of the advances in digital technology in ECEC, the second part of this literature review focuses primarily on exploring the balance and impact of different language assessment methodologies, in particular around how these paradigms affect children from EAL backgrounds. This exploration provides further insight and contributes to ongoing dialogue about how digital and traditional early learning methods can potentially be harmonised to support the diverse linguistic and cultural needs of all children in ECEC settings.

Ideologies and Affordances of Language Assessment in ECEC: Play and School Readiness and What These Mean for Children From EAL Backgrounds

Navigating Pedagogical Discourses: A Dual Pathway for Language Assessment in ECEC

Internationally, two predominant pedagogical ideologies are observed regarding the purpose of ECEC: “social pedagogy” and “readiness for school” (Jahreie, 2021). These, along with other varied terms, have been the focal point of ongoing debates among researchers and policymakers, especially when making pedagogical decisions on early language assessment in ECEC (Højen et al., 2022; Jahreie, 2021). The first, the social pedagogy approach, is a philosophical ideology that originated in Germany (Jahreie, 2021, 2022). This approach critiques the potential negative impact on children’s learning and development in the early years from categorisation that inevitably comes with various forms of assessments (Jahreie, 2021). Researchers supporting this pedagogical discourse argue that children develop at their own rates, and their strengths and capabilities can be manifested in different ways; therefore, any type of assessment should take these aspects into account (Højen et al., 2022; Jahreie, 2021, 2022). In the Australian ECEC landscape, early years assessments are considered an integral part of the ongoing cycle of pedagogical planning, documentation, and evaluation rather than merely an audit of learning outcomes as the “end product” of children’s learning (AGDE, 2022; New Zealand Ministry of Education, 2004). Similarly, in Nordic countries like Norway and Denmark, the belief in holistic curriculum and child-centred learning is prevalent among ECEC educators, and a notable amount of attention is paid to children’s potential as well as their sense of agency, regarding them as “human becomings” rather than “human beings” (Jahreie, 2021, 2022). In this vein, early years language assessments are expected to be a dynamic process that serves to monitor an individual child’s learning progress and, when necessary, determine whether

additional support needs to be engaged (Bedore & Peña, 2008). ECEC educators' ambivalence towards the traditional concept of "school readiness" means that they are more inclined to have varied expectations of certain aspects of children's language skills and the notion of an adequate language proficiency level for school compared to the expectations of school teachers (Bedore & Peña, 2008; Højen et al., 2022; Jahreie, 2021). Further, ECEC educators who follow a social pedagogy approach may feel that their professional identity as teachers is challenged in the sense that many are confident enough to make autonomous professional decisions on whether additional pedagogical assistance is required for any particular child in their classroom, without congregated data such as assessment results (Jahreie, 2021). The results are used to validate their thinking but sometimes can contradict their judgement, causing unnecessary confusion during reporting processes (Højen et al., 2022; Jahreie, 2021).

The second ideology stems from a readiness-for-school approach, with its roots traced back to France and other English-speaking countries (Jahreie, 2021, 2022). This pedagogical position has become increasingly widespread, with international organisations such as the Organisation for Economic Co-operation and Development (OECD) highlighting the importance of criterion-based or standardised assessments in areas of improving educational outcomes for minority-language children (Jahreie, 2021; OECD, 2018, 2021). Recent Programme for International Student Assessment (PISA) results saw several OECD countries identified as having the biggest disparities between minority-language students and their native-born counterparts (OECD, 2018, 2021). Efforts to improve early language and literacy education have since gained significant momentum. This shift has been driven by the goal of enhancing overall educational outcomes. Recognising the challenges faced by minority-language groups, many countries have initiated action in their educational systems. Minority-language groups often face

disadvantages due to the intersection of cultural and linguistic backgrounds with socioeconomic factors, and to address these inequities, national policies and assessments are always the first options to be implemented. These interventions start before school entry, targeting ECEC with a keen focus on early intervention to mitigate rising societal inequality and inequity in ECEC. (Højen et al., 2022; Jahreie, 2021). Despite such assessments often being labelled as at odds with the principles of child-initiated, play-based pedagogy by members of the aforementioned Nordic model community, they do hold significant value in providing ECEC educators with objective knowledge and a structured understanding of children's abilities and strengths, potentially preventing future learning difficulties at school (Jahreie, 2021; Joner et al., 2022). Particularly in the areas of language and literacy, screening programs are recommended in primary care facilities like ECEC settings for identifying potential developmental delay for vulnerable children (Højen et al., 2022). For instance, if a child demonstrates emerging abilities after sitting a standardised language assessment such as, in this case, the Vocab Task, ECEC educators can use the data gathered from the assessments to develop individualised forms of assistance to support next-step learning (Buzzelli, 2018; Dawson et al., 2020; Howard & Melhuish, 2017). It is worth noting, however, that follow-up resources for children needing early intervention after the initial screening should be carefully considered. If an ECEC setting does not have the capacity for that, the screening results would be perceived as of little value (Højen et al., 2022; Joner et al., 2022).

Treading Water: Early Language Assessment for Children From EAL Backgrounds

Ongoing questions are raised when it comes to the effective assessment of minority-language children, with numerous calls for language assessments in early childhood to be more culturally and linguistically responsive and focused on celebrating the different ways of life of

children (Australian Government Department of Education for the Ministerial Council, 2022; Kaiser & Rasminsky, 2019; Rameka, 2011). These children mostly come from immigrant families and speak one or more languages other than English at home (Højen et al., 2022; Jahreie, 2021; Joner et al., 2022). Research has examined various strategic educational plans for early childhood across the globe. These studies reveal that support for children's cultural and linguistic identity is often lacking (Kaiser & Rasminsky, 2019; Ntuli et al., 2014). Criterion-referenced assessments seemingly compound this issue, with their point of reference set in favour of monolingualism and middle-class values (Jahreie, 2021, 2022). Language is a big part of children's cultural identity, and according to the EYLF V2.0, children are accepted as competent learners who are skilful at transferring and adapting skills across different cultural contexts (AGDE, 2022; Kaiser & Rasminsky, 2019). Children's oral language competence can transcend cultures or dialects, and ECEC educators are encouraged to promote the maintenance of children's home culture and language, acknowledging their right to communicate in either Standard Australian English or their home language (Australian Government Department of Education for the Ministerial Council, 2022; Ewing et al., 2016). Te Whāriki, the curriculum framework for ECEC in New Zealand, also states that assessment of children's oral language and communication skills should lead to creating an inclusive ECEC environment where children from EAL backgrounds are able to always speak their tongues in comfort, and educators can take account of children's verbal and nonverbal cues (Blaiklock, 2010; New Zealand Ministry of Education, 2007, 2017).

In various learning environments, criterion-referenced assessment is frequently cited as one of many assessment approaches. It is leaned towards a formal method that measures an individual student's performance against a set of predetermined criteria or standards, rather than

comparing their performance to that of others. This can include both standardised and non-standardised forms of evaluation (Bond, 1996). In the context of ECEC, criterion-referenced assessments can often be used to evaluate children's progress in specific learning domains, such as language development (Notari-Syverson et al., 2003). The Vocab Task can be considered a criterion-referenced assessment in the form of an Expressive One-Word Picture Vocabulary Test (EOWPVT), as it measures children's expressive vocabulary knowledge against a set of age-appropriate target words (Dionysios et al., 2010; Howard & Melhuish, 2017). The use of criterion-referenced assessments in ECEC settings, however, has both advantages and limitations. On one hand, these assessments can provide educators with valuable information about children's strengths and areas for improvement, enabling them to tailor their teaching strategies accordingly (Notari-Syverson et al., 2003). On the other hand, they possess inherent pedagogical conflict with the Nordic model's concept of "a standard child" (Jahreie, 2021, 2022). As an example of such a model, in most cases, these assessments are unable to be designed and aim only for the "standard child" baseline, and therefore, accurate data about each child's capabilities are unlikely to be gathered. This results in some children's developmental profiles being inaccurately represented and interpreted (Jahreie, 2021; Kitano, 2011; Ntuli et al., 2014). According to the model, the ideological image of "a standard child" in many Western countries is, by default, portrayed as being White, middle class, and monolingual. It is important to recognise that such stereotypical views may lead to even more serious implications in the ECEC system when assessment materials are developed with solely the "majority standards" in mind, arguably exacerbating the inequality between the majority- and minority-language children (Jahreie, 2021, 2022; Kitano, 2011).

Another potential downside of criterion-referenced assessments is that a child's performance in measurable learning domains such as early language and literacy might be favoured over other essential life skills such as socioemotional well-being and independence skills (Højen et al., 2022; Jahreie, 2021; Kitano, 2011; Papadopoulou et al., 2014). Perhaps even more importantly, ECEC educators may end up spending an excessive amount of time focusing on collecting this evidence of children's assessment results with the assistive use of digital technology, taking precious time away from the child being creative and engaged in play-based learning (Ball, 2013; Højen et al., 2022). Clearly, it is not ideal for educators to narrow the curriculum and focus on easily measurable skills at the expense of more holistic, play-based learning experiences, while the nature of language development in young children, especially those from EAL backgrounds, requires sensitive and informed approaches to understand children's varied linguistic profiles and needs (Costley, 2014; Department of Education and Training Victoria, 2011).

Mistry and Sood (2020) defined *children from EAL backgrounds* as those who speak one or more languages at home other than English. For the purpose of this thesis, in narrower terms, children from EAL backgrounds refer to those who speak one or more languages other than Standard Australian English. This includes the term *minority-language children*, frequently used in discussions throughout this thesis, and *Children from EAL backgrounds*, which was used in the interview questions. Although there are controversies over whether the label EAL can lead to such children being regarded as a problem and as needing additional assistance, the EAL marker can also mean recognising children who speak two or more languages as capable learners with far greater linguistic awareness (Costley, 2014; Murphy et al, 2019). In certain studies, being bilingual or multilingual in the early years has been proven to be developmentally advantageous

for children, benefiting their emotional and behavioural health, willingness to learn, and family and community connections (Clarke, 2009; Han & Huang, 2010; Department of Education and Teaching Victoria, 2011; Yazıcı et al., 2010). Furthermore, a child's first language can also play a key role in their further language acquisition. For instance, a study in Israel examining 32 second-generation Russian–Hebrew-speaking children within a bilingual ECEC setting found that anchoring in children's first language lays the foundations for their second-language acquisition later in life (Schwartz et al., 2012). This reinforces the importance of acknowledging and supporting the linguistic diversity of children from EAL backgrounds, which not only shows respect for their cultural identity but also fosters their cognitive and linguistic development.

Diligent language assessments with a deep appreciation of bilingual and multilingual learning complexities are needed to understand better and support the language development of Children from EAL backgrounds. Detailed snapshots of their present vocabulary knowledge can be recognised as valuable datasets for setting early language and literacy expectations, and this information can also be used in certain early intervention and therapeutic settings (Bedore & Peña, 2008; Goldstein, 2006). In saying this, given the complexity of bilingual or multilingual language learning, assessments of both children's first and additional languages are viewed as necessary to account for the contextual factors around language assessment tools (Drury, 2013; Ewing et al., 2016; Hovsepian, 2017). Further, the education systems in many countries have yet to employ sufficient speech and language educators in the ECEC sector, and such shortage often results in large-scale screening and follow-up services being deprioritised compared to targeted service delivery (Højen et al., 2022). In some English-speaking countries, it is also widely believed that children from EAL backgrounds will eventually acquire English and catch up with their native-English-speaking peers through a natural learning process that occurs in ECEC

settings (Drury, 2013). Despite this, there is much evidence to suggest that the further language learning acquisition journeys of these children are far more complex and multifaceted than currently recognised and that little research has explored the domain of informing ECEC educators and social policy educators how to assist this cohort in practice best (Bedore & Peña, 2008; Drury, 2013; Jahreie, 2021, 2022).

As the diversity of children in ECEC settings continues to grow over the years (AEDC, 2021), the need for culturally fair assessment practices has become increasingly apparent. Culturally fair assessment refers to the process of evaluating children's abilities and progress in a manner that minimises bias and takes into account their unique cultural and linguistic backgrounds (Espinosa, 2005; Pena, 2007). This approach recognises that traditional assessment methods, often developed and normed based on monolingual, middle-class populations, may not accurately reflect the true capabilities of children from diverse backgrounds (Gutiérrez & Rogoff, 2003).

Researchers have thus emphasised the importance of developing and implementing culturally fair assessment practices in ECEC settings to ensure that all children have an equal opportunity to demonstrate their knowledge and skills (Castro et al., 2011; Espinosa, 2005). This can typically involve considering factors such as the cultural relevance of proposed assessment materials, the assessment's instructional language, and the socio-cultural context in which the assessment takes place (Barrueco et al., 2012; Pena, 2007). One key aspect of culturally fair assessment is the use of multiple measures and information sources to comprehensively understand a child's abilities (Espinosa, 2005). In addition to the criterion-referenced assessments, this may include a combination of standardised and other informal assessment methods like observations, parent and teacher reports, and work samples, allowing educators to

triangulate data and make informed decisions about a child's strengths and areas for growth (Barrueco et al., 2012; Castro et al., 2011; Espinosa, 2005). Another critical consideration is adapting proposed assessment tools and procedures to be more culturally and linguistically appropriate (Pena, 2007). This may involve using translated or culturally modified versions of assessments, including culturally relevant stimuli, and engaging bilingual assessors or interpreters (Barrueco et al., 2012).

Furthermore, culturally fair assessment practices require educators to distinguish the cultural and linguistic characteristics of the children they serve and to use this knowledge to inform their assessment practices (Castro et al., 2011; Gutiérrez & Rogoff, 2003). This typically involves ongoing professional development and cultural competence training to help educators understand and appreciate the diverse ways in which children demonstrate their knowledge and skills (Espinosa, 2005). In the context of language assessment tools like the Vocab Task, it is crucial to consider how these principles of culturally fair assessment can be applied. This may look like examining the cultural relevance of the vocabulary items included in the assessment, exploring ways to adapt the administration procedures to be more culturally and linguistically responsive, and interpreting the results in light of the child's cultural and linguistic background (Pena, 2007).

To summarise, mainstream language assessment in ECEC presents a complex array of ideologies and pedagogical practices, particularly in assessing children from EAL backgrounds. The social pedagogy approach, advocating for individualised, dynamic assessments combined with intentional teaching, contrasts with the readiness-for-school approach, which relies predominately on criterion-referenced assessments to identify and support early learning needs for vulnerable groups. While these assessments can offer valuable understandings of a child's

early language development, they may unintentionally risk oversimplifying their multifaceted capabilities and developmental needs. Moreover, the focus on measurable outcomes in areas like early language and literacy may inadvertently overlook other crucial aspects of ready-for-school milestones, such as social and emotional well-being (Bedore & Peña, 2008; Højen et al., 2022; Jahreie, 2021, 2022). Thus, it becomes crucial for educators to examine both approaches diligently, ensuring that any language assessments not only respect the distinct language and cultural backgrounds of children from EAL backgrounds but also contribute intentionally to their holistic development in the early years (AGDE, 2022; Jahreie, 2021; Kaiser & Rasminsky, 2019).

Conclusion

In conclusion, this chapter has highlighted the importance of understanding the individualised trajectories of vocabulary development in children from EAL backgrounds and the need for assessment practices that are responsive to their cultural and linguistic diversity in ECEC settings. The examination of digital technology in ECEC has revealed both opportunities and challenges for language assessment, emphasising the need for careful integration of technology that complements traditional play-based pedagogy. The review has also shed light on the contrasting ideologies of social pedagogy and readiness for school in language assessment, underlining the importance of striking a balance between holistic, child-centred approaches and the need for early identification and support for children with language difficulties. The analysis of vocabulary assessments available has identified their benefits and limitations, particularly in their ability to cater to diverse linguistic and cultural backgrounds. It has also highlighted the need for a combination of formal testing and informal assessment methods in ECEC settings to gain a comprehensive understanding of children's language capabilities.

Chapter 3.

Theoretical Framework

In this chapter, I start by exploring the theoretical framework surrounding language development in the early years and how the sociolinguistic perspectives of psycholinguists like M. A. K Halliday and Lev Vygotsky are anchored in ECEC. This is followed by a review of the various ways their perspectives inform educators' understanding of meaning-making among young children. I then discuss Bronfenbrenner's ecological model, which explores how nature and nurture interact in shaping children's learning and development. The ecological model's multilayered pedagogical approach is also discussed to explore how it can provide a comprehensive lens for understanding the environmental, biological, and societal factors that impact language acquisition and holistic development in the early years.

Language Development in the Early Years: Meaning-Making From Sociocultural Perspectives

Over the last century, linguists have held a range of stances on the nature of language development in early childhood, due to the complex processes involved in young children's communication development. Among all these theories of language development in ECEC, this thesis focuses on children's early language development through the lens of social-cultural perspectives. In particular, it draws on Halliday's (1975, 1993, 2004) systematic functional linguistics (SFL) and the work of Vygotsky, both of whom had a keen focus on the sociocultural contexts of children's language learning and communication through different acts of meaning (Vygotsky, 1981; Wells, 1999).

The Macquarie Dictionary interprets language as a way of communication among humans involving a system of symbols with allocated meanings in verbal or nonverbal methods

(Macquarie Dictionary Publishers, n.d.). The emergence of language necessarily involves children's innate desires and, more crucially, involves children finding ways to connect with others and to understand their surrounding sociocultural environments (Wells, 1999). SFL considers children's early language development as functionally oriented. Children develop language skills through interactions, relationships, and the exchange of meanings (Halliday, 2004; Wells, 2009). As Halliday (2004) stated,

The view I take is that of language development as a process of intersubjective creation, whereby a child, in interaction with significant others—mother, family, peer group, teachers—creates in himself the systems of meanings, wordings and expressions that we call language. (p. 145)

During a longitudinal study that Halliday (1975) conducted with his son Nigel, Halliday analysed how his child travelled through the different stages of language development from when he was 9 months old. From this research, Halliday argued that by the end of Stage 3—adult language—a typical child is able to develop adult-like speech patterns and establish a framework of the adult language system. This framework involves more complex sociolinguistic functions and provides a basis for other contextual uses of language later (Halliday, 1975; Painter, 1998; Webster & Halliday, 2015). A child is, first and foremost, what Halliday referred to as a “social man” in a complex, interactive social system, where they simultaneously develop understanding of the linguistic system, such as semiotics, semantics, and lexis, through the medium of language (Halliday, 1993). As a child advances through different stages of their life, their linguistic capacity grows to intentionally meet the demands arising in the meaning groups.

In *Learning How to Mean: Explorations in the Development of Language*, Halliday (1975) explored the complications inherent in the lexical items of various languages, highlighting the complexity and interconnectedness of first- and second-language acquisition

processes (Halliday, 2007a). He explained that a singular lexical item in one language can often translate into a variety of meanings in another, indicating the diverse nature of linguistic features (Halliday, 1975, 2007b). This variation presents challenges for children learning new languages as there can be minimal, if any, resemblance in pronunciation or word class between their native languages and the new ones being learned (Halliday, 2007a). Halliday referred to the work of Susan Ervin-Tripp, a renowned U.S. psycholinguist, to stress that children typically integrate new words, sentences, or grammatical structures into their existing linguistic framework. In particular, common errors made in the acquisition of a second language, such as the tendency towards overgeneralisation and simplification of words, mirror those observed in first-language learning, albeit not universally (De Abreu et.al., 2013; Goodrich et al., 2013; Halliday, 1975, 2007a; Susan, 1974).

Across ECEC settings, Halliday's sociolinguistic theories have had a significant impact on educators recognising children's abilities and supporting them in their early language development when preparing them for school (Yu, 2016). That is, a child is expected to know, despite occasionally overgeneralising some linguistic rules, what words sound like and how they are formed and to engage in turn-taking conversations with a basic understanding of broad grammatical features (Thwaite, 2019). A richer, deeper linguistic experience can support children in developing all facets of their linguistic system materially, logically, institutionally, and socially (Halliday, 2007b). This further highlights the importance of children developing their language systems through typical ECEC activities such as indoor and outdoor playtime. Children's language development is supported by educators, who should pay close attention to everyday linguistic interactions with children—for example, what is said to and by a child and conversations with educators and other children within their learning environment (Halliday,

2007a, 2007b). Halliday's perspective on early language development as a dynamic process is particularly relevant to this research because it highlights the importance of considering the social context in which the Vocab Task is administered. Educators' perceptions of the Vocab Task's effectiveness are likely influenced by their understanding of how children use language to connect with others and make sense of their world (Halliday, 2007a).

Lev Vygotsky, a renowned Soviet psychologist of the early 20th century, was influential in contributing to developmental psychology, particularly regarding the intersections between children's thought and language development in a sociocultural environment, while Halliday's meaning-making theories emphasise the functional and social areas of early language development (Bodrova & Leong, 2015; Vygotsky, 1981; Wells, 1999). Vygotsky argued that children's words and thoughts are interrelated, rather than language being developed in a mechanical way. The development of linguistic thinking is an ongoing process that evolves as children grow (Vygotskiĭ, 1962). From a Vygotskian standpoint, children's early vocabulary development is inextricably entwined with cognitive and communicative processes; it does not occur in isolation but is fundamentally shaped by thinking and speaking as interdependent faculties (John-Steiner & Mahn, 1996; Kellogg & Ripp, 2020; Vygotsky, 1997). Vygotsky also proposed that children internalise their sociocultural milieu, as well as social interactions, to construct their understanding of the world (Vygotskiĭ, 1962; Vygotsky, 1997). In his book *Thought and language*, Vygotsky (1962) explained that the process of children merging their thoughts and language happens simultaneously, and the meaning of words is key to their linguistic thinking. Particularly during the years before school, children can skilfully associate with, and separate meanings from, objects in imaginary scenarios without realising it (Vygotskiĭ, 1962). He added that with the help of a *more knowledgeable other* (MKO), children develop

what he referred to as pre-intellectual speech and prelinguistic thoughts through playful social interactions (Jeung & Kellogg, 2019; Vygotskiĭ & Cole, 1978; Vygotsky, 1981). The guidance received during play from MKO, usually in the form of verbal language, is internalised in a child, acting as an inner speech, which is why the role of adults is also crucial within a play environment (Smolucha & Smolucha, 2021; Vygotskiĭ & Cole, 1978). In the context of this research, educators act as MKOs, and their interactions with children during the Vocab Task can significantly impact children's language development. Understanding how educators perceive their role in supporting children's language learning through the Vocab Task is a key aspect of this study.

Further to the discussions above, it is important to recognise that the sociocultural perspectives of Halliday and Vygotsky play a key role in shaping the research aims and methodologies of this thesis. The research questions, such as “What are educators’ perceptions of the Vocab Task?” are rooted in the sociocultural belief that language serves as a tool for meaning-making and social engagement (Vygotskiĭ, 1962). To align with this framework, the study adopts a qualitative methodology, specifically semi-structured interviews, which provide educators with an opportunity to express their opinions more candidly. This style of interview aims to understand educators’ first-hand experiences and contexts, offering insights into the social and cultural factors that influence their perceptions of the Vocab Task’s implementation (Creswell, 2009). Further to this, through thematic analysis of the interview data, the study also seeks to identify patterns and themes that reflect the socio-cultural aspects of early language assessment and pedagogical practice in ECEC settings.

In conclusion, both Halliday’s and Vygotsky’s sociolinguistic perspectives view language as a tool for meaning-making that is developed through social interactions and relationships.

Both scholars placed importance on the interdependence of thought and language, which are instrumental in understanding how children naturally learn and develop their languages, both first and second, in the early years (Halliday, 1975, 2007b; Vygotskiĭ, 1962; Vygotsky, 1981). Their approaches also underpin this thesis as both of them advocate for a comprehensive understanding of children's language skills, considering not only their linguistic knowledge but also their capability to use language functionally in various social contexts (Bodrova & Leong, 2015; Jeung & Kellogg, 2019; Sabol et al., 2021). Building on that, in the next section, I examine Bronfenbrenner's ecological model, which is widely regarded as a crucial framework for understanding the significance of considering both the immediate and broader contexts that constantly shape a child's developmental journey (Bronfenbrenner, 1986; Bronfenbrenner & Evans, 2000; Bronfenbrenner & Morris, 2006).

Nature, Nurture, or Both? Bronfenbrenner's Ecological Model Approach on Children's Learning and Development

Bronfenbrenner's ecological model has had a long-lasting impact on ECEC practices, particularly in child development and child-centred teaching and learning development. The model focuses primarily on the experiences, relationships, and multilayered influences in a child's life (Bronfenbrenner, 2009; Bronfenbrenner & Morris, 2006). Looking beyond the individual layers to the interrelations between them, the child is placed at the centre as a developing social being, and the surrounding environment is categorised into a nested system—namely, from inside outwards, the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. An overview of each of these layered systems follows.

Microsystem. This system is usually characterised as the immediate setting of a child or a developing person, what Bronfenbrenner refers to as a home, school, community group, or a laboratory setting (Bronfenbrenner, 2009).

Mesosystem. This is the level at which elements in the microsystem intertwine and are not separated but viewed as influencing and connecting with each other (Bronfenbrenner, 2009).

Exosystem. This is where elements that do not directly involve a child or a developing person come into play. An example could be a shift in a family's study and work environments that is not directly related to a child but can have a flow-on impact on the child's life (Bronfenbrenner, 1986).

Macrosystem. This component places significant emphasis on social and cultural elements, such as socioeconomic status and ethnicity, surrounding the child or a developing person.

Chronosystem. This outermost system focuses on the patterns and transitions of historical events throughout a child's or developing person's lifespan (Bronfenbrenner, 1986; Bronfenbrenner, 2009).

In ECEC learning environments, adopting an ecological model perspective prompts educators to consider more broadly a child's biological attributes as well as the various relationships within their sociocultural environments. This means that not only individuals, like parents and educators, and learning environments, such as ECEC settings and schools, have direct impact on a child's learning and development, but also social factors—for example, connections, values, cultures, ethos, and beliefs—can have a ripple effect on a child over the course of their lifetime (Hayes, 2017). Bronfenbrenner's theory therefore emphasises teaching practices and considers the contextual elements of learning environments that he argued are more

influential than the characteristics of the learners themselves (Bronfenbrenner & Evans, 2000). Shifting from viewing children as passive recipients to active co-constructors of knowledge, educators are encouraged to pay close attention to cues in a child's lived experience and reflect on their perceptions of the child and the suitability of their teaching practice and programs. These include giving a child the opportunities to own and express their views, actions, and play, or in another words, planning learning experiences that embody the principle of respecting children as autonomous and competent individuals (AGDE, 2022; DEEWR, 2009).

To further facilitate children's involvement in the aforementioned child-centred programs and practices, Bronfenbrenner encouraged educators to look at the "proximal processes" that involve sustaining two-way interactions with children for a prolonged period of learning time (Bronfenbrenner & Evans, 2000). In ECEC settings, learning through play is universally acknowledged to involve one of the most intensive and consistent interactions between educators and children within both physical and social learning environments (Hayes, 2017).

Bronfenbrenner emphasised that the opportunity for children to impact and be impacted by the environments via repeated actions or rituals is crucial. In doing so, children begin to recognise varied nuances in their surroundings as they develop their own cognitive image of the world. Practically speaking, supporting language development in ECEC settings requires educators to focus on building continuous relationships with children, with continuity and stability in their environments being one of the critical aspects (Bronfenbrenner & Evans, 2000; Hayes, 2017). Bronfenbrenner also argued that the complexity of child development challenges us as educators to rethink how we can best create a nurturing learning environment for every child. Of the nested layered system discussed earlier, the micro- and mesosystems are those in which a child has direct relationships and contact with their immediate learning environments. Therefore, it is

crucial to ensure that a child's environment is as inclusive as it can be to foster their sense of belonging and security (Bronfenbrenner & Evans, 2000).

Notably, Bronfenbrenner's ecological model provides a foundation for understanding the complex nature of children's learning and development in the early years, which in this thesis offers a holistic lens for examining the Vocab Task's implementation and educators' individual experiences. Factoring in the layered systems that potentially influence children's oral language development, this research aims to understand how the Vocab Task interacts with these systems and how educators perceive its role in supporting children's learning within their wider ecological context. The research questions, such as "How do educators perceive the Vocab Task score's representation of children's oral language development?" are explored by considering the mix of individual, environmental, as well as sociocultural factors. The model also underscores the importance of considering not only the immediate environments and relationships that directly interact with children but also the broader societal and cultural contexts (Bronfenbrenner, 1979; Spilt et al., 2015; Xu & Liu, 2021). This holistic approach prompts educators to rethink what child-centred learning experiences look like in their teaching practice by acknowledging the existence of various layers in a child's environment, thereby emphasising the pedagogical values of the "proximal processes" and sustained interactions between them and children (Eadie et al., 2019; Hedges, 2021).

Conclusion

In conclusion, the sociolinguistic theories of Halliday and Vygotsky, emphasising the role of language in social interactions and the relationships between thought and language, respectively, provided a foundational theoretical basis of children's early language development for this thesis. Their perspectives are complemented by Bronfenbrenner's ecological model,

which highlights the influences of both immediate and broader environmental contexts on a child's learning and development. Together, this integration of varied theoretical perspectives underpins the thesis, guiding the research aims, questions, and methodology, while advocating for a holistic approach in ECEC, encouraging educators to adopt child-centred teaching and practice, be it for programs or assessments that focus on children's meaning-making and interactions and considering the multifaceted nature of a child's language learning in the early years.

Chapter 4.

Methodology

Research Questions

This study aimed to explore educators' perceptions and experiences of using the Early Years Toolbox (EYT) Vocab Task in early childhood education and care (ECEC) settings. The following research questions guided the design and implementation of this study:

1. What are educators' perceptions of the Vocab Task?
2. How do educators perceive the Vocab Task score's representation of children's oral language development?
3. How do educators use the Vocab Task scores to inform their teaching, particularly for children for whom English is an Additional Language?

To address these research questions, a qualitative research design was adopted, employing semi-structured interviews with educators who opted in and had experience using the Vocab Task in their ECEC settings. The data collected through these interviews were analysed using thematic analysis to identify key themes and patterns in these educators' perceptions and experiences.

The following sections of this chapter will provide a detailed description of the research design, participant selection, data collection, data analysis procedures and ethics arrangement used in this study.

Research Rationale

Well-planned research methodology and design are critical for ensuring that research implementation captures meaningful and accurate data and contributes to answering the research

questions (Creswell, 2009). By way of background, quantitative research was conducted by the EYT research team during the initial phase of the EYT to establish the validity and reliability of each application, including the Vocab Task (Howard & Melhuish, 2017). However, the EYT and the Vocab Task have only been in use for a relatively short time, 5 years (at the time of this study); thus, there is a clear need to research their implementation and impact on early childhood pedagogy and practice in general.

There remains much to be explored by the EYT research team and other educators regarding how the Vocab Task influences educators' professional knowledge and practice in terms of assessment in the early years and children's early language development. Thus, to contribute to the knowledge gap between the invention and design of the Vocab Task and educators' understanding and teaching practices, it seemed appropriate for this thesis to adopt an alternative research method. This research therefore sought to explore the impacts of the implementation phase of the EYT (Creswell, 2009; Jarvie, 2012), particularly the perspectives of educators who have implemented the Vocab Task.

Qualitative Research Design

Qualitative research is a methodology widely used in fields such as the social sciences, psychology, and education, where there is a need to understand human behaviours and experiences and to gather nonnumerical data to understand the complexities and nuances of a particular inquiry (Aspers & Corte, 2019; Lichtman, 2010; Ward & Delamont, 2020). Qualitative research in general follows the order of defining the research question(s), collecting and analysing the data, representing, and reporting, which requires the researcher to deploy a high level of interpretative and analytic skills (Atkins & Wallace, 2016; Braun & Clarke, 2006; Ponce et al., 2022). In the field of sociology, and of relevance to early childhood research, the key focus

of qualitative research is the analysis of interactions, knowledge, and practices exchanged via social interrelationships, as well as how researchers transfer and make sense of these data (Ward & Delamont, 2020). Interviews and naturalistic observations are widely used in educational research. This is mainly because in education settings, especially in individual interviews, it becomes possible to elevate and explore the lived experiences of students and educators to form a sociological understanding of a range of identities or issues (Biddle & Ellena, 1964; Ward & Delamont, 2020).

Contrary to quantitative methodology, the key characteristics of qualitative research are to explore and gain in-depth insights into participants' patterns of thoughts, behaviours, activities, feelings, attitudes, and perceptions (Atkins & Wallace, 2016; Lichtman, 2010). This means that it commonly relies on narrative and descriptive information that involves transcribed data. Some of the qualitative research methods include ethnography, interviews (structured, semistructured, and open ended), focus groups, case studies, and observations (Ward & Delamont, 2020). The objectives of these methods are not to present generalisable findings but rather to discover diverse patterns, themes, or underlying values based on the participants' responses (Lichtman, 2010).

In this thesis, to gain a holistic understanding of the nuanced implementation of the Vocab Task in ECEC services, the qualitative methods adopted were semistructured interviews and the thematic data analysis of interview data. This approach allowed the participants to discuss and highlight a range of contextual factors within the scope of the Vocab Task. This presented opportunities for me to follow up on any emerging thoughts and then shift the focus to elicit further fact-based narrative responses that were unique and distinctive to each EYT testing environment (Creswell, 2009). Furthermore, thematic analysis, which was adopted in this study,

provided opportunities for me to rigorously explore reoccurring patterns of meaning in relation to the research objectives and to make sense of the user experiences of the Vocab Task in various key themes (Braun & Clarke, 2006, 2012). To help organise and code information in categories when sorting through the interview transcripts and audio recordings, I utilised a spreadsheet table to keep track of the data (Creswell, 2009; Gournelos, 2019). An example of the spreadsheet table used for data analysis can be found in Appendix I, which illustrates how the data were organised and coded in different columns to facilitate the identification of themes and patterns.

Semistructured Interviews

To gain a broader range of insights and viewpoints, seven educators from the participating ECEC services in New South Wales (NSW) and Victoria were selected for this research. This selection was mindful of the diversity within each service, considering both the number of children aged 3 to 5 years and the variety and intersections presented in their demographic profiles. The aim of this approach was to understand how diverse backgrounds and settings might influence children's learning experiences and outcomes, which is a vital part of any educational research (Tracy, 2010; Yin, 2015).

Of the seven, four were from the Greater Sydney area, two from Metropolitan Melbourne, and one from another metropolitan city within NSW. The criteria for the participants from each participating ECEC service are outlined as follows. All seven participants had

- a. been appointed as the educator responsible for conducting the EYT at their ECEC service;
- b. received EYT training provided by either the EYT research team at the University of Wollongong or within their ECEC organisation;
- c. been working with children aged 3 to 5 years;

- d. had experience working with children from EAL backgrounds for at least the previous 12 months.

Individual interviews were conducted via the videoconferencing application Zoom and completed between August 2022 and December 2022, with each lasting for approximately 30 min. According to the consent forms signed by the participants, the audio-recording function was enabled throughout each interview, with a detailed transcript edited and produced afterwards.

Table 1 provides more information about each participant.

Participant Table

To protect the confidentiality and anonymity of the participants in accordance with the guidelines outlined in the human ethics approval, pseudonyms were used based on their initials:

Table 1

Participants' Qualifications and Base Early Childhood Education and Care (ECEC) Service Locations

Participant	Qualification	Base ECEC service location
Educator A.	Diploma	Multiple ECEC services across Metropolitan Sydney Area
Educator F.	Bachelor of Education	Metropolitan Sydney Area
Educator K.	Bachelor of Education (0–5)	Metropolitan Wollongong Area
Educator L.	Bachelor of Teaching	Metropolitan Sydney Area
Educator S.	Bachelor of Education	Metropolitan Sydney Area
Educator Y.	Master of Teaching	Metropolitan Melbourne Area
Educator M.	Graduate Diploma	Metropolitan Melbourne Area

Interview Questions

The 10 interview questions followed Creswell's (2009) "past, present and future" model, where the questions began by asking the participants about their experiences and understanding of the Vocab Task, moving onto comparing these thoughts with their current thinking following implementation and ending with suggestions for future improvement of the task at a practical

level (see Appendix B for the interview questions). The development of the interview questions is also closely linked to the respective research questions:

Table 2

Mapping of the Interview Questions Relating to Each of the Research Questions

Research Question (RQ)	Corresponding Interview Questions
RQ1: What are educators' perceptions of the Vocab Task?	Q1, Q2, Q5, Q6, Q9
RQ2: How do educators perceive the Vocab Task score's representation of children's oral language development?	Q3, Q4, Q7, Q8
RQ3: How do educators use the Vocab Task scores to inform their teaching, particularly for children for whom English is an Additional Language?	Q3, Q4, Q8, Q10

It is important to note that this research positions the participating educators as informants with hands-on teaching experience of implementing the Vocab Task with children aged 3 to 5 years, such as teaching reflection and observations (Yin, 2015). With that in mind, the interview questions, despite following a pre-established set of questions, were designed to be free flowing and open ended, encouraging the participants to draw from their firsthand experiences of the Vocab Task and to give their perspectives on its implementation and value for their pedagogy and practice. That is, the semistructured format, to some degree, helped to balance the rigidity of a fully structured interview and the potential deviation of focus of an unstructured one. The advantage of a semistructured interview is that the researcher can branch off at times to delve deeper into unique responses while maintaining a naturally flowing conversation, with the core research questions consistently covered (Creswell, 2009; Jarvie, 2012).

Data Analysis

Thematic analysis was conducted for this research. Thematic analysis is a form of qualitative data analysis (Braun & Clarke, 2012; Willig, 2017). Its application varies depending on the specific types of content analysed (Terry & Hayfield, 2021). From a social constructionist perspective, thematic analysis in the sociocultural paradigm acts more as a way to explore meaning and experience socially rather than individually (Burr, 1995; Wells, 1999). Collectively, the analysis aims to conceptualise the enablers in the wider social and cultural context that influence each individual within it (Burr, 2015). In the context of an ECEC setting, as this thesis embodies, this means looking closely at the external elements or conditions that shaped—either facilitated or hindered—an educator’s behaviours or inner beliefs relating to their teaching practice when implementing the Vocab Task.

An important aspect of thematic analysis is the question of how themes emerge and are elevated from the data set in the process of analysis (Clarke & Braun, 2017). This process normally involves a substantial amount of professional judgement from researchers as themes are often initially identified at a high level. The goal is to conceptualise commonalities in a way that directly relates to the research questions as closely as possible (Terry & Hayfield, 2021). Braun and Clarke (2012) outlined a six-stage reflexive approach to thematic analysis. The researcher starts by familiarising themselves with the data. This can include transcribing verbal data if the initial data are in oral format, which helps inform the analysis with initial thoughts and interpretation. The next step is to generate the codes that represent certain aspects of the data set the researcher is interested in and sees potential for further interpretative analysis. This is followed by searching for and reviewing themes. These are the stages at which the research scope is set and an overarching thematic map begins to take shape and, in some cases, may

involve subthemes for a more refined structure. The final steps, defining the themes and producing the report, are taken after well-defined themes have been generated. A final analysis is produced to capture the essence of the data with sufficient evidence, logical narrative, and coherent argumentation (Braun & Clarke, 2006; Clarke & Braun, 2017).

The qualitative analysis approach in this study involved transcribing the interview recordings and reviewing the transcripts, with a particular focus on the underlying narratives each participant intended to convey about their experiences with the Vocab Task. Further, with approximately 20 minutes on average and 145 minutes in total of recordings and 88 pages of transcripts collected, the transcribing style used was orthographic, excluding the unrelated nonverbal accounts. This process included retaining all the verbal accounts from the data set and editing out distracting parts of the recordings, such as stutters, repetitions, and other sound effects, in an attempt to streamline and better summarise the participants' key points without altering their original tone and meaning (Braun & Clarke, 2006; Braun & Clarke, 2012; Ward & Delamont, 2020). Key themes and subthemes were then identified and grouped based on the quotations, patterns, and trends of what the participants said during the interviews. This was followed by theorising and conceptualising these data with detailed documentation of the analytical and decision-making processes of the Vocab Task (Creswell, 2009; Fugard & Potts, 2019):

Firstly, during the initial coding phase, I identified several recurrent patterns and ideas that emerged from the participants' responses. Some examples of these initial codes include but are not limited to: "Children's First Language Other Than English", "Children's Life Experiences", "Images Shown in the Vocab Task", "Test Procedures", "Child's Engagement Level", "Educators' Pedagogical Strategies", and "Child-educator Interactions"

After generating the initial codes, I began to search for themes by organising related codes into potential themes. This process involved examining the relationships between codes and considering how they could be combined to form overarching themes that capture the main ideas of the educators' perceptions and experiences.

For instance, the codes " Children's First Language Other Than English", "Children's Life Experiences", and " Images Shown in the Vocab Task" were grouped together under the theme "Educators' Perceptions of Variations in Children's Vocab Task Scores." This theme encompasses educators' observations of how various factors, such as children's linguistic backgrounds, life experiences, and the design of the assessment tool itself, contribute to the variations in children's performance on the Vocab Task.

Similarly, the codes "Test Procedures" and "Child's Engagement Level" were grouped under the theme "Educators' Perceptions of the General Use of the Vocab Task." This theme captures the educators' experiences and observations regarding the implementation and usage of the Vocab Task in their teaching practice, including its strengths, limitations, and potential areas for improvement.

Ethics Arrangements

This research obtained approval from The University of Sydney Human Research Ethics Committee (HREC), as documented in HREC Approval No. 2021/920. Appendices C and D contain the project approval and its subsequent modified approval. Organisational consent is detailed in Appendix E. Furthermore, for reference, the sample letter of invitation, participant information statement, and participant consent form are included in Appendices F, G, and H, respectively.

Chapter 5.

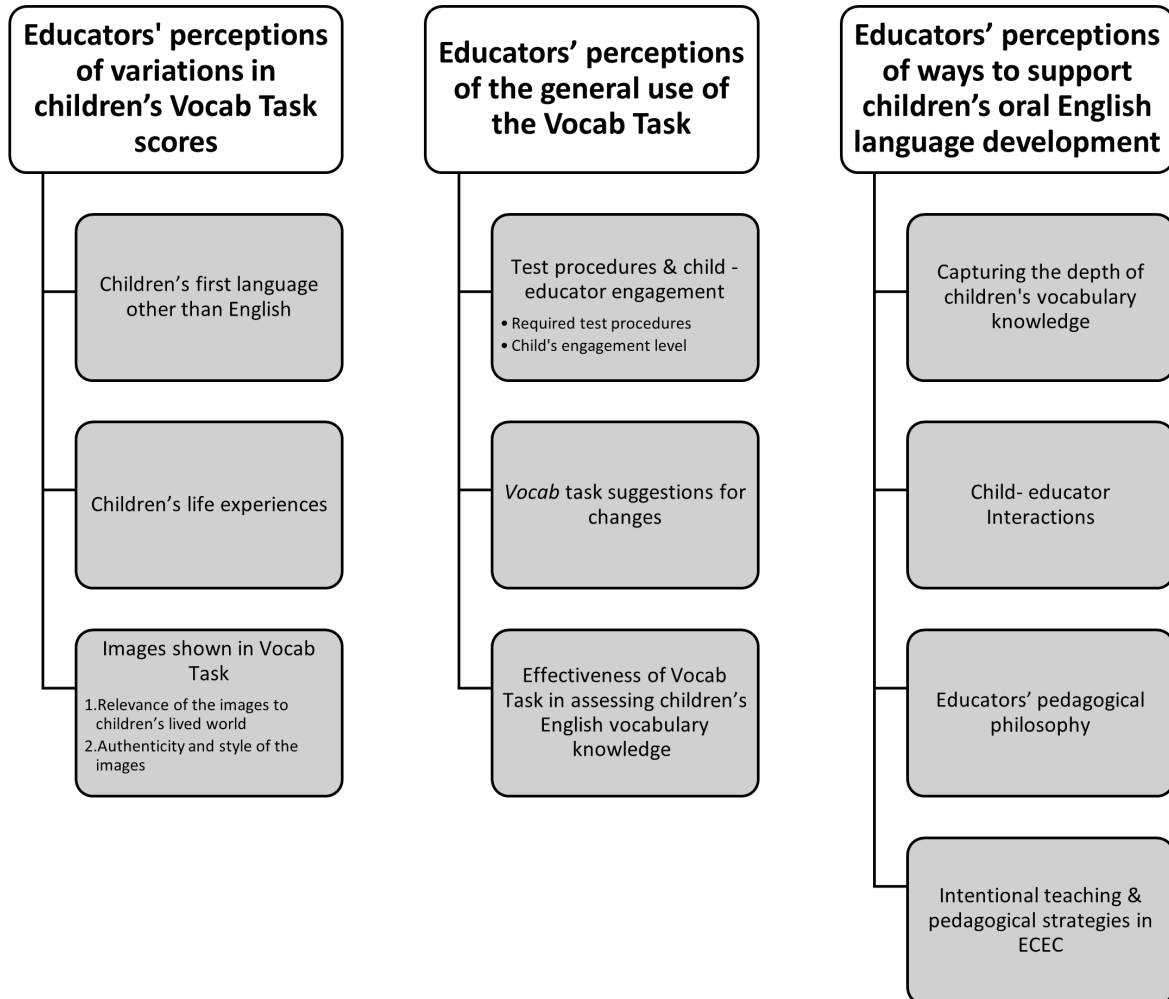
Findings

In this chapter, I present findings generated through a thematic analysis (Braun & Clarke, 2006), revealing three main themes. Each participating educator's views and experiences of the Vocab Task generated these themes. These themes not only shed light on key variables affecting the task scores, but also encapsulate educators' reflective dialogues during their interviews on pedagogy and practice for improving the implementation of the Vocab Task and supporting children's early language development in ECEC learning environments, in line with the three original research questions—namely, “What are educators’ perceptions of the Vocab Task?” “What are educators’ understandings of children’s oral language development from the use of the Vocab Task?” and “How have children’s scores from the Vocab Task impacted educators’ pedagogical approach to facilitating English language development in early childhood education and care settings, particularly with children from English as an additional language backgrounds?”

To provide a more detailed understanding of these research questions, subthemes were developed under each main theme. These subthemes are visually represented in the thematic map in Figure 1. These overarching themes and subthematic categories provide the framework for comprehensive discussions in this chapter.

Figure 1

Final Thematic Map



Note. ECEC = early childhood education and care.

Theme 1: Educators' Perceptions of Variations in Children's Vocab Task Scores

Theme description: This theme explores the factors that educators believe contribute to the variations in children's scores on the Vocab Task. The key information is that children's performance on the task is, in fact, influenced by multiple factors, including their linguistic backgrounds, life experiences, and the task's design.

Through analysis of the interviews with the educators, three factors emerged as potentially influential variables impacting children's performance in the Vocab Task: children having a first language other than Standard Australian English, children's life experiences, and Vocab Task images that include the authenticity and style of these images and their relevance to the children's lived worlds.

Children's First Language Other Than English

More than half the participating educators stated that children from EAL backgrounds were less likely to score as high as their non-EAL counterparts in the Vocab Task. The following comments are illustrative of educators' statements:

Yes, definitely. I mean, we have a few that speak fluent Farsi with no pronunciation errors or anything. When you came down to that one and one test, they would either withdraw or be shy or not be sure. (Educator A.)

We have one child who's pretty much come up on the emerging section. He speaks Spanish as well as English home—so we do know he goes to also speech therapy, so we kind of work alongside with the speech therapist as well in terms of their language and their vocabulary, things like that [pause] I think it can yeah, obviously we know there are some things that [the child] might kind of tend to say in Spanish instead of the English. Just if it might not be their language, just as their confidence and things like that. (Educator L.)

It sure does. It does reflect like a lot because sometimes they end up saying it in their own language ... I can't really say they answered it correctly because obviously it has to be answered in English ... Even though I know what they're trying to say is exactly the same as what it is in English ... Like water, aqua. They say aqua, which is like water in Spanish when they say that, yes, it is correct technically, but it's not in English, so that affects the scores. (Educator S.)

Well, I have a little boy that speaks Vietnamese at home. And when he did the toolbox he only had only just been at the Centre probably would have been only a month. And some of the pictures he would say in English and then some pictures I'm guessing he was saying in Vietnamese ... so I said to his family that I have to mark them as "I don't know." But then when I did it again with him the next time around, it's amazing how much more that he picked up ... even his family were saying, he's coming home and talking so much more and so much more English as well, which is really lovely to hear from the parent perspective too. (Educator K.)

From these statements, it seems clear that despite the four educators identifying numerous occurrences of the preference of children from EAL backgrounds to answer the questions in the Vocab Task in their home languages, they had to mark the children the exact way set out in the standardised test procedures, which required the children to respond in Standard Australian English. This potentially means that for children whose first language is Standard Australian English, the Vocab Task serves the intended purpose of assessing their oral English language proficiency as a developmental tool. However, for children from EAL backgrounds, the Vocab Task has a seemingly different function, instead being an assessment of capabilities in an additional language and thus not indicative of their overall language skills and capabilities.

Outcome 4 of the EYLF V2.0 ("Children are confident and involved learners", AGDE, 2022) states that one of the key strategies for educators to support children's learning is to

“understand that competence is not tied to any particular language, dialect or culture” (p. 55).

The educators’ statements during the interviews, such as those quoted above, demonstrate their recognition of an incongruence between test results and children’s language competency in general for children from EAL backgrounds. This suggests that the Vocab Task is yet to adequately cater to the multifaceted nature of children’s early language diversity and that educators’ professional judgement and interpretation of the results are still much needed in order to celebrate the broader spectrum of knowledge children with their own languages and cultures bring into ECEC settings (AGDE, 2022).

Educator A. also described an instance where a child from EAL background was perceived as fluent in their first language, but their performance during the Vocab Task under test conditions was influenced by inner factors such as their emotional wellbeing and confidence. The EYLF V2.0 emphasises the importance of establishing a culturally and linguistically safe learning environment for all children, where they need to feel emotionally safe and have a strong sense of belonging before they are able to learn through play (AGDE, 2022). In this case, the one-on-one test format could seemingly create an undesirable and stressful situation for children in the ECEC setting, especially those from EAL backgrounds as they try to answer the prompts in the Vocab Task in Standard Australian English.

Children’s Life Experiences

The second subtheme revealed that children draw on their varied lived experiences during the Vocab Task. In relation to one of the images (see Figure 2), Educator L. said:

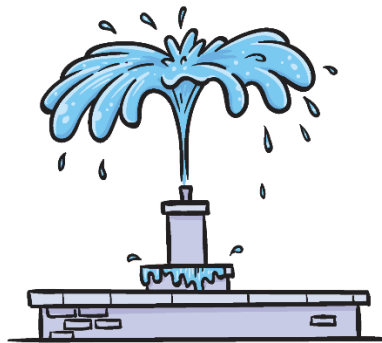
Like the [Figure 2] fountain, they might go like, you know, they can sometimes say water, and you kind of go, “What else might be called?” And they kind of like, “But I go to the park and I’ve

seen that in the park.” So they connect it to their own personal experiences. So you kind of know they kind of grasp what it is, but they just don’t know the terms. (Educator L.)

Figure 2

Fountain Picture in the Vocab Task

Back



Prompt

Response

So you got to kind of put that they know they didn’t answer it. But I think having that making sure you kind of then do follow on with other language they use and vocab they use to explain that. (Educator L.)

When they give me an answer like, “It was a dark and stormy night”. It’s so rich and it’s so descriptive and it’s so creative, and it’s actually such a huge expression of their vocabulary and literacy skills yet because they didn’t identify the exact, exact thing. (Educator F.)

There are pictures about instruments there that sometimes the children don’t have any interaction of in the past. And then just because they don’t know that particular instrument, that doesn’t mean like they completely don’t know how to express themselves. It’s just that they have not interacted in that kind of, like sort of instrument before. So it’s just kind of unfair just because they don’t have that sort of experience. (Educator S.)

I think a lot, you know, depends on how much knowledge they have. So some children with English as second language, they still have a lot of knowledge about various elements in their environment. They would know a lot about the musical instruments, which a child with English as first language may not know much due to low exposure. (Educator M.)

The data extracts above show examples of more than half (four) of the educators expressing concerns about the assessment approach of the Vocab Task. Specifically, they noted that during the assessment, specific aspects of the children's language may be stimulated but not measured due to the limited scope of the task. Such unmeasured aspects could potentially serve as indicators of the child's language capabilities.

Images Shown in the Vocab Task

Four educators identified two scenarios where images led to overemphasising context and potential interpretation bias. Both scenarios influenced children's scores in various ways.

Authenticity and Style of the Images

In the following statements, it appears the design of the images are too complex or open ended for children of 3 to 5 years old, hence unintentionally distracting children from the task at hand:

There is like a picture of a child who is sweating in the Vocab section. And a lot of children sort of mistaken it as crying or you know raining on. (Educator S.)

I'm trying to think of one like the spider. There's the picture of the spider, and some of the children will just say, like, because it doesn't really look like a spider. (Educator K.)

I thought that certain visuals were a bit confusing and that was very consistent with all the children. For example, the winking match [face]. It takes too long for the person to wink and the

child[ren] are, you know, when they look at the person, they say, he looks okay. And then the wink can happen a few seconds later. (Educator M.)

I think one thing that tells me a lot is the children they can't tell the sweating one, so the sweating one, a lot of them couldn't tell that one. They just think that the child is wet. Like they always say, "I'm sweating. I'm hot and sweaty." So they definitely do know the word, but it's just from the picture, they aren't able to tell me what it is. (Educator Y.)

If images hinder comprehension significantly, it may be harder to isolate vocabulary knowledge as the sole skill being measured. See Figure 3 in reference to Educator S.'s and Educator Y.'s statements on the "picture of a child who is sweating".

Figure 3

Picture of a Child Sweating in the Vocab Task

See



Prompt

Response

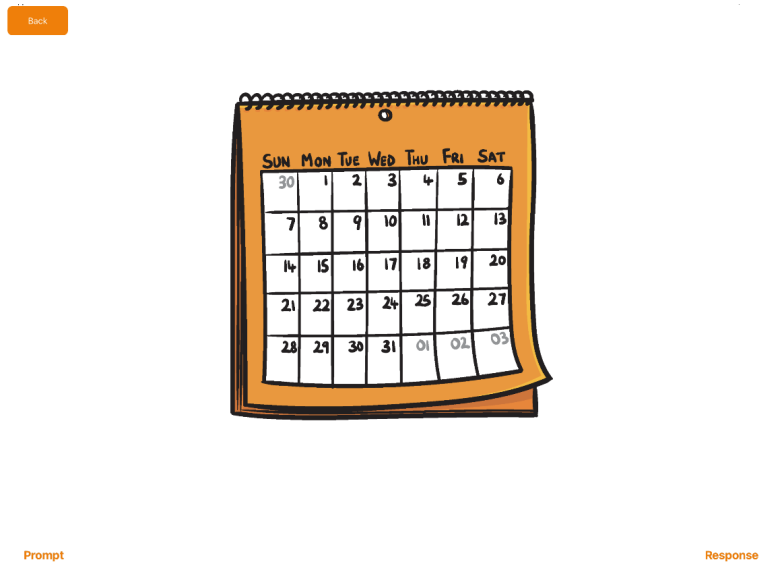
Relevance of the Images to Children's Lived Worlds

According to Educator F., children rely on cues they encounter in real life to identify the images in the Vocab Task:

It does—but I found some of the things that sort of hold back the children in terms of getting better results is some of the objects that children are required to identify in the app don't really seem like things that they access in a modern context, like the calendar [Figure 4].

Figure 4

The Calendar Picture in the Vocab Task



Like I haven't seen a calendar with that with a spiral bound calendar on a wall since my grandma's kitchen in 1988. So I don't think they see that sort of thing a lot of the time, so I think some of those things hold them back a little bit. And another thing I sort of struggle with, if it was possible is the very limited and restricted way that they're expected to answer. ... A little bit more deeper looking at the things that the children are expected to identify in this more modern context: Like the calendar, No, the kids aren't seeing that spiral bind thing on the wall because everybody's mum and dad got their little calendar on their phone now that they're looking at on their own. (Educator F.)

When the relevance and context of the images to their own lives are minimal, this may mislead them, resulting in incorrect identification or recall. A child who has not been exposed to

the objects or situations portrayed in the images is unlikely to recognise those images. In this case, in line with Bronfenbrenner's perspective, the ecological model cautions against evaluating children's capabilities without considering the contextual factors that shape their development (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 2006).

In summary, these three factors observed by the educators—namely, children's first languages, their life experiences, and the images shown on the screen—outline possible limitations of score-based assessments like the Vocab Task. They indicate that such assessment tools cannot necessarily be relied on for a comprehensive evaluation of a child's oral English language proficiency unless the factors above are adequately considered during data interpretation. When it comes to data interpretation, children's language backgrounds, life experiences, and images in the assessment tools should be considered when interpreting the scores.

Theme 2: Educators' Perceptions of the General Use of the Vocab Task

Theme description: This theme focuses on educators' experiences and observations regarding the general implementation and usage of the Vocab Task during their teaching practice. The central concept is that educators have identified both strengths and limitations of the task, coupled with potential areas for improvement.

Test Procedures and Child: Educator Engagement

Two main categories can be derived from the observations made by the educators about their general use of the Vocab Task: (a) preset test procedures such as the ways sets of words are asked during the task and (b) a child's engagement level. Such categorisation is essential in understanding both the structure of the Vocab Task and how it resonates with the child assessed.

Required Test Procedures

As the following data extracts show, Educator S. and Educator A. felt that a more engaging and effective testing procedure may require the developer of the Vocab Task to overhaul the design and logic of its game-like approach:

I would say not so monotone with the question? How they always say, “What is this?” Maybe if they did something like the numeracy toolbox game, where they kind of, is more open questions, I would say I think that would be a little bit more appropriate for the child to describe a little bit more in terms of vocabulary. I have like children that are quite smart when they’re observing the little buttons at the bottom and they notice that I’m pressing different buttons at the same time, depending on how they answer. And then they start asking questions. It’s like, “How come you’re pressing that button?” (Educator S.)

I’m just thinking if they change around the words, new words, different words with the same pronunciation. If I had the combination of using the app and changing words every now and then so the teachers don’t know what’s coming up, the kids don’t know what’s coming up, I guess might be a bit more authentic. (Educator A.)

Further to their insights, as described in Learning Outcome 3 of the EYLF V2.0, educators actively promoting a sense of enjoyment throughout children’s learning is considered playful teaching (AGDE, 2022). For example, the monotony and repetitiveness in questioning might not be the best way to stimulate a child, and instead, open-ended and diversified questions would allow children to elicit more meaningful responses that are reflective of their language skills. Moreover, a randomised feedback mechanism and regularly shuffled questions would also help ensure children are unable to predict the upcoming images, keeping their focus and curiosity

level high. This would, in turn, support children to develop reciprocal social communication skills and connect to their surroundings as active and informed citizens (AGDE, 2022).

Child's Engagement Level

In terms of how engaged children are throughout the Vocab Task, two of the seven educators reported varied reactions from children, from introverted children scoring surprisingly high to others who were socially active having pronunciation issues that normally went unnoticed in group settings:

We had a few interesting examples, so a few children they quite surprised us throughout the test, throughout the game. They would be shy in the group or not speak up or what but mind you throughout the test they scored really high, so that gave us input in depth. And we had other children who were happy and jolly and very social, but we kind of miss the fact that they're not pronouncing certain things the way they should be. So it's interesting to have that one-on-one interaction. (Educator A.)

In the beginning they were very excited because I feel like it's a new thing to them like a novelty, but because playing a game on the iPad. But because we implement a lot of iPad[s] in our learning as well, so the children do have a lot of opportunities to engage with iPads and stuff. So the toolbox is not even like an exciting thing for them anymore. So they've lost interest, especially like the older 4-year-old. (Educator Y.)

The benefit of having one-on-one attention is the opportunity for each individual child to show their, at times, unexpected capabilities and to uncover areas for improvement in language skills.

Educator A. and Educator Y. also flagged that a child's engagement level was directly related to their exposure to technology. Overreliance on technology gadgets such as iPads in

regular learning can make introducing the Vocab Task less appealing to children, leading to decreased engagement over time. This also raises questions about equitable access to technology. Some children may be disadvantaged due to limited or no access to iPads, potentially skewing the observed engagement levels and outcomes.

Vocab Task Suggestions for Changes

The educators were given opportunities to make suggestions for how the Vocab Task should evolve in the next steps, based on their usage so far with children in different ECEC settings:

A little bit more deeper looking at the things that the children are expected to identify in this more modern context. Like the calendar. No, the kids aren't seeing that spiral bind thing on the wall because everybody's mum and dad got their little calendar on their phone now that they're looking at on their own. (Educator F.)

Maybe it can be like a different set of words, a set of pictures each time round, and also, maybe instead of because it's animated, like cartoon pictures, maybe instead of that, it can be like real pictures. Maybe you have a real voice. (Educator Y.)

I would suggest to have real pictures and not the drawn pictures. I feel that sometimes some of the drawn pictures can be taken a different way. (Educator K.)

I can't really think of anything to change. Like I said, I think it's more about making those notes, and notes. Even if they can't name it, not to adding that extra information is important. (Educator L.)

I wish for teachers, you know, a sort of graph would come up. That would be last year, this child[sic] or, there are certain children who have gone through them since 2021. So they probably have

done four or five. So it'll be good if you know the toolbox could just pop up, "Okay, this was the first step, then it was here, then it sort of plateaued and then it went up here." Maybe they can support the teachers in providing resources, maybe some ideas or maybe identifying areas in language development that we can focus on, and it'll be good if [the] toolbox in some way could give us some pointers or directions share sort of articles or something that can build our knowledge in that regard. (Educator M.)

Their feedback can be summarised into two categories: content and educators' usage.

In the first category, Educators F., Y., and K. suggested that the sets of words, voice prompts, and images in the Vocab Task needed updating in addition to more random images. Specifically, using contemporary real-life images and actual voice recordings could improve engagement and comprehension, rather than animated images.

In the second, Educator L. discovered that offering additional context to children who struggled to name an image significantly enhanced their comprehension of the task at hand. Progress tracking, that is, implementing a feature that allowed educators to track progress in an easily digestible graph format, would be welcomed. For the purpose of professional development, Educator M. wanted to see additional resources integrated into the Vocab Task such as professional articles, pedagogic ideas and resources, or next-step exercises they could use to zoom in on specific areas of children's language development.

Effectiveness of the Vocab Task in Assessing Children's English Vocabulary Knowledge

The educators gave feedback on how effective they thought the Vocab Task was as an early-year vocabulary knowledge assessment tool and highlighted the complexity and nuances involved:

Yes, it definitely has [its merits]. Even just like doing it, we had some of the children from the toddler room move up to our room, and it was just interesting to watch, you know, those younger ones come through and, like, how many pictures that they could identify and yeah, as I said, it just opens up the conversation with families as well. Overall, pretty much every child that we do the toolbox with has had a steady improvement in results and being able to identify more of the vocab words. And yeah, just implementing different experiences and putting things in the learning environment definitely has helped. And then as well, identifying children that may have mispronounced. Like I had a little girl that instead of flower, she said “s”lower. And so picking up that as well as we’re going through it, then we were able to have a meeting with the families and say, okay, I think we might need to go down the path of speech assessment and some sessions. So yeah, it’s been very helpful. (Educator K.)

The next time around, it’s amazing how much more that he picked up. Even his family were saying, he’s coming home and talking so much more and so much more English as well, which is really lovely to hear from the parent perspective too. (Educator K.)

Well, they definitely did [progress]. I feel that more so with the confidence to actually speak and talk to us, compared to the initial assessments that they might have been shy maybe. So throughout the months of having that one-on-one interaction with small group interactions, they were a bit more confident and trusting to open up and say it, even if you might have been wrong with the pronunciation of the word. But I feel like it helps in that sense. (Educator A.)

The one [child] that was in the emerging area, he still actually did show up in emerging this year. He did it last year as well. But we kind of know from ourselves how far he’s come [in] his language as well. So again, even though the toolbox said he’s still in emerging level, we know how much he has progressed from last year in kind of vocab and that kind of use of language and

everything. So we kind of use that together. So it's not like we kind of look at him and go oh, we know through our observations and things. (Educator L.)

And I feel like the Vocab app, it only measures someone's, you know, vocabulary to an extent, isn't it? It doesn't measure their communication skills because you know in the past, yes, I did have some children that maybe they weren't able to tell you the names of the musical instruments that on there, the number of musical instruments, but their communication skills can still be very, very high. So that only measures whether children know those 55 pictures, isn't it? (Educator Y.)

Because sometimes they end up saying it in their own language. I can't really say they answered it correctly because obviously it has to be answered in English. Even though I know what they're trying to say is exactly the same as what it is in English. Yes, it is correct technically, but it's not in English, so that affects the scores. (Educator S.)

Collectively, the educators acknowledged three main benefits of the Vocab Task as a form of English vocabulary knowledge assessment. First, it helped them to track children's progress in gaining confidence to speak and converse with others while identifying gaps in their vocabulary knowledge. Second, it served as a discussion starter with families about their children's early language development journeys. Third, it helped to surface potential pronunciation or speech issues children displayed during the assessment that may require referrals to further early intervention or therapies.

However, the Vocab Task is not without its limitations. The limited scope of the task means that it assesses only in English and covers a set of words that are not truly representative of a child's broader vocabulary knowledge. Moreover, a child's strong communication skills may not be captured by the Vocab Task, even if they do not know specific words for it.

Theme 3: Educators' Perceptions of Ways to Support Children's Oral English Language Development

Theme description: This theme examines educators' understanding and strategies for supporting children's oral English language development. The key pieces include educators implementing various pedagogical approaches and reflecting on their practices in the learning environment.

Capturing the Depth of Children's Vocabulary Knowledge

For example, below Educator L. and Educator F. highlighted the significance of acknowledging and valuing children's oral vocabulary expressions that go way beyond pre-determined answers for the images shown in the task:

But then often what I'll do is in the notes, put down whether, they kind of, because sometimes they don't know what it is, but they give a really great description of how it is used or whatever specific name of it. I find it can be a little bit kind of go, no, they don't know it, like you put down no, always write in the notes: "They use extended vocabulary or vocabulary to explain how it's used or are they even going to go and some of them go into, how they've used it or what they've seen." (Educator L.)

I feel really guilty like saying, "Sorry, you're not achieving the expected outcome" when they give me an answer like, "It was a dark and stormy night." Do you know what I mean? It's so rich and it's so descriptive and it's so creative, and it's actually such a huge expression of their vocabulary and literacy skills yet because they didn't identify the exact, exact thing. And that can happen with the children that have English as a first language or a second language. Both of them can do that. (Educator F.)

They explained that they used various methods to support children's oral language development during the Vocab Task. To capture a full range of children's vocabulary, these two educators opted for qualitative methods such as jotted notes to record information that was more than a simple "yes" or "no" answer. They believed that children should be given credit for the creativity and richness of the languages they used in the Vocab Task. Such expressiveness beyond the expected answers is often more valued in interactions in ECEC settings than simple rote memorisation of words (von Suchodoletz et al., 2023).

Additionally, educators argued that children knowing the names of specific images was not indicative of how competent they were when meaning-making in real life (Halliday, 1975, 2007a). This means evaluating not just whether they can name an object, but also how they use language to describe, inquire about, and relate to that object within the context of their everyday experiences (AGDE, 2022; Halliday, 2007a). Further, despite not necessarily recognising every single item, the children were seen to demonstrate abilities that were higher than typically expected for the age group in terms of their understanding and use of language creatively. They also noted that their observations of children's descriptive languages were not just confined to children from EAL backgrounds, but also extended to those whose first language was Standard Australian English in real-life contexts.

Child-Educator Interactions

Child-adult interactions are regarded as the "driving force" of a child's early development from a sociocultural perspective (Bronfenbrenner, 2009; Bronfenbrenner & Morris, 2006; Eadie et al., 2019). In the following extracts, many of the educators highlight examples in relation to the characteristics of these interactions and their roles in facilitating children's early language development:

Well, my role would be a lot of role modelling and describing and reading books. I love reading books to children. And a lot of the things would come up in that, like looking at language and looking at the images, but you don't really assess it, how much they're actually bringing in. And then when we started doing the apps, it's like, oh, like we didn't realise that, you know, pasta, we might say pasta more than spaghetti. So it's a lot of just your verbal language as well. And. Yeah, it just opened it up to how much extra things that you can look at. (Educator K.)

But I've learned that a lot of small interactions were not happening because we were going by the program, taking photos and this and that's—we sort of kept reinforcing the fact that it's important to have [those] smaller children interactions and also the fact that you can have a conversation in mealtime, you can have a conversation in rest time, constantly talking. (Educator A.)

Even just before Early Years Toolbox, I know that I'm supposed to help them in terms of it being expressive. As much as possible you are there to kind of have them interact with other children and be able to connect and have that kind of relationships. Again, it starts socially, and as long as they are able to feel connected and have that sense of belonging. I think that's my prime role and to be able to have that connection with the community and towards the other children and more so with their key educators. Because again if you think about it, children start with being able to have that connection. If they don't have that connection, they won't be able to learn anything. So as my role as an educator, you need to be able to have that connection with the children first—relationship first before anything else and make them feel that they are safe. That's the first and foremost of beyond everything. The Early Years Toolbox kind of help[s] me to sort of remember to always just describ[e] what I'm doing so the children would know eventually. If I were to learn something, I think I've learned to sort of hold myself back without really assisting and scaffolding their learning in a way, which is sort of a bad habit for me, because as a teacher, you want to do anything to help that child as well. It's surprising of how much they observe over the

little things that you do. So, as a teacher, I think we have to be really cautious of what we do in our own actions because they can really see it. (Educator S.)

When I did it for the first time, it really did blow my mind and I sort of realised, “Oh, I’ve never spoken about this”, “Did we come across any discussions or you know books or instances?” It did sort of make me expand my, you know, areas that I can maybe, you know, focus on and talk to children, different topics that can be covered during interactions. (Educator M.)

Participants first emphasised the power of role modelling in both routine and informal settings. Specifically, Educator K. mentioned activities with children such as reading books that naturally create a learning environment rich in language vocabulary (Baldwin, 1995; Coe & Shelby, 1998; Eadie et al., 2019; Farrant & Zubrick, 2013). These books can then act as a medium for educators to expand their interactions with children on various other topics based on their responses and needs. Sometimes educators can miss such opportunities, until they step away and reflect on their teaching practices (McKie et al., 2012; Whitehurst et al., 1988). It can be interpreted that the Vocab Task provides contexts and opportunities for engaging in more one-on-one communications that make some educators increasingly aware of the importance of these interactions with children. Such interactions are arguably the key to relationship building and children’s emotional safety before any learning may occur where children feel safe to explore and express themselves (Bronfenbrenner & Morris, 2006; Eadie et al., 2019; Smidt & Lehl, 2018). Educators S. and M. added that, to achieve the above, they needed to be consistently mindful of their own behaviours and languages used around children. This is significant because children are keen observers who are connected to their worlds (AGDE, 2022).

Educators' Pedagogical Philosophy

Educators' pedagogical philosophy plays an important role in shaping children's learning, providing opportunities for collaboration to grow and relationships to be built (AGDE, 2022). From the following extracts, it is evident that most of the educators felt that their implementation of the Vocab Task was significantly influenced by their pedagogical philosophies and practices:

I feel really guilty like saying, "Sorry, you're not achieving the expected outcome" when they give me an answer like, "It was a dark and stormy night." (Educator F.)

In the notes, put down whether they, kind of, because sometimes they don't know what it is but they give a really great description of how it is used or whatever specific name of it ... always write in the notes: "They use extended vocabulary or vocabulary to explain how it's used or are they even going to go and some of them go into how they've used it or what they've seen." But as I said, the fact that you can write a note. Most of the educators here we have a bit of a notebook next to it to add little notes as well. At the end of it, we do a toolbox report when we get the results back and sent. So we try to put that in there as well. (Educator L.)

The educators actually have a sheet with the names of the pictures and we like tick off or we write little notes and things onto that. So that's really, really helpful because we use that as a progression for the three times that we do it over the years. So you can see, oh, they didn't get that word last time, or they're pronouncing it correctly this time. So, yeah, just having that as well as a bit of a running record we use and it's good for starting conversations with families. (Educator K.)

They would be shy in the group or not speak up or what but mind you throughout the test they scored really high, so that gave us input in depth. And we had other children who were happy and

jolly and very social, but we kind of miss the fact that they're not pronouncing certain things the way they should be. So it's interesting to have that one-on-one interactions. (Educator A.)

We've been studying about how crucial these 5 years are in all aspects and especially language. So, it is a predictor of their success when they go to school. So, I am aware of, you know, my role in contributing towards it and making sure that, you know, I give them enough experiences and opportunities where they're exposed to rich language and vocabulary, do a print-rich and, you know, a language-rich environment, as well as modelling that when I'm interacting with children—paraphrasing, you know, understanding the approximation of words and extending on that. (Educator M.)

From these comments, there is an underlying theme of taking a holistic approach to measuring children's early language development, taking into account emotional, social, and long-term factors (AGDE, 2022; DEEWR, 2009). The educators used various tools such as jotted notes and running records to track and capture qualitative data along with the quantitative data the Vocab Task provided, both of which were useful for starting conversations with families, advocating for the importance of parental involvement in improving children's language capabilities. Environment-wise, the educators valued a "print-rich" and "language-rich" environment, where they modelled thoughtful language use, and socially interactive learning settings were established.

Intentional Teaching and Pedagogical Strategies in ECEC

All seven educators' reflections, as illustrated in the following, presented a variety of intentional teaching strategies and pedagogical approaches. In other words, the Vocab Task was not just a vocabulary assessment tool in the hands of these educators. The task became more of a

catalyst, prompting them to reevaluate, adapt, and enrich the planning cycle from observing, planning, and implementing to analysing and reflecting on their programs (Arthur, 2020):

A lot of the things would come up in that, like looking at language and looking at the images, but you don't really assess it, how much they're actually bringing in. And then when we started doing the apps, it's like, oh, like we didn't realise that, you know, pasta, we might say pasta more than spaghetti. So it's a lot of just your verbal language as well. And. Yeah, it just opened it up to how much extra things that you can look at. It's just amazing that you can think of different things and different language for the various pitches. Like, even though some of our children that have difficulty with identifying and naming, and then you look at the progression and they still said the same thing as last time, and then you go, okay, well, what can we do to support that? It just opens it up to more possibilities, really positive things around your experience with the Vocab Task. So when we do our toolbox assessment, the educators actually have a sheet with the names of the pictures and we like tick off or we write little notes and things onto that. So that's really, really helpful because we use that as a progression for the three times that we do it over the years. So you can see, oh, they didn't get that word last time, or they're pronouncing it correctly this time. So, yeah, just having that as well as a bit of a running record we use and it's good for starting conversations with families. (Educator K.)

As I mentioned earlier, it wasn't so much an individual—like this activity for this child, this activity for this child. It was more about rather than going through various books, like spending a longer time working with single books, to get children familiar with repetition. So rather than possum magic today and then something else tomorrow and something else on Wednesday, it would be maybe possum magic all week and really focus one day on just listening the next day on someone talking the next day asking some questions, just like really getting into the books a little bit deeper. And maybe each day might be a little bit different in how we approach that, and therefore, each day might be better suited to meeting the different children's needs. (Educator F.)

When we were running the program of Vocab, we eventually started at story bags.¹ So a lot more small group interactions. We realised that some of those children don't necessarily participate in large groups. So we initiated as a team—it took a little while but initiated small group instructions because at the time I was the EL [Educational Leader] as well. So going through the needs of the different children and how this will benefit them so we have story bags that teachers could just grab at any time and have smaller group interactions. (Educator A.)

The children, even the ones that are at the age expected, like at the level expected for their age or even kind of above, we obviously are then kind of again setting goals to kind of reinforce it or extend their kind of language and things like that as well across the board with all of them, not just the ones that kind of have English as a second language or bilingual learning like that as well, but using our knowledge of them and the results from the toolbox together, it's not just we look at the toolbox or we just kind of we really look at all of it across the board as well. Sometimes it is limiting in the way that it's just kind of looking to name it. But as I said, the fact that you can write a note. Most of the educators here we have a bit of a notebook next to it to add little notes as well. At the end of it, we do a toolbox report when we get the results back and sent. So we try to put that in there as well. (Educator L.)

We explore languages a lot because all my 15 children they're all at, in terms of their language and communication, they're all at a later stage. I don't really support them in terms of basic communication because they're already very strong with that. So we do explore vocab, synonyms like vocab. It's like, building stronger vocab for them and exploring like different languages. So they're all very interested in learning each other's languages, so we explored Mandarin. We've explored like Vietnamese. We've explored Swahili, Arabic. Obviously, you do speak to them still in English, but definitely at a more simpler basic level. And yeah, visuals, visual really helps.

¹ The story bags Educator A. referred to are reading resources bags that each educator at that particular ECEC service had and carried around when engaging with the children in the learning environment.

And yeah, and I feel like with a lot of peer learning involved as well, because when they play with their friends so it's not all my contribution. Like all the other children that he plays around with really played a good part. So that child actually picked up English really quickly in a few months and yeah, and all the children in the room as well, they all played a big part. (Educator Y.)

I could see, okay, you know, this child has made progress from last previous toolbox assessment to this toolbox assessment. So, I think that really helped me to, to identify ways on which I can sparkle some words when I'm doing a reading or enhance my book reading times with children and make it a conversation and give them opportunities to refer to that context and, you know, engage in description, or recounting or retelling things like that. I would say, oh, you know, maybe we can do some book readings or, you know, have some discussions or include some visuals around musical instruments, for example, because there's a group of children that they don't know much about it or about facial expressions. It sort of gives me an idea about an area where children don't know much about. They probably know a lot about animals, but they don't know much about facial features of a person. (Educator M.)

The Early Tears Toolbox kind of help[s] me to sort of remember to always just describ[e] what I'm doing so the children would know eventually. (Educator S.)

Following the implementation of the Vocab Task, some of the intentional teaching strategies many of the educators used included small-group interactions on focused topics for an extended period. They reported that by doing so as a community effort, the children generally received better targeted learning opportunities for a variety of learning needs. Visual aids and peer learning, such as educators making an effort to include words and concepts into shared learning activities like reading or group times, were also emphasised as effective pedagogical

strategies, particularly for children who were developing language capabilities (Whitehurst et al., 1994; Whitehurst et al., 1988).

Conclusion

To conclude, this chapter presented participating educators' views and experiences concerning the Vocab Task through a thematic analysis which identified three main themes and 10 subthemes. These themes highlight the key factors influencing children's Vocab Task scores and provide educators' reflections on pedagogical considerations for enhancing future implementation of the task and supporting children's early oral language development. It is evident that the findings provide valuable insights that directly address the research questions posed earlier, laying the foundation for more in-depth discussions in the next chapter.

Chapter 6.

Discussion

This chapter further investigates the findings generated from the data analysis explored in the previous chapter, beginning by discussing its relevance to the original research questions about the Vocab Task and its alignment with the recently updated EYLF V2.0 (AGDE, 2022). The discussion engages with existing literature reviews of early years vocabulary assessment, social constructivism, and ecological systems theory in relation to ECEC. The final section of the chapter looks at potential avenues for future research and practical applications of the Vocab Task, specifically targeting EYT's development team and ECEC educators.

Research Question 1: What Are Educators' Perceptions of the Vocabulary Task?

Participants largely perceived the Vocab Task, a form of Expressive One-Word Picture Vocabulary Test (EOWPVT), to be effective for tracking the expressive vocabulary development milestones of children aged 3 to 5 years (Dionysios et al., 2010). However, in my research, most participating educators observed a score discrepancy when administering it to children from EAL backgrounds (Hoffman et al., 2014). This discrepancy is significant as it suggests that for this cohort of children, the task subtly shifts its function to a tool for assessing capabilities in an additional language, raising concerns for educators about forming equitable and ecologically valid assessments in early language and literacy (Hill, 2011). This issue is worth noting because it could imply that children's cultural identities and the multifaceted values they bring with their first languages in ECEC settings might be undervalued or, in some cases, overlooked. Avoiding a narrative that confines children's capabilities to a particular language or culture is a key concern for these educators (AGDE, 2022).

The educators who participated in my research demonstrated a deep understanding of the concept of holistic child development. Their responses showed that throughout the process of administering the Vocab Task, they found themselves engaged in a balancing act, interpreting the task scores as part of a much larger and complex system of children's early language capabilities (Hoffman et al., 2014). They recognised that the scores, while providing a quantifiable indicator of children's English vocabulary knowledge, were influenced by multiple factors and did not truly indicate the children's overall language ability. These factors included the images shown in the app, children's emotional states, sociocultural contexts, and real-life exposures, which all contribute to a child's overall early language development (Bronfenbrenner, 1986, 2009). Such intersectionality forms a critical part of educators' professional judgement in interpreting variations in children's scores more judiciously (Humphry et al., 2017; Xu & Liu, 2021).

These findings seem to indicate a clear need for a more holistic approach to assessing children's English vocabulary knowledge, extending beyond standardised tests such as any type of EOWPVT. This approach should include observational assessment and interactive engagement between educators and children, which can provide richer and more nuanced knowledge about a child's early language abilities (Undheim, 2022; Zabatiero et al., 2018). These methods can capture the subtle and diverse ways children express and understand language, particularly important for children from EAL backgrounds whose language skills or capabilities may not be fully represented in many standardised testing formats (Jahreie, 2021, 2022). Additionally, the findings also resonate with the existing literature on culturally fair assessment and the limitations of standardised snapshot assessments in accurately reflecting the language knowledge of children with EAL backgrounds possess (Espinosa, 2005; Pena, 2007).

As highlighted in Chapter 2, these types of assessments often may not capture the full range of linguistic abilities that children with EAL backgrounds hold, as they are heavily dependent on the child's familiarity with the specific cultural context and language used in that particular assessment (Abedi, 2006; Bedore & Peña, 2008). The educators' observations on the score discrepancies for children with EAL backgrounds when administering the Vocab Task align with these concerns and underscore the need for more context-relevant approaches to language assessment in culturally and linguistically diverse ECEC settings. This particular finding is significant in the sense that it directly addresses the research question's focus on educators' perceptions of the Vocab Task and its effectiveness in assessing children's early language development, and also suggests that while the task may provide a valuable snapshot of children's expressive vocabulary knowledge in standard Australian English, its limitations in capturing the full range of the language abilities of children, especially from EAL backgrounds, should be carefully considered when interpreting the results and making decisions in teaching practice based on the assessment data.

Research Question 2: How Do Educators Perceive the Vocab Task Score's Representation of Children's Oral Language Development?

The educators who participated in this research advocated for a more child-centric, dynamic, and engaging approach to the general use of the task. Their responses supported the need for the Vocab Task to be a more user-friendly assessment tool, as well as contribute to an ECEC learning environment in which each child's progress and achievement in their oral language development is properly valued and celebrated. Drawing from their day-to-day teaching experiences, several participants proposed a pathway for redesigning the task with a mix of affirmations and critiques. In their opinions, the inherent content design and dynamics of

any assessment like the Vocab Task should work both ‘for children’s learning’ and ‘as learning’ (AGDE, 2022). In other words, they should serve its purpose of benefiting the “testees”, rather than the “testers”, catering for the varying degree and manifestation of children’s early language skills and capabilities as well as scaffolding their self-awareness and appreciation of learning that takes place on their own (AGDE, 2022; Xu & Liu, 2021).

While participants acknowledged on multiple occasions that the task created pathways to track progress, initiate dialogues with families, and identify children’s potential speech or pronunciation issues, the most prominent concern raised was on the topic of context-specific assessment methods and playful teaching (Humphry et al., 2017). This concern aligns with the multimodal ECEC assessment approaches highlighted in Chapter 2’s literature review, which emphasises the need for assessments that reflect a child’s diverse learning environments and experiences. The current format, characterised by its lack of variation in questioning and structure, could potentially work against creating a more inclusive ECEC learning space and holistically capturing a child’s true expressive vocabulary knowledge. Most educators highlighted that the lack of variety and excitement in the Vocab Task after its initial phase may not sustain the enjoyment factor for children’s learning, indicating that the pedagogical element of assessment ‘as learning’, for example what children wish to learn and how they would learn best, might not be supported by the task’s test procedure (AGDE, 2022; Pearson et al., 2007). This observation helps in understanding that children’s engagement in learning activities is closely linked to how engaging, stimulating, and culturally relevant these activities are to their everyday experiences, where their languages develop through these kinship systems and cultural connections (AGDE, 2022; Halliday, 2007a; Kellogg & Ripp, 2020; Vygotskiĭ, 1962).

Further, educators' insights into children's fluctuating engagement levels, influenced by an interplay of their personality traits, individual learning styles, familiarity with modern technology, and developmental stages, suggest the need for more flexible, adaptive general assessment tool usage. The educators' responses showed their understanding that a child's oral language development in the early years is never linear and can significantly be influenced by various factors such as their disposition, developmental stage, and exposure to various forms of languages (Højen et al., 2022; Jahreie, 2021). One of the potential next steps could be to consider diversified context provisions. For example, several educators suggested incorporating real-life images and voice recordings into the Vocab Task that they believed could make the assessment more engaging and reflective of children's diverse experiences. Moving away from predetermined word sets and allowing for a more dynamic range of images could also help in catering to children's individual language development differences (Jahreie, 2021, 2022).

The principles and practices that should underpin language and vocabulary assessment in the early years need to emphasise the importance of considering children's sociocultural contexts and adopting a strengths-based approach that values their diverse linguistic repertoires (García & Kleifgen, 2010; Souto-Manning, 2013). The educators' reflections on the need for more engaging, culturally relevant assessment tools that capture children's language abilities beyond a standardised format directly relate to Research Question 2's emphasis on educators' perceptions of the Vocab Task's representation of children's oral language development, which in line with the aforementioned principles. Their suggestions for incorporating real-life images and voice recordings and allowing for a broader range of images shown to the children reflect the increasing recognition of the importance of developing early years assessment tools that are

responsive to children's diverse experiences and ways of communicating (Espinosa & García, 2012; Sanchez et al., 2010).

Research Question 3: How Do Educators Use the Vocab Task Scores to Inform Their Teaching, Particularly for Children For Whom English Is An Additional Language

Central to answering the last research question is the educators' advocacy for adopting a multidimensional assessment approach that creates an all-round view of children's oral English language capabilities and embracing the nuances within this domain from a socioconstructivist perspective when supporting children's development (AGDE, 2022; Bronfenbrenner & Morris, 2006; Spilt et al., 2015). Educators in this research acknowledged that children's oral English language development is shaped by their sociocultural contexts in their early lives. This understanding underscores the significance for language development of experiences in both home and ECEC settings with both educators and parents (Bronfenbrenner, 1979; Eadie et al., 2019; Spilt et al., 2015; Xu & Liu, 2021).

To optimise these experiences, the educators in this research emphasised the importance of ensuring learning environments are "print-rich" and "language-rich". Most of them showed that they understood a child's language capacities extended beyond the recognition of images or objects on a screen. The findings of this research indicate that this recognition seems to have led to reflection on the relationships between their pedagogical philosophies and teaching practices. There was a strong focus on spontaneous, rather than unstructured, interactions with children, such as role modelling and shared book reading experiences, in conjunction with peer learning activities (Baldwin, 1995; Eadie et al., 2019; Farrant & Zubrick, 2013; Smidt & Lehl, 2018; Whitehurst et al., 1988). Educators pointed out that in these interactions, they saw the opportunity to nurture not just language skills, but also socioemotional and cognitive

development by engaging with children in these informal learning moments (Papadopoulou et al., 2014).

Another important point identified by many of the educators in this research was the critical role that parents and families play in children's early language development in creating supportive and culturally safe environments that are fundamental to every child's sense of being and belonging (Arthur, 2020). Recognising that learning is not confined to the ECEC setting alone, educators stressed the need to maintain open, regular communications with families. By working together, the home and the ECEC setting can form a collaborative space that provides consistent and holistic support for a child's language developmental needs (AGDE, 2022; Eadie et al., 2019). This collaboration can potentially be expanded to sharing strategies and resources, encouraging language-rich activities at home and thereby contributing to an increase in children's funds of knowledge (AGDE, 2022; Arthur, 2020).

Literature on effective language and literacy practices in ECEC settings consistently emphasises the critical role of two-way interactions between educators, children, and, equally importantly, families in supporting children's language development in the critical first few years of their lives (Dickinson & Tabors, 2001; Wasik & Hindman, 2011). The educators' focus on creating "print-rich" and "language-rich" environments, engaging in spontaneous interactions with children and collaborating with families to have ongoing support and dialogues for children's language development directly relates to Research Question 3's point on various ways the educators use the Vocab Task scores to inform their teaching practices. Their reflections on the importance of considering children's socioemotional and cognitive development alongside their language skills in Standard Australian English also resonate with studies on the intersecting nature of these developmental domains and the need for integrated, whole-child approaches to

early language and literacy teaching practice (Bredekamp et al., 2022; Dickinson & Porche, 2011).

Summary of Findings

- a. The educators viewed the Vocab Task as an effective early years assessment tool for tracking children's progress on expressive English vocabulary knowledge.

The data indicated that educators did not find it difficult to administer the task in the respective ECEC settings with its current flow, interface, or data collection methodology. From a logistical perspective, the task's standardised and normed administration process aligns seamlessly with various forms of formative and summative assessments the educators had already conducted throughout the year, providing further insights into a child's incremental progress of their expressive English vocabulary knowledge (Hoffman et al., 2014).

- b. The task facilitates a two-way dialogue between educators and families about children's early language development.

Family engagement is the cornerstone of a child's learning journey in any holistic ECEC practice (AGDE, 2022), and according to the educators in this research, the Vocab Task can help in strengthening the connections. One of the most distinguishing impacts of the task is its capacity to serve as a "conduit" between educators and families after each implementation. By drawing on the results from the task, together with observations and notes, educators are able to talk to families on a regular basis, keeping them informed of their children's progress in vocabulary knowledge development (Hoff, 2010).

- c. The task has some predictive value and serves as an early identification tool to inform educators' and families' decision-making.

The functionality of the task extends beyond numerical assessment to offer predictive value. Research indicates a strong correlation between early vocabulary knowledge and subsequent academic success, particularly in language-related subjects (Duff et al., 2015; Hart & Risley, 1995). As such, the task acts as an invaluable tool that assists educators and families to plan early intervention approaches. This means that children who require early intervention can be identified early, thereby potentially mitigating the risks of language delays that could otherwise lead to academic failures later at school.

- d. The task subtly encourages educators to reflect on their intuition and perspectives of children's early language development.

The task does more than assess children. It indirectly serves as a reflective tool for educators, as well. The nuances of the task, ranging from the role of the images shown to interacting with children during each assessment, require a certain level of interpretive engagement from educators, which leads to reflective practices. The process of administering the task and interpreting its results gives educators the opportunity to consistently reflect on their own perspectives and potential biases concerning children's early language development. Not only does this align with the tenets of reflective teaching practice, but also it promotes educators' ongoing development of their professional judgement, which is central to their role in responding to children's language learning needs (AGDE, 2022).

Participants in this research report limitations of the Vocab Task despite generally positive accounts:

- a. The scope of the task is specific and may not provide a complete snapshot of children’s vocabulary knowledge.

While the task is specifically designed for educators to assess certain aspects of a child’s language capabilities—English vocabulary knowledge—it is imperative to recognise its limitations in providing a holistic understanding of their capabilities. Educators pointed out that by design, a standardised EOWPVT such as the task, regardless of how meticulously and regularly it is developed and updated, is constrained by the number of words that can feasibly be included and the contexts in which these words are presented (Hoffman et al., 2014; Xu & Liu, 2021). That is, the task might not be designed to consider other important variables relating to children’s diverse identities and ways of communicating, which ultimately affects their understanding of their worlds. These constraints necessitate caution for educators in interpreting results as they offer only a quick “scan” of the child’s vocabulary skills at a specific point in time. To address these, educators also suggested that the task be used in conjunction with other forms of formative or summative assessment methods.

- b. The task may still inadvertently scaffold a potentially stress-inducing test environment despite all good intentions and its child-friendly design.

Although the task is tailored to be engaging and gamified, the nature of it being an “assessment” can still at times induce a certain level of performance anxiety, especially for children from EAL backgrounds. Children at the age of 3 to 5 years may not fully understand the concept of assessment and evaluation, but they are often acutely responsive to the attitudes and expectations of the educators administering these tasks, based on those educator–child interactions (Spilt et al., 2015). According to the educators

in this research, even in typically child-centred ECEC settings, performance anxiety can still skew results and compromise the validity of the task after the initial novelty wanes.

- c. The standardised task is not a one-size-fits-all test, and inherent bias such as cultural and linguistic insensitivity may persist.

The educators showed that they recognised that standardised tests, by their very nature, aim for a level of objectivity that can be universally applied (Hoffman et al., 2014).

However, they conceded that this universality often overshadows the nuanced differences and values children bring into culturally and linguistically diverse ECEC settings (York, 2016). Findings from this research indicate that the task is not completely free of such inherent biases. For example, certain images in the task can be interpreted differently across a group of children. Further, from an antibias perspective, the test may not adequately cater for children for whom Standard Australian English is not their first language, thereby leading to a systematic bias and presenting a disadvantage that is unrelated to their language capabilities (Xu & Liu, 2021).

Implications for Future Research and Implementation of the Vocabulary Task

Following are some practical suggestions for the EYT development team to consider for future improvements of the task based on the findings of this research.

Implications for Improving the Design of the Vocab Task

- a. Develop a multimodal assessment with interactive elements such as audio cues and multilingual support.

Two avenues are highlighted for future revisions of the EYT Vocab Task. The first is to consider the potential for making the task multimodal, by merging visual and audio

modes, as this could facilitate a more inclusive testing environment for children with varying levels of vocabulary knowledge, including those with visual impairments or any other additional needs (Hill, 2011; Samuelsson, 2023). Second, adding multilingual support would be particularly effective in culturally and linguistically diverse ECEC settings to address some of the inherent biases and limitations associated with monolingual assessment tools (York, 2016). In the latest update, this appears to have already been a focus for the developer, with languages embedded such as Korean, Norwegian, and Turkish, with more in progress.

- b. Add and curate new sets of images with regular updates for enhanced complexity and clarity.

Participants in this research suggested that the visual components of the task, while engaging, should be subject to periodic review to ensure they maintain the balance between complexity and clarity. Regular updates, guided by both research and voices from stakeholders such as educators, parents and also children, could serve to calibrate the assessment's level of difficulty and relevance over time. New sets of images could also be added to reflect the more culturally diverse settings in which children live and can relate to, thus further enhancing the tool's applicability across ECEC settings (Hoffman et al., 2014). As mentioned earlier in the introduction in Chapter 1, recent updates of the task, according to the version history log, have introduced similar enhancements, now featuring verbs and more challenging items, extending its assessment capabilities to a broader range of ages and abilities.

- c. Trial the introduction of professional learning modules together with interpretive guidelines to assist in the data interpretation process for both educators and potentially even parents.

While the validity and accessibility of the task are currently robust, the absence of ongoing professional learning modules featuring detailed interpretive guidelines might potentially lead to more inconsistencies in the data interpretation process across different ECEC settings.

Educators could significantly benefit from guidelines and ongoing professional learning that stipulates how to analyse results, recognise variations of results, and identify potential areas for intervention. Such resources, once made easily accessible, could help standardise the interpretation process further, hence enhancing the reliability and validity of the task by exercising sound professional judgement (Hoffman et al., 2014).

Implications for Practice

To help educators make more effective and culturally informed use of the task, future guidelines and training could consider incorporating the following points:

- a. Effective time management, flexibility, and engagement can make a big difference.

While the vocabulary task is designed for children aged 3 to 5 years, it is crucial to keep in mind that the attention spans of children in this age range can vary significantly, as can developmental stages. Therefore, any assessment administration must cater for their learning needs (Xu & Liu, 2021). The use of the task lies not just in its completion but in the process during which the data are gathered. As such, educators are always encouraged to be as adaptive and playful as possible in their approach when administering the task (AGDE, 2022).

- b. Children's emotional states need to be paid attention to.

Further to the suggestion in the previous point, future training and guidelines should also remind educators of being particularly attuned to the emotional states of children. Signs of stress such as eye contact, withdrawal, or expressing verbal cues of frustration are to be noted and appropriately addressed. If there is evidence of any stress, it would be beneficial to temporarily pause the task and resume it at another time or to implement some other calming activities that can help the child regain focus and ease any tension (AGDE, 2022).

- c. Emphasise the holistic lens in interpreting the task results.

It is understood that the results of the task can offer valuable insights into a child's expressive vocabulary knowledge; however, interpreting the results in isolation should almost never be encouraged (Xu & Liu, 2021). As discussed in the first implication, the task is also susceptible to inherent biases. The process of assessment indicates that it could still inadvertently reinforce stereotypes that potentially have lasting impacts on children's future learning experiences (Xu & Liu, 2021; York, 2016). Therefore, in the implementation guidelines, a holistic approach that advocates for cultural responsiveness should be highlighted as the key to understanding children in their sociocultural contexts and identities to ensure more equitable assessment and evaluation (AGDE, 2022; Wells, 1999). This would enable educators to learn how to contextualise these results further within the wider scope of the ongoing assessment cycles, with the use of observational notes and other forms of documentation capturing children's voices as part of assessment "as learning"—for instance, child portfolios (AGDE, 2022; Hills, 2011).

The development of the learning modules and guidelines as outlined above may also open up opportunities to invite families and other relevant stakeholders into the assessment process. This would support families' understanding of the contextual relevance of the task result and enable them to be more informed in their children's learning journeys (AGDE, 2022; Eadie et al., 2019).

Chapter 7.

Conclusion

Overall, this research highlights that the Vocab Task included in the EYT is a valuable tool for assessing vocabulary in the early years. Its increasing use by numerous ECEC services testifies to its effectiveness and highlights its potential as a valuable addition to existing language assessment tools (EYT, n.d.). The participants in this study reported important strengths as well as limitations of the Vocab Task's implementation, particularly around the language capacity of children from EAL backgrounds that requires educators to employ a prescribed, methodical approach. It is also important to consider the use of the EYT Vocab Task in conjunction with other forms of communication assessments, such as observations. This will ensure a holistic understanding of children's language capabilities and needs, resulting in more refined teaching practices that can potentially benefit children in the long term (AGDE, 2022; DEEWR, 2009).

It is important to acknowledge certain limitations in the methodologies used in this research while recognising this research's contribution to improving educators' teaching practices and informing the future application of the Vocab Task. Despite the participants coming from various ECEC services, of roughly more than 600 ECEC services using the Vocab Task (EYT, n.d.), this research sample represents only a small proportion of educators' perspectives in parts of NSW and Victoria, as all seven educators were situated in metropolitan areas. Therefore, the study is not generalisable, with its sample size and demographic composition only partially representing the landscape of ECEC settings in Australia. The experiences and perceptions of educators from rural or less urbanised areas, as well as those from other varied cultural and linguistic backgrounds, might offer different insights into the

implementation and effectiveness of the Vocab Task (Terry & Hayfield, 2021). This means that such specific focus may ultimately limit the broader applicability of the final findings presented in this thesis. The individual experiences of educators and the challenges they face in supporting children's language development, and in using the Vocab Task, may vary significantly depending on their contexts. As the research concludes, I recognise that future studies could benefit from expansion to engage with a broader range of ECEC services throughout all states and territories across Australia. This would invariably provide a more comprehensive understanding of how the Vocab Task is being implemented in diverse teaching and learning contexts. As the Vocab Task continues to be improved and its implementation processes further refined and understood in ECEC services over time, including incorporating feedback from families from various geographical, cultural, and linguistic backgrounds, larger scale research could offer a more complete perspective on the EYT Vocab Task's use and impact (Creswell, 2009; Yin, 2015).

I also acknowledge that although the Vocab Task is regarded as a useful asset for many ECEC settings, this research does not account for longitudinal outcomes of the task, and it is important to recognise that its full potential can only be realised through ongoing adjustments and purposeful implementation (Creswell, 2009). This research captures only a snapshot of the educators' experiences and their perceptions at a given time and does not track the long-term impacts of the task on children's language development or the lasting effects of these educators' teaching practices over a prolonged period. Future versions of such assessment tools should not only aim to contribute to more culturally responsive, inclusive ECEC programs but also propose a more equitable landscape. In this landscape, all children would have the opportunity to showcase their language capabilities in multiple ways. Additionally, opportunities need to be

offered for educators and families to collaborate as partners and extend the impact of the task beyond ECEC settings (AGDE, 2022).

Lastly, reflecting on the entire research process, what also came to light as a somewhat unexpected yet fascinating discovery was the profound dedication and professional sense of identity displayed by each educator participating in this research towards early language and holistic development in ECEC settings. Understandably, working in an ECEC service comes with many challenges, including time and resource constraints alike. Nevertheless, these educators spent time reflecting on ways to support children's various learning needs and to implement the Vocab Task more effectively, which, at that point in time, was new and an addition to their curriculum and practice. Further, their willingness to engage in this new research, to share their lived experiences and insights with me, suggests an even broader commitment to ongoing professional learning (AGDE, 2022). As co-learners with children, families, and communities, the educators saw the significant value in reflective practice and sought this opportunity to contribute to the body of knowledge in language assessment in ECEC that could benefit not only their own teaching practice but potentially also that of their peers sector wide (AGDE, 2022; Brookfield, 2017). Through understanding this research, it has become increasingly clear to me that committed educators like those in my research are the cornerstone of continuous growth of the future ECEC sector in Australia, together with the ongoing partnerships between educators, families, and the broader ECEC community.

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Appendices

Appendix A.

More Example Screenshots of the “Vocab” Task of the EYT

Figure A1

The Vocab Task Homepage

The screenshot displays the 'Vocab!' task homepage with a colorful cartoon background featuring a blue hippo and a green snake. The word 'Vocab!' is prominently displayed in large, stylized yellow letters. Overlaid on the page are two forms. The first form, on the left, is a registration form with fields for 'Child ID:', 'Grade:', 'Age:', and 'Sex:'. The 'Sex:' field has a dropdown menu with 'N/A' selected. The second form, on the right, is the 'Application Settings' dialog box. It includes a 'Save' button at the top left. The settings include: 'Study Name' (text input), 'Database URL' (text input with a 'Code' button), 'Email Results' (toggle switch, currently off, with a note '*This will disable database recordings'), 'Language' (dropdown menu with 'Korean' selected), 'Child Performance Chart' (toggle switch, currently on, with a note 'Positions a child's performance against Australian benchmarks within half-year age groups.'), and 'Game Progress Text' (toggle switch, currently on). At the bottom of the settings dialog, there is a list of languages: 'English', 'Korean' (highlighted), 'Norwegian', and 'Turkish'. The version 'Version 1.15.1 (Build 23111201)' is displayed at the bottom right of the settings dialog.

Child ID:
Grade:
Age:
Sex:

Application Settings

Study Name:
Database URL:
Email Results: ☐ *This will disable database recordings
Language:
Child Performance Chart: ☒ Positions a child's performance against Australian benchmarks within half-year age groups.
Game Progress Text: ☒

English
Korean
Norwegian
Turkish

Version 1.15.1 (Build 23111201)

Figure A2

The Sunflower Picture in the Vocab Task

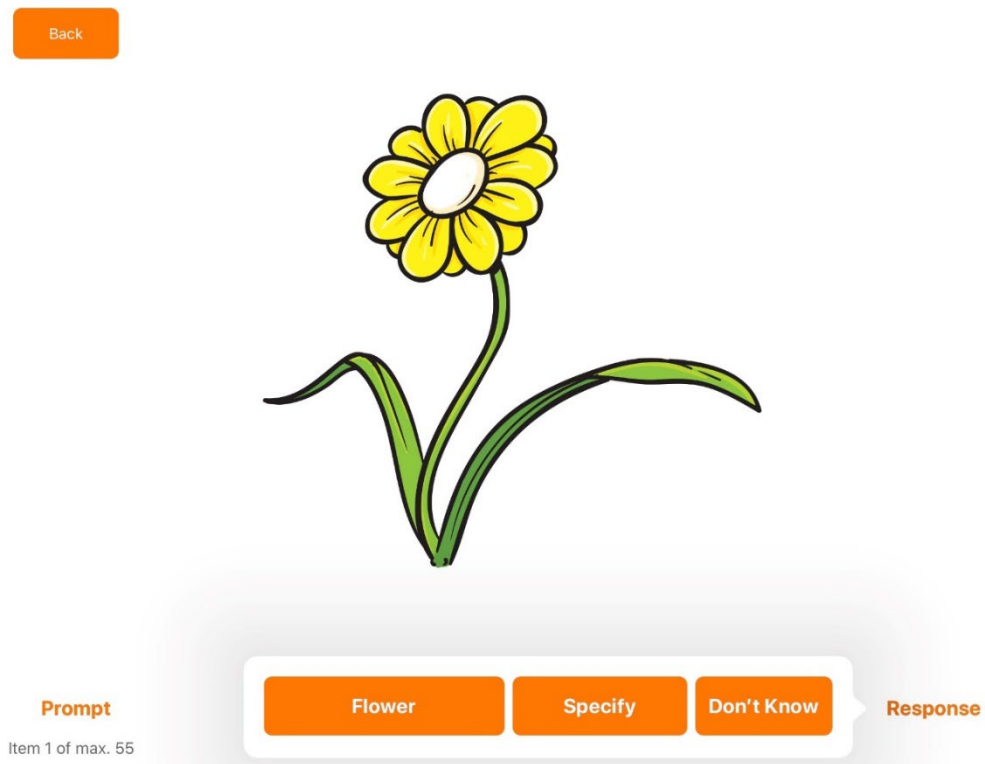
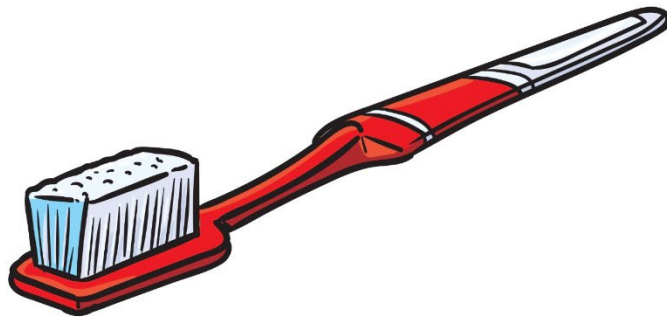


Figure A3

The Toothbrush Picture in the Vocab Task

Back



Prompt

Item 8 of max. 55

Toothbrush

Specify

Don't Know

Response

Figure A4

The Game Over Page in the Vocab Task



While the above scores may be sufficient for brief assessment and screening purposes, it is not recommended that these scores (which are derived from unprocessed data) be used for formal assessment, diagnostic or research purposes. It is advised that complete and processed data (e.g., trial-by-trial accuracy data at each level) be used for formalised uses.

Appendix B.

Interview Questions

1. How long have you implemented the “*Vocab*” task of the *Early Years Toolbox (EYT)* with children? What is the highest qualification you have achieved in Early Childhood Education?
2. How many of the children in your room speak a language other than English? Have you been able to assess children whose first language is not Standard Australian English?
3. In between the assessments, how do you adapt your educational program to the developmental needs of these children’s English language skills you previously identified from the “*Vocab*” task?
4. As a result, how effective have your strategies been, and have these children progressed over the assessment periods, especially those with emerging vocabulary knowledge in Standard Australian English?
5. Do you think these children’s first languages influence their “*Vocab*” scores?
6. Do the “*Vocab*” scores generally validate your professional judgement on children’s vocabulary knowledge in Standard Australian English?
7. Before the introduction of the “*Vocab*” task, what was your understanding of educator’s roles in developing EAL Children’s vocabulary knowledge in Standard Australian English?
8. Since the implementation of the “*Vocab*” task, what have you learnt regarding how educators can support EAL children develop their vocabulary knowledge in Standard Australian English?

9. Do you think the “*Vocab*” task of the EYT has a role to play in facilitating children’s oral English language development in general?
10. Moving forward in what ways do you think this “*Vocab*” task can be improved to better support oral English language development of all children?

Appendix C.

The University of Sydney Human Research Ethics Committee Project Approval



Research Integrity & Ethics Administration
HUMAN RESEARCH ETHICS COMMITTEE

Monday, 14 February 2022

Dr Amanda Niland
School of Education and Social Work Research Operations; Faculty of Arts and Social Sciences
Email: amanda.niland@sydney.edu.au

Dear Amanda,

The University of Sydney Human Research Ethics Committee (HREC) has considered your application.

I am pleased to inform you that after consideration of your response, your project has been approved.

Details of the approval are as follows:

Project No.: 2021/920
Project Title: Early Years Toolbox in Practice: A Case Study of Educators' Perspectives on Assessment for Children's Oral English Language Development
Authorised Personnel: Niland Amanda; Brosseuk Debbie; Hu Yifan;
Approval Period: 14/02/2022 to 14/02/2026
First Annual Report Due: 14/02/2023

Documents Approved:

Date Uploaded	Version Number	Document Name
09/02/2022	Version 2	PCF - Clean Version
09/02/2022	Version 2	PIS - Clean Version
30/10/2021	Version 1	Interview Questions - Appendix 3
30/10/2021	Version 1	Research Flyer - Our Place Victoria
30/10/2021	Version 1	Research Flyer - UoW Engagement Centres

Condition/s of Approval

- Research must be conducted according to the approved proposal.
- An annual progress report must be submitted to the Ethics Office on or before the anniversary of approval and on completion of the project.
- You must report as soon as practicable anything that might warrant review of ethical approval of the project including:
 - Serious or unexpected adverse events (which should be reported within 72 hours).
 - Unforeseen events that might affect continued ethical acceptability of the project.
- Any changes to the proposal must be approved prior to their implementation (except where an amendment is undertaken to eliminate *immediate* risk to participants).
- Personnel working on this project must be sufficiently qualified by education, training and experience for their role, or adequately supervised. Changes to personnel must be reported and approved.
- Personnel must disclose any actual or potential conflicts of interest, including any financial or other interest or affiliation, as relevant to this project.
- Data and primary materials must be retained and stored in accordance with the relevant legislation and University guidelines.

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Research Portfolio
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ABN 15 211 513 464
CRICOS 00026A

Monday, 14 February 2022

Dr Amanda Niland
School of Education and Social Work Research Operations; Faculty of Arts and Social Sciences
Email: amanda.niland@sydney.edu.au

Dear Amanda,

The University of Sydney Human Research Ethics Committee (HREC) has considered your application.

I am pleased to inform you that after consideration of your response, your project has been approved.

Details of the approval are as follows:

Project No.: 2021/920
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- Personnel working on this project must be sufficiently qualified by education, training and experience for their role, or adequately supervised. Changes to personnel must be reported and approved.
- Personnel must disclose any actual or potential conflicts of interest, including any financial or other interest or affiliation, as relevant to this project.
- Data and primary materials must be retained and stored in accordance with the relevant legislation and University guidelines.

Appendix D.

The University of Sydney Human Research Ethics Committee Project Ethics Modification

Approval



Research Integrity & Ethics Administration
HUMAN RESEARCH ETHICS COMMITTEE

Thursday, 9 June 2022

Dr Amanda Niland
School of Education and Social Work Research Operations; Faculty of Arts and Social Sciences
Email: amanda.niland@sydney.edu.au

Dear Amanda,

Your request to modify this project, which was submitted on 08/05/2022, has been considered.

This project has been approved to proceed with the proposed amendments.

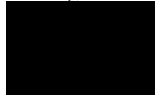
Protocol Number: 2021/920
Protocol Title: Early Years Toolbox in Practice: A Case Study of Educators' Perspectives on Assessment for Children's Oral English Language Development
Annual Report Due: 14/02/2023

Documents Approved:

Date Uploaded	Version Number	Document Name
08/05/2022		Research Flyer - Goodstart Early Learning

Please contact the ethics office should you require further information.

Sincerely,



Associate Professor Kieron Rooney
Acting Chair
Modification Review Committee (MRC 2)

The University of Sydney of Sydney HRECs are constituted and operate in accordance with the National Health and Medical Research Council's (NHMRC) [National Statement on Ethical Conduct in Human Research \(2018\)](#) and the NHMRC's [Australian Code for the Responsible Conduct of Research \(2018\)](#)

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CRICOS 00026A

Appendix E.

Organisational Consent

The following organisational consent has been redacted at the request of the organisation to preserve the anonymity of participants.

3 May 2022

Dear Yifan

Re: Organisational Consent, *Early Years Toolbox in Practice: A Case Study of Educators' Perspectives on Assessment for Children's Oral English Language Development*

██████████ is pleased to confirm organisational consent for you to proceed with your research, consistent with your approved participant information and consent documentation from the University of Sydney (HREC Approval No 2021/920) subject to the following conditions:

- conduct the research in accordance with your HREC approved protocol, NHMRC National Statement on Ethical Conduct in Human Research (2007).
- conduct the research project in accordance with the ██████████ Code of Conduct and ██████████ Privacy Policy.
- follow all directions of ██████████ centre staff when in a centre or ██████████ when engaged in this research activity.
- Immediately advise ██████████ if any complaints are made about the project or if continuation of the research may be harmful in any way to a participant or participants.
- provide milestone updates to ██████████; and
- if ██████████ is to be identified in any way in your dissertation and/or any articles or publications, you provide your draft dissertation and/or any articles or publications to ██████████ for review prior to publication, such approval not to be unreasonably withheld or refused. Please note, approval would only be withheld if the document/s poses a risk to ██████████ reputation or the health, safety and reputation of our centres, children and their families or our educators and centre support teams. ██████████ would make no comment on the validity of the research.

Best wishes for the successful completion of your Master of Education.

Yours sincerely



Appendix F.

Letter of Invitation



Letter of Invitation

A Research Study about the Early Years Toolbox and Children's Early English Language Development

"Are you an early childhood educator working with children aged from three to five years old?"

"Have you used Vocab task of the Early Years Toolbox with these children?"

"Have you worked with children who speak another language other than English for the past 12 months?"

If your answers are "yes" to all the questions above – **WE WANT YOU!!** You are invited to take part in this study about the Vocab Task of the Early Years Toolbox and children's English language development.

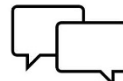
This research will involve having a 30 to 40-minute interview via online platform ZOOM with the student researcher Yifan. The interview comprises around 10 questions about your understandings and day-to-day teaching practices with the implementation of the Vocab task of the Early Years Toolbox.

If you require any additional information regarding this research, you can ask for a Participant Information Statement to read more about this study, and please do not hesitate to contact Yifan or the supervisory team, Dr Amanda Niland (amanda.niland@sydney.edu.au) and Dr Debbie Brosseuk (debbie.brosseuk@sydney.edu.au) should you have any further questions.

Thank you in advance for considering participating in this research project. Your time and support will be greatly appreciated – the contact detail for Yifan is listed below, alternatively you can indicate your interest via the Centre Director at your Goodstart Early Learning Centre.

Yours Faithfully,

Yifan HU
Master of Education (Research) Candidate
Sydney School of Education and Social Work
The University of Sydney
yihu4881@uni.sydney.edu.au



Appendix G.

Participant Information Statement

Participant Information Statement



Early Years Toolbox in Practice: A Case Study of Educators' Perspectives on Assessment for Children's Oral English Language Development

Dr Amanda Niland (Responsible Researcher)
Sydney School of Education and Social Work
Phone: +61 2 9351 6361 | Email: amanda.niland@sydney.edu.au

Mr Yifan Hu (Master of Education (Research) Candidate)
Email: yihu4881@uni.sydney.edu.au

1. What is this study about?

We are conducting a research study investigating educators' reflections on assessing children's vocabulary knowledge in Standard Australian English using the *Vocab* task of the Early Years Toolbox. The research will focus on educators' experiences using the tool, and its influence on their understandings and practices in relation to supporting children's language development, including those children with English as an Additional Language (EAL) backgrounds.

Young children's vocabulary lays a foundation that has a flow-on impact on their literacy acquisition such as reading and writing skills later at school. Research shows that children's linguistic backgrounds need to be carefully considered when it comes to assessments of language development. Children naturally develop their linguistic skills through socially and culturally relevant interactions, thus it is vital for early childhood educators to recognise this and support their language development accordingly.

The *Vocab* task of the Early Years Toolbox has been regarded as a reliable and valid tool for assessing children's expressive English language development since it first launched domestically and internationally in 2017. As it is relatively new, what is yet to be discovered is the influence of implementing the *Vocab* task influence on educators' language teaching practices.

Taking part in this study is voluntary. Please read this sheet carefully and ask questions about anything that you don't understand or want to know more about.

2. Who is running the study?

The study is being carried out by the following researchers:

1. **Dr Amanda Niland** (Research Supervisor)
Lecturer at Sydney School of Education and Social Work, The University of Sydney
2. **Dr Debbie Brosseuk** (Associate Supervisor)
Lecturer at Sydney School of Education and Social Work, The University of Sydney
3. **Mr Yifan Hu** (Student Researcher) is conducting this study as the basis for the degree of Master of Education (Research) at The University of Sydney.

3. Who can take part in the study?

We are seeking educators who have previously received the Early Years Toolbox training and had experience of implementing the *Vocab* task with children aged from three to five years old. Additionally, the eligible educators also need to be teaching children who speak another language other than English for at least the past 12 months.

You have been invited to take part in this study because you meet the eligibility criteria above and you have received the information about this research study from either the Director – Research & Evaluation or the Senior Manager Engagement and Translation of your organisation.

4. What will the study involve for me?

If you decide to take part in this study, you will be asked to participate in an online ZOOM interview with the student Researcher:

- This interview should last approximately 45 minutes, no longer than an hour.
- You can participate in the interview anywhere in Australia with access to a computer or mobile device.
- This interview will be conducted online via the platform of ZOOM
- This interview will contain around ten questions about your experience of supporting the language development of children aged from three to five years old and perspectives on using the Early Years Toolbox with this age group.
- Audio recording will be involved – You can indicate which form of recording you prefer by ticking the relevant box in the Participant Consent Form.

5. Can I withdraw once I've started?

Being in this study is completely voluntary and you do not have to take part.

Your decision will not affect your current or future relationship with the researchers or anyone else at The University of Sydney.

If you decide to take part in the study and then change your mind, you can withdraw by contacting the research supervisor, Dr Amanda Niland or the student researcher (Mr Yifan Hu), via phone or email indicating your intention of withdrawing from this study.

If you take part in an interview you may refuse to answer any questions that you do not wish to answer.

If you choose to withdraw, we will not collect any more information from you. Please let us know at the time you withdraw what you would like us to do with information we have collected about you up to that point. Any notes or recordings that were about, only you, will be removed from the study database and deleted.

6. Are there any risks or costs?

Aside from giving up your time, we do not expect that there will be any risks or costs associated with taking part in this study.

7. Are there any benefits?

You will not be compensated or receive any direct benefits from being in the study.

8. What will happen to information that is collected?

By providing your consent, you are agreeing to us collecting information about you for the purposes of this study.

Any information you provide us will be stored securely and we will only disclose it with your permission, unless we are required by law to release information. The study findings may be published.

You will not be individually identifiable in these publications.

- The information collected from you will be about the attitudes, knowledge and understanding of your language teaching practices with the implementation of the Early Years Toolbox.
- Audio recordings will be taken, and these will only be used for the purpose of data analysis and will not be used in any presentation or publication.
- Data will be stored securely, in a University of Sydney encrypted online data storage repository for five years after the completion of this study. During this time only the student researcher and the research supervisory team will have access to the stored data.
- At the end of the approved retention period all electronic records will be deleted, and hard copies will be destroyed via shredding.

- You will also have the opportunity to check the transcript of your interview once it has been transcribed and ready for review. You can indicate you would like to check your transcript by ticking the relevant box on the Participant Consent Form.
- We will keep the information we collect for this study and may use it in future studies. At this stage when and what these future studies will involve are yet to be finalised. We will reach out and seek another ethical approval before we use any of the information in the future.

9. Will I be told the results of the study?

You have a right to receive feedback about the overall results of this study. You can indicate you are interested in receiving the feedback of this study by answering “yes” to the question “I would like feedback on the overall results of this study” and providing your preferred contact details (email/telephone/postal address) in the Participant Consent Form. This feedback will be in the form of a brief lay summary.

10. What if I would like further information?

When you have read this information, the following research supervisor and student researcher will be available to discuss it with you further and answer any questions you may have:

1. Dr Amanda Niland (Responsible Researcher)
Sydney School of Education and Social Work, The University of Sydney
Phone: +61 2 9351 6361 | Email: amanda.niland@sydney.edu.au
2. Mr Yifan Hu (Master of Education (Research) Candidate)
Sydney School of Education and Social Work, The University of Sydney
Email: yihu4881@uni.sydney.edu.au

11. What if I have a complaint or any concerns?

The ethical aspects of this study have been approved by the Human Research Ethics Committee (HREC) of The University of Sydney [[HREC Approval No 2021/920](#)] according to the *National Statement on Ethical Conduct in Human Research (2007)*.

If you are concerned about the way this study is being conducted or you wish to make a complaint to someone independent from the study, please contact the University:

Human Ethics Manager
human.ethics@sydney.edu.au
+61 2 8627 8176

This information sheet is for you to keep

Appendix H.

Participant Consent Form

Participant Consent Form



Early Years Toolbox in Practice: A Case Study of Educators' Perspectives on Assessment for Children's Oral English Language Development

Dr Amanda Niland (Responsible Researcher)
Sydney School of Education and Social Work
Phone: +61 2 9351 6361 | Email: amanda.niland@sydney.edu.au

Mr Yifan Hu (Master of Education (Research) Candidate)
Email: yihu4881@uni.sydney.edu.au

Participant Name

I agree to take part in this research study. In giving my consent, I confirm that that:

- The details of my involvement have been explained to me, and I have been provided with a written Participant Information Statement to keep.
- I understand the purpose of the study is to investigate educators' perspectives on the effectiveness of the Vocab Task of the Early Years Toolbox and whether, and how, their teaching practices are adapted to meet children's varying linguistic needs.
- I acknowledge that the risks and benefits of participating in this study have been explained to me to my satisfaction.
- I understand that in this study I will be required to participate in an online ZOOM interview with the student Researcher which contains around 10 questions and lasts approximately 45 minutes and no more than an hour.
- I understand that my participation may be audio taped.
- I understand that being in this study is completely voluntary.
- I am assured that my decision to participate will not have any impact on my relationship with the research team or the University of Sydney.
- I understand that I am free to withdraw from this study at any time and that I can choose to withdraw any information I have already provided (unless the data has already been de-identified or published).
- I have been informed that the confidentiality of the information I provide will be protected and will only be used for purposes that I have agreed to. I understand that information about me will only be told to others with my permission, except as required by law.

- I understand that the results of this study may be published, and that publications will not contain my name or any identifiable information about me.

- I confirm the following:

I consent to audio recordings Yes ☐ No ☐

I would like to review my interview transcripts Yes ☐ No ☐

I would like feedback on the overall results of this study Yes ☐ No ☐

I consent to being contacted for future studies Yes ☐ No ☐

If you answered **yes**, please provide your preferred contact details (email/telephone/postal address):

- I understand that after I sign and return this consent form it will be retained by the researcher, and that I may request a copy at any time.

Participant Name _____

Signature _____

Date _____

Appendix I.

Example Spreadsheet Table Used for Thematic Analysis

Figure I

Example Spreadsheet Table for How Each Theme is Broken Down

Themes	Sub-themes	Examples & Analytical Notes	
Variations in children's Vocab task scores <i>(This theme contains information about the spectrum of children's Vocab task scores observed due to a range of factors throughout the test)</i>	Children's first language other than English <i>(This sub-theme refers to teacher's reflections on how EAL children perform throughout the Vocab task)</i>	"Yes, definitely, I mean, we have a few that speak fluent Fas with no pronunciation errors or anything. When you came down to that one and one test, they would either withdraw or be shy or not be sure." – Teacher A "We have one child who's pretty much come up on the emerging section. He speaks Spanish as well as English home - So we do know he goes to also speech therapy, so we kind of work alongside with the speech therapist as well in terms of their language and their vocabulary, things like that...I think it can yeah, obviously we know there are some things that (the child) he might kind of tend to say in Spanish instead of the English. Just if it might not be their language, just as their confidence and things like that." – Teacher L "It sure does, it does reflect like a lot because sometimes they end up saying it in their own language...I can't really say they answered it correctly because obviously it has to be answered in English... Even though I know what they're trying to say is exactly the same as what it is in English... Like water, aqua. They say aqua, which is like water in Spanish when they say that, yes, it is correct technically, but it's not in English, so that affects the scores." – Teacher S "Well, I have a little boy that speaks Vietnamese at home. And when did the toolbox he only had only just been at the centre probably would have been only a month. And some of the pictures he would say in English and then some pictures I'm guessing he was saying in Vietnamese...so I said to his family that I have to mark them as 'I don't know'. But then when I did it again with him the next time around, it's amazing how much more that he picked up...even his family were saying, he's coming home and talking so much more and so much more English as well, which is really a lovely to hear from the parent perspective too." – Teacher K Analysis: The Early Years Learning Framework V2.0, 2022 [EYLFV2] highlights that the relationships between educators and children as well as families are improved when a culturally and linguistically safe learning environment is established where educators acknowledge and advocate for children's cultural identity and their first languages (Australian Government Department of Education for the Ministerial Council, 2022). Therefore, children tend to feel a stronger sense of belonging in such setting in appreciation of linguistic diversity. These teachers' reflections show that for children whose first language is English, the EYT serves the purpose of assessing their oral English language proficiency as a developmental tool. Nevertheless, for EAL children, the EYT has a seemingly different function, being rather an assessment of skills in an additional language. In reference to the EYLFV2 learning outcome 4" Children are confident and involved learners" (Australian Government Department of Education for the Ministerial Council, 2022), one of the key strategies for educators to support children's learning is to "understand that competence is not tied to any particular language, dialect or culture." This demonstrates that when educators interpret the data derived from the EYT, it is crucial to keep in mind that the result does not necessarily show the whole picture of a child's language capability and the educators also need to pay close attention to fostering children's sense of belonging and security in their learning environment, in particular with EAL children.	
	Children's individual experiences <i>(This sub-theme refers to children drawing on their lived experience when answering the Vocab task questions)</i>	"Like the (picture) fountain, they might go like, you know, they can sometimes say water, and you kind of go, 'what else might be called?' And they kind of like, 'but I go to the park and I've seen that in the park.' So they connect it to their own personal experiences. So you kind of know they kind of grasp what it is, but they just don't know the terms. So you got to kind of put that they know they didn't answer it. But I think having that making sure you kind of then do follow on with other language they use and vocab they use to explain that" – Teacher L "When they give me an answer like, 'it was a dark and stormy night...' It's so rich and it's so descriptive and it's so creative, and it's actually such a huge expression of their vocabulary and literacy skills yet because they didn't identify the exact, exact thing." – Teacher F "There are pictures about instruments there that sometimes the children don't have any interaction of in the past. And then just because they don't know that particular instrument, that doesn't mean like they completely don't know how to express themselves. It's just that they have not interacted in that kind of, like sort of instrument before. So it's just kind of unfair just because they don't have that sort of experience." – Teacher S "I think a lot, you know, depends on how much knowledge they have. So some children with English as second language, they still have a lot of knowledge about various elements in their environment. They would know a lot about the musical instruments, which a child with English as first language may not know much due to low exposure..." – Teacher M Analysis: The EYLFV2 (2023) states that "Educators understand the importance of including children's voices and contributions to assessment. Assessment strategies that are inclusive, culturally and linguistically relevant, and responsive to the physical, emotional, social, intellectual and regulatory capabilities of each child will acknowledge each child's abilities, strengths and competencies". It is evident that while using the EYT to assess children's English language development, the teachers were able to recognise and intentionally identify children's interactions and communication throughout the test, in conjunction with noting down their scores. The teachers do emphasise that there were instances where the EYT assessments were unable to assess some aspects of language skills - a value in the language was stimulated, that they could call on to respond. However, this was not measured, although it indicated language skills.	
		Relevance of the Illustrations to Children's Lived World	Authenticity and Style of the Illustrations
		"It does...but I found some of the things that sort of hold back the children in terms of getting better results is some of the objects that children are required to identify in the APP don't really seem like things that they access in a modern context...Like the calendar. Like I haven't seen a calendar with that with a spiral bound calendar on a wall since my grandma's kitchen in 1988...So I don't think they see that sort of thing a lot of the time, so I think some of those things hold them back a little bit. And another thing I sort of struggle with... if it was possible is the very limited and restricted way that they're expected to answer... A little bit more deeper looking at the things that the children are expected to identify in this more modern context... Like the calendar... No, the kids aren't seeing that spiral bind thing on the wall because everybody's	"...there is like a picture of a child who is sweating in the Vocab section. And a lot of children sort of mistaken it as crying or you know raining on..." – Teacher S "I'm trying to think of one like the spider. There's the picture of the spider, and some of the children will just say, like, because it doesn't really look like a spider..." – Teacher K "I thought that certain visuals were a bit confusing and that was very consistent with all the children. For example, the winking match (face). It takes too long for the person to wink and the child(ren) are, you know, when they look at the person, they say, he looks okay - And then the wink can happen a few seconds later..." – Teacher M