

Curriculum-Based Dynamic Assessment of Narratives: Benefits for Bilingual Filipino Children

Anne Laurie

A Thesis
In the Department
of
Education

Presented in Partial Fulfillment of the Requirements

For the Degree of
Doctor of Philosophy (Education) at
Concordia University
Montréal, Québec, Canada

July 2023

© Anne Laurie, 2023

CONCORDIA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

This is to certify that the thesis prepared

By: Anne Laurie

Entitled: *Curriculum-Based Dynamic Assessment of Narratives: Benefits for Bilingual Filipino Children*

and submitted in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY (Education)

complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Signed by the final examining committee:

_____	Chair
Dr. Walcir Cardoso	
_____	External Examiner
Dr. Patricia Cleave	
_____	Examiner
Dr. Harriet Petrakos	
_____	Examiner
Dr. Sarita Kennedy	
_____	Examiner
Dr. Miranda D'Amico	
_____	Thesis Supervisor
Dr. Diane Pesco	

Approved by:

Dr. Sandra Martin-Chang, Graduate Program Director

Dr. Pascale Sicotte, Dean, Faculty of Arts & Science

August 23, 2023

ABSTRACT

Curriculum-Based Dynamic Assessment of Narratives: Benefits for Bilingual Filipino Children

Anne Laurie, Ph.D.

Concordia University, 2023

In 2021, people of Filipino origin arriving in Canada reached nearly one million, leading to rising numbers of Filipino children in Canadian schools (Statistics Canada, 2022). Filipino-speaking children who display challenges in learning the language of instruction may be referred for language assessment. However, standardized assessments are often not suited to children acquiring a second language, leading to inaccurate conclusions regarding their abilities. This set of studies examines the benefits of a novel curriculum-based dynamic assessment (CBDA) developed to assess the narrative abilities of children acquiring English as a second language.

Study 1 examined the accuracy of the CBDA in distinguishing typical language development (TD) from language difficulties (LD) for 34 bilingual Filipino children and compared the classification accuracy to the *Test of Narrative Language – Second Edition* (TNL-2; Gillam & Pearson, 2017). The results showed that the CDBA was an excellent predictor of language ability.

Study 2 examined narrative microstructure for children from Study 1 at pretest and posttest. Children in the TD group scored higher than the LD group on productivity measures at both pretest and posttest and on complexity measures at pretest. The TD group also improved on the productivity measures, while the LD group did not change on either the productivity or complexity measures.

Study 3 explored the modifiability ratings and performance on the TNL-2 of four kindergarten children with LD who participated in the first two studies, using a multiple case-

study design. All four children showed difficulties answering wh-questions appropriately and warranted high examiner effort. They displayed differences in their learning preferences and potential and performed differently from one another on the TNL-2.

Study 4 explored Filipino-Canadian parents' views on Filipino children's narratives and on the usefulness of the CBDA through focus groups. They indicated that the story content was influenced by personal experiences common in the Filipino culture and described "good" stories as elaborated and structured in keeping with story grammar models. Lastly, parents appreciated the CBDA's focus on individual capabilities and its cultural sensitivity.

Together, the studies provide evidence that the CBDA of narratives is valuable for assessing Filipino- and English-speaking children and contributes to research on dynamic assessment for bilingual children.

Acknowledgements

The completion of this arduous journey could not have happened without the support of numerous individuals in my corner, and for that, I thank you all.

First and foremost, I am deeply indebted to my unbelievably supportive supervisor, Dr. Diane Pesco. I want to convey my profound appreciation for your instrumental role in shaping not only my academic trajectory but also my personal growth. Thank you for taking a chance on me and for your meticulous attention to detail when I needed it the most, and for mentoring me with unwavering patience and care. I am forever grateful for the way you went above and beyond every step of the way and kept me motivated. I am immensely grateful for the invaluable “teaching moments” that have contributed to my growth as a confident researcher. I am fortunate to be your student.

I am deeply grateful to my committee members Dr. Harriet Petrakos, Dr. Sarita Kennedy for guiding my dissertation in directions I never would have taken if it was not for your expertise. Thank you, Dr. Miranda D’Amico for also being a part of my team and to Dr. Walcir Cardoso for your enthusiastic and engaging conversations along the way. Lastly, I extend further thanks to Dr. Patricia Cleave for agreeing to join the committee as an external examiner.

To my parents, it is rare to find both parents who fully understand the difficulty of a PhD endeavor and are able to provide guidance, whether it be through challenging methodological and statistical conversations, or practical applications of my work. Countless days were spent engaging in thought-provoking discussions where they challenged my perspectives and pushed the boundaries of my understanding. Your perspectives on education have enriched this dissertation immensely. Your dedication has not gone unnoticed, as you have graciously prioritized my aspirations, providing the necessary resources, emotional support, and

encouragement required to navigate the complexities of a doctoral program. Merci pour tout. Je vous aime.

To Dave, Steve, Glaiza, Raiza, Rio, and Rianne. Thank you for keeping me human during these intense years and for being there when I needed you the most. It is a pleasure to watch us all grow together.

To the Acosta family, especially Keann, Kara, and Georgel, you have been not only the best research assistants, but also cherished family members. I hope you know I have learned so much from each of you, and I hope to continue to.

There have been many Concordians who have been by my side since Day 1, providing invaluable support throughout the years. Among them, I am particularly grateful to my girls Monyka, Nasim, and Bojana. While our similarities keep us close together, it is our differences that make us grow. In this often solitary pursuit, our collective bond became an unwavering source of strength, support, and inspiration. Together, we have navigated uncharted intellectual territories, overcame many challenges, and celebrated triumphs. I genuinely could not have done this without your friendship. I am immensely excited to witness the futures that await us, and I will be wholeheartedly cheering you on every step of the way.

To my New River Beach community, your incredible support during these past few years has filled me with immense pride to call this place home. Whether it was your drop-ins for a chat, the wonderful get-togethers in the evenings, or your kind gestures of bringing food for me and my dog, you have truly exemplified the spirit of community.

Merci au Fonds de recherche du Québec de m'avoir soutenu pendant mes études. Cette subvention a joué un rôle crucial dans l'allègement des contraintes financières, me permettant de me consacrer à mes activités de recherche.

Panghuli, sa mga lumahok sa aking pagsasaliksik, ipinaaabot ko ang aking lubos na pasasalamat. Salamat sa pagtanggap sa akin sa inyong mga tahanan sa mapanghamong panahon ng COVID-19. Pakiramdam ko ay napakapalad ko at nagkrus ang ating mga landas, at nasaksihan ang mga pagkakaibigang umusbong mula sa ating mga pagtatagpo. Ang gawain ko ay para sa iyo at sa lahat ng mga bata na madama na kinakatawan sila sa sistema ng paaralan.

Dedication

To Nanny,

for inspiring me to forge my own path and for being there with every ocean breeze, future and past.

To my great-great-great grandfather John A. Clark, the first schoolteacher in Fundy Shores. I hope you are proud.

For God gave us not a spirit of fear but of power, love, and self-discipline.

2 Timothy 1:7

Contribution of Authors

The four studies in this dissertation are co-authored with my supervisor, Dr. Diane Pesco. Study 1 has been published in *Language, Speech, and Hearing Services in Schools*. Study 2 will be submitted for publication as research notes to the *Canadian Journal of Speech-Language Pathology and Audiology*. Study 3 is under review at *Child Language Teaching and Therapy*. Study 4 will be submitted for publication to *Journal of Language, Identity & Education*.

Outlined below are individual contributions.

Research design: Anne and Diane

Development of narrative tasks, mediation strategies, language questionnaire, focus group questions: Anne with feedback from Diane

Recruitment and data collection: Anne

Data analysis: Anne

Manuscript writing: Anne with feedback from and editing by Diane

Funding: FRQSC Doctoral Fellowship, The O'Brien Fellowship, Concordia University

Table of Contents

List of Figures.....	xvii
List of Tables.....	xviii
Definitions of Key Terms.....	xix
General Introduction	1
The Educational Context for Immigrant Children	1
Language Assessments.....	2
Dynamic Assessment.....	4
Theoretical Basis of Dynamic Assessment.....	5
Dynamic Assessment in Practice	6
Curriculum-Based Dynamic Assessment	7
The Importance of Assessing Narratives.....	8
Story Grammar Model.....	9
The Context of English Exposure in the Philippines	10
Filipino Children’s Narratives.....	11
The Dissertation Studies	12
Original Contribution.....	15
Study 1: Curriculum-Based Dynamic Assessment of Narratives for Bilingual Filipino Children	17
Abstract.....	18
The Importance of Narratives	19
Dynamic Assessment.....	20
Test–Teach–Test Approach.....	22

CBDA.....	22
Dynamic Assessment of Narratives.....	23
Purpose of This Study.....	24
Method.....	25
Recruitment and Inclusion Criteria.....	25
Language Exposure.....	26
Language Ability Group.....	26
Study Design.....	28
Pretest Measures and Procedures.....	29
Single-Picture Task.....	29
Standardized Narrative Measure.....	31
Teaching Phase: Mediation Procedures.....	32
Posttest Measures and Procedures.....	34
Reliability.....	34
TNL-2 and Single-Picture Task.....	34
Modifiability.....	35
Data Analysis.....	35
Results.....	36
Discriminant Analysis and Logistic Regressions.....	37
Modifiability.....	39
Posttest Predictors.....	39
Pretest Predictors.....	39
ROC Curve Analysis.....	40

Discussion.....	42
Classification Ability of the Predictors	42
Implications.....	45
Limitations and Future Directions.....	46
Conclusions.....	47
Connecting Study 1 and Study 2.....	49
Study 2: A Brief Look at the Microstructure in the Narratives of Bilingual Filipino	
Children	51
Abstract.....	52
Dynamic Assessments of Microstructure.....	54
Method	55
Participants and Design.....	55
Measures and Procedures	56
Data Scoring and Reliability	57
Data Analysis.....	57
Results.....	58
Productivity	59
Complexity	61
Discussion.....	62
Implications.....	64
Future Directions and Limitations.....	65
Connecting Study 2 and Study 3.....	67

Study 3: Dynamic Assessment of Narratives: Case Studies of Bilingual Filipino

Kindergarteners with Language Difficulties	68
Abstract	69
Narratives of Children with Developmental Language Disorder (DLD).....	70
Dynamic Assessment and Bilingual Children with DLD	71
Methods.....	73
Participants	73
Design.....	75
Testing Phase Measures and Procedures.....	75
The Single-Picture Task.....	75
Test of Narrative Language—Second Edition (TNL-2)	76
Mediation Measures and Procedures.....	77
Results.....	78
Mediation Sessions by Child.....	78
Maria.....	79
Daniel.....	82
Tyson	84
Jackson.....	86
Summary Across Children	88
Test of Narrative Language—Second Edition (TNL-2).....	89
Discussion.....	89
Similarities and Differences Amongst the Children.....	90
Implications, Limitations, and Future Directions.....	92

Conclusion	93
Connecting Study 3 and Study 4.....	94
Study 4: Filipino Parents’ Views on Their Children’s Stories and on the Usefulness of a Curriculum-Based Dynamic Assessment.....	95
Abstract.....	96
Immigrant Parents’ Views on Children’s Language Skills.....	98
Cross-Cultural and Cross-Linguistic Differences in Children’s Narratives.....	98
Filipino Children’s Narratives.....	99
Filipino Children and English Exposure.....	101
Study Design and Aims.....	102
Method	102
Participants.....	102
Materials.....	103
Procedures.....	104
Data Analysis.....	106
Reliability.....	107
Results.....	107
Parents’ Interpretations of Filipino Children’s Stories.....	108
Theme 1: Story Content Concerning Relation to Children’s Experiences.....	108
Theme 2: Views of “a Good Story”.....	110
Theme 3 – Filipino Children’s Language Abilities in English.....	112
Theme 4 – Views and Practices Related to Children’s Learning.....	114
Parents’ Views on the CBDA.....	116

Theme 1. CBDA: “Better Cater[s] What Filipino Kids Really Need”	116
Theme 2. Desires for CBDA Expansion.....	118
Discussion.....	119
Filipino Children’s Stories	120
Views on the CBDA.....	121
Limitations and Future Directions.....	122
General Discussion	123
Key Findings.....	124
Theoretical Implications.....	126
Implications for School-Based Practice	128
Implications for Non-Filipino Researchers Conducting Research with Filipinos Families....	131
Limitations	132
Future Directions: Practice and Research	133
Conclusion	136
References.....	137
Appendix A	162
Appendix B	163
Appendix C	164
Appendix D.....	166
Appendix E	168
Appendix F.....	172
Appendix G.....	176
Appendix H.....	177

Appendix I	178
Appendix J	179
Appendix K.....	182
Appendix L	186
Appendix M	188
Appendix N.....	190
Appendix O.....	191

List of Figures

Study 1

Figure 1 *Delayed Treatment Design* 29

Study 2

Figure 1 *INMIS Productivity Variables and Index by Group*..... 60

Figure 2 *INMIS Complexity Variables and Index by Group* 62

List of Tables

General Introduction

Table 1 <i>Dynamic Assessment: Components of Mediation (Based on Miller et al., 2001)</i>	7
---	---

Study 1

Table 1 <i>English Exposure and Language Use in the Home by Language Ability Group</i>	27
--	----

Table 2 <i>Participants by Language Group, Grade, Age, and Gender</i>	28
---	----

Table 3 <i>Descriptive Statistics of Predictor Variables for Discriminant Analysis</i>	38
--	----

Table 4 <i>Results from the Discriminant Function and ROC Curve Analyses</i>	41
--	----

Study 2

Table 1 <i>Pretest, Posttest, and Gain Scores on the INMIS Measures by Language Group</i>	58
---	----

Study 3

Table 1 <i>Children's Ages, Home Language Exposure, and Language Services</i>	74
---	----

Table 2 <i>Children's Scores on the Modifiability Rating Scale by Skill</i>	79
---	----

Table 3 <i>Maria's Narratives on the Single-Picture Task</i>	80
--	----

Table 4 <i>Daniel's Narratives on the Single-Picture Task</i>	82
---	----

Table 5 <i>Tyson's Narratives on the Single-Picture Task</i>	85
--	----

Table 6 <i>Jackson's Narratives on the Single-Picture Task</i>	87
--	----

Table 7 <i>Pre- and Post-Mediation Scores on the TNL-2</i>	89
--	----

Study 4

Table 1 <i>Themes Related to Parents' Interpretations of Filipino Children's Stories</i>	108
--	-----

Table 2 <i>Themes Related to the Usefulness of the Curriculum-Based Dynamic Assessment (CBDA)</i>	116
---	-----

Definitions of Key Terms

Filipino Language. Filipino is the official language in the Philippines and is generally considered to be the standard variety of Tagalog. The terms Filipino and Tagalog are often used interchangeably by Filipinos (Roseberry-McKibbin, 1997), including by the study participants.

Bilingual. For the purposes of this research, bilingual children were exposed to and spoke two languages, namely Filipino and English, in their daily lives whether at home, in the community, or at school. The children were learning English as a second language and had acquired Filipino as their native language.

Curriculum-Based. For the purposes of this research, curriculum-based refers to the skills, teaching methods, and materials that came from the child participants' school curriculum, namely the kindergarten to Grade 5 English Language Arts curriculum of New Brunswick.

Language Difficulty. For the purposes of this research, the term language difficulty describes children who scored below cutoff on a standardized parent questionnaire designed to identify language impairment amongst bilingual children. In most cases, parents also expressed concern about their child's language development and some children had been formally diagnosed with a language disorder or were receiving services for language difficulties.

Developmental Language Disorder (DLD). Developmental language disorder pertains to children whose language development deviates from the expected course despite typical development in other domains. DLD has replaced the term Specific Language Impairment in the literature and practice following Bishop et al. (2017).

General Introduction

According to the 2021 Canadian census, 1.3 million new immigrants settled in Canada between 2016 and 2021, representing 3.5% of the total Canadian population (Statistics Canada, 2022). Canadian children born of immigrant parent(s) numbered almost 1.9 million children under the age of 15, accounting for 31.5% of the total child population of Canada in 2021, compared to 29.2% in 2016. Over the same period (2016-2021), the number of people of Filipino origin arriving in Canada grew from 851,410 to 957,355, with the Philippines ranking second in the top places of birth among immigrants living in Canada (Statistics Canada, 2022).

The Educational Context for Immigrant Children

In terms of educational achievement, immigrant children are more likely than their non-immigrant counterparts to pursue post-secondary education and receive a post-secondary degree (OECD, 2017). Moreover, their parents are more likely to hold a post-secondary degree than their non-immigrant counterparts which can lead to better educational outcomes for the children (Childs et al., 2018). For immigrant children, however, educational achievement in the early years of school is highly dependent on proficiency in the language of instruction, and low proficiency can have adverse effects on school performance (Hoff, 2013; Prevoo et al., 2016).

Research reveals that children may appear to lack proficiency in the language of instruction for various reasons. One possibility is that a child possesses language skills in the language of instruction different from the skills the school values and expects (Hoff, 2013; Koury & Votruba-Drzal, 2014; Peña et al., 2006; Taylor & Payne, 1983). Another reason is that the child is still learning the language of instruction as a second/additional language and simply needs greater exposure to the language. A third possibility is that the child has an underlying difficulty with acquiring language that if left untreated in the early years, may lead to later

difficulties in literacy (Preston et al., 2012; Storch & Whitehurst, 2002) and academic, social, and professional areas (Dodd, 2013; McCormack et al., 2009).

In cases of slow acquisition of the language of instruction, children may be referred to speech-language pathologists (SLPs) and/or child psychologists for assessment (Haywood & Lidz, 2007), defined broadly as “the process of data gathering that informs decision making” (Lidz, 2002, p. 2). Historically, education practitioners and speech-language pathologists have assessed children using traditional standardized assessments without intentional regard for cultural background (Peña et al., 1992). This is problematic for immigrant children from culturally- and linguistically-diverse backgrounds, defined here as cultural/ethnic and linguistic backgrounds different than the majority in a particular place. For instance, in Canada, European descendants most likely speak English or French as their primary language (Statistics Canada, 2023a). Families from culturally or linguistically diverse backgrounds bring with them worldviews, language, traditions, and customs that may be different than those found in the majority culture (Costigan et al., 2016). These differences may be amplified for children in such families at school, as the linguistic, social, and pedagogical expectations may differ from what they were accustomed to in their home country (Masten et al., 2012). In recent years, these differences have come to be seen in a more positive light and pedagogical practices are increasingly guided by ideologies that immigrants and culturally-diverse people bring rich knowledge and experience from which all members of a school community can benefit (Roessingh, 2020).

Language Assessments

While clinicians and practitioners have made great strides to promote cultural diversity in schools and educational curricula (Roessingh, 2020), diagnostic language assessments have

fallen behind (Bedore & Peña, 2008; Orellana, et al., 2019) and remain subject to bias. Bias involves a “systematic error in the estimation of a value” (Reynolds & Suzuki, 2003, p. 83). Although standardized and normed-referenced measures are widely used in research and practice, they may be biased because they are normed on populations that do not include culturally and linguistically diverse children. Bias may also arise from tests being administered by examiners with a middle-class mainstream background (Ball, 2007; Laing & Kamhi, 2003). Every examiner has their own biases and may unconsciously project their cultural beliefs, attitudes, conventions, and values onto children (Eriks-Brophy, 2014). Biases can increase when an examiner knows little about the children’s language and culture, does not recognize that children and/or their parents possess different beliefs than they do (e.g., regarding the child’s role in adult-child communication), or considers only their own beliefs as valid. Biases can not only affect children’s performance but also affect how children’s abilities are perceived. Charity and colleagues (2011), for example, found that educators can perceive children outside the majority cultural group as less intelligent than their mainstream peers, even when they perform similarly on tests. Yet another source of bias is the assumption that all children from a particular cultural or ethnic background think, speak, and learn the same way (Saenz & Huer, 2003). Assuming homogeneity is risky since heterogeneity can exist within even a small sample (e.g., a sample could include families with varied socioeconomic statuses, dialects, and geographical origins; Peña et al., 1992).

Given the various sources of potential bias, traditional language assessments may underestimate children’s true language abilities (Hasson & Joffe, 2007; Peltier, 2011; Reynolds & Suzuki, 2003); this can be problematic with the ever-increasing number of immigrants to Canada, with many of these families speaking one or more minority languages different than the

official languages taught in schools (Slavkov, 2017). This is true for many Filipino children in New Brunswick, where the study took place, who have Filipino (the official language in the Philippines) as a primary language and may have little exposure to English before entering kindergarten. With the number of immigrant children rising in Canada (Statistics Canada, 2023b), careful attention is needed to ensure language assessments are as culturally bias-free and as accurate as possible in assessing children's true language abilities (Reynolds & Suzuki, 2021).

In recent years, researchers and clinicians have looked at using dynamic assessment as a culturally-sensitive way to assess the language of children from culturally-diverse backgrounds (Eriks-Brophy, 2014; Peña et al., 1992; Stevenson et al., 2016). The following section focuses on this type of assessment and how it can be helpful in assessing the language of children from culturally- and linguistically-diverse backgrounds such as bilingual Filipino children.

Dynamic Assessment

Dynamic assessment has been used to assess a wide range of skills vital for children's literacy and language success and is gaining in popularity, particularly when assessing children from culturally-diverse backgrounds (e.g., Gutiérrez-Clellen & Peña, 2001; Gutiérrez-Clellen & Quinn, 1993; Henderson et al., 2018; Kramer et al., 2009; Lidz & Peña, 1996; Peña et al., 2006; Orellana, et al., 2019; Petersen, et al. 2017, 2020; Stevenson et al., 2016). Differentiating between language differences (as one might observe in bilingualism) and language disorders is one of the original purposes of dynamic assessments. Supporters of dynamic assessment claim that this assessment approach provides "more reliable, valid, and diagnostically and prescriptively useful estimates of the tested abilities, or competence, than would be the case if the same tests were administered under traditional psychometric methods" (Dillon, 1997, p. 164). Dynamic assessment is a process-oriented method of evaluation that focuses on the child's

ability to learn and master a skill and on what the child can do as opposed to what the child cannot do or is lacking (Feuerstein, 1977; 1981; Hasson, 2018; Lidz, 1991; Peña et al., 1992).

Three features which distinguish dynamic assessments from standardized and normed-referenced assessments are: examining the learning process in addition to the assessment's results; providing continuous feedback to the child throughout mediation; and using individualized intervention to suit their learning needs and styles (Grigorenko & Sternberg, 1998).

Theoretical Basis of Dynamic Assessment

As detailed below, Vygotsky's scaffolding principles and Feuerstein's mediation principles fit into sociocultural theory in which language learning is assumed to be a social process (Vygotsky, 1986). According to Vygotsky's model, children learn from their environment through social interaction with adults or more capable learners. For example, children begin to experience cognitive activities such as problem-solving when in the company of others. Then, through modelling and scaffolding by more capable learners, children internalize the problem-solving strategies until they can implement them independently. Implied within Vygotsky's theory of cognitive development is his concept of the zone of proximal development (Vygotsky, 1978). The zone of proximal development refers to the difference between what children can do on their own versus in the presence and with the assistance of others. The level of assistance a child needs shows how close they are to reaching independent functioning.

While Vygotsky's followers, such as Campione, Brown, and colleagues, integrated Vygotsky's principles to dynamic assessment, the teaching technique used with each child was predetermined and structured (Campione & Brown, 1987; Campione et al., 1984). Although this approach increases reliability in ensuring each session is carried out in the same way, it is not designed according to children's individual needs. In contrast, the most prominent theorist in

dynamic assessment, Reuven Feuerstein, recommended tailoring mediation to the child.

Feuerstein was primarily interested in using scaffolding to examine individual children's learning processes: that is, their responses to interaction and the type of support they need to demonstrate learning (Feuerstein, 1977; Feuerstein et al., 2002). He argued that these are better indicators of a child's overall potential and future academic achievement than standardized measures.

According to Feuerstein (1981), mediation occurs in two steps. First, the child encounters a stimulus in his or her environment. Second, a mediator, usually a more expert or capable individual in the targeted area, supports the development of the child's understanding and thinking skills to modify the child's cognitive structure. These steps are crucial for mediation (Feuerstein 1977, 1981; Feuerstein et al., 1980, 2002; Lidz, 1983).

Dynamic Assessment in Practice

The purpose of one-on-one mediation is to help a child interact more effectively with the learning task until skills are mastered and performed independently. For this to occur, several steps or strategies need to be implemented: stating the skill's intent and meaning, developing metacognitive awareness of the skill, planning, and ensuring skill transfer. Table 1 illustrates how to implement the strategies effectively (Miller et al., 2001). To assess the effects of mediation, examiners often assess the children's overall modifiability during each session (Lidz, 1983).

The concept of modifiability and the development of a modifiability rating scale to assess modifiability was first introduced by Lidz (1987; 1991). The modifiability ratings are based on a child's level of responsiveness to mediation, their level of skill transfer, and the amount of effort the examiner had to put in to achieve skill transfer. In research contexts, the modifiability scale has often been used successfully to classify children into a typically developing or language disorder group (Orellana et al., 2019; Peña et al., 2007). Gingrich (2019) provides additional

evidence of the effectiveness of modifiability in accurately classifying children by language group. Based on his literature review on the classification accuracy of dynamic assessment implemented with culturally-diverse children, he claimed that modifiability ratings were “the most robust indicator of classification for children as language impaired or typically developing” (p. 6). In turn, the information gathered during mediation may lead to more effective interventions (Peña, 2000).

Table 1

Dynamic Assessment: Components of Mediation (Based on Miller et al., 2001)

Strategy	Implementation	Desired outcome for child
Intentionality	The examiner communicates the purpose of mediation and names the skill.	Child is aware of the session’s goal.
Meaning	The examiner explains the purpose and value of the skill.	Child understands why the skill is important.
Transcendence	The examiner helps the child develop metacognitive awareness of the skill. The examiner might ask “what if” and “why” questions to guide the child.	Child learns to think hypothetically and independently.
Planning	The examiner helps the child think about the skill’s importance and how to use the newly learned skill.	Child learns to be self-regulated and an active participant in own learning.
Transfer	The examiner summarizes the session by helping the child think about using the newly learned skill in other contexts and future settings.	Child learns that the skill can be applied to different contexts.

Curriculum-Based Dynamic Assessment

One criticism of dynamic assessments and language assessments in general, particularly in educational settings, is the uncertainty that the assessment goals match the children’s school curriculum outcomes (Haywood & Lidz, 2007). Therefore, to overcome this limitation, dynamic

assessment can be curriculum-based (Barrera, 2003; Haywood & Lidz, 2007). Curriculum-based dynamic assessment (CBDA) involves using the school's curriculum to determine dynamic assessment goals (Haywood & Lidz, 2007; Lidz, 1991). CBDA's aim is to maximize the link between assessment and classroom instruction. That is, it uses the curriculum's objectives to identify gaps in children's learning that are directly relevant to them (Eriks-Brophy, 2014; Haywood & Lidz, 2007) as it is the nature and degree of the gaps that define children's learning difficulties (Haywood & Lidz, 2007).

CBDA is also relevant to any school curriculum because it often uses classroom materials, which avoids the heavy costs and low ecological validity that frequently come with standardized assessments. Researchers support linking assessment to classroom instruction for second language learners and children from culturally-diverse backgrounds who possess learning difficulties (Barrera, 2003; Ortiz & Wilkinson, 1991). The information gained from CBDA can offer educators insights into a child's knowledge of the curriculum content and indicate approaches to help the child master such content (Haywood & Lidz, 2007). In turn, this could lead to recommendations to other professionals (e.g., resource teachers, educational assistants, and speech-language pathologists) providing additional intervention to a child (Lidz, 1991). An additional benefit of CBDA is that it allows for everyone involved with children's academic achievement to be on the same page whether they are classroom teachers or clinicians.

The Importance of Assessing Narratives

Alongside dynamic assessment, practitioners have noted the usefulness of assessing narratives in culturally-and linguistically diverse children (Henderson et al., 2018; Kramer et al., 2009; Peña et al., 2006; Petersen et al. 2017; 2020). Narrative assessments have been widely recommended for culturally-diverse children due to the universality of the narrative genre (Ball

& Bernhardt, 2008; McKeough et al., 2008; Peltier, 2014; Westby et al., 2002), but they can also reveal cultural variations in narrative content, structure, and purpose (Gorman et al., 2011; Uccelli & Paez, 2007). Such assessments also offer a breadth of information on children's vocabulary and grammar in addition to story production and comprehension.

Early use of narratives is also a predictor for later academic achievement. Understanding and producing narratives is a critical part of children's development (Davies et al., 2004). In the first five years of children's lives, they learn to use words that develop into meaningful conversations to express ideas, recount past experiences, and create fictional stories (Boudreau, 2008). These conversations all depend on various domains such as memory, language, and social (Hudson & Shapiro, 1991). Research shows that children who demonstrate well-developed and coherent narratives have an academic advantage over children with less developed narratives (Griffin et al., 2004; Schick & Melzi, 2010; Westerveld & Gillon, 2010). In contrast, DLD is associated with difficulties in performing narrative tasks such as retelling a story, linking story ideas together, and organizing a story (Gillam & Pearson, 2017).

Story Grammar Model

Stein and Glenn (1979), whose work has been highly influential, proposed that stories follow specific patterns or "story grammar". According to these authors, complete narratives contain one or more episodes, and each episode typically contains one or more characters; a setting (place and time); initiating events (i.e., events that seek out motivation); a problem or a goal to be achieved by the main character(s); attempt(s) to solve the problem or to achieve the goal; consequences of those attempts; internal states (i.e., emotions and mental states of character(s)); and a resolution. The story grammar model is based on the notion that individuals have a story schema (i.e., a mental structure) that informs narrative processing and production.

Stein and Glenn (1979) examined young children's narratives and found that children between the ages of 3 and 5 years told stories that described the character(s) and actions but often did not follow a chronological or logical sequence and thus were hard to follow. According to the researchers, children around 6-years-old were able to tell more cohesive and organized narratives than younger children. Many later studies have shown developmental effects for story grammar (e.g., Boudreau, 2008) and Owens (2013) argues that by age 10, children typically produce narratives containing all the story grammar elements.

While there are developmental trends in narrative production, what is considered a good story is often culturally- and linguistically-dependent (Westby et al., 2002). Thus, the next section elaborates on the sociocultural and linguistic background of Filipinos, the dissertations' targeted population, and on why an investigation of Filipino children's English narratives with a dynamic assessment is warranted. This is followed by a discussion of what is known so far about Filipino children's narratives.

The Context of English Exposure in the Philippines

English has had a long-standing presence in the Philippines, even before Filipino became the official language in 1973, as it was a tool for government employment (Thompson, 2003). Filipino governmental policies mandate English language classes for public and private school students from primary to secondary education (Lucas et al., 2016). English learning in the Philippines can be characterized by two approaches: surface learning and deep learning. Surface learning focuses on memorization and basic understanding, while deep learning involves more complex thinking and problem-solving (Bernardo, 2008). Many Filipino teachers tend to rely on surface learning due to curriculum expectations (Thompson, 2003).

Another language phenomenon in the Philippines is the emergence of "Taglish," which blends English words into everyday spoken and written Filipino. Taglish has become the preferred dialect among many young Filipinos, surpassing English (Lucas et al., 2016). In the capital city of Manila, educated Filipinos predominantly use Taglish unless specific professional contexts require English or Filipino such as law, health care, education, and business management (Go & Gustilo, 2013). This language preference extends to white-collar and blue-collar job settings, shaping language mastery among children.

Considering the increasing popularity of Taglish as the everyday spoken and written language and the presence of English in the school system, we can assume that Filipinos who arrive in Canada as immigrants have varied levels of English proficiency. Filipino children newly arrived in the Canadian education system may lack exposure to academic English, making appropriate classroom instruction and intervention beneficial for them to maximize their English language development. To ensure this benefit, the language assessments that examine the children's English language abilities need to capture their true language abilities for practitioners to make appropriate recommendations.

Filipino Children's Narratives

The literature on Filipino children's narratives is limited to a few studies. One study conducted by Lofranco and colleagues (2006) examined the narratives of six- and seven-year-old Filipino children who were English monolinguals with Filipino exposure in the home. They found that children's narratives in terms of story length and story complexity were comparable to normative data found in other studies of children from different backgrounds but of similar age. They also reported that the children who had the most Filipino exposure made more Filipino-influenced errors such as violations of English word order in a sentence, omission of tense

markers, verbless sentences, and gendered pronoun errors.

In another study conducted by Chua and colleagues (2017), narratives were elicited from five- and six-year-old Filipino-English bilingual children using a wordless photo sequence. The authors reported that while most of the children provided actions, only some provided other story grammar elements, in line with the authors' expectations given the children's age. However, an unexpected finding was a lack of character description, which according to the researchers contrasts with findings from past studies of children of a similar age.

Amora et al. (2020) used the Multilingual Assessment Instrument for Narratives (Gagarina et al., 2019) in English then adapted it to Filipino to examine how Filipino-English bilinguals in the Philippines ages 5-, 10-, and 22-25-years structure their stories in both English and Filipino. They reported that across the language groups, language did not significantly influence story structure, suggesting that story structure may depend on factors other than language (MacLeod & Pesco, 2022). However, the narratives told by 10-year-olds were similar to those told by the adults and consisted of significantly more story elements than 5-year-olds, supporting findings of age effects in previous studies (e.g., Fiestas & Peña, 2004).

The available studies inform readers that although there may be the presence of cultural and linguistic differences compared to English, Filipino children are expected to tell stories resembling a story grammar model and with similar length and complexity as English monolinguals. However, the content of bilingual Filipino children's narratives, along with parents' expectations of their children's narratives, remains unknown.

The Dissertation Studies

The overall goal of this dissertation was to develop, implement, and examine the effects and usefulness of a CBDA of narratives for first-generation Canadian bilingual Filipino children

attending elementary schools in a Canadian province. The CBDA was developed by consulting the province's provincial English Language Arts curriculum to identify narrative skills that children needed to know when it comes to constructing a narrative and supported by a commercially available dynamic assessment called *Dynamic Assessment and Intervention: Improving Children's Narrative Abilities* (Miller et al., 2001). Additionally, the CBDA was developed in consultation with an elementary school resource teacher, a Grade 2 classroom teacher, and an English-as-an-Additional Language teacher to ensure that the skills were indeed taught in the classrooms, the mediation strategies were aligned with classroom expectations, and to gather materials that could support high-quality mediation (e.g., worksheets). The studies received ethical approval from the Office of Research at Concordia University (see Appendix A). Children were recruited via a recruitment ad on Facebook (see Appendix B) and the snowball method. All children were either classified as either typically developing in language (TD) or having language difficulties (LD) via parent report using the *Alberta Language and Development Questionnaire* (ALDeQ; Paradis et al., 2010) and an author-developed questionnaire (see Appendix C and D for questionnaire in English and Filipino, respectively). Written consent was obtained from parents of children (see Appendix E and F for consent form in English and Filipino, respectively) and verbal assent was obtained from each participant before the data collection. Parents also received an information letter about the study (see Appendix G and H for English and Filipino, respectively) and information on how I would respect the university's health guidelines for in-person research during COVID-19 (see Appendix I for in-person human research approval letter).

Data collection was conducted in various locations across the province in the children's homes between March 2021 and September 2021. For data collection with parents, written

consent was obtained (see Appendix J and K for English and Filipino, respectively) and data was collected in person or virtually on Zoom.

The overall goal of **Study 1** was to examine the classification accuracy of various CBDA predictor variables compared to the widely-used, standardized, and normed-referenced Test of Narrative Language-2nd Edition (TNL-2; Gillam & Pearson, 2017). The TNL-2 and an author-developed task (i.e., the “single picture task”) were used to assess children’s narratives at pretest and posttest, and a modifiability rating scale was used during the mediation phase (see Appendix L). Pretest, posttest, and modifiability scores were analyzed using discriminant analysis and logistic regressions to examine which predictor variable best classified children. The CBDA is novel in that, to the best of my knowledge, there is no CBDA of narratives developed for culturally- and linguistically diverse children in mind.

Study 2 extended Study 1 as it examined the language used by the 34 bilingual children in their narratives, employing a measure of narrative *microstructure* (Justice et al., 2006), a term used to contrast with the overall or *macrostructure* of a narrative, addressed in Study 1. The *Index of Narrative Microstructure* entails measures of both productivity and complexity. Independent and paired-samples t-tests, and descriptive statistics were conducted to analyze differences. This study provides researchers and clinicians with a more comprehensive understanding of the children’s narrative microstructure skills and the potential of such skills in identifying children who are at risk for language difficulties. Additionally, it provides information on which skills may be appropriate to target for mediation.

While Study 1 and 2 utilized the whole sample, **Study 3** focused on four kindergarten children with language difficulties. The research explored their performance on CBDA, particularly during mediation, using a multiple case-study design. There is little research on the

performance of children with language difficulties during mediation. Therefore, clinicians working with bilingual Filipino children may not know what to anticipate when administering CBDA. Study 3 highlights the similarities and differences between the children as expressed by their responsivity, level of skill transfer, and the amount and type of examiner effort. Pretest to posttest scores on the TNL-2 were also explored to complement the children's profiles. Practitioners can gain insight from the profiles and may be inspired by some of the mediation strategies used with the children described in the study.

Study 4 explored first-generation Filipino-Canadian parents' views on children's narratives gathered in the previous studies and the usefulness of CBDA through two focus groups. Parents listened to audio-recordings of various narratives told by children (see Appendix M) and discussed the cultural and linguistic elements that could have contributed to their narratives (see Appendix N for focus group questions). They then shared their perspective on CBDA. Thematic analysis was used to extract themes from the discussions. The parents' interpretations of Filipino children's narratives obtained from the study can aid clinicians in recognizing differences that could be due to language and culture versus a DLD. The parents' views on assessment are additionally important given the neglect of this issue in research and the lack of recognition of parents as experts on their children (Garg, 2021; Gillanders et al., 2021). The present study helps fill this gap by giving the parents an opportunity to have their voices heard regarding a dynamic assessment of narrative skills represented in the school curriculum.

Original Contribution

Ultimately, to support bilingual Filipino children's academic success, it is imperative they have the essential language skills valued in the school curriculum and be able to express their identity, which can enhance both their academic achievement and overall well-being. This

chapter demonstrated the immediate need for culturally-sensitive language assessments. CBDA is an approach several scholars and assessment developers recommend increasing cultural sensitivity and relevance in the classroom. However, to date, no CBDA is commercially available to practitioners and clinicians, who are therefore forced to either continue assessing with traditional assessments or create their own CBDA with the uncertainty of its effectiveness. To the best of my knowledge, there has not been any curriculum-based dynamic assessment designed with Filipino children in mind. Such an assessment would provide rich information on Filipino children's language needs that could then inform recommendations to support their overall language development and academic success. In turn, clinicians and school-based practitioners can be more confident in interpreting children's language abilities and in the recommendations for intervention practices. The current study aims to fill this gap by piloting a CBDA of narratives to examine its effectiveness in distinguishing between LD and TD children and to provide essential information summarizing children's language and narrative abilities. Additionally, this dissertation focuses on gathering parent information on Filipino stories and their input on the usefulness of CBDA in assessing their children's language. Knowing this information could help clinicians understand cross-cultural and -linguistic elements that could help mitigate assessment biases due to cultural differences, thus contributing to more accurate interpretations of Filipino children's language abilities and distinctions between language difference and DLD.

Curriculum-Based Dynamic Assessment of Narratives for Bilingual Filipino Children

Anne Laurie and Diane Pesco

Department of Education, Concordia University, Canada

Citation:

Laurie, A. & Pesco, D. (2023). Curriculum-based dynamic assessment of narratives for bilingual Filipino children. *Language, Speech, and Hearing Services in Schools*, 54(2), 489-503.
https://doi.org/10.1044/2022_LSHSS-22-00117

Abstract

Speech-language pathologists need tools that can accurately estimate bilingual children's language abilities and thus help avoid misdiagnoses. This study addresses this need by investigating the accuracy of a novel curriculum-based dynamic assessment of narratives in distinguishing bilingual children with language difficulties (LDs) from children with typically developing (TD) language. Participants comprised 34 Filipino–English bilingual children attending elementary school in English: seven with LDs and 27 with TD language. All children were assessed on narrative skills relevant to their school curriculum during a dynamic assessment involving a test–teach–test sequence. We then examined how accurately the children's scores on narrative tasks completed during the test phases, and on a modifiability rating scale completed during the teaching phase, discriminated the LD and TD groups. According to discriminant analyses, logistic regressions, and receiver operating characteristic curve analyses, the modifiability rating classified the children with 97.1% accuracy. Children's scores on the narrative measures following the teaching phase were also better at predicting language group than their initial scores, with the Test of Narrative Language–Second Edition (TNL-2) Narrative Language Ability Index score reaching 100% accuracy at posttest. The curriculum-based dynamic assessment of narratives shows promise at distinguishing TD language from LD in a group of understudied bilingual children that is rapidly growing in both Canada and the United States. The findings compare favorably to past studies of dynamic assessment and extend this work by integrating curricular goals to the narrative assessment process.

Curriculum-Based Dynamic Assessment of Narratives for Bilingual Filipino Children

The issue of fairness in language assessment has been raised by researchers in the communication disorders field repeatedly (e.g., Bedore & Peña, 2008; Maul, 2015; Orellana et al., 2019) and has come again to the forefront as professional organizations seek to promote equity and honor the cultural and linguistic diversity found in contemporary societies (American Speech-Language-Hearing Association, 2022; Speech-Language & Audiology Canada, 2021). There is a growing awareness that standardized language assessments for children (as well as adults) may be biased towards monolingual learners and culturally insensitive (Carter et al., 2005; Hunt et al., 2022; Laing & Kamhi, 2003; Peña et al., 2006). Consequently, such assessments may be poor at estimating children's true language abilities (Hasson & Joffe, 2007). The need for assessments that lessen bias and permit accurate interpretations of children's language abilities is acute given global immigration rates and the accompanying rise in the numbers of children whose first language (L1) is different than the language they will likely be schooled in (Slavkov, 2017). In this study, we consider whether a form of assessment, namely, curriculum-based dynamic assessment (CBDA), can help meet this need for Filipino children, a population that grew in the United States from just over 2 million to over 4 million between 2010 and 2019 (Budiman, 2021). In Canada, Filipinos represented the largest group of new arrivals from 2011 to 2016 (Statistics Canada, 2017) and increased from 662,600 to 837,130 during the same period (Malek, 2021). The CBDA assessment we examine focuses on narratives, given their importance to children's communication and academic achievement.

The Importance of Narratives

Narratives have high ecological validity when measuring abilities in communication, given that they play a role in social interactions with others and make up a significant part of

children's discourse. Narratives are also present across culturally diverse populations, though the ways and times that stories are told are culturally governed (Eriks-Brophy, 2014). Narrators must employ grammar and particular vocabulary (e.g., temporal terms to sequence events and causal terms to link them) and must additionally organize their stories so they are both comprehensible and meaningful to listeners (Stadler & Ward, 2005). Researchers agree that narratives both reflect current oral language and can serve as a context for enhancing language skills since they require a higher level of linguistic complexity than everyday conversations (Stadler & Ward, 2005). These claims point to the importance of narrative development in children's academic success. Strong narrative abilities are associated with various literacy skills such as print knowledge, decoding, writing, and reading abilities (Griffin et al., 2004). Research shows children who demonstrate well-developed and coherent narratives have an academic advantage over children with less developed narratives (Schick & Melzi, 2010). For the reasons cited above, narratives are important to assess.

Dynamic Assessment

Standardized, norm-referenced assessments are commonly used to screen for or identify speech and language difficulties (LDs) and inform intervention, assess knowledge, and monitor performance over time (Haywood & Lidz, 2007). However, such assessments may be normed uniquely for monolingual children (Carter et al., 2005; Maul, 2015) or biased against children from cultural groups that are excluded or underrepresented in the norming sample (Laing & Kahmi, 2003). Thus, they may not provide the information needed to accurately distinguish language difference from language disorder for children who belong to nondominant linguistic and cultural groups (Peña et al., 2006), and this could lead to one of two undesirable outcomes. First, one might misdiagnose a child with a language disorder and then, recommend unnecessary

intervention (Hunt et al., 2022), which could, in turn, lead to the child missing significant class time and instruction (Gándara et al., 2005). Conversely, one might attribute any differences in the child's language relative to peers to their linguistic and cultural environment and, consequently, not refer a child for treatment even when it is needed (Hunt et al., 2022; Peña et al., 1992). To circumvent these risks, practitioners are increasingly valuing dynamic assessment.

Dynamic assessment is framed by Vygotsky's model of cognitive development (Vygotsky, 1978) and Feuerstein's notion of structural cognitive modifiability (Feuerstein, 1977, 1990; Feuerstein et al., 1980), both of which propose that children learn from their environment through social interaction with more capable learners. For example, children begin to experience cognitive activities such as problem-solving when in the company of others. Then, through modeling, children internalize the problem-solving strategies until they can implement them independently. Feuerstein argued that the results from a low-performing child on standardized assessments are not an indicator of overall potential and should not be used solely to measure future academic achievement. He further suggested that if clinicians provide appropriate mediation strategies for a sufficient period, the child's test results can increase significantly (Feuerstein, 1977).

Dynamic assessment has been used to assess many skills vital for children's language success and has gained popularity, particularly when assessing bilingual and multicultural children (e.g., Gutiérrez-Clellen & Peña, 2001; Henderson et al., 2018; Kapantzoglou et al., 2012; Kramer et al., 2009; Lazewnik et al., 2019; Orellana et al., 2019; Peña et al., 2014; Petersen et al., 2017, 2020). The aim of dynamic assessment is to highlight the maximum potential a child can achieve with the intervention of an adult or a more capable learner in a targeted area (Hasson, 2018). It is a process-oriented method of evaluation that focuses on the

child's ability to learn and master a skill and thus on what the child can do, rather than what the child cannot do (Hasson, 2018; Lidz, 1991). In addition to identifying children's learning potential, dynamic assessment can help differentiate between language differences and impairments, and this is indeed one of its original purposes (Gutiérrez-Clellan & Peña, 2001).

Test–Teach–Test Approach

The test–teach–test approach to dynamic assessment is used in this study. This approach, referred to by Bamford et al. (2022, p. 1885) as a “sandwich” format for dynamic assessment, builds on Feuerstein's ideas. In this approach, an examiner uses a standardized or nonstandardized measure for both pretest and posttest but introduces a mediation phase between the two, focused on areas that need improvement as determined by the pretest. This approach highlights children's strengths, helps identify areas needing improvement, emphasizes what they can do unassisted and assisted, and helps predict future unassisted performance (Hasson & Joffe, 2007). During the mediation phase, the examiner assesses the child's modifiability or ability to learn new skills given opportunities to learn in a supportive environment. Modifiability is often measured by observing children's responsiveness to teaching, their ability to transfer their skill to a new context, and the effort examiners must put in for children to achieve such transfer (Lidz, 1991). While researchers have often created their own modifiability scales tailored to their study's questions, they agree on the modifiability scale's purpose: to measure children's ability to change given an opportunity to learn through mediation.

CBDA

One criticism of the dynamic assessment approach is the uncertainty that the assessment goals match what children are expected to learn as part of their school's curriculum (Banerjee & Guiberson, 2012; Haywood & Lidz, 2007). Powell (2018), for example, suggested that school-

based speech-language pathologists (SLPs) may target language and literacy skills in intervention without prior consultation of the school curriculum. By referring to the curriculum, clinicians can ensure that children have some foundational knowledge of the skills to be assessed or need such knowledge, thus making the assessment process meaningful for the child. This is where CBDA comes in (Lidz, 1991).

CBDA's aim is to maximize the link between assessment and classroom instruction, an approach that has been recommended for bilingual and multicultural children who possess learning difficulties (Banerjee & Guiberson, 2012; Barrera, 2003). Applicable to any school and curriculum, CBDA uses the curriculum's objectives to identify gaps in children's learning that are directly relevant to them (Eriks-Brophy, 2014; Haywood & Lidz, 2007). CBDA can also be made relevant to any school curriculum by using classroom materials, which avoids the heavy costs and low ecological validity that frequently come with standardized assessments. The information gained from CBDA not only offers insights into a child's knowledge of the curriculum content but also indicates approaches to help the child master such content (Haywood & Lidz, 2007). This information could be shared among school practitioners (Powell, 2018), such as resource teachers, SLPs, and English-as-an-additional-language educators. In turn, a shared understanding among such practitioners could lead to the best practices to foster the child's academic success (Meaux & Norris, 2018).

Dynamic Assessment of Narratives

Dynamic assessment has been used to assess narratives from diverse cultural backgrounds, such as African American children (Peña et al., 1992, 2006), Latino children (Peña et al., 1992, 2014, 2006; Petersen et al., 2017), and Indigenous children (Henderson et al., 2018; Kramer et al., 2009). Several of these studies used a modifiability rating scale to examine the

accuracy with which the assessment classified bilingual or multicultural children compared to a language-impaired or typical-language group. Peña et al. (2014, 2007) and Kramer et al. (2009) found that the modifiability rating was either a strong or the best predictor of language learning group and that scores following mediation (i.e., posttest scores) were also strong predictors.

To date, research on dynamic assessments with Filipino children, let alone bilingual Filipino children, is absent. The literature on Filipino children's narratives is rare and mostly restricted to narratives produced in the Filipino language (e.g., Devanadera & Alieto, 2019), and studies of English narratives are even scarcer. A study by Lofranco et al. (2006) is an exception. The authors examined the narrative skills of eight 6- and 7-year-old Filipino children who were described as English-dominant, although they were exposed to Filipino in their homes. The authors found that the structure of the children's narratives was comparable to that of English monolingual children, though the narratives contained some grammatical errors. These findings are informative, in that they shape what we might expect of young Filipino narrators. However, our goal was to assess how well a dynamic assessment of narratives distinguishes Filipino–English children with different language abilities.

Purpose of This Study

The purpose of the present study is to distinguish bilingual Filipino children with language learning difficulties from typically developing (TD) children using a CBDA of narratives. The research questions are as follows: (a) How well does a measure of children's modifiability distinguish the two language ability groups? (b) Do posttest scores on the Test of Narrative Language-Second Edition (TNL-2; Gillam & Pearson, 2017) and a novel single-picture task predict language ability better than pretest scores? (c) How do scores on these measures compare to one another in predicting language ability group?

Based on the previous literature on dynamic assessment of narratives with bilingual and multicultural children (e.g., Henderson et al., 2018; Kramer et al., 2009; Peña et al., 2014, 2006; Petersen et al., 2017), for the first two research questions, we hypothesize that the modifiability rating and posttest scores will distinguish children in the LD and TD groups with high accuracy and be more accurate than pretest scores. For the third research question, our main goal is to assess the usefulness of a novel single-picture task in predicting language ability group by comparing it to the TNL-2, a widely used measure. The analysis is thus exploratory.

Method

Recruitment and Inclusion Criteria

Following ethical approval from Concordia University's institutional review board, participants were recruited via two methods: a recruitment ad posted on the Facebook page of a local association connecting members of the Filipino community and snowball sampling, which began with the first author's personal connections in the Filipino community. Once the researcher connected with parents, they were sent an information letter and consent form to give permission for their child's participation. Contact was established with 35 parents, 34 of whom agreed to participate. A bilingual Filipino- and English-speaking research assistant translated the consent form into Filipino, and parents received both the English and Filipino versions. Parents returned the signed consent form in the language of their choice to the first author via e-mail, Facebook Messenger, or in person prior to the first assessment of the child.

To participate, Filipino had to be the primary or only language spoken in the home. Children with known or suspected LDs were included, if these were not accompanied by another delay, disorder, or condition (e.g., autism, Down syndrome, global developmental delay, hearing loss). None of the 34 parents who agreed to their child's participation reported any such

difficulties for their child.

Language Exposure

All the participants were first-generation Filipino-Canadian children attending public elementary schools where instruction was in English, and the curriculum included English Language Arts. Parents provided information about their child's language exposure via a questionnaire developed by the authors and offered in both English and Filipino, to allow parents to respond in the language they preferred. The questionnaire asked about the child's language exposure in the home with family members, current language learning outside of the home, parental or teacher concerns about their child's language development, and whether the child was receiving special language services at school or privately. Parents of 29 children reported Filipino as the children's L1, and five reported both Filipino and English as the L1. Most children (30/34) were exposed to English at school, or for kindergarteners, in the community, for at least a year prior to the study. Table 1 presents the information on Filipino language exposure in the home. Parents further revealed that all the children were also exposed to Filipino outside the home (e.g., at Filipino community events, church services, and family gatherings). In addition to standard Filipino, eight children understood or spoke other Filipino languages (e.g., Cebuano).

Language Ability Group

To gather more detailed information on the children's language abilities, parents also completed the Alberta Language and Development Questionnaire (ALDeQ; Paradis et al., 2010), which was designed for clinicians to assess a child's L1 development when they have limited opportunities to do so directly. As Paradis et al. (2010) pointed out, language disorder observed in a child's L1 would also manifest in their second language. The ALDeQ asks parents about their

child’s developmental milestones, L1 abilities, behavior patterns, and activity preferences, as well as their family history. Research on the ALDeQ suggests it is a valid tool. As Paradis et al. (2013) found, the ALDeQ was highly associated with clinical judgments of language impairment in bilingual children. Moreover, it has high specificity (Paradis et al., 2010, 2013), suggesting it is unlikely to overestimate LD. A total score was calculated for each child and compared to a criterion value provided with the ALDeQ; children who scored 1.25 SDs or more below the mean were considered LD ($n = 7$), whereas those scoring above this value were considered TD in language ($n = 27$). The participants’ language group by grade is provided in Table 2, along with other demographic variables.

For four of the seven children in the LD group, the parent questionnaire revealed concerns regarding the child’s language development and the child had either been formally diagnosed with LDs or was receiving SLP services, confirming the ALDeQ results. One child’s parents reported concerns but had yet to seek out services. For the two other children, parents did not report concern on the parent questionnaire; however, informal conversations with the parents revealed that one child was in fact receiving SLP services, and the other child was referred by school personnel for services a month after participating in our study.

Table 1

English Exposure and Language Use in the Home by Language Ability Group

	Years of English Exposure	Current Language Use in the Home	
	Mean (SD)	% of parents using English and Filipino	% of parents using only Filipino
Language Difficulty	1.79 (1.14)	29%	71%
Typically Developing	2.44 (1.06)	37%	63%

Table 2*Participants by Language Group, Grade, Age, and Gender*

Grade	Age in months		Gender		Age in Months		Gender	
	M	SD	Girls	Boys	M	SD	Girls	Boys
KG (<i>n</i> = 9)	68.3	3.4	1	3	67.8	7.4	2	3
Grade 1 (<i>n</i> = 6)	–	–	0	0	82.8	5.5	5	1
Grade 2 (<i>n</i> = 4)	91.0		1	0	91.0	2.7	3	0
Grade 3 (<i>n</i> = 6)	102.0		0	1	105.0	7.2	5	0
Grade 4 (<i>n</i> = 7)	–	–	0	0	119.0	5.1	2	5
Grade 5 (<i>n</i> = 2)	124.0		0	1	127.0		0	1
Total (<i>N</i> = 34)			2	5			17	10

Note. KG = Kindergarten. The em dash indicates the absence of participants in the corresponding category. SD is blank when the number of participants was 1. The mean ages of girls and boys was respectively 90.5 months (SD = 17.8) and 94.2 months (SD = 21.2).

Study Design

The study used a longitudinal delayed treatment design (Heath et al., 1982) by having two experimental groups, which began CBDA at different times, as shown in Figure 1. After being divided into language ability groups (as described above), the children were proportionally but randomly assigned to either the experimental or delayed-experimental group. The design allowed for all children to receive the dynamic assessment, and for us to compare changes from pretest to posttest in the experimental group to changes from baseline to pretest in the delayed-experimental group before it had received CBDA. This comparison was conducted to rule out practice effect; significant change in the experimental group but not the delayed-experimental group would suggest that it was not due to practice alone.

Figure 1

Delayed Treatment Design

Experimental	Pretests	Mediation 1	Mediation 2	Posttests			
	S-P task (1 st) TNL-2 (2 nd)			S-P task (1st) TNL-2 (2 nd)			
Delayed- Experimental	Baseline			Pretests	Mediation 1	Mediation 2	Posttests
	S-P task (1 st)			S-P task (1st) TNL-2 (2 nd)			TNL-2 (1 st) S-P task (2 nd)

Note: TNL-2 was not administered at baseline to avoid practice effects at pretest; conversely, the single picture task was administered using a different picture. At posttest, the first experimental group completed the single-picture task first (i.e., before the TNL-2) and the delayed-experimental group completed it second. Given that the two groups were collapsed for analyses, this strategy allowed us to control for potential order effects. S-P task = single-picture task; TNL-2 = Test of Narrative Language-Second Edition.

Pretest Measures and Procedures

The first author administered the measures to participants individually at home, in a quiet room with as little distraction as possible. She first introduced herself to the child and engaged the child in conversation about themselves and their day to establish rapport before explaining the procedures and requesting the child’s assent to participate. All sessions were audio recorded using a Sony ICDPX370 IC Voice Recorder to allow for later scoring of children’s narratives.

Two narrative measures were administered, as elaborated below.

Single-Picture Task

As depicted above in Figure 1, the single-picture task was administered at pretest and posttest for the two experimental groups. A baseline measure was added for the delayed-experimental group to rule out practice effects as noted in the Study Design section above.

Therefore, each child in the experimental group was seen 4 times during a 2-week period and children in the delayed-experimental group were seen 5 times.

For this task, children were prompted to tell a story based on a picture. The pictures for the single-picture task were carefully chosen from children's books. They were selected based on three criteria: (a) depicted events or actions that would be familiar to children to encourage a storyline, (b) had two to three main characters to allow interaction between story characters, and (c) appeared in books that were not highly popular to reduce the chance that children had seen the pictures before and would retell the story they had previously heard (e.g., books by Robert Munsch and English books directly related to the Filipino culture were excluded).

Six pictures that respected the criteria were collected. To assess their appeal to children, the researcher solicited the aid of two teachers (Grade 2, $n = 9$, and Grade 5, $n = 21$) at a neighboring elementary school, where the student body was diverse. According to teacher report, 30%–40% of students, depending on the classroom, were from immigrant backgrounds and/or racialized groups. None of the participants in this study was in the classes. The teachers asked their students to list the pictures from their most to least favorite (i.e., 1 to 6) as a story prompt. We chose the three pictures that were most favored. These were the same in Grades 2 and 5. The first picture was from *Jabari Jumps* (Cornwall, 2017), and it depicts a boy on a diving board looking down at a pool with his father looking up at him. The second picture, from *It Was You!* *Blue Kangaroo* (Chichester Clark, 2009), depicts a mother and daughter in the kitchen reacting to a sink overflowing with water. The third picture, from *Skunks for Breakfast* (Choyce, 2006), depicts a child screaming because a skunk is stealing one of her cookies, and her father in the doorway, wondering what is happening.

The Narrative Features Rating Scale, a scale we revised and elaborated based on a scoring protocol by Miller et al. (2001), was used to score the single-picture task and determine two skills to address in CBDA. These had to be skills that children had not yet mastered and

occurred the earliest according to the narrative developmental sequence outlined in the regional English Arts curriculum (not cited to protect confidentiality of participants given the small size of the Filipino community in the region). The scale was revised to fit the English Arts curriculum and apply to stories generated from a single picture, and elaborated to clearly distinguish each rating. The scale addressed (a) story components, including the story's setting, literal character information, character's internal states, temporal order of events, and causal relationships, each scored on a 0–4 scale; (b) story ideas and language, encompassing the complexity of ideas, vocabulary, and grammar, as well as use of dialogue, each scored on a 0–4 scale; and (c) episode structure, determined by the presence in a story of an initiating event, attempt, internal response, consequence, plan, and resolution, each scored on a 0–1 scale. Children could receive a maximum score of 42.

Standardized Narrative Measure

The TNL-2 (Gillam & Pearson, 2017) assesses comprehension and production using multiple tasks and genres. To measure narrative comprehension, the child is asked to listen to three narratives: (a) a script (i.e., a report of the usual events at a restaurant) while viewing a single picture depicting key events; (b) a realistic story while viewing a sequence of five related pictures; and (c) a fictional story depicted in a single picture. Immediately, after each of these tasks, the child is asked to respond to comprehension questions. To measure narrative production, the child is asked to (a) retell a script while looking at a single picture, (b) tell a personal-like story based on five sequenced pictures, and (c) tell a fictional story based on a single picture.

The TNL-2 tasks were administered and scored according to test guidelines. Raw scores were converted to scaled scores and a composite *Narrative Language Ability Index* (NLAI). The

TNL-2 authors guide clinicians to use the NLAI to inform their decision-making and report that the specificity and sensitivity of the NLAI were best using a cutoff score of 92 (Gillam & Pearson, 2017, p. 67). As elaborated in the results, we adopted the same cutoff score to determine language group at pretest (i.e., LD if below 92, TD if equal or above 92).

The TNL-2 was normed on 1,310 children between the ages of 4;0 and 15;11 (years;months) residing in the United States. Stratified sampling by age and ethnicity was used to obtain a representative sample of the U.S. population. Asian/Pacific Islander children, the ethnic group Filipinos would belong to, comprised 5% of the norming sample (n = 69). To examine potential differences between cultural groups, the authors compared the scores of 55 of these Asian/Pacific Islander children to 55 White children matched on age, gender, and parental education (the analysis was one among multiple comparisons of ethnic or racial groups). They found that Asian/Pacific Islander children performed marginally better all on scores and concluded “that the TNL-2 possess(es) little to no bias against Asian/Pacific Islanders” (Gillam & Pearson, 2017, p. 61). While it is unclear whether the sample included Filipino children, these results do suggest that the TNL-2 is not negatively biased against Asian/Pacific Islander children.

Teaching Phase: Mediation Procedures

The first author consulted the curriculum and collaborated with a local elementary school resource teacher, classroom teacher, and an English-as-an-additional-language teacher to review the curricular goals and ensure the mediation sessions were aligned with them. They also provided the first author with classroom materials to (e.g., a worksheet that helps with creating a story resolution) to support high-quality and purposeful mediation. The first author also served as the examiner and carried out the individual mediation in two sessions of predetermined length

(25–30 min), one day apart. The examiner began by reading aloud the transcribed story told by the child at pretest to refresh their memory and stated to the child that they would build on the story together. The mediation was partially scripted following the works of Lidz (1991) and Miller et al. (2001) but remained flexible to adjust to each child’s abilities. The strategies entailed the following: stating the targeted skill for the child, explaining why the skill is important, prompting and scaffolding the skill, and prompting the child to think about how to use the skill in the future (planning). For prompting and scaffolding, the examiner first worked with the child to integrate the targeted skill into the story the child told at pretest. This was followed by scaffolding the child’s use of the skill in other narratives prompted by another single picture (Choyce, 2006), in personal stories, and in familiar fictional stories (e.g., Little Red Riding Hood). The goal was for the child to use the skill independently by the session’s end.

To establish fidelity of the procedures, a research assistant (a) listened to 26% of the recorded sessions (both sessions from nine different children with varying abilities) and (b) using a checklist of the mediation strategies, verified that each strategy was implemented. Fidelity was 98%. Planning and transfer strategies were not implemented during one session as these tasks were too difficult for the child with LD.

Following each mediation session, we examined the children’s modifiability on a modifiability rating scale based on the works of Lidz (1991). This scale includes three subscales: child responsivity (0–3), examiner effort (0–3), and level of skill transfer (0–2) for a maximum total score of 8 (see Appendix L). For each of these measures, the examiner provided a rating based on several criteria that we established to reduce ambiguity in the ratings. The ratings for each item were totaled to obtain an average modifiability score across both sessions.

Posttest Measures and Procedures

Two days, on average, after the second mediation session, children were retested on the same narrative measures as at pretest. Half of the participants completed the single-picture task first (i.e., before the TNL-2) and the other half completed it second to control for order effects on the posttest. The single-picture task stimulus (i.e., the picture with the boy on the diving board) was different than at pretest and one the children had never seen. The TNL-2 was administered again. It does not offer parallel forms; however, the TNL-2 manual states that the assessment “has acceptable test–retest reliability,” with a NLAI coefficient of .93 (Gillam & Pearson, 2017, p. 46).

Reliability

TNL-2 and Single-Picture Task

The principal investigator trained a graduate student assistant who was blind to the study’s goals and the children’s ethnicity, age, and language status to independently score the TNL-2 and rate the narratives from the single-picture task using the Narrative Features Rating Scale. In both instances, the assistant practiced with stories that reflected a range of scores at pretest; these were selected by stratifying the sample to below average, average, and above average TNL-2 scores and then randomly selecting stories from each stratum. Following the training and resolution of any scoring differences, we randomly selected 20% of the remaining stories from each stratum and time point (i.e., baseline when applicable, pretest, posttest) to establish reliability. As the TNL-2 items vary in terms of the scoring range (0 to 1 for some items, 0 to 2 or 3 for others), not all measures of interrater agreement are suitable. We chose the percentage of agreement to measure interrater reliability and found it to be very strong at 91.4%.

For the single-picture task, the scoring scale was uniform across items, which permitted the calculation of weighted kappa, a statistic that corrects for chance agreement and takes into account close but nonidentical ratings by raters. Interrater reliability was strong (Landis & Koch, 1977) for all subscales: story components, $k = .80, p < .001$; story ideas and language, $k = .80, p < .001$; episode structure components, $k = .77, p < .001$. Interrater differences were reviewed by the first author, and ratings were adjusted as necessary.

Modifiability

A second research assistant with graduate-level training in language and literacy development was trained to score children's modifiability of the targeted skills during mediation. As was the case for the narrative tasks, we used random stratified sampling to identify mediation sessions for training and independent scoring, and the research assistant was blind to the participants' ethnicity, age, and language status. The assistant listened to the audio recordings of the mediation sessions and completed the modifiability rating scale. The assistant proceeded to independently score 26% of the mediation sessions (two sessions each for nine children) for the three modifiability components: child responsivity, examiner effort, and skill transfer. Calculated with weighted kappa, interrater reliability was substantial, $k = .80, p < .001$ (Landis & Koch, 1977). Interrater differences were reviewed by the first author, and ratings were adjusted as necessary.

Data Analysis

The data were entered to SPSS (Version 28) for statistical analysis. To assess the accuracy of CBDA in classifying children by language ability, we conducted discriminant analyses and logistic regressions. Discriminant analysis has been recommended to see if a predictor can accurately identify children with language impairments, with accuracy rates of 90%–100%

described as “good” (Plante & Vance, 1994). Logistic regression is the nonparametric version of discriminant analysis, and a more suitable analysis for binary dependent variables. We had only one such variable but provide the logistic regressions for all variables to allow direct comparison of results. Both analyses yielded information on the predictor’s overall accuracy at classifying children on the dependent variable (i.e., language ability group), sensitivity (i.e., the predictor’s ability to correctly identify a child as being in the LD group), and specificity (i.e., the predictor’s ability to correctly identify a child as being in the TD group). The binary predictor was the TNL-2 NLAI at pretest; the two levels were a score of < 92 or ≥ 92 . We examined this predictor only at pretest to see how well it classified children by language ability when using the cutoff score recommended in the TNL-2 manual for testing under typical conditions (i.e., not as part of a dynamic assessment). In addition, we entered the children’s continuous scores on the TNL-2 NLAI at pretest and posttest as predictors to determine whether the ideal cutoff score would differ from 92. The other CBDA predictors of interest appear in Tables 2 and 3. Additionally, we report canonical correlations between the predictors and dependent variable for the discriminant analyses, and the amount of variance (Nagelkerke R^2) that the predictors account for in the dependent variable for logistic regressions. Receiver operating characteristic (ROC) curve analyses were also carried out to determine cut-off scores for each predictor and compute the area under the curve (AUC), a measure of effect size.

Results

The accuracy of CBDA of narratives in English in differentiating bilingual Filipino children with and without LD was examined using discriminant analysis, logistic regressions, and ROC curve analyses. Before implementing those main analyses, we tested for practice effects. We compared the baseline to the pretest gains for the delayed-experimental group (since

this would be a period of no intervention) to the experimental group's pretest to posttest gains. The delayed group gain was nonsignificant: $M = 1.39$, $SD = 4.2$, $t(17) = 1.40$, $p = .180$. As expected, the experimental group gain was significant from pretest to posttest: $M = 7.38$, $SD = 8.5$, $t(15) = 3.48$, $p = .003$. Moreover, for the delayed-experimental group, the gain from pretest to posttest was similar to the experimental group, providing further support that practice effects were not present: $M = 7.67$, $SD = 7.2$, $t(17) = 4.53$, $p < .001$. We also tested for gender effects on the single-picture task, using an independent-samples t test on the Time 1 measure (i.e., pretest for the experimental group, baseline for the delayed-experimental group). The results indicated a nonsignificant difference between girls ($M = 14.89$, $SD = 8.4$) and boys ($M = 11.2$, $SD = 8.2$), $t(32) = 1.28$, $p = .209$.

Discriminant Analysis and Logistic Regressions

Discriminant analysis is used to predict group membership based on one or more predictors. The assumptions for the analysis include homogeneity of variance–covariance and a roughly normal distribution of the predictor variables (Tabachnick & Fidell, 2013). As we only entered one predictor per analysis, homogeneity of variance–covariance was not an issue. Table 3 summarizes the descriptive statistics and tests for skewness and kurtosis to assess the distributions of the predictor variables for the LD and TD groups.

As expected, the sole binary variable (i.e., TNL-2 NLAI pretest) was not normally distributed; the values for skewness and kurtosis were outside acceptable ranges of -2 to $+2$ and -7 to $+7$, respectively (Hair et al., 2014). In addition to the discriminant analyses, we thus carried out logistic regressions, as described in the Data Analysis section. The logistic regression results are provided solely in the text, whereas the results for the discriminant analyses appear in Table 4.

Table 3*Descriptive Statistics of Predictor Variables for Discriminant Analysis*

Predictor	Language Difficulty (<i>n</i> = 7)				Typically Developing (<i>n</i> = 27)			
	Mean (SD)	Range	Skew	Kurtosis	Mean (SD)	Range	Skew	Kurtosis
Pretest Predictors								
S-P Task Time 1 ^a	10.1 (6.4)	2-18	.13	-1.51	14.07 (8.9)	1-30	.36	-1.03
TNL-2 production pretest ^b	24.29 (10.5)	11-37	-.11	-2.08	43.04 (14.3)	15-69	-.52	-.58
TNL-2 NLAI pretest (binary)	.14 (.4)	0-1	2.65	7.00	.89 (.3)	0-1	-2.62	5.27
TNL-2 NLAI pretest (continuous)	78.7 (7.5)	72-94	1.59	3.08	102.2 (9.8)	86-122	.41	-.66
Modifiability	2.2 (1.4)	0-4.5	-.01	.46	6.6 (1.3)	4.5-8	-.48	-1.08
posttest predictors								
S-P Task posttest	8.7 (5.16)	2-16	.04	-1.50	24.9 (8.8)	7-38	-.53	-.71
TNL-2 NLAI posttest (continuous)	82.9 (8.6)	72-91	-.35	-1.88	110.7 (11.0)	94-130	-.01	-1.17

Note. S-P Task = Single-Picture Task; TNL-2 = The Test of Narrative Language-2; NLAI = Narrative Language

Ability Index. ^aTime 1 = baseline for delayed treatment group, pretest for experimental group. ^bRaw score.

Modifiability

Discriminant analysis showed that the children's modifiability score was related to language ability, $A = .34$, $X^2(1) = 33.71$, $p < .001$. Table 4 provides classification accuracy, sensitivity, and specificity. The logistic regression showed similar findings, $X^2(1) = 29.17$, $p < .001$, Nagelkerke $R^2 = .90$, and identical sensitivity and specificity. The results of the two analyses confirm that the modifiability score was a strong predictor of Filipino children's language ability, in line with the study hypothesis.

Posttest Predictors

According to the discriminant analysis, children's total score on the single-picture task at posttest was also related to language ability, $A = .75$, $X^2(1) = 16.06$, $p < .001$. The logistic regression was also significant, $X^2(1) = 16.89$, $p < .001$, Nagelkerke $R^2 = .61$; however, in comparison with discriminant analysis, it showed lower classification accuracy and lower sensitivity, but similar specificity. Finally, the discriminant analysis showed that the TNL-2 NLAI continuous score at posttest was related to language ability, $A = .45$, $X^2(1) = 24.86$, $p < .001$. The logistic regression was also significant, $X^2(1) = 34.58$, $p < .001$, Nagelkerke $R^2 = 1$, and like the discriminant analysis, correctly classified all participants to their preestablished language group.

Pretest Predictors

For the single-picture task at Time 1 (i.e., baseline for the delayed treatment group and pretest for the experimental group), discriminant analysis showed that children's scores were not related to language ability, $A = .96$, $X^2(1) = 1.18$, $p = .28$. The logistic regression was also nonsignificant, $X^2(1) = 1.33$, $p = .25$, Nagelkerke $R^2 = .06$, and showed identical sensitivity and

specificity to the discriminant analysis. The results suggest that the single-picture task, developed for our study, was not a strong predictor of Filipino children's language ability at Time 1.

For the TNL-2, we first examined their pretest raw scores on the TNL-2 production task since this task is most comparable to the single-picture task. Discriminant analysis showed that Wilks' lambda was significant, $\Lambda = .75$, $X^2(1) = 8.96$, $p = .003$. The logistic regression was also significant, $X^2(1) = 9.15$, $p < .001$, Nagelkerke $R^2 = .37$. Sensitivity and specificity values were identical to those found using discriminant analysis.

We next examined children's pretest scores on the TNL-2 NLAI, expressed in binary terms (below the cutoff score of 92 or equal to/above 92). Wilks' lambda was significant, indicating that the score was related to language ability, $\Lambda = .53$, $X^2(1) = 19.85$, $p < .001$. The logistic regression was significant, $X^2(1) = 14.72$, $p < .001$, Nagelkerke $R^2 = .55$. When the pretest score on the TNL-2 NLAI was expressed as a continuous variable, Wilks' lambda remained significant, $\Lambda = .48$, $X^2(1) = 23.23$, $p < .001$. The logistic regression was also significant, $X^2(1) = 24.83$, $p < .001$, Nagelkerke $R^2 = .81$. For both the binary and continuous NLAI pretest scores, sensitivity and specificity were again identical to the discriminant analysis.

ROC Curve Analysis

ROC curve analysis is used to evaluate classification accuracy of a predictor and to determine cutoff scores for optimal sensitivity and specificity. The AUC of the cutoff point is the effect size of the classification, with .5 indicating no ability to predict and 1.0 indicating a perfect ability to predict (Tabachnik & Fidell, 2013). AUC values above .80 are considered acceptable, and AUC values above .90 are considered excellent (Hintze & Marcotte, 2010). The AUCs and their respective optimal cutoff values from the discriminant analyses are reported in Table 4.

Table 4*Results from the Discriminant Function and ROC Curve Analyses*

Predictor	Classification Accuracy	Sensitivity	Specificity	Canonical Correlation	AUC	Cut-Off Point
Pretests						
S-P Task Time 1 ^a	79.4%	0%	100%	.19	.622	15.5
TNL-2 Production ^b	82.4%	42.9%	92.6%	.50	.849	37.5
TNL-2 NLAI (Binary)	88.2%	85.7%	88.9%	.68	.873	92 ^c
TNL-2 NLAI (Continuous)	97.1%	85.7%	100%	.72	.971	83
Modifiability	97.1%	85.7%	100%	.81	.987	3.8
Posttests						
S-P Task	88.2%	71.4%	92.6%	.63	.931	17
TNL-2 NLAI (Continuous)	100%	100%	100%	.74	1.000	92.5

Note. ROC = receiver operating characteristic; AUC = Area Under the Curve; S-P Task = Single-Picture

Task; TNL-2 = The Test of Narrative Language-2; NLAI = Narrative Language Ability Index. ^aTime 1 =

baseline for delayed treatment group, pretest for experimental group. ^bRaw score. ^c92 = Cut-Off Point was

determined by the TNL-2 manual, not from the ROC.

Discussion

This study investigated the ability of a novel CBDA of narratives to accurately classify bilingual Filipino children by language ability, and additionally compared accuracy with children's initial scores on a popular norm-referenced standardized narrative assessment. The CBDA was developed not only to assess the children's current oral narrative abilities but also to align assessment with curricular goals and to assess their learning of new skills. This approach has the potential to provide fairer assessment for bilingual Filipino children, a population which is growing rapidly in the United States and Canada and for whom information about language abilities is scant, leaving practitioners to rely on standardized assessments that may not capture children's true abilities and could consequently lead to misdiagnosis of language impairment when none exists, or failure to detect language impairments that do. Drawing on previous studies and the principles of dynamic assessment, we hypothesized that modifiability and posttest scores would best classify children by language ability. These hypotheses were confirmed as elaborated below.

Classification Ability of the Predictors

We anticipated that the CBDA's modifiability rating would be a strong predictor based on the effectiveness of similar ratings in classifying children in previous studies focused on narrative ability (e.g., Henderson et al., 2018; Kramer et al., 2009; Peña et al., 2006, 2014; Petersen et al., 2017, 2020). Our study found that the modifiability score, based on examiner effort, child responsivity, and skill transfer, was indeed an excellent predictor, classifying children's language ability with 97.1% accuracy (85.7% sensitivity and 100% specificity). The modifiability predictor only misclassified one child as TD, while the parent report indicated LDs in Filipino. This child had only been in Canada for 2 months prior to testing and, up to that time,

had limited English exposure. The child's performance on the single-picture task that we used to determine skills for mediation was thus unsurprisingly low, and the goals we established based on their score were among the earliest ones presented in the language arts curriculum that informed CBDA. The child achieved one of the early developing skills that would typically be mastered by a child of similar age and, thus, obtained a modifiability rating of 4.5, just above the threshold of 4.0 for LD classification.

Notably, we established strong interrater reliability for the modifiability rating ($k = .80$). Reports of interrater reliability for modifiability ratings have been largely absent in dynamic assessment research (but see Petersen et al., 2017, 2020, for exceptions). The strong interrater reliability found in our study provides some evidence for the criterion validity of the three modifiability measures and suggests that evaluations of examiner effort, child responsivity, and skill transfer can be carried out reliably by individuals who have a background in education and child development but are not necessarily speech-language professionals. This is important given that SLPs are often stretched thin and may wish to solicit the assistance of others.

The TNL-2 NLAI continuous posttest score was also found to be a strong predictor of language group. This result is in line with the dynamic assessment literature demonstrating that posttest scores discriminate between children with language impairments and TD children in the areas of vocabulary (e.g., Kapantzoglou et al., 2012; Ukrainetz et al., 2000), grammar (e.g., Lazewnik et al., 2019), and narratives (e.g., Peña et al., 2006; Petersen et al., 2017, 2020). In this study, posttests followed mediation of narrative "targets" tailored to the child's current abilities; if the child were to learn new skills via mediation, these could contribute to improved posttest scores. It is also possible, however, that children with LD might require more teaching than a dynamic assessment typically offers and thus might benefit less than TD children. Consequently,

the gap between TD and LD children could widen at posttest and discriminate the group better than pretests. Indeed, this was the case in our study; the TNL-2 NLAI continuous posttest score did not misclassify any children. Interestingly, the cutoff score that discriminated the TD and LD groups so well was 92.5, very close to the standard score of 92 that discriminated best between TD children and children with language impairment in the TNL-2 norming sample (Gillam & Pearson, 2017). This finding provides support for using the TNL-2 posttest score in the context of CBDA to assess bilingual learners.

While on the surface, the NLAI continuous pretest score also appears to be an excellent predictor (misclassifying only one child), our analyses showed that the cutoff score that allowed for high accuracy was 83, well below the recommended cutoff score of 92 alluded to above (Gillam & Pearson, 2017). Although a larger sample of bilingual Filipino children could yield a different cutoff, the information gathered here is valuable in that it suggests that a lower cutoff might be more appropriate for distinguishing TD and LD among such children. Simply applying the cutoff of 92 at pretest could lead to overdiagnosis of LD. This risk was reflected in data for three children in our sample who were classified as LD with the 92 cutoff according to their NLAI score in English, but not according to the ALDeQ, a parent report of their Filipino ability. This risk is recognized by TNL-2 authors who suggest that children should be exposed to English for over 25% of the time for at least a year to obtain valid results (Gillam & Pearson, 2017). While two of the three misclassified children had less than a year of English exposure, one child met the criteria but was still misclassified. In summary, the pretest TNL-2 NLAI scores were less accurate than the posttest scores following mediation and required a lower cutoff than has been recommended for TD children. The TNL-2 post-mediation is thus clearly a better choice.

Regarding the single-picture task, children's pretest scores had the lowest classification accuracy (79.4%) of all the predictors, followed by the TNL-2 production pretest score. These findings came as no surprise as they were raw scores and thus not scaled on age. As an older child with LD could have scored similarly to a younger TD child, the score could fail to distinguish LD and TD. As reported above, however, the posttest score had good classification accuracy (88.2%), despite the scores not being scaled on age. Additionally, we did not observe practice effects on this task. This is encouraging preliminary evidence that narratives elicited with a single picture and taking only 2 to 3 min to administer may be a valid CBDA measure. This is a novel finding, given that to the best of our knowledge, narratives elicited with single pictures have not been examined in the literature on dynamic assessment. The validity of the measure should be examined with a larger sample of bilingual Filipino children.

Implications

Our findings demonstrate that administering a CBDA and providing bilingual Filipino children with opportunities to improve their narrative skills allowed a more accurate picture of their language abilities than administration of a standardized test alone. An issue raised perpetually in the dynamic assessment literature regarding the test-teach-test approach is that it is more time consuming than many standardized assessments (Peña et al., 2006). In this study, although the dynamic assessment required that children be seen on four occasions, it yielded valuable information and showed that a quickly administered narrative task, where a child was asked to tell a story from a single picture, could be used effectively to identify narrative skills for mediation. The disadvantage of a potentially longer assessment period might be outweighed by the benefits; if school-based SLPs can make reliable judgments between language difference and LD by incorporating a CBDA to their practice, this could in turn help

them prioritize children for treatment and manage their caseload. Additionally, as the mediation goals are curriculum based, this could perhaps allow trained practitioners other than SLPs to carry out mediation sessions and integrate them to services the child may already be receiving at school.

The results have significant implications for both speech-language clinicians and classroom teachers. By implementing CBDA and particularly by rating children's modifiability, clinicians can obtain crucial information on how bilingual children tell narratives; gain insight on children's learning processes, problem-solving strategies, and their response to mediation; identify the children's strengths and areas needing improvement; and highlight the length and type of feedback needed for the children to learn a new skill (Hasson & Joffe, 2007). This information can help clinicians make well-informed and confident decisions (Peña et al., 2006) and plan appropriate intervention (Hasson, 2018). This information is also helpful for classroom teachers to support bilingual children's classroom learning as the skills are curriculum based.

Limitations and Future Directions

One of the study's limitations was that not all children had a formal diagnosis of a language delay or disorder/impairment. This could be due to a variety of factors, such as a shortage of SLPs in the school system where the study took place, the prohibitive cost of private services, and a lack of diagnostic assessments suited for children with limited English exposure (Paradis et al., 2013). We used the ALDeQ to group the children in either the TD or LD language group and complemented the information gathered with our parent questionnaire. While, in clinical practice, a more comprehensive assessment would typically be used in diagnosis, there is no gold standard to identify children with language impairments (Hunt et al., 2022) and measures designed for bilingual children are rare. Nonetheless, we were confident in the ALDeQ results

given its good validity (Paradis et al., 2010; 2013) and the complementary information provided through our parent questionnaire.

A second limitation relates to the nature of the mediation in our study and in studies of dynamic assessment more generally. The fact that the mediation is individualized based on each child's abilities and needs, and reflects, in our study, a local curriculum, makes it difficult for others to replicate exactly the approach. However, the mediation strategies we used can be replicated in future studies with bilingual children. There is one caveat related to the application of the modifiability scale that should be considered in future studies or in practice. In our study, neither the examiner (first author) nor the rater who rated modifiability to establish interrater reliability knew the cutoff score that would distinguish the LD and TD groups, since the cutoff was only later derived from the data. It is unclear whether knowing a cutoff beforehand would influence the examiners' judgments of modifiability.

In terms of other future directions, we are currently examining the growth shown by the children in the TD and LD groups in greater detail and in relation to both targeted and untargeted skills; this information, once published, could inform both research and practice. In addition to these further analyses, we could analyze the microstructural elements of the narratives the children produced on the single-picture task to better understand the language and narrative skills of Filipino–English bilinguals. Finally, other researchers could expand on our work by conducting CBDA with other populations of bilingual children.

Conclusions

Our findings showed that a novel CBDA of oral narratives accurately classified bilingual Filipino children by language ability. Two dynamic predictors, a modifiability score based on children's responses to mediation and the children's TNL-2 NLAI continuous score after

mediation, were the most robust discriminators between language ability groups. This echoes the findings of several dynamic assessments of narrative studies with bilingual children (e.g., Henderson et al., 2018; Petersen et al., 2017). This study contributes to increasingly solid evidence that dynamic assessment is well suited for assessing underrepresented groups in norming samples, in our case, bilingual Filipino children. These children may arrive at schools that are lacking valid and reliable language assessments for them and even fewer or no assessments that match the curricular goals relevant to their school success. Adding a cost-effective CBDA of oral narratives to a school's language arts curriculum could provide rich and complementary information by revealing bilingual children's narrative abilities, their readiness to learn new narrative skills, and ideas for intervention using curricular goals in a school setting where practitioners can collaborate to support children's academic success.

Connecting Study 1 and Study 2

The findings of Study 1 revealed the classification accuracy of various predictor variables of language ability on a CBDA of narratives. Posttest and modifiability scores were found to distinguish bilingual Filipino children who were either typically developing in language (TD) or had language difficulties (LD) according to parent report. These predictors had higher sensitivity and specificity than pretest scores alone, giving precedence to administering a dynamic assessment with this population to identify children who may need further assessment and potentially intervention to support their language skills.

Along with the pretest, posttest, and modifiability scores examined in Study 1, the gains in children's scores from pretest to posttest have often been examined in dynamic assessment research to distinguish LD and TD groups (e.g., Kapantzoglou et al., 2012; Peña et al., 2001; Ukrainetz et al., 2000). Dynamic assessment is framed by Vygotsky's (1978; 1986) and Feuerstein's (1977) interactive approaches to language learning. Feuerstein argued that the results from a low-performing child on standardized assessments are not an indicator of overall potential as they may lack experience with the skills being measured yet perform well when working with more capable learners in the target area. However, children with LD can present deficits in their ability to learn and apply skills taught to them (Botting, 2002). Therefore, differences in scores between LD and TD groups may ensue post mediation.

Additionally, there is literature showing differences in scores between LD and TD children on the microstructural features of their narratives (e.g., Winters et al., 2022), meaning the linguistic components of the narrative, in contrast with the overall structure of the narrative (i.e., macrostructure). Therefore, Study 2 examines the microstructure in the pretest and posttest narratives of the 34 children from Study 1, using the validated *Index of Microstructure* (INMIS;

Justice et al., 2006) to identify score differences between the LD and TD groups.

A Brief Look at the Microstructure in the Narratives of Bilingual Filipino Children

Anne Laurie and Diane Pesco

Department of Education, Concordia University, Canada

To be submitted as Research Notes to the *Canadian Journal of*

Speech-Language Pathology and Audiology

Abstract

The present study examined the microstructure of narratives told by 34 Filipino-English speaking children in the context of a curriculum-based dynamic assessment (Laurie & Pesco, 2023). These children were classified as either typically developing in language (TD; $n = 27$) or as having language difficulties (LD; $n = 7$). Narratives were elicited using a single-picture task to examine potential differences between the language groups at pretest and at posttest (i.e., before and after the mediation phase of the dynamic assessment). Productivity and complexity were analyzed using the Index of Narrative Microstructure (Justice et al., 2006). Independent samples t-tests revealed significant differences between the TD and LD groups in productivity at both pretest and posttest, as well as in complexity at pretest. Scores for the individual measures contributing to the productivity and complexity indices showed that the TD group outperformed the LD group on all measures at both pretest and posttest. Paired samples t-tests showed significant gains in productivity from pretest to posttest for the TD group, but negligible gains in the LD group, while neither group improved significantly on the complexity index. The study emphasizes the importance of including productivity measures in future studies aimed at distinguishing TD and DLD in bilingual children. The findings can inform future research on factors that predict language ability and enhance our understanding of the language abilities of Filipino bilingual children.

A Brief Look at the Microstructure in the Narratives of Bilingual Filipino Children

To fully capture children's narrative abilities, one can investigate both macro- and microstructural elements. Macrostructure refers to the global structure of the narrative and has often been conceptualized following a story grammar model (e.g., Gillam & Pearson, 2017; Petersen & Spencer, 2012; Schneider et al., 2006). By contrast, microstructure refers to the narratives' internal linguistic components and has been further defined as having two dimensions: productivity (i.e., the amount of output in a narrative) and complexity (i.e., the grammatical features; Justice et al., 2006). Researchers such as Brewer (1985) note that alongside macrostructural story elements, microstructural skills are necessary to produce a good narrative.

In a recent meta-analysis, Winters et al. (2022) examined the literature on the narratives of children with Developmental Language Disorder¹ (DLD), broadly defined as “a neurodevelopmental communication disorder characterized by significant deficits in language learning, comprehension, and expression” (p. 3908). Winters et al. found that not only story grammar, but also grammatical accuracy, was a robust factor in distinguishing between DLD and typically-developing (TD) children. This follows earlier studies showing microstructural differences in the narratives of children with language disorders (e.g., Liles et al., 1995; Ripich & Griffith, 1988). More recent research has also shown that bilingual children with language disorders tend to produce narratives that are shorter in length, have lesser lexical diversity (e.g., Altman et al., 2016), and contain a greater number of grammatical errors compared to their TD

¹ Following Bishop et al. (2017), the term Developmental Language Disorder has gradually replaced Specific Language Impairment (SLI), although there is still some controversy over the equivalence of the terms as outlined in a forum on the topic edited by Green (2020; <https://academy.pubs.asha.org/2020/02/latest-forum-from-perspectives-tackles-sli-dld-terminology-discussion>). Studies prior to 2017 were thus likely to refer to SLI or language disorders rather than DLD, hence some variety in the use of terms in this section.

peers (Kapantzoglou et al., 2017). On the latter point, Cleave et al. (2010) showed that both monolingual and bilingual four-year-olds with language impairment exhibited high rates of ungrammatical utterances in narrative contexts. In a longitudinal study of children of a similar age, Rezzonico et al. (2015) also found that bilingual children with TD had higher scores than bilingual children with SLI on microstructure measures (lexical, diversity, sentence length, first mentions, and verb accuracy) at two time points.

In this study, we examine the microstructure of the narratives of bilingual Filipino children in TD and LD groups, exploring not only initial between-group differences but also the gains the children in each group showed following a dynamic assessment focused on macrostructural skills (Laurie & Pesco, 2023).

Dynamic Assessments of Microstructure

Dynamic assessment is rooted in Vygotsky's (1978; 1986) theory of the zone of proximal development (ZPD), which emphasizes the potential for change. According to Vygotsky, children's language and other cognitive abilities develop through social interaction with more capable learners. Therefore, Vygotsky's followers are interested in how children perform a task or display their knowledge following social interaction and scaffolding within such interactions. In an educational context, children who are typically developing in language but are new to the language of school instruction might be expected to show gains following dyadic interactions with an adult designed to scaffold their existing skills (i.e., mediation).

While one might expect greater gains by TD children compared to children with DLD following the mediation phase of a dynamic assessment, past studies have mixed findings. Researchers have examined gains in vocabulary (e.g., Gutiérrez-Clellen et al., 1998; Kapantzoglou et al., 2012; Peña et al., 1992; Peña et al., 2001; Ukrainetz et al., 2000), sentence

structure (e.g., Hasson et al., 2012), morphology (e.g., Lazewnik et al., 2019), and narratives (e.g., Henderson et al., 2018; Peña et al., 2006; Petersen et al., 2017). With the exception of Peña et al. (1992; 2001) and Ukrainetz et al. (2000), the studies did not find differences between language groups. As discussed in the original studies, the lack of differences could be due to using pretest-posttest tasks that were too difficult or insensitive to change, leading to findings of no gains in either group; posttest administration immediately after the last mediation session showing temporary gains in both groups that may not have been equally retained in the two groups had the posttest been administered at a later time (Petersen et al., 2017); or allowing too much time between each dynamic assessment session introducing confounding factors such as classroom instruction in the targeted area (Lazewnik et al., 2019). The present study addresses these issues and includes the use of a validated measure of narrative microstructure, called the Index of Microstructure (INMIS; Justice et al., 2006) which encompasses two metrics: productivity and complexity. Using the INMIS, Hoffman (2009) examined narratives from school-aged children with and without language impairment using a wordless picture book and found that the complexity index but not the productivity index differentiated the language groups. In her discussion, Hoffman questioned whether similar findings would arise from narratives elicited via a single picture. The present study addresses this question for a sample of bilingual Filipino children.

Method

Participants and Design

The participants were 34 bilingual Filipino children at various grade levels (kindergarten to Grade 5) who were either typically developing ($n = 27$) or had language difficulties (LD; $n = 7$). Details on the classification of children to group and on the dynamic assessment are provided

in Laurie and Pesco (2023). The mean ages of the children in the two groups were not significantly different: LD group $M = 84.29$, $SD = 22.4$, TD group $M = 96$, $SD = 20.6$, $p = .197$.

The present study examines these bilingual children's pretest and posttest INMIS scores, to determine whether the TD and LD groups were significantly different at either point. Past studies of children with TD and LD would predict differences at pretest, but the findings following dynamic assessments are mixed and thus the analyses at posttest are exploratory.

Measures and Procedures

The *Index of Narrative Microstructure* (INMIS; Justice et al., 2006) was used to analyze the children's narratives, elicited using a task fully described in Laurie and Pesco (2023). In summary, the children were presented with a single picture from a children's book and asked to tell a story based on the picture. The picture at posttest was both different from the pretest and one the children had never seen before, but similar to the pretest picture in that it depicted two characters – an adult and a child – facing a problem of sorts.

Based on factor analysis (Justice et al., 2006), the INMIS includes six measures in its productivity index: total number of words (TNW); total number of different words (NDW), representing lexical diversity; LENGTH calculated as the total number of C-units, defined as a main clause and its dependent clauses; total number of C-units that contained two or more clauses (COMPLEX); and total number of coordinating and subordinating conjunctions (COORD and SUBORD, respectively). The complexity index is based on three measures: mean length of C-unit in words (MLT-W), proportion of complex C-units (PROPCOMPLEX), and SUBORD, a measure that also loaded onto the productivity factor in the factor analysis. The authors noted that some measures – namely, COMPLEX, COORD, and SUBORD – loaded in the factor analysis with more traditional measures of productivity, contrary to their hypothesis.

They nonetheless retained the Productivity and Complexity dimensions, noting that microstructure is not unidimensional. The INMIS formulas used to calculate the two metrics follows. Note that the formula can yield either a negative or positive result.

- $Productivity = -1.60 + (-0.0010 \times MLT-W) + (-0.21 \times PROPCOMPLEX) + (0.017 \times NDW) + (-0.00054 \times TNW) + (0.014 \times COORD) + (0.0072 \times SUBORD) + (0.0094 \times LENGTH) + (0.068 \times COMPLEX).$
- $Complexity = -2.84 + (0.27 \times MLT-W) + (0.85 \times PROPCOMPLEX) + (0.012 \times NDW) + (-0.0027 \times TNW) + (0.028 \times COORD) + (0.026 \times SUBORD) + (-0.085 \times LENGTH) + (0.14 \times COMPLEX).$

Data Scoring and Reliability

Children's narratives on the single-picture task from pretest to posttest were transcribed verbatim and analyzed using the Systematic Analysis of Language Transcripts (SALT; Miller & Iglesias, 2020). As per the guidelines for the INMIS, children's narratives were first divided into C-units, then coded for COORD, SUBORD, and COMPLEX wherever applicable. The primary researcher's supervisor also coded conjunctions and complex C-units for 20% of transcripts. Interrater reliability was 96.5% for conjunctions and 100% for complex C-units; differences were resolved through discussion. The remaining components on the INMIS were generated via SALT, except for PROPCOMPLEX which was calculated in SPSS by dividing COMPLEX by LENGTH, as instructed by Justice et al. (2006).

Data Analysis

For each of the microstructural elements, our initial plan was to conduct mixed ANOVAs to examine differences in scores between LD and TD children on both the productivity and complexity indices. However, the assumptions for equal variance were not met for the

productivity posttest. Therefore, we compared the LD and TD groups' productivity and complexity scores using independent samples t-tests with correction for unequal variance in SPSS and present descriptive statistics for the individual microstructural elements contributing to the two main scores to explore the data further. We additionally conducted paired-sampled t-tests for each group separately to examine pretest to posttest differences on the productivity and complexity indices.

Results

Table 1 provides descriptive statistics for the LD and TD groups on all the INMIS measures contributing to the productivity and complexity indices. As can be seen, the mean scores at both time points and the gains appear higher in the TD group compared to the LD group.

Table 1

Pretest, Posttest, and Gain Scores on the INMIS Measures by Language Group

Measure	Language Difficulty			Typically Developing		
	Pretest Mean (SD)	Posttest Mean (SD)	Gain Mean ^a (SD)	Pretest Mean (SD)	Posttest Mean (SD)	Gain Mean (SD)
TNW	74.6 (56.1)	65.0 (39.1)	-9.6 (42.8)	130.4 (124.3)	205.6 (131.2)	75.2 (116.4)
NDW	34.4 (22.0)	34.0 (18.0)	-0.4 (16.8)	59.2 (38.0)	83.3 (41.4)	24.1 (38.4)
LENGTH	10.1 (5.5)	10.4 (5.2)	0.3 (3.5)	14.9 (13.2)	22.8 (13.5)	7.9 (11.0)
COORD	1.4 (1.6)	1.3 (1.3)	-0.1 (1.5)	1.7 (2.1)	3.4 (3.1)	1.7 (3.2)
COMPLEX	.29 (.76)	.43 (.53)	.14 (.69)	2.3 (3.0)	3.9 (3.5)	1.6 (3.8)
SUBORD	0.3 (0.8)	0.4 (0.5)	0.1 (0.7)	2.3 (2.8)	4.0 (3.8)	1.7 (4.1)

MLT-W	6.7 (2.2)	7.1 (3.5)	0.4 (3.7)	8.3 (2.2)	8.9 (1.9)	0.6 (2.5)
PROPCOMPLEX	0.02 (0.52)	0.05 (0.92)	0.03 (0.1)	0.13 (0.14)	0.16 (0.14)	0.03 (.18)

^aMean gain was calculated by subtracting the pretest means from the posttest means.

The assumption of homogeneity of variance on the productivity and complexity indices was tested using Levene's statistic. At pretest, both indices met the assumption. At posttest, the assumption was violated for productivity, and thus the independent and paired-sampled t-test with unequal variances are reported in this case.

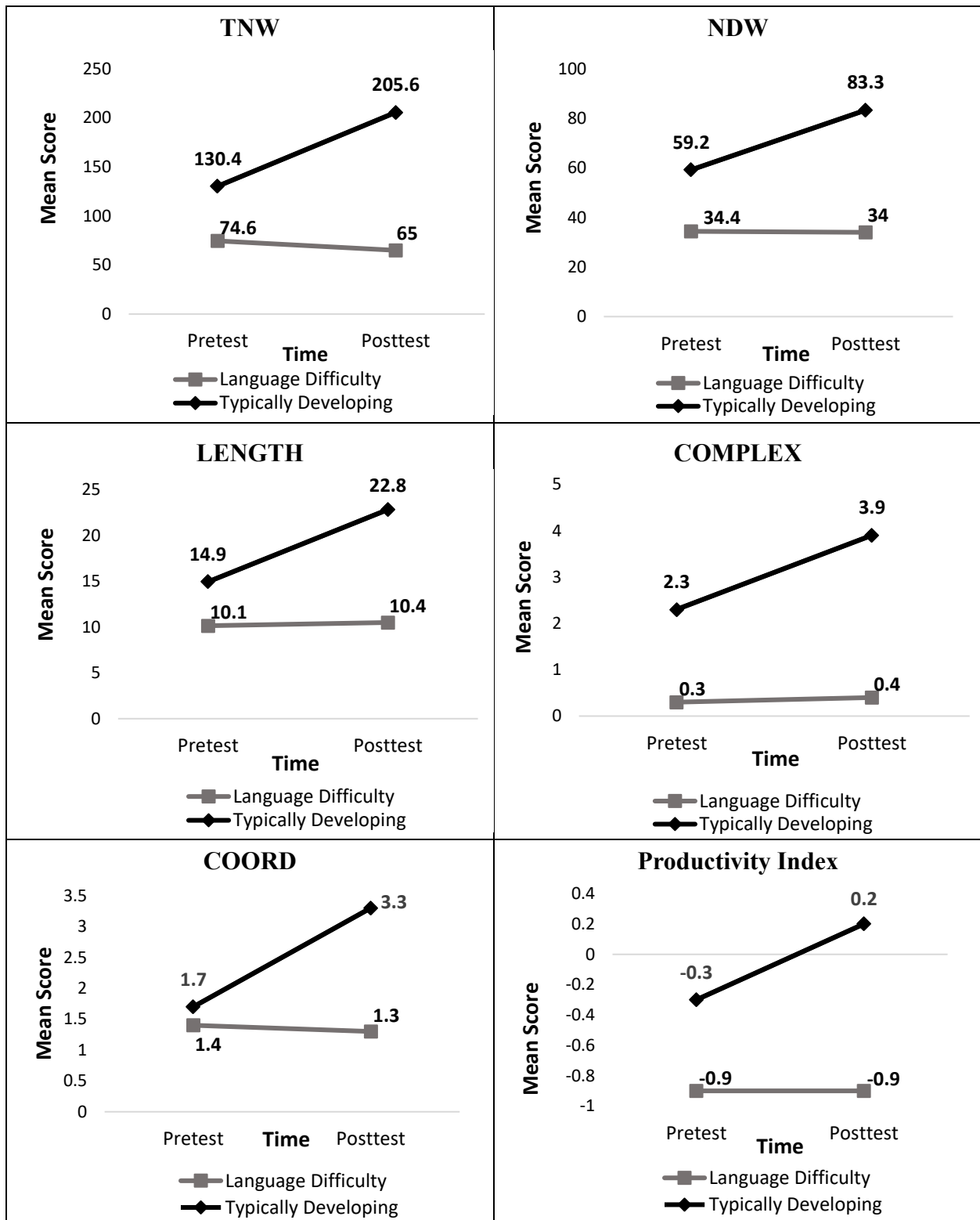
Productivity

Independent samples t-tests were conducted to examine differences in scores between the two language groups at pretest and posttest on the productivity index. Hedge's g , a measure of effect size was also calculated. At pretest, there was a statistically significant difference between the LD group ($M = -.93$, $SD = .41$) and TD group ($M = -.31$, $SD = .87$), $t(32) = -2.701$, $p = .01$, $g = 0.77$. At posttest, there was also a statistically significant difference between LD ($M = -.93$, $SD = .35$) and TD ($M = .22$, $SD = .98$), $t(28.1) = -5.003$, $p < .001$, $g = 1.28$. At both times, scores in the TD group were higher.

Paired-samples t-tests were conducted to examine differences in scores on the productivity index for both LD and TD groups from pretest to posttest. For the LD group, there was no significant difference from pretest ($M = -.93$, $SD = .41$) to posttest ($M = -.93$, $SD = .35$), $t(6) = .03$, $p = .98$, $g = 0.00$. For the TD group, the mean score increased significantly from pretest ($M = -.31$, $SD = .87$) to posttest ($M = .22$, $SD = .98$), $t(26) = 3.02$, $p = .01$, $g = 0.57$. Results for the individual measures contributing to the productivity index and the index itself are illustrated in Figure 1 apart from SUBORD, which is presented in the complexity index.

Figure 1

INMIS Productivity Variables and Index by Group



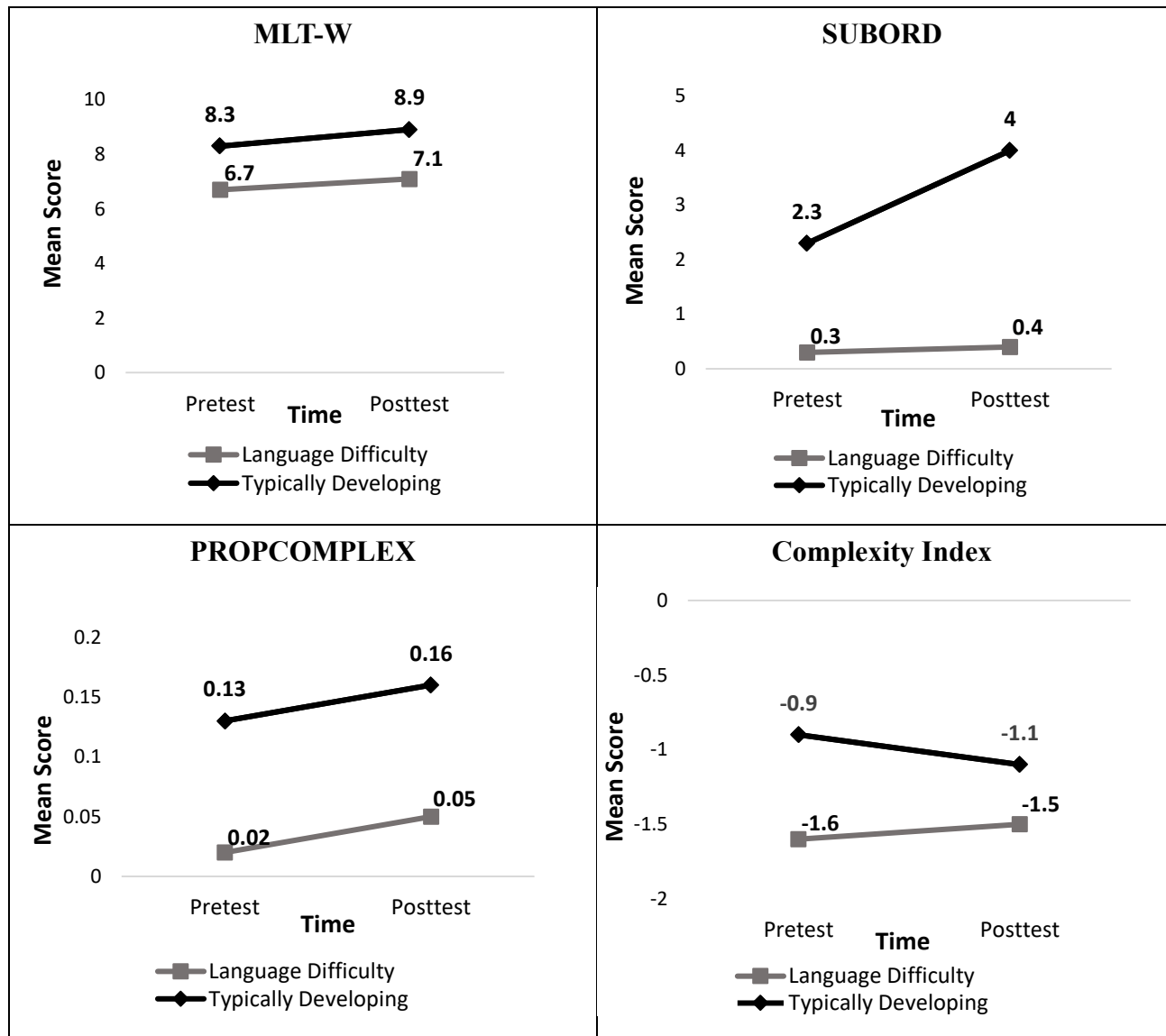
Complexity

Independent samples t-tests were conducted to examine differences in scores between the two language groups at pretest and posttest on the complexity index. At pretest, the LD group had significantly lower scores than the TD group: LD ($M = -1.58, SD = .56$), TD ($M = -.89, SD = .90$), $t(15.4) = -2.520, p = .02, g = 0.81$. At posttest, there was no significant difference between the LD group ($M = -1.46, SD = 1.24$) and TD group ($M = -1.05, SD = 1.17$), $t(9.0) = -.776, p = .46, g = 0.35$. Results for the measures contributing to the complexity index and the index itself are illustrated in Figure 2.

Paired-samples t-tests were conducted to examine differences in scores on the complexity index for both the LD and TD groups from pretest to posttest. For the LD group, there was no statistically significant difference in the scores from pretest ($M = -1.58, SD = .56$) to posttest ($M = -1.46, SD = 1.24$), $t(6) = .028, p = .79, g = 0.12$. Nor was there a significant difference in the TD scores from pretest ($M = -.89, SD = .90$) to posttest ($M = -1.05, SD = 1.17$), $t(26) = -.807, p = .43, g = 0.15$.

Figure 2

INMIS Complexity Variables and Index by Group



Discussion

This study adds to the growing body of research that argues dynamic assessment can provide valuable information about the language skills of bilingual children (e.g., Gutiérrez-Clellen & Peña, 2001; Hasson et al., 2012; Henderson et al., 2018; Kramer et al., 2009; Laurie &

Pesco, 2023; Peña et al., 1992; Peña et al., 2001). Using a published index of narrative microstructure, the INMIS (Justice et al., 2006), this study examined the microstructure of narratives gathered from bilingual Filipino-English speaking children as part of an earlier study examining the accuracy of a dynamic assessment of narratives in distinguishing LD and TD groups. The findings revealed distinct patterns between the two groups. The TD children's scores increased significantly on the productivity index following mediation focused on macrostructural elements, and descriptive data suggested that their scores also increased on all the variables contributing to this index. However, they did not demonstrate significant gains in complexity. In contrast, the LD group did not exhibit gains in either productivity or complexity, and descriptive data suggested either minimal gains or slight decreases on the variables comprising each index.

Although the TD group's increase on the productivity index was coupled with a lack of significant change in complexity, the lack of complexity differences found at posttest between the LD and TD groups aligns with previous studies such as Peña et al. (2006). The pretest data also aligns with Hoffman's (2009) finding that the INMIS's complexity index differentiated LD and TD groups. The descriptive data in the present study, however, showed a downward trend for the complexity score. This trend could have resulted from the way the INMIS is calculated. As noted by Hoffman (2009), a possible limitation to the INMIS involves the weightage given to story length. Specifically, the INMIS complexity score is influenced by story length, as it subtracts the story length measure, while the productivity index adds it. Consequently, at posttest, if a child tells a longer story with similar complexity compared with their pretest, their total complexity index score can decrease.

Hoffman (2009) also found that the INMIS's productivity index did not differentiate LD and TD groups, a result described by Hoffman as unexpected and contrary to research by others.

In contrast, our research showed a significant difference at pretest and posttest (i.e., both before and after the dynamic assessment). This contrasting finding between Hoffman (2009) and the present study may relate to the narrative elicitation method. Hoffman used a wordless picture-book to elicit stories. In this context, children could rely heavily on the pictures to construct a story, but children with LD may be less able than children with TD to meet the demands of cognitive and linguistic demands of formulating a story with fewer picture cues.

Implications

In this study, as discussed immediately above, we found significant differences in productivity between LD and TD bilingual Filipino groups and in complexity at pretest. The significant gains for TD children on productivity at posttest supports Vygotsky's (1978; 1986) model for cognitive development and learning potential. The lack of gains in the LD group, however, suggests that intervention would be needed to affect change (Feuerstein et al., 1979; Haywood, 1997). Clinicians opting to administer the dynamic in their practice should consider using productivity measures to obtain a more comprehensive understanding of the children's narrative skills before and after mediation.

Laurie and Pesco (2023) found that modifiability ratings, gathered during the mediation phase of the dynamic assessment, as well as posttest scores on measures following mediation, were excellent predictors of language ability. If clinicians were to examine these variables along with the microstructural features discussed in the present study, this would provide a more comprehensive profile of each child's narrative skills and learning potential and enable practitioners and clinicians to more confidently identify children who are at risk for language difficulties.

Future Directions and Limitations

The TD children achieved higher scores on the productivity index following the dynamic assessment and the descriptive data suggested that this was due to gains in word output, lexical diversity, and story length, while the LD children did not change. These findings underscore the importance of including productivity measures in future studies aimed at distinguishing TD and DLD. This study of microstructure adds to the literature showing that gains in macrostructure scores are also effective at distinguishing between DLD and TD groups (e.g., Henderson et al., 2018; Kramer et al., 2009; Petersen et al., 2017). While we might have also investigated children's macrostructure, a methodological issue relating to unequal scales prevented us from doing so. Specifically, the episode structure scale ranged from 0-1, while the other scales ranged from 0-4. Since the targeted skills for mediation were based on low-achieved skills, not every child had the same set of targeted skills. Thus, some children worked on two skills, each of which were assessed on a 0-4 scale, while others worked on one skill with a 0-4 scale, and the other on a 0-1 scale. As a result, children who worked on two skills with 0-4 scales had a greater opportunity for improvement compared with children who worked on skills with one 0-4 and one 0-1 scale during the mediation phase. Adjustments to the scales in future studies could allow a direct comparison of LD and TD groups' performance on their macrostructure skills as part of a dynamic assessment of narratives.

Another limitation of our study was the small sample sizes, unequal cells, varied ages, and heterogeneity in variance for some measures. With a larger, more balanced, or matched sample of TD and LD children, other analyses could be conducted (e.g., mixed ANCOVA to test for group-time interactions and covary age). However, it was encouraging to see that even with the small sample and conservative t-tests for unequal variance, significant results were obtained.

Furthermore, the descriptive data showing that TD children's scores increased for almost all elements, while LD children showed negligible gains, suggests avenues for further exploration.

Connecting Study 2 and Study 3

The findings of Study 2 revealed that the microstructural properties of children's narratives improved for children in the TD group following two short mediation sessions targeting their narrative skills. Children in the LD group did not improve, suggesting that the LD group needed intervention to induce change. Early intervention is critical for children with language disorders to support their development and overall educational achievement (Preston et al., 2012).

Most dynamic assessment studies have focused on the assessment's ability to classify children in a LD or TD group, rarely examining individual children's performance. This rarity is surprising given that dynamic assessment is characterized by mediation sessions that are individualized and cater to each child's learning potential. To address this gap, Study 3 uses case studies to investigate the performance of four kindergarten bilingual Filipino children classified as LD from Studies 1 and 2 during the dynamic assessment. The study is novel in that it explores the performance of an overlooked population, that is Filipino- and English-speaking children, during the mediation phase of the assessment, as well as on the TNL-2 (Gillam & Pearson, 2017).

**Dynamic Assessment of Narratives: Case Studies of Bilingual Filipino Kindergarteners
with Language Difficulties**

Anne Laurie and Diane Pesco

Department of Education, Concordia University, Canada

Currently under review at *Child Language Teaching and Therapy*

Abstract

The goal of the present study was to investigate the performance of four bilingual Filipino kindergarteners with language difficulties on a dynamic assessment of narratives. Using a multiple case-study design, we examined the children's modifiability by detailing their responsiveness, level of skill transfer, and the amount and type of effort the examiner (i.e., the researcher) expended during two mediation sessions. We also assessed the children's narrative skills pre- and post-mediation using the Test of Narrative Language-Second Edition (TNL-2; Gillam & Pearson, 2017). All four children had difficulties answering wh-questions, showed little transfer of the newly learned skills to novel tasks, focused often on the story problem, and needed continual prompting and repetition. However, each child showed unique learning preferences and learning potential, prompting the researcher to apply different strategies to support their individual abilities. As expected, pre-to-post gains on the TNL-2 were negligible apart from one child who showed improvement in their comprehension scores. The study offers insight into the similarities and differences amongst Filipino bilingual children with language difficulties that could inform service delivery with this under-researched population. The study may also inspire clinicians to incorporate dynamic assessment into their practice and to attempt the mediation strategies presented with other groups of bilingual children.

Dynamic Assessment of Narratives: Case Studies of Bilingual Filipino Kindergarteners with Language Difficulties

When bilingual children are referred for assessment due to concerns about their language development, clinicians are challenged with disentangling whether the child has a “language difference” (i.e., language development that reflects the influences of a first language or bilingualism) or a developmental language disorder (DLD; Hasson et al., 2012; Peña et al., 2020). This challenge stems, in part, from the norming of many standardized language tests on monolingual speakers. Indeed, there is no gold standard for diagnosing bilingual children with a DLD (Camilleri & Botting, 2013) and the establishment of developmental norms for such children is complicated by factors such as the length and quality of their language exposure (Peña et al., 2020) and the similarities of the languages they acquire (Fuertes & Liceras, 2018).

The consequences of inadequate assessments for bilingual children have been noted in past research. Stow and Dodd (2005), for example, propose that such children may be under-referred to speech-language therapists and may thus lose opportunities to benefit from treatment. In contrast, others have noted that bilingual children are overrepresented in speech-language services and may be receiving treatment that is unnecessary, as well as costly and emotionally burdensome for children and their families (Hunt et al., 2022). Given these undesirable outcomes, researchers have sought ways to differentiate language difference and disorder. These include the use of dynamic assessment and the assessment of narratives, a discourse form that children from various cultures and linguistic backgrounds readily engage in from a young age (Owens, 2013).

Narratives of Children with Developmental Language Disorder (DLD)

Children who produce well-developed and coherent narratives have better foundational

skills and an academic advantage over children who produce less-developed narratives (Griffin et al., 2004). Hudson and Shapiro (1991) state that by the time typically-developing children reach eight years of age, their narratives are complete, sophisticated, and cohesive. In contrast, those of children with DLD often lack critical story elements (Peterson & McCabe, 2013). Owens (2013) adds that children with DLD often demonstrate difficulties in retelling and organizing a story, produce few lengthy utterances in their stories, and include more irrelevant information. Typically-developing peers of such children produce more complex narratives with greater similarities to written narratives (Kaderavek & Sulzby, 2000).

Children with difficulties in narrative expression often also exhibit difficulties in narrative comprehension as reflected in their weak encoding of causal relationships and poor recall of pictorial narratives including such relationships (Bishop & Donlan, 2005) and their greater difficulty making inferences in narrative contexts compared with typically-developing peers (McClintock et al., 2014). Therefore, it is important to assess children on their narrative comprehension skills to get a comprehensive picture of their abilities.

Dynamic Assessment and Bilingual Children with DLD

Alongside narratives, researchers have looked at using dynamic assessment to distinguish bilingual children with and without DLD (e.g., Peña et al., 2014, Petersen et al., 2017). The dynamic assessment approach is grounded in Vygotsky's zone of proximal development (Vygotsky et al., 1978) and Feuerstein and colleagues' (1977) mediated learning experience. Its main objective is to understand children's learning needs and ability to master a skill by working with the child through short teaching sessions called mediation. Lidz (1991) argues that researchers and clinicians using a dynamic assessment approach should use a particular set of strategies to ensure high-quality mediation. These involve stating the purpose of the skill and its

meaning to the child, supporting the child to think hypothetically and independently and develop metacognitive awareness, and helping the child plan how to use the skill and transfer it to new contexts. During mediation, the examiner assesses the child's responsiveness to these strategies, their level of skill transfer, and the effort the examiner must put in for the child to achieve transfer (Peña, 2000). Bilingual children's scores on modifiability rating scales have successfully classified them to either a typically-developing or DLD group (e.g., Orellana et al., 2019; Peña et al., 2014; Petersen et al., 2017).

Mediation is individualized by design and every child is a unique learner; therefore, we expect children with language difficulties to respond to the mediation strategies in diverse ways that align with their learning potential. However, the details of mediation with bilingual children have rarely been provided in the literature. The current investigation applies a multiple case-study design to examine mediation sessions with bilingual children with the intent of informing clinical practice by highlighting similarities and differences amongst the children. It profiles the performance of four bilingual Filipino kindergarteners with language difficulties (see Methods) during a dynamic assessment of their narrative abilities. The study goals are (a) to provide evidence for the usefulness of dynamic assessment in revealing a range of abilities amongst children with language difficulties; (b) to provide examples of differentiated instruction for these children in the mediation phase; and (c) to assess the outcome of the mediation on children's scores on a standardized assessment of narrative skills. We asked:

1. How do bilingual Filipino children perform during the mediation phase of dynamic assessment as captured by the child's modifiability ratings and a qualitative description of the elements contributing to the ratings (i.e., the child's responsiveness to the mediation, examiner effort, and transfer)?

2. How do the children score on the standardized, norm-referenced Test of Narrative Language—Second edition (Gillam & Pearson, 2017) pre- and post-mediation?

Methods

Participants

Participants were selected from a larger study (Laurie & Pesco, 2023) examining the accuracy of a dynamic assessment of narratives in distinguishing bilingual children who were typically developing or had language difficulties. Ethical approval for that study was obtained by the University Human Research Ethics Committee at [removed for blinding] University. The first author described the study to parents at an initial visit to the home, answered any questions the parents had, and received written consent for the child's participation.

The classifications of children's language status were based on the *Alberta Language and Development Questionnaire* (ALDeQ; Paradis et al., 2010) and supplemental information provided by parents about the child's language exposure and current language abilities. These questionnaires were completed with parents at the first home visit, following consent. The ALDeQ assesses a child's L1 abilities, developmental milestones, behavior patterns and activity preferences, and family history of various difficulties and delays. All four children scored 1.25 standard deviations or more below 66, the cutoff value on the ALDeQ suggesting the presence of language difficulties in the L1. None of the parents reported that their children had other conditions that could have impacted their language ability (e.g., a global developmental delay or hearing loss).

While seven children were classified as having language difficulties (henceforth, LD) in the larger study, for the present study, we chose only the four children in kindergarten to remove grade level as an influencing factor on children's profiles. The children were between the ages of

5;5 and 6;1 as shown in Table 1. All four were of Filipino background and were acquiring both Filipino and English. The children were all exposed to Filipino at home and at familial, social, and community events. They were also exposed to English at home to varying degrees, at school, and in the larger community.

As also shown in Table 1, three of the four participants were receiving special services in English for language before participating in the study. Maria was the sole child who was not receiving language services; however, her parents expressed concern about her English skills.

Table 1

Children’s Ages, Home Language Exposure, and Language Services

Child ^a Age	Home Language Exposure	Language Services Received
Maria 5;5	Filipino and English. Parents were beginning to learn English and spoke English to younger siblings.	Not receiving services at time of testing but parents were worried about poor English comprehension and grammar.
Daniel 5;7	Filipino initially, with increase in English last two years to support English skills. Parents and older sibling continued to speak Filipino to one another.	Receiving services from SLP for a year for speech and language. Parents report great improvement during this time.
Tyson 5;8	Filipino, with increase in English by parents over the last 6 months following arrival to Canada. No siblings.	Not receiving services at time of testing. Mom thought he needed time to learn English, but child was referred to an SLP a month after participating in the study based on teacher concerns.
Jackson 6;1	Filipino, with increase in English by parents during last year to support English skills. No siblings.	Receiving services by SLP for a year (few words prior to intervention). Parents report great improvement with clinician support.

^aPseudonyms are used for anonymity

Design

We used a test-teach-test approach to dynamic assessment as it has been found to distinguish between language difference and disorder, and to be highly useful to clinicians in planning intervention, regardless of the child's cultural and linguistic background (Peña, et al., 2014). More specifically, we implemented pre- and post-mediation tests and two mediation sessions.

Testing Phase Measures and Procedures

The pre- and post-mediation testing sessions were conducted individually by the first author in a quiet room in the children's homes, lasted 25–30 minutes, and were audiorecorded to allow transcription and reliability checks. The tasks described immediately below, were the same in the pre- and post-mediation sessions.

The Single-Picture Task

For the single-picture task, children were asked to generate a story based on a single picture from a child's storybook (one picture was used pre-mediation and another post-mediation, to avoid practice effects). The pretest picture, from the book *It Was You! Blue Kangaroo* (Chichester Clark, 2009), depicts a little girl with an adult woman in a kitchen who are surprised to see the sink overflowing with water. The posttest picture, from *Jabari Jumps* (Cornwall, 2017), depicts a little boy on a high diving board at a public pool with his dad looking up at him from the pool. Both pictures were unfamiliar to the children prior to participating.

The *Narrative Features Rating Scale* (NFRS) was used to score the single-picture task. The scale is based on Miller et al. (2001) but was revised to be relevant to stories generated from a single picture, and to distinguish the ratings clearly. The scale addresses three narrative aspects. The first, *story components*, comprises the story's setting (time and place), literal character

information, character's internal states, temporal order of events, and causal relationships, each scored on a 0–4 scale. The second narrative aspect, *story ideas and language*, includes the complexity of ideas, vocabulary, grammar, and dialogue, each scored on a 0–4 scale. Lastly is episode structure, which includes an initiating event, attempt, internal response, consequence, plan, and resolution, each scored on a 0–1 scale. The first author transcribed then scored the children's narratives for the single-picture task according to the NFRS, once the session was completed. Reliability of scoring was established for our larger sample using weighted kappas and was strong for all three narrative aspects: story components, $k = .80, p < .001$; story ideas and language, $k = .80, p < .001$; episode structure components, $k = .77, p < .001$ (Laurie & Pesco, 2023).

Test of Narrative Language—Second Edition (TNL-2)

The TNL-2 (Gillam & Pearson, 2017) is a popular standardized assessment, validated with a norming sample of 1,130 children across the U.S. between the ages of 4;0 and 15;11. It has three comprehension tasks comprised of literal and inferential questions, and three production tasks. While the assessment does not provide parallel forms, the comprehension and production scores each have good test—retest reliability with Narrative Language Ability Index (NLAI) coefficients of .85 and .82, respectively.

The test authors established that a cutoff of 92 was best (i.e., had high sensitivity and specificity) in distinguishing between typically-developing language and DLD. In our larger study of bilingual Filipino children, a score of 92 on the post-test was also found to be an optimal cutoff. The TNL-2 was scored according to the manual, with raw scores for both the comprehension and production tasks converted first to standard scores and then to the NLAI, a composite score providing an overall view of children's narrative abilities. Inter-rater reliability

for the TNL-2 scoring in our larger sample of Filipino children was strong, with a percentage agreement of 91.4 across various scales and scores (Laurie & Pesco, 2023).

Mediation Measures and Procedures

Once the children's narratives on the single-picture task were transcribed and scored, the first author selected two low-rated narrative skills for mediation (one skill per session). These were skills that appeared earliest in the children's regional English Language Arts curriculum and are widely recognized as key elements in narratives. In keeping with the dynamic assessment approach, the objective of the mediation sessions was for the children to use newly learned skills independently by the session's end. The first author (referred to below as the examiner) conducted the sessions at the children's homes on two consecutive days. At the start of the first session, the child listened to the story they had produced on the single-picture task, read aloud by the examiner; at the second session, the examiner again read aloud the story, integrating the information added during the first session. The examiner-child dyad would then continue to work on the skill established for the session. The sessions were semi-scripted and lasted 25–30 minutes each. They were guided by Lidz's (1991) principles, outlined in the introduction, and supported with various learning materials (e.g., worksheets from children's English Language Arts curriculum and drawing materials).

Children's modifiability was scored using a modifiability rating scale provided in Laurie and Pesco (2023). The scale covers children's *responsivity to teaching*, scored from 0–3 (not at all, slightly, moderately, highly); *examiner effort*, scored from 0–3 (extreme, high-moderate, moderate, slight); and children's *skill transfer*, scored from 0–2 (no, some, yes). For each of these components, the scale includes criteria that must be met to obtain each score. An average score of the two sessions was totaled for a possible score from 0 to 8.

Inter-rater reliability of modifiability ratings, calculated on our larger sample using weighted kappa, was strong at .80, $p < .001$, and fidelity to procedures was excellent at 98% (Laurie & Pesco, 2023). The remaining 2% for fidelity was accounted for by the intentional omission of planning and transfer strategies for a child in the present study (see results for Tyson).

Results

Mediation Sessions by Child

In this section, we report the children's scores on the modifiability rating scale and describe qualitatively each child's sessions based on extensive notes taken during and immediately after the mediation sessions. The descriptions address the effectiveness of various teaching strategies, the amount and type of examiner effort necessary to support learning, and children's level of skill transfer by the end of each session. All four children received modifiability ratings on the low end of the scale, averaging 1.9 across the 4 children ($SD = 1.65$). This mean rating was lower than the mean rating of 6.6 ($SD = 1.3$) for the 27 bilingual Filipino participants in the typically developing group (Laurie & Pesco, 2023), and the mean rating of 4.9 ($SD = .89$) found for the 5 kindergarten children within the TD group who had varying levels of English exposure (range 2 months to 2 years). Table 2 details the ratings for each skill and modifiability component. As the table shows, the children's average scores were all below 4.5, the cutoff score indicative of a language difficulty based on our larger study.

Table 2*Children's Scores on the Modifiability Rating Scale by Skill*

Modifiability	Child			
	Maria	Daniel	Tyson	Jackson
Child Responsivity Skill 1	1	1	0	0
Child Responsivity Skill 2	2	1	0	1
Examiner Effort Skill 1	1	1	0	0
Examiner Effort Skill 2	2	1	0	0
Transfer Skill 1	0	0	0	0
Transfer Skill 2	1	1	0	1
Average Modifiability Score	3.5	3	0	1

Note. We addressed one skill per session on two consecutive days.

Maria

Maria's first pre-mediation story on the single-picture task (see Table 3) included several story grammar elements but were difficult to follow as the events were not connected clearly and the story included pronoun and other grammatical errors. The skills targeted for mediation were story setting and character information: elements that we thought would help situate listeners and thus follow Maria's stories better.

Table 3

Maria's Narratives on the Single-Picture Task

Pre-Mediation	Post-Mediation
<p>They have a lot of bubbles and his mother come out there. And the children will point the finger on the sink and have a lot of bubbles and they are stopping it that is why it is a lot. And somehow, they put it back and go out there outside. And there are a lot of bubbles clean up, and then so hard. And that is why that girl's super naughty and got a lot of bubbles everywhere. And super sad and his mother come out and is angry and so so not good at it. And do you know it is hard. Clean up it things look like a pool and you cannot swim in there. And I go swimming and naughty says and they still come inside and call in his phone and clean up the water with this (unintelligible) and they are waiting outside and sit down there and the mother told the kid "that is why don't do that again" and so good and proud and say sorry. And so a lot of bubbles to clean up it and put it outside and so put it in the plastic in the black one and that is why all it them is gone now.</p>	<p>He's a bit scared, too high, that is why. He get down there and get higher and higher and a bit high and super up in the sky and he would be scared. He don't know how to go down there. And he don't know how to, and he said that he's really scared and his mum and dad to come to help you. In the helicopter would to be there soon there. And you come there and rescue him. That is why.</p>

Note. Repetitions and abandoned utterances that did not appear to contribute to the story have been removed for clarity.

Child Responsivity. Maria's difficulty in telling a fully coherent story was also observed in the mediation sessions. Additionally, she struggled to differentiate wh-questions.

Consequently, many of her answers were nonsensical. Even when her responses to questions were accurate, she preceded them with "that's why", which could confuse listeners. For instance, when asked, "*Where is this story happening?*" she replied, "*That's why the girl is in the kitchen.*"

For setting, the examiner asked Maria to (a) draw the time and place she saw in the single

picture used in the pre-mediation session (e.g., a kitchen and a sun to indicate daytime) and (b) describe it. The examiner then referred to the drawings to assist Maria in generating appropriate answers to “where” and “when” questions. Maria was then presented with a new picture and asked where the story was happening. As her answer was “*That’s why the girl is crying*”, it was clear that she needed additional teaching. When she was asked to draw where the new story was happening, she did so and named the setting without prompting (a bedroom). However, when asked to tell the setting with no drawing, she instead proceeded to tell an entire story. A similar pattern occurred when she was asked to name the setting on a personal story about her friends at school after drawing it, and then asked to name it again without drawing.

For character information, we again used drawing to help inspire character descriptions (e.g., the child drew a picture of a mother and daughter and the examiner elicited details about their physical characteristics). Overall, Maria was more attentive and on task compared to the first session. She showed eagerness and ability to tell long stories with relatively rich information, especially when given the opportunity to draw. However, as observed in the first session, when asked for the character information, she would tell the whole story unless reminded of the question’s focus. Moreover, her responses remained challenging to understand.

Examiner Effort. For the first session, the examiner did most of the talking as Maria was rather quiet and seemed unsure of herself unless she was telling a story. To facilitate comprehension, the examiner used slightly slowed speech. The examiner needed to request verbal imitation twice and to prompt Maria to provide on-topic answers. Overall, the examiner had to exert less effort when working on the second skill (i.e., character information). One explanation could be Maria’s apparently greater interest in describing the characters versus the settings, particularly on a picture with a character who resembled her (i.e., a little girl with long

brown hair and a pink dress). Her initial enthusiasm for this character may have contributed to her richer answers in this session for both picture-based and personal stories. The examiner also had to work hard to distinguish wh-questions and communicate instances where Maria’s use of the phrase “that’s why” might be appropriate.

Transfer. For the first skill (providing setting information), Maria did not demonstrate skill transfer or an understanding of the skill by the end of the session. She showed some transfer in providing character information in response to questions and in drawing, but when asked to describe a character in a new story without stimuli or cues, she instead provided an entire story, again showing difficulties in understanding the task. When asked why describing characters was important to stories, she replied with “*because everyone has a name*”, a vague response that showed some but incomplete understanding.

Daniel

Daniel’s story on the single picture task was short and limited to the central story problem (see Table 4). The skills selected for mediation were character information and story attempt, to help Daniel start thinking how to structure a story by expanding on the relationship between the story problem, which he presented, and the characters’ actions to solve it.

Table 4

Daniel’s Narratives on the Single-Picture Task

Pre-Mediation	Post-Mediation
Something is falling on the ground. The end.	He trying to jump in the water. What happens when he jump far away in the beach, far away in the river. And then, he was drowning. The end.

Child Responsivity. For character information, the examiner worked with Daniel on giving a name to one of the main characters (i.e., the little girl in the picture). Initially, he

referred to characters only as “them” or “it”. The examiner first discussed with Daniel the names of his family members and friends to make the point that everyone has a name. Later in the session, Daniel independently named the little girl in the picture “Ate” which means big sister in Filipino. The strategy of discussing people familiar to him and relating their names and physical characteristics helped him understand the importance of naming and describing characters in stories. Daniel’s mother indicated that he was able to read (i.e., decode) words well for his age. The examiner drew upon this strength, using cue cards that said “name” and “looks like” to elicit character information at the start of the first session. These were an effective strategy for Daniel to include character information but also appeared to help him organize his thoughts and stay on task. When the cue cards were removed, he was easily distracted and often interrupted the exchange in progress to tell personal stories and to ask questions unrelated to the session.

Once the cue cards were gradually taken away, they determined whether Daniel could a) give the characters a name and b) describe their physical characteristics, first by asking questions related to another single picture, then by eliciting the familiar Little Red Riding Hood story (unsupported by pictures). In these contexts, Daniel was fixated on recounting key events in the story (e.g., *the wolf eating the grandmother*). However, when the cue cards were reintroduced and verbal prompting was involved, Daniel gave answers that were accurate and creative (e.g., *the wolf had pointy teeth and big grey ears*).

In the second session, targeting attempts (i.e., actions taken by characters to solve story problems), Daniel was very energetic and had difficulty sitting in place, and therefore, on task. The examiner took advantage of his energy by having Daniel act out and verbalize the actions. He responded creatively and without hesitation, albeit with some verbal prompting to keep him on task. However, when it came to independently providing character attempts based on a second

picture and then in a personal story, he focused on the story problem unless he was prompted, as observed during the first session. Daniel demonstrated the ability to provide creative story information during both sessions but needed strategies to help direct his responses and stay on task (i.e., cue cards and prompting) and ones that matched his energy level (i.e., story acting).

Examiner Effort. For both sessions, the effort required was high-moderate as Daniel needed considerable support. The examiner reduced their speech rate at the beginning of each session when first explaining the meaning of the skill. They also requested verbal imitation twice for the first skill and once for the second; provided several examples for each new story and modelled responses; and provided gestural cues and verbal prompts (e.g., cloze procedures or phonological cues) to guide Daniel. At times, repetition was needed to keep him on task.

Transfer. For the first skill, Daniel could verbalize what he had learned “*the names and what the characters look like*” but could not perform the skill independently. In answer to a question about why the skill was important for stories, he replied, “*because I did great*” and “*so I can play LEGOS*”, indicating a lack of understanding of the skill’s purpose. By the end of the second session, he could verbalize the importance of attempts “*to solve the problem*” and come up with creative attempts. However, there was no evidence of independent skill transfer as prompts and cue cards were continuously required.

Tyson

For Tyson, the first targeted skill was the story setting, an element missing from his pre-mediation story (see Table 5). The second skill was providing any story information that was not explicit in the picture (an element on the NFRS). This skill was chosen as Tyson demonstrated some instances of “going beyond the picture” during the pre-mediation session; we hoped to encourage him to talk by choosing a skill he could exhibit in various ways since he spoke only a

few words at the pre-mediation session. He also took a long time to reply, spoke slowly, and paused after every few words. Consequently, the pre-mediation and post-mediation stories, though quite short, each took over 3 minutes to complete. Sometimes he lacked appropriate intonation.

Table 5

Tyson’s Narratives on the Single-Picture Task

Pre-Mediation	Post-Mediation
<p>The mom and daughter they are both and the kid and there was a mouse! And there is a water and it can’t turn off. And a lot of bubbles. And turn the water...start to grow. Mom said, “and turn the water, and there is a mouse!” There is a water mouse. And...mom and he run and turn the water and start to grow. Start to swim. And mom said, “And turn off”. The kid is know to turn the water and starts to grow and grow and grow. And lots of bubbles. And there’s a mouse! The water. The water...run!</p>	<p>In the water. Swimming. The boy jump, jump on the water down there. One thing is inside the water. People’s in the water. Children swimming. The kid jump over the water.</p>

Child Responsivity. During the first meditation session, it continued to be challenging to get answers from Tyson and his responses, when given, were often inaccurate. For example, when he was presented with the picture where the kitchen sink was overflowing, and asked, “*Where is this story happening?*” he replied with “*water*”. After some modeling and requests for verbal imitation, it was clear that expressing the story *time* was above Tyson’s abilities, perhaps because it was more abstract. To see if he understood the concept of “when”, he was asked to draw a sun to indicate that the story happened in the daytime. Instead, he drew the story problem with water overflowing onto the floor. This phenomenon occurred with another picture-based story that occurred at nighttime, and therefore, was not story dependent.

By the end of the first session, Tyson could tell the story place for both picture-based stories but required repetition of the questions, prompting while pointing to the picture, and requests for verbal imitation from the examiner. Within the first session, there did not seem to be a strategy that was more effective than another for Tyson to use the skill independently. Tyson's responses in the second session were very similar; overall, he did not demonstrate any learning strategies and could only complete the task by imitating the words of the examiner.

Examiner Effort. For both sessions, as Tyson often did not respond to questions or prompts and remained fixated on the story problem, the examiner exerted maximum effort. This was reflected in the examiner slowing their speech rate, performing the task for Tyson, and frequent requests for direct verbal imitation or 'yes'/'no' answers (e.g., "*Did this story happen in the jungle?*"). "Why" and "how" questions were notably difficult as he would often answer with "*I don't know*" even after he was provided with models of correct responses. Consequently, the sessions were very one-sided. In the second session, to avoid Tyson experiencing frustration at being unable to complete the tasks, the examiner eliminated the planning and transfer strategies.

Transfer. There was no indication of skill transfer in either session. Tyson continued to need extensive support in the form of direct verbal imitations, prompting, and examples for him to verbalize logical answers.

Jackson

The first targeted skill for Jackson was the story setting as it was omitted from his pre-mediation story as shown in Table 6. The second targeted skill was story attempt. While Jackson identified a story problem in his pre-mediation story, he omitted actions to solve the problem.

Table 6*Jackson's Narratives on the Single-Picture Task*

Pre-Mediation	Post-Mediation
But the momma just do it like (mimics the mom) and then the girl just do it like (mimics the daughter) and look at this soap. It makes a dirty mess, but momma is able to stop soap in the ground.	He's about to swim in the pool. And the water park when he's in the beach-pool-water-park. After he jumps in the water, let him swim and play with the water when he splash.

Child Responsivity. In the first session, Jackson had great difficulties staying on task. He often interrupted to tell stories about his interests (e.g., bugs and sea turtles) and it was often difficult to bring him back to the task. The examiner paused the session and gave him an opportunity to tell a story about sea turtles, hoping it would satisfy him enough to get back on track, but this was unsuccessful. Therefore, after working on the initial story, the examiner elicited setting in the context of subjects that interested Jackson (e.g., adding the setting to a story about a mother sea turtle giving birth to baby sea turtles). He provided creative and relevant information with some prompting. However, when prompts were removed, he dove into long stories without providing setting information. He also had difficulties understanding “when” and “how” questions and understood them both as “why”; thus, the examiner modelled correct responses when asking questions that began with “when” or “how”.

For the second skill, story attempts, Jackson noticed the story problem and stated that it was “*a bad story that need to be fixed.*” The examiner drew upon his thinking and asked Jackson what actions would be needed to ensure the character was happy by the end of the story (and to thus shift the story from “bad” to “good”). He was better at maintaining his attention to the task when the examiner’s prompts began with “*To make this a good story (do) we need to...*”. In these instances, he was enthusiastic and determined to turn a “bad” story into a “good” story and

provided more accurate answers.

Examiner Effort. For both skills, the examiner applied maximum effort to keep Jackson interested in the topic long enough to work on the skill as he was easily distracted. The examiner often rephrased questions or provided feedback to direct his attention to the task; however, Jackson continued to need extensive prompting. While he was very chatty, the examiner did most of the on-topic talking.

Transfer. Jackson did not verbalize an understanding of the setting skill by the end of the first session or show evidence of skill transfer. He demonstrated some knowledge of the skill when the topic was of interest to him but had difficulties implementing the skill in other stories whether they were picture-based or not. For the second skill, attempts (i.e., actions to solve story problems), he demonstrated some understanding of their importance by stating we need them to “*solve rude stories to make it good.*” Additionally, with prompting, his story actions were creative when he was on topic. Therefore, he demonstrated some knowledge and skill transfer.

Summary Across Children

All children were on the low end of the modifiability rating scale, and under a cutoff score that distinguished children with language difficulties from children with no language concerns in the larger study. When asked to apply the skill we had worked on during mediation to a new story, Maria and Jackson told the whole story while Daniel and Tyson were fixated on the story problem. None of the four children could verbalize a complete understanding of the skill by the end of each session but Maria, Daniel, and Jackson each provided a vague response regarding the importance of one of their targeted skills. None of the children implemented the targeted skill to a new story without some prompting at the very least, and thus, did not show evidence of complete transfer.

Test of Narrative Language—Second Edition (TNL-2)

For the TNL-2, administered pre- and post-mediation, children’s raw scores were converted to standard scores as per the test manual and were generally below the test’s mean standard score of 10 ($SD = 3$). These scores are presented in Table 7, along with NLAI scores (see Method). Maria’s NLAI was just above a score of 92 established by the test authors as a cutoff point to distinguish language learning difficulties. Her relatively high NLAI reflected strong production scores, but she was weak in comprehension. A similar pattern occurred post-mediation and Maria’s NLAI score of 91 was below the TNL-2 cutoff, indicating language difficulties. The three other children had scores under the 92 cutoff at both time points.

Table 7

Pre- and Post-Mediation Scaled Scores on the TNL-2

Child	TNL-2 Pre-Mediation				TNL-2 Post-Mediation			
	Comp. Score	Prod. Score	Total Score	NLAI	Comp. Score	Prod. score	Total Score	NLAI
Maria	6	12	18	94	6	11	17	91
Daniel	6	7	13	80	9	7	16	89
Tyson	5	6	11	75	4	6	10	72
Jackson	5	7	12	78	4	6	10	72

Discussion

The present study used a multiple case study design to examine the performance of four bilingual Filipino children with LD on a dynamic assessment of narratives. Current research has centered mainly on the effectiveness of modifiability as a variable to predict membership of children in either a typical language group or a delayed or disordered language group. However, there is a paucity of research examining how bilingual children with LD perform during the mediation phase of dynamic assessment. Gutiérrez-Clellen and Peña (2001) examined mediation

of vocabulary for two Spanish-English bilinguals, but to the best of our knowledge, no case studies have been conducted of mediation targeting narrative skills. This study fills a gap by closely examining bilingual children's performance in terms of how responsive they were to mediation, their level of skill transfer, and the amount and type of effort the examiner exerted. This approach allowed us to identify similarities and differences across the four children. The information gathered has direct implications for clinical practices, as elaborated below.

Similarities and Differences Amongst the Children

Based on past research on children with language difficulties (e.g., Peña et al., 2000), we expected children in our study to exhibit low responsivity and skill transfer. The findings aligned with these expectations and revealed similarities amongst the children. For instance, when setting was the targeted skill, and the children were asked to provide the setting in a new story after working on it, they instead provided actions or events, often focusing on the story problem. This demonstrates a lack of skill transfer to a novel task. To additionally assess skill transfer, the children were each asked why the skill is important for stories. None of the children could verbalize a clear understanding. These results indicate that further intervention (i.e., beyond the two half-hour mediation sessions in our study) was required for the children to learn new story skills and to articulate their importance. Second, when examining their responsivity, we noted that all four children had difficulties with wh-questions to various extents. These difficulties were also revealed by their low comprehension scores on the TNL-2. Maria's use of that's why at the beginning of most of her answers was particularly noteworthy. Third, when the story setting was the targeted skill for mediation, learning the when (time) led to more difficulties and confusion amongst the children than the where (place). This difficulty could stem from temporal information being too abstract for the children's current cognitive development (Powell & Snow

2007).

As expected of children with language difficulties, there was little to no improvement on the TNL-2 from pre- to post-mediation (Hasson et al., 2012; Miller et al., 2001). Daniel, whose NLAI increased by nine points, was the exception, but he remained under the 92 cutoff for the TNL-2 indicative of a “language learning disability” (Gillam & Pearson, 2017, p. 67). This increase coincides with information on the parent report that stated Daniel had recently made excellent progress in therapy with a SLP and implies that intervention with the SLP would continue to benefit Daniel.

All four children had modifiability scores below the cutoff score established in our larger study of dynamic assessment (see Methods). However, the children’s difficulties did not manifest in the same way, and thus, required different strategies for productive mediation. For instance, while all children struggled to various extents on learning new skills, the examiner had to reduce the mediation content for Tyson as the planning and transfer strategies were above his abilities. He spoke very little and took long pauses between answers, making the interactions very one-sided favoring the examiner. If we contrast this with Jackson’s performance, he was very chatty, and it was hard to keep him on task. Daniel also exhibited difficulties maintaining attention to the task but could come up with creative examples through story acting, while a sit-down approach functioned well for the others. Maria’s answers were often long and complex; she provided several components and ideas in her stories, but her stories lacked coherence and cohesion and were at times incomprehensible. The inclusion of various story elements inflated her scores, especially on the pre-mediation TNL-2 NLAI on which she scored just above the test’s cutoff. If one were to consider only this score, then Maria would have been misclassified as typically developing. However, the dynamic assessment revealed difficulties that would require

further assessment and thus provided important information.

Implications, Limitations, and Future Directions

This multiple case study design has important implications for clinicians who wish to use a dynamic assessment of narratives in their practice. The qualitative description of the mediation sessions shows the value of dynamic assessment to capture children's individual learning styles, behavior when learning, strengths and weaknesses, and learning potential in two relatively short teaching sessions targeting narrative skills that are often included in Language Arts curricula, and important for children's academic success. The findings could augment practitioners' confidence regarding how to evaluate modifiability. Additionally, clinicians can be inspired to try some of the strategies described in their own dynamic assessments or in treating children with language difficulties. Finally, it provides information that could guide expectations of Filipino-English bilinguals with language difficulties, an under-researched population. Readers should be cautious, however, in applying the findings directly to all bilingual Filipino children with language difficulties.

Dynamic assessment research on narratives, including the current study, has investigated mainly narrative macrostructure (e.g., Laurie & Pesco, 2023; Peña et al., 2014; Petersen et al., 2017). In addition to macrostructure, microstructure (including number of different words; verb accuracy; and "first mentions", a measure of cohesion) has also been shown to be affected in both monolingual and bilingual children with DLD (Rezzonico et al., 2015). Solely examining the macrostructure may be insufficient for understanding children's narrative skills. As we observed with Maria, for example, macrostructural scores were high despite stories that were hard to follow. By examining both macrostructure and microstructure, we can fully capture children's narrative abilities. Thus, one interesting future direction would be to further examine

the microstructure for the children in this study. A second direction would be to expand the dynamic assessment to other bilingual populations, particularly under-researched groups.

Conclusion

In conclusion, the present study analyzed modifiability (i.e., children's responsivity, examiner effort, and skill transfer) during mediation for four bilingual Filipino children with language difficulties as part of a dynamic assessment of narratives. This multiple single case-study design can help guide clinicians' expectations of bilingual children's performance and can inform and inspire clinicians who wish to administer a dynamic assessment with bilingual children by providing ideas for intervention.

Connecting Study 3 and Study 4

The first three studies focused on the effectiveness of a CBDA to assess bilingual Filipino children's narrative skills and their modifiability. While dynamic assessments of children from culturally- and linguistically diverse backgrounds have been described as more culturally-sensitive than most standardized assessments, researchers have proposed that in addition to qualified practitioners, experts in the targeted language and culture be consulted (Eriks-Brophy, 2014). Through family and community collaboration, researchers and practitioners can gain insight into the cultural or linguistic factors affecting children's language (Eriks-Brophy, 2014). and their results on assessment (Brockman, 2022). Including parents as experts can increase an assessment's ecological validity, defined as the degree to which assessment items and procedures reflect real-life experiences of the target population (Carter et al., 2005).

In Study 4, two focus groups were conducted with Filipino parents of the children from the previous studies to gather information on their views on (a) their children's stories; and (b) the usefulness of CBDA in assessing their children's language. This collaboration is especially critical given the little information available on Filipino children's English language development and the increasing numbers of Filipino children attending Canadian schools.

**Filipino Parents' Views on Their Children's Stories and on the Usefulness of a Curriculum-
Based Dynamic Assessment**

Anne Laurie and Diane Pesco

Department of Education, Concordia University, Canada

Abstract

The current study examined the perspectives of first-generation Filipino-Canadian parents regarding the narratives of Filipino- and English-speaking children, as well as their views on the utility of a curriculum-based dynamic assessment (CBDA) of narratives. Two focus groups were conducted with parents of children who participated in an earlier study of the CBDA (Laurie & Pesco, 2023). Parents listened to audio-recordings of the children's narratives on a single picture and engaged in discussions about the cultural and linguistic aspects that may have influenced them. Thematic analysis of the discussions revealed several themes. Parents primarily discussed the content of the children's stories, indicating it was influenced by parent-child interactions common in the Filipino culture. They also emphasized the importance of stories being lengthy, detailed, and emotional to be considered "good" stories, and expected a narrative structure aligned with story grammar models. Furthermore, parents underscored the cultural sensitivity of the CBDA and appreciated its approach of not comparing their children to norms established for monolingual children, but rather focusing on individual learning capabilities. They expressed the hope that the CBDA would be extended to include all immigrant children in Canadian schools, enabling practitioners to accurately interpret children's language abilities and needs. The study highlighted the valuable role of parents in providing insights on Filipino cultural and linguistic aspects of narratives, which can aid in distinguishing between language differences and disorders when concerns arise about a child's language development.

Filipino Parents' Views on Their Children's Stories and on the Usefulness of a Curriculum-Based Dynamic Assessment of Narratives

From 2016 to 2021, Canada welcomed over 1.3 million immigrants, increasing the overall number of immigrants to almost 8.4 million or roughly 23% of the total Canadian population (Statistics Canada, 2022). In the same years, the number of people of Filipino origin arriving in Canada grew from 851,410 to 957,355, respectively, ranking second in the top places of birth among immigrants living in Canada in 2021 (Statistics Canada, 2022). The increase in immigration has been accompanied by heightened linguistic and cultural diversity in Canadian society, mirrored in schools (Hajisoteriou et al., 2017; Walker & Riordan, 2010). Moreover, many children from immigrant families attend schools where the language of instruction is not their first language (L1). Thus, they have the double task of learning the language of instruction and meeting the same curricular demands as their non-immigrant peers. In schools where English is the language of instruction, English L2 learners might thus be at a disadvantage compared to their English L1 peers (Kieffer, 2008; Roessingh, 2020).

To address this disadvantage, early childhood programs for English L2 learners and early interventions have been implemented, and children have benefitted from these (Votruba-Drzal et al., 2015). However, to intervene most effectively and allocate resources appropriately, it is critical to understand potential linguistic and cultural influences on children's abilities and performance at school (De Feyter & Winsler, 2009). Knowledge of such influences could inform educational practice and could also have implications for distinguishing language differences from language delays or disorders that could be present in both a child's first and second languages. One source of such information is parents.

Immigrant Parents' Views on Children's Language Skills

Immigrant parents' perspectives on and involvement in their children's schooling has often been investigated (see Antony-Newman, 2019 for a review). Parents who speak a language other than the language of instruction have also been asked to report on aspects of their child's language, such as proficiency in the home language (e.g., Paradis et al., 2010) or language achievement in the L2 (e.g., Diaz Larenas et al., 2021) as well as to share their views on bilingual instruction (Song, 2019) and immersion programs (e.g., Dorner, 2010). However, very little research has explored immigrant parents' views on their children's performance in specific school curriculum areas and the best way to assess it, and our search did not reveal any studies on parents' views on narrative assessments administered to their children or on the stories told by their children in the context of these assessments. Yet, research indicates cross-linguistic and cross-cultural differences in children's stories (e.g., Peltier, 2014; Schick & Melzi, 2010; Westerveld et al., 2022) that parents could elucidate. Furthermore, when assessments are conducted without any input by parents, they may have concerns about the assessment's applicability to their children and ability to identify their needs (Gillanders et al., 2021); by involving parents, the assessment can be improved, and parents can play a more agentic role and advocate for their children, in line with a more expansive notion of parental involvement in education promoted by Garg (2021).

Cross-Cultural and Cross-Linguistic Differences in Children's Narratives

Narratives have high ecological validity when assessing children's communication abilities since they are present in daily life and in school curricula. They have been recommended to evaluate the language of children from culturally-diverse populations (Botting, 2002). However, as Bruner (1991) argues, culture determines what a good story is and, as

McKeough et al. (2008) point out, stories can provide a window into culture. Researchers have examined children's narratives from a cross-cultural and cross-linguistic perspective for these reasons. In their review article, Schick and Melzi (2010) note that the themes children address in their narratives are often culturally-dependent. For example, Wang and Leichtman (2000) found that Chinese children's narratives were less descriptive and contained less talk about oneself than Euro-American children's narratives but focused to a greater extent on themes of social harmony, moral correctness, and concern with authority. Cultural differences in the narrative structures of children from various Asian backgrounds may include shorter narratives about personal experiences but their narratives are similar in terms of chronological patterns to those of Euro-American children (Peterson & McCabe, 2013).

Gorman and colleagues (2011) studied narratives, elicited with wordless picture books, of 60 African American, Latino-American, and Euro-American children in Grades 1 and 2. They found no significant differences amongst these cultural groups on their story structure. However, there were some notable differences in other elements. Namely, African American children used more fantasy and dialogue (e.g., "Look, I found a ring") and Latino children described the characters in greater detail, while Euro-American children emphasized the nature of the characters' relationships (e.g., mother, baby) to a greater extent.

Filipino Children's Narratives

The literature on Filipino-English bilingual children's narratives is scant. Two studies (Amora, 2020; Chua et al., 2017) have examined the degree to which Filipino children's stories correspond to a story grammar model, in which stories consist of an initiating event (often some problem), the internal responses of characters to the event, plan and attempt(s) to resolve the problem or achieve a goal and the consequences of these, and a resolution (Peterson & McCabe,

2013; Hudson & Shapiro, 1991; Stein & Glenn, 1979). Chua and colleagues (2017) elicited narratives from five- and six-year-old Filipino-English bilingual children using a wordless photo sequence and found that while most of the children provided actions, only some provided other story grammar elements, in line with the authors' expectations given the children's age. However, an unexpected finding was a lack of character description, which according to Chua et al. contrasts with findings from past studies of children of a similar age.

Amora et al. (2020) used the Multilingual Assessment Instrument for Narratives (Gagarina et al., 2019) in English and a Filipino adaptation of the same assessment to examine how Filipino-English bilinguals in the Philippines ages 5, 10, and 22-25 years structure their stories in each of their languages. They found that language did not significantly influence story structure in any age group, suggesting that story structure may depend on factors other than language (MacLeod & Pesco, 2022). However, the narratives told by 10-year-olds were similar to the adults and consisted of significantly more story elements than 5-year-olds, supporting findings of age effects in previous studies (e.g., Fiestas & Peña, 2004).

Chua et al. (2015) and Amora et al. (2020) conducted their studies in the Philippines, where children had high levels of exposure to Filipino compared to English. Lofranco et al. (2006) investigated the story structure (macrostructure) and language used within stories (microstructure) of eight 6- and 7-year-old Filipino American children who spoke only English but were exposed to Filipino in their homes. Using identical measures from a previous study with Euro-American, African American, and Latino American children (Peña et al., 2006), they found that the children's story length and the mean length of the utterances in their stories were comparable to children in the Peña et al. study (2006). However, the children with the least amount of English exposure told narratives that included more Filipino-influenced elements.

Such elements included differences in the word order in a sentence (word order is more flexible in Filipino than in English), pronoun errors, verbless sentences, and omission of tense markers. Hamilton et al. (2018) found similar Filipino-influenced elements in their study on Filipino-English dialect with two kindergarten children.

Given the small body of studies on Filipino-English bilingual children's narratives, the generalizability of their findings is limited. However, the synopsis of these studies is Filipino children's narrative structures contain story grammar elements but may differ in other ways for linguistic and cultural reasons. Collaborating with parents can help interpret children's narratives and thus increase the cultural sensitivity of narrative assessments. The insights by parents could have implications for practitioners whose expectations for a good story may differ from what is expected in the child's home culture and language, and who may consequently view differences as deficits (Cheatham & Jimenez-Silva, 2011). In assessing children's narratives, it is also essential to consider their language exposure. The following section discusses the English level exposure Filipino children may have when arriving in Canada.

Filipino Children and English Exposure

Many children who had some formal education in the Philippines and now attend school in Canada can speak and understand English to various degrees, primarily due to public and private schools' policies promoting the learning of English as a second language (Lucas et al., 2016). That is, the two sectors implement bilingual education with English and Filipino instruction and materials from the beginning of primary to the end of secondary school (Bernardo, 2008). However, various sociocultural elements, such as motivation to learn English and its usefulness in their everyday life, affect Filipino students' English proficiency (Bernardo, 2019). For example, Lucas and colleagues (2016) found that the use of Filipino among friends

and family and the availability of Filipino in media, books, and magazines, reduced Filipinos' motivation to learn English and to use it in contexts outside formal education.

Study Design and Aims

A qualitative study was conducted to explore the views of Filipino parents on their children's stories and the usefulness of a curriculum-based dynamic assessment (CBDA; Laurie & Pesco, 2023) to assess their children's narrative and language skills. This study reflects a social constructivist paradigm (File et al., 2016) by examining Filipino parents' co-construction of their understanding and knowledge of Filipino children's stories based on cultural norms, shared experiences, and reflections on those shared experiences. The study provided Filipino parents with an opportunity to use their past cultural, linguistic, and social experiences in the Philippines and with the Filipino education system to (a) interpret Filipino children's narratives gathered in an earlier, related study (Laurie & Pesco, 2023) and (b) to evaluate the usefulness of CBDA in assessing their children's language. The aim was to enhance the cultural sensitivity of the CBDA by providing parents with opportunities to voice their impressions of the children's stories and potentially describe narrative features that are valued in Filipino culture but might be unrepresented in the school curriculum and, thus, in the dynamic assessment that integrated curricular goals.

Method

Participants

In this focus group study, the first author interviewed the parents of children who had participated in an earlier study examining the accuracy of a CBDA of narratives in distinguishing bilingual children who were typically developing from children who had language difficulties (Laurie & Pesco, 2023; Laurie & Pesco, under review). Ethical approval for both the earlier and

present studies was obtained by the University Human Research Ethics Committee at [removed for blinding] University.

During the last visit with the children in their homes, their parents were informed that they would have an opportunity to participate in focus groups to be held once all the child data were scored and analyzed. The parents were told that their participation would be entirely voluntary and that their child's results would not be affected by their decision regarding participation. Once all the child data were scored and analyzed, parents were contacted again and informed that the focus group would soon occur. Eight parents agreed to participate and provided written consent (see Procedures below). Three mothers and one father of typically-developing children in grades 1, 3 and 4 participated in the first focus group in person (see Setting). Four mothers with children in kindergarten and grades 1, 2, and 5, two of whom had children with LD, participated in the second focus group online. All the parents were born and raised in various regions of the Philippines and had Filipino as their L1 and English as their L2 or L3. They had all received some English instruction as part of their formal education and felt comfortable participating in a focus group in English. At the time their children participated in the study, the parents had resided in Canada for a period ranging from nine months to three years.

Materials

To elicit the parents' views on the children's stories (see Appendix M), they were presented with audiorecordings and verbatim transcripts of four pretest stories told by four different children who had participated in the study investigating the accuracy of dynamic assessment, alluded to above (Laurie & Pesco, 2023). The children's stories were elicited by presenting them with a single picture from a children's book (Chichester Clark, 2009), depicting a woman and a girl in a kitchen reacting to an overflowing sink. The stories included two stories

from children who were in a typically-developing language group and two from children with language difficulties according to a standardized parent report of their child's developmental history and Filipino abilities (see Laurie & Pesco, 2023). None of the narratives were the participants' own children and the recording pitch was altered. The pretest rather than posttest narratives were chosen for all the children to avoid the potential influences of the dynamic assessment in which narrative skills included in the children's school curriculum were targeted, and to heighten the chance that their narratives would contain some Filipino cultural and linguistic elements.

Procedures

The study involved two focus groups, with four parents per group. This number has been recommended by Kruger and Casey (2014) to gain rich information about people's experiences. Two meeting formats – in-person and virtual – were offered. The virtual option allowed parents who had either moved since their child participated or who lived in remote areas to participate without necessitating lengthy travel. Consent forms were distributed to the participants ahead of each meeting, either in person or via Facebook Messenger for the Zoom session. Participants received two versions of the consent form, one in English and one in Filipino, and read and signed the version of their choice.

The in-person focus group occurred in a university classroom and was scheduled to allow participants to gather before discussion began. A bilingual Filipino-English assistant moderator was hired to help set up the equipment and seating area; greet participants; record the time, audiorecord the sessions; and take notes of pertinent themes, quotes, and nonverbal activity, such as head nods. The first author and the assistant moderator set up food and drinks and provided a meal for everyone as the focus group ran around supper time, and serving food when people

gather is customary in Filipino culture. Participants were encouraged to eat their food during the focus group so they would not feel rushed. Once the participants were ready to begin, everyone sat at an oval table where the first author displayed a monitor with a PowerPoint presentation relevant to the focus group questions that helped guide the session.

The second focus group was conducted virtually via Zoom. Four mothers participated from the comfort of their homes. They were encouraged to sign into the Zoom session prior to the focus group start time to meet and engage in informal chats with each other and the moderator and assistant moderator. The assistant moderator sent transcripts of the four stories before the focus group began.

The focus groups began with the moderator explaining the goal of the discussion and how it was to be structured. Participants were also invited to use Filipino at any point if they felt they could express themselves better than in English and were told that the assistant moderator would translate on the spot and later in the transcription process. For the in-person focus group, the assistant moderator distributed pens and transcripts of the four stories and encouraged parents to write down anything that came to mind regarding the stories. For the focus group on Zoom, parents received the transcripts via Facebook Messenger and were told to do the same. Then, the moderator played the digital audiorecordings of the four stories to provide examples and context for parents. Parents were aware that the narratives were from children in Grades 2 and 5 but no further details were given, and as noted above, the recordings' pitch was changed so participants could not identify the children. Once participants listened to the four stories, the moderator began asking the first set of questions (see Appendix N) which were intended to see if parents thought any of the story elements were influenced by Filipino culture or language. First, the moderator asked the parents what caught their eye without any additional prompting. Next, using

PowerPoint slides as a visual aid, the moderator presented some of the narrative strengths that children demonstrated, as well as skills that were worked on during mediation, to obtain parents' views on these (see Appendix O). Next, parents were asked about children's exposure to stories outside of school.

Once the first set of questions was answered, parents were asked if they had any final comments before moving on. Next, the moderator presented the main findings from the earlier study (Laurie & Pesco, 2023; Laurie & Pesco, under review) via PowerPoint, then proceeded to ask the second set of questions regarding parents' perspectives on the value of the CBDA for their children. Once all the questions were answered, the moderator asked the participants if they had any final remarks regarding any of the questions or points brought up during the session. Once these remarks were exhausted, participants were compensated \$30 for their participation. The parents who participated in the in-person group were compensated with cash and signed a proof of payment form. Parents who participated in the Zoom focus group were compensated via e-transfer.

Data Analysis

All focus group discussions were transcribed verbatim and coded using inductive thematic analysis as presented by Braun and Clarke (2006). This method of generating detailed and meaningful themes assumes the researcher plays an active role in establishing themes grounded in the data. We followed Braun and Clarke's (2006) six phases of analysis: (1) becoming familiar with the data, (2) coding initial features across the entire data set, (3) collating the codes to generate themes that reflect the data, (4) reviewing these themes to ensure the initial codes work for each theme, (5) naming and refining the themes to allow a clear name and

definition for each theme, and (6) selecting relevant quotes from the data to provide context and to support each theme. Quotes below are verbatim with minor edits for clarity.

Reliability

Reliability of the data was established by first comparing the responses of the moderator and the Filipino assistant moderator by debriefing immediately after participants left the focus groups, sharing their notes and initial interpretations of the discussions. The moderator also shared interpretations of the participants' answers (following coding) with the Filipino assistant moderator to establish trustworthiness of the findings. Then, a second coder (the thesis supervisor) reviewed the in-person focus group's transcripts independently and followed the same procedure for coding as the first author. To enhance the credibility of the results, member checking was completed by sending members of each focus group a list of codes summarized by theme, reflecting the key points raised in the discussion. The participants were invited to provide feedback on a summary of the main themes and subthemes. Six participants responded and felt the summary adequately captured the discussion.

Results

By conducting thematic analysis, we identified four themes relevant to the first aim (i.e., parents' interpretations of Filipino children's stories) and two themes relevant to the second (i.e., the usefulness of the CBDA). These are presented in Table 1 and Table 2 along with subthemes and supported with relevant quotes from the parents in this section.

Parents' Interpretations of Filipino Children's Stories

Table 1

Themes Related to Parents' Interpretations of Filipino Children's Stories

Themes	Sub-themes
1. Story content concerning children's experiences	1.1 Children interpret picture based on personal experience 1.2 Personal experience affects the story content
2. Views of "a good story"	2.1 Should follow a story grammar model 2.2 Should emphasize emotions and humour 2.3 Should be elaborated 2.4 Should be creative
3. Filipino-influence on narratives in English	3.1 Less coherent (compared to Filipino) 3.2 Vocabulary differences 3.3 Pronoun errors
4. Views and practices related to children's learning	4.1 Desire for Canadian teachers to be stricter 4.2 Parents provide educational resources 4.3 Children are not seen as adults' conversational partners in social gatherings

Theme 1: Story Content Concerning Relation to Children's Experiences

Children Interpret Picture Based on Personal Experience. All study participants remarked on the story content spontaneously when asked what caught their eye regarding the four stories. They returned to this topic at other points in the discussion, making it the most discussed topic. As can be seen in the series of quotes below, parent C1 noticed that the children attributed the story problem (the overflowing sink) to some wrongdoing by the child and described the mother as angry. A second parent (B1) in the same focus group elaborated on this point, and a third (A1) added that the children had this interpretation even though, in her view, the mother in the picture looked upset rather than angry.

C1: Looking at the picture, it's probably the mom that's upset. I would say that most of the kids would like focus on [that] because that's going to be ...like ...the Filipino household.

B1: Like, I'm the parent, ... the one who's in authority... whoever did it, as long as something happened "like, okay, sorry, Mom. It's my fault".

A1: Yeah, the interpretation of the kids is like, it's coming from the Filipino household. Because that's like, a common thing. And [in] each of the story, right? Like, the mom is mad and it's the kid's fault and it's what usually happens inside the house... "Actually, the picture of the mom, the expressions, it doesn't look like she's upset. She's shocked but the kids like interpreted [it] as their mom is upset.

Parent C1 further explained that a mother might seem angry to a child, even when she is not truly angry, and A1 noted differences between Filipino and Euro-Canadians in how parents express themselves to their children:

A1: That's just normal, in the Philippine household. It's different from the white people. Like, you're always sweet with your ways. You don't get mad but in the Filipino household, it's how we show our love to the kids. We get mad, but that's [only] one way.

The children's depiction of the mother's reaction in their stories came up again in the second focus group without prompting. C2 cautioned, however, that while the children's story content could provide a glimpse of Filipino parenting style, it might also reflect a tired mom, which has a more universal connotation. She explained,

C2: Anger can be it [part of Filipino culture]. It depends on the type of parents, but I know a lot of Filipino parents are like that... Well, I guess it's also partly because ... being a mother itself is so tiring and like make[s] the mother very overwhelmed with everything. And yeah, it could be a very angry mom or it could be just a tired mom. It could be anything, but very typical for a Filipino mom, I would say.

Personal Experience Affects the Story Content. Some parents spoke further about the effects of children relating the story picture to their personal experience. One said this could restrict what and how much children shared and curb their imagination. As this parent (B2) explained, "I think for some [stories] it should be more details... whatever they experience more, that's their story ...and it's mostly ... talk about their life, their background." When asked later about the usefulness of the CBDA, one parent also suggested that a "more positive" picture be used, as the one used was "just like from our background", referring to the parents' earlier

comments regarding children describing the child character as blameworthy and the mother character as angry in their stories.

Theme 2: Views of “a Good Story”

Stories Follow a Story Grammar Model. All parents spoke about the story components and structure of a good story and related their views to their own academic experiences in the Philippines where, as they described, Filipino students were expected to follow a “Western curriculum”. The parents recognized that the expectations for storytelling were thus the same as their children were experiencing at their school in Canada.

C1: Our educational system back home, it's patterned after the Western curriculum. So, the way English is taught, it's basically the same. So, we kind of adapted the way we tell a story. So, it has to have the beginning, the middle part and there's the conclusion. So, I think it's pretty much the same.

A2: I remember when I was [in] elementary back then, teachers are very particular about coming up with what the story was about. Like, having the first, the middle and the end. Like, in the first you will have these greetings [openings]. You will have this identification...of all of the characters. In the middle, it's like all of the events and so on. At the end, you will summarize what the story [was] about.

A few parents emphasized the importance of a strong ending that brings the story to a close and resolves some event in the story. For instance, one parent, returning spontaneously to the depiction of the angry mother, expressed the importance of a conclusion that “circles back” and ends on a positive emotional note for the characters:

B1: Some of the things that's happen [in the children's stories] is missing a piece, the conclusion. Like, you know, you should circle back, right? [Like in life] You love them, you get mad, but still make them know that you love them.

Similarly, C2 stressed the pride of the mother when the child in the story played an active role in resolving the story problem.

C2: There's something also about the story that strongly talks about the culture. You know, when [in] the third story, at the end, the mom was very proud of her *only* when she

cleaned up after herself. ... I think that's so much about Filipino culture when [that] the mom was very proud *after* the kid cleans up the mess.

Should Emphasize Emotions and Humour. A couple of parents mentioned that a good story often invokes emotion and humour, qualities that capture the listener. One parent emphasized that humour is fundamental to Filipino culture, provides meaning to the storyteller's recounts, and is considered more important than the story structure.

B2: usually when we tell stories, we tell stories that has meaning and impact in our lives. So regardless if it followed the prescribed flow, as long as it's something meaningful to us. And usually, it's something funny. We usually tell a lot of stories that are funny...which invokes a lot of emotion. So yeah, it doesn't really matter whether we follow a certain structure, as long as we're able to express, what we really want to say with emotion.

Should be Creative and Elaborated. In line with the second focus group's emphasis on engaging the listener, the parents in the first focus group mentioned the importance of children using description, creativity, and elaboration to capture their listeners' attention, particularly in an educational context where children must show their narrative abilities. Parents were a bit surprised to see a lack of description in the stories and to hear from the moderator that across all ages, character description was lacking. Parents in both focus groups mentioned that only the first story showed good elaboration and creativity as illustrated in the exchange below:

A1: The very first [story] is very detailed. There's something that she can't see on the picture. Like, she just assumed the latter [end] part of it. Like, she created a story [with] the ending...and it's not in the picture.

C1: When we tell a story, we want it to be as colorful and descriptive as possible.

B1: Creative, that's the word. Yeah, I could see this as a creative person [story 1]. Like, when you ask her to give you a story, she's just made up and added whatever she thinks could fit the story...because for us, done is not enough. You know what I mean? You need to do more.

A1: Yeah, because we were taught like...you have to write a reaction paper using 500 words. So, you cannot submit it lesser than 500. You have to think of how to elongate that. Right? It was like [that] at school in the Philippines.

Parents in the first focus group went on to provide an explanation for the lack of creativity and elaboration: today's substantial use of digital gadgets. More specifically, parents felt digital gadgets affect the amount of talk children engage in and the value they place on conversation:

B1: It's easy for them to get the information. So, for example, I'll just ask "what is this"? And then I'll ask Google...The moment the kids see each other, they always play, [with] gadgets...like, digital platforms. That's their common interest. So, I can see that's where the problem is. The conversational piece...is kind of missing.

C1: [It's] a less effort...I've noticed, personally as well, this is one of the areas of my son needs to work on. When he is telling a story, he kind of rush[es] into finishing it. So, he ended up missing some of the points in the story, because he's in a rush [to finish]...it's not as detailed as you want it to be.

A1: yeah, it's not very detailed, it's like a yes or no answer.

A couple of parents stated that they noticed children engage in more elaborate conversations when the digital gadgets are not present. As one parent expressed,

D1: [Child name] would invite some of her classmates over. They don't have any gadgets, but they were like really talking and talking for like, they could talk for long hours. I think the problem there is like having gadgets.

Theme 3 – Filipino Children's Language Abilities in English

Less Coherent (Compared to Filipino). Parents in both focus groups mentioned that the simplicity of the children's stories could be due to the fact that English is not their first language. Consequently, the children may express themselves less well than in Filipino.

B1: One thing that I've noticed the way they tell it, it's maybe because it's not their language. Like, I think it could be more explained if it's in their own language...They could have better express[ed] themselves if it's in their own language...in Filipino.

C1: They're having a hard time organizing their thoughts. So, they will end up not really forming a coherent story the way it should be told to an audience. So that might be the reason why...there's some areas that need to [be] work[ed] on [in] the stories.

One parent related one of the child's stories back to her own abilities as a Filipino L1 adult speaker and described the grammatical error as typical of adults as well:

A1: [There's] some fault on the grammar right? That's how we speak, like this one [the third story] "til she mom came". So, sometimes we cannot express the grammar properly.

Vocabulary Differences. Parents also mentioned that when children tell stories in their L2 they may rely on literal translations and simpler vocabulary. As two parents explained,

C1: For the vocabulary part, maybe the lexical resource is not that rich...they're translating [to] very basic term[s] in English. And kids actually do like, just direct translation of...terms they usually use here in the [Philippines].

B2: It's like they're translating it directly from Filipino to English. Like, [in the third story] "She opened the water". It should be "She turned on the faucet", right? So, it's like a direct translation from the Filipino language. Because like [in English] we say "turn on the light", but in Tagalog we say *buksan ang ilaw*. The direction translation is "open the light".

One parent elaborated on C1's point by providing an example of a grammatically incorrect translation in the third story as the correct translation would be "go" and not "gone".

B1: And [in the third story] she said, "Gone"...That's a direct translation of *umalis* [which means] "go, they go away, or get away from here".

Pronoun Errors. Across both focus groups, pronoun errors were discussed greatly as parents identified errors in the children's stories. One parent disclosed that the pronoun errors made some of the stories confusing to follow.

B2: Sometimes I get confused when I read the texts like "who's the one talking, is it the mom or the child, is it a "he" or "she"? ... because we don't have the gender thing...In Tagalog, we don't have "he" or "she".

Several parents provided a linguistic explanation as to why this occurred in the children's stories. One parent summarized by saying,

A2: [In Filipino] it's like more on general nouns like, "children" or "child". When we say *itong bata*...It's like "this kid". It's like a general term. We're not usually using like he she ... When we express ourselves or describe something what the child did, like we [in Canada] use "he or she". But in the Philippines, we just use *siya* for both.

To elaborate on the gender pronoun difficulties, two parents in the other focus group mentioned that in English it can be difficult provide the correct pronoun and noted that the

gendered pronoun might be replaced with a gender-specific kinship term such as *Kuya* for big brother and *Ate* for big sister.

A1: [Pronoun They] Yeah, we usually get confused how we say it. It just comes out naturally...It's [for example], *Kuya, Ate*. Yeah, [it's the] distinction of "he" or "she".

D1: Because we're like, still translating it in our head.

Theme 4 – Views and Practices Related to Children's Learning

Desire for Canadian Teachers to be Stricter. Throughout the focus group discussions, parents often provided information on the various practices, in and outside of the home, that showed their views and expectations regarding their children's language learning. Some of these expectations related to their children's school curriculum and teachers' expectations. One desire was for teachers to expect more from their students, to push them to reach their full potential, compared with teachers in the Philippines. One parent summarized,

A1: The teachers here I find they're not very strict with the kids. They're very relaxed. They're lenient. They're not in the Philippines...Well, from where we were taught, they were very, very strict. Like, "this is what you have to do", "you cannot submit it like that". There's certain things you have to do in order for you to pass the subject, but here, I find they're very lenient.

One parent added that parents might have higher expectations than teachers because the quality of work expected from the students to pass to the next grade is higher in the Philippines compared with Canada. One parent expressed that a child might tell a short story even if the classroom requirement was to tell a longer story.

B1: Before [in the Philippines], we are required to tell a story in 500 words. So, I could just finish that in 50 words, but I need to do with at least 500...[Schools in Canada] are too lenient. I mean, if a student doesn't know anything, why would he pass to the next grade? If you can't finish a grade level [in the Philippines], you'll repeat the level.

Parents Provide Educational Resources. Since parents were generally dissatisfied with the schools' curricular expectations, they mentioned that they supplemented their children's

learning with additional resources or with good reading practices to ensure they are learning outside of the school. For example, some parents said:

B1: I supplement. There's a Canadian curriculum that you can buy in Costco.

D1: [I focus] more [on] math. Language is okay, but I supplement both with Kumon.

A2: [Child] always has her book, reading every night, caught in the dark...she was reading all by herself. It's like "you know how to read all of this?" "Yes, mom because you read it to me and now, I know it".

Children are not seen as adults' conversational partners in social gatherings. While there is an expectation for parents to supply children with educational resources, some members of the first focus group stated they are not children's conversational partners, particularly during gatherings. Therefore, there are fewer expectations for children to be stimulated with language by parents. To illustrate, the following discussion occurred.

C1: When Filipino families gather around, it's the only time that we [adults] could catch up with each other. And sometimes the kids would have their own world too.

A1: Yeah, because they were taught too in the Philippines that you [kids] cannot like gossip with the adults.

D1: It's like our "me" time with the adults.

One parent in the second focus group used her experience as an early childhood educator to emphasize the expectation of obedience and silence from Filipino children in the presence of adults. As this parent expressed, Filipino children do not typically speak up unless they are asked to do so, in the home and at school, while in Canada, children are encouraged to initiate talk.

C2: As Filipinos, we were taught in early childhood, not to generally speak up until we're being asked. So, that can be a very big factor. Being an early childhood educator in Asia and here, I've seen a very, very vast difference. That's because we were raised that way. We were taught early on that, "okay, just be quiet" when doing a circle time. "Do not talk until you are allowed to" but here in Canada, be the way you want, like you can share whatever you want, to share your feelings, whatever. It's the way we encourage children here compared to the Philippines. So that is a very big factor.

Parents' Views on the CBDA

Table 2.

Themes Related to the Usefulness of the Curriculum-Based Dynamic Assessment (CBDA)

Themes	Sub-themes
1. CBDA: "Better cater[s] to what Filipino kids really need"	1.1 "More fair" than standardized assessments 1.2 "A notch higher": shows individual child's strengths and needs 1.3 "Good tool in terms of encouragement"
2. Desires for CBDA Expansion	2.1 "Beneficial not only for Filipino kids" 2.2 Make available "on a larger scale" in local and Canadian schools

Theme 1. CBDA: "Better Cater[s] What Filipino Kids Really Need"

"More Fair" Than Standardized- Normed-Referenced Assessments. Parents from both focus groups were consistent with their comments on the CBDA as an assessment tool to measure their children's language. When parents were provided with a contrast between CBDA and norm-referenced tests, they were all pleased that the CBDA does not compare children's performance to normative data. Parent D1 stated simply that the CBDA "*better cater[s] to what Filipino kids really need*". Parents added to D1's comment and stressed how the dynamic assessment's individualized approach is especially beneficial for newcomer Filipino children and could lead to fewer language misdiagnoses.

C1: I kind of liked the part not to misdiagnose the kids for just actually struggling during the transition process from our local dialect or national language to the English language, and it's not a delay, you know? So, I kind of liked that part... The [normative] data is biased... Filipino kids is not on... the data [norming sample]... Your assessment would actually help all the Filipino kids not being misdiagnosed... We would be able to properly identify what help is needed, rather than putting them in a box [mislabeling].

B1: You deviated from the norm, which is based on age, which is a good thing, if I may say... You don't need to compare children because they come from different backgrounds,

languages, cultures...So, you can't, really do the apples-to-apples comparison. You can't do that. So that's why you need to go through that process where you need to really assess them individually and work to extract whatever they have for you to provide the proper classification.

Another parent used a personal example to address the issue of fairness and potential bias in standardized assessments. In contrast, the parents liked that the CBDA approach does not depend on answers that may be irrelevant to children's culture and language, and thus, may be more culturally-fair.

B2: I remember when I was in high school, we were taking the IQ test...In the exam, they'll ask about snow. Like, why would you ask snow to the people in the Philippines when there's no snow? So, if you're in a school...where it is very diverse people com[ing] from different countries, it's really unfair to just evaluate them with bias... It's good that this [CBDA] is more culturally-fair...because you are basing it on the child himself.

Another parent felt that the repeated assessment involved in CBDA was fairer as it considers behavioural factors when interpreting children's performance:

C2: This is a very promising tool because it's not a one-time assessment. The disadvantage of...a typical assessment tool is that it just happens once. What if the child in that moment is just not in the mood? The child is just upset or just not happy at all? And then, they gather the results during that assessment session, which is not fair. So, the repeated assessment is very good.

“A Notch Higher”: Shows Individual Child's Strengths and Needs. All parents voiced their appreciation for the dynamic assessment approach as it focuses on identifying and addressing gaps in children's learning and using children's strengths in a mediation phase to teach new skills. As one parent expressed:

B1: This is a notch higher, right? What's currently being done, it's like, you've put [a lot of] effort on this one, you know, what's the gap and how it's going to be addressed, what strategies that needs to be done to fill the gap, right? So that alone is...a bar higher.

One parent whose child has a developmental language disorder similarly appreciated that the CBDA plays on children's strengths and offers mediators an opportunity to teach new skills

in a way that they may better understand. As such, it is sensitive to children's learning pace and individual learning potential.

D2: So, for me, it's good because you focused on each kid's differences [including] child[ren] with special needs. It really helps [child name] to understand. You're being patient with what you're teaching. For my child in terms of her learning, you focus on that, which it's really helpful to her.

“Good Tool in Terms of Encouragement”. The topic of encouragement came up in both focus groups but was more stressed in the second, starting with A2 expressing, “This kind of assessment will be a good tool to use in terms of encouragement and approach to the children”. Parents then discussed the benefit of the mediation sessions as an opportunity for the examiner to provide encouragement and develop a personal connection throughout the assessment process. The importance of encouragement relates back to C2's comment (see Theme 4) regarding expectations for Filipino children to stay quiet in class and tendency to be less encouraged to talk in Filipino classrooms compared to Canadian ones. As two parents expressed:

B1: You captured [children's narrative abilities] in a way that you spent time with them doing the assessment individually, getting to know them, getting that relationship, and try to unlock whatever capabilities that they have in storytelling.

B2: If the child doesn't trust the person or if she's shy or hasn't developed the confidence...or not comfortable or relaxed in front of that person who [is] passive and detached to the child, I think it will also affect how the child answers and delivers her story. If the child is more relaxed, if she has known the interviewer for a while and she has put down all her guards, then it'll be easier for her to tell stories and I think the assessment would turn out better.

Theme 2. Desires for CBDA Expansion

“Beneficial Not Only for Filipino Kids”. Parents in both focus groups mentioned spontaneously their desire to have the CBDA expanded as they saw the tool as beneficial not only for Filipino children but other immigrant children who may not be represented in language assessments' normative sample. As C2 explained,

C2: The assessment tool may be very, very beneficial not only for the Filipino kids...It can also be a very good assessment tool for other children aside from Filipino. You know, it can open a great advantage to other race[s] who comes in Canada.

One parent noted that different cultures may have different expectations for storytelling compared to curricular expectations and felt that a dynamic assessment approach could help children from these cultural backgrounds:

C1: Not just for the Filipino kids, probably other cultures as well because I'm sure they have different ways of telling a story cultural wise...especially for newcomer[s], for other people of different nationalities that might be coming over.

Make Available “On a Larger Scale” in Local and Canadian Schools. Finally, parents highlighted their wish to see CBDA implemented in other schools since constructing narratives is a critical skill for language development and incorporated in many curricula already.

B1: I just wish they could do this on a larger scale...that this would be part of the standard of the Canadian system. I just wish that they would go away with a popular one and go with this...even if anything, province wide, you know? I mean, all of these children within [province] should be assessed this way. I'm just hoping.

C2: We have a lot of newcomers in Canada and this tool can help a lot of children because it doesn't mean that the child is not speaking a lot that they don't understand at all. I hope that this assessment tool will materialize, and it will help a lot of kids [who] come to Canada in the future.

Discussion

The present study used focus groups to address Filipino parents' views on (a) Filipino children's stories told in English and (b) their views on the usefulness of the CBDA of narratives administered to their children. While many studies acknowledge that parents are critical influences on children's language development, their views are seldom considered in research in relation to children's stories or the types of language assessment administered (Gillanders et al., 2021). Gaining parents' insight has the potential to provide educators who have bilingual Filipino children in their classrooms with knowledge about potential Filipino-influenced elements in the

children's stories. The study may also aid school-based practitioners by showing whether a CBDA of narratives is beneficial from a parental perspective.

Filipino Children's Stories

The focus groups' discussion primarily centred around the story content and its tie to Filipino culture. Each participant alluded to the picture of the mother and daughter in the kitchen with an overflowing sink influenced the children's narrative content based on their experience (as noted in the results, the children spoke about the mother displaying her disapproval of her child due to a mess the child created). While the participants noticed the parent-child dyad in the picture was not inherently negative, they stated that in Filipino culture it is typical to assume the parents are always right and to display their displeasure with their children when they are involved in wrongdoing, and expect their children to amend the wrongdoing. Once the problem is rectified, the parents express their approval. Wang and Leichtman (2000) found similar story themes in Chinese children's narratives and related these back to expectations of obedience to authority or conformity to authority figures. They argue that these cultural expectations are based on typical socialization practices and cultural values. The content of children's narratives thus provides a glimpse into children's thinking, thoughts, and behaviours and can be a source of information for educators to understand the potential differences amongst their students.

A good story, according to Filipino parents, contains the lessons learned, expressed through an elaborate conclusion that resolves the story problem. Along with a strong ending, parents communicated that for Filipino children's narratives, they expect the elements typical of a story grammar model informing many language arts curricula in Canada, and in the Philippines, as the Filipino language arts curriculum, according to the parents, is based on a typical Western curriculum. This finding is consistent with past studies showing that Filipino

children tell stories following a story grammar model (Amora et al., 2020; Chua et al., 2017; Lofranco et al., 2006).

In addition to the expectation for children to tell stories that follow a story grammar model, parents emphasized the need for more description, creativity, and elaboration, since as they expressed, there is always a way to improve on one's storytelling abilities. Similarly, Chua et al. (2017) found the lack of character description in 5- and 6-year-old Filipino children's narratives concerning, considering it is a skill expected from children of that age (Berman & Slobin, 1994, as cited in Lofranco et al., 2006). Furthermore, parents hinted at what makes a story "tellable" (Hühn et al., 2014). Namely, humour and emotion were mentioned as important features of stories and qualities that capture the listener's attention. While humour and emotion have yet to be reported in the literature on important Filipino story elements, they have been deemed important by adults from other cultural backgrounds, such as Anishinaabe elders (Peltier, 2014).

All the parents recognized the Filipino language influence in children's narratives and cited issues such as coherence, overly literal translations, and pronoun errors. They stated that educators should be careful not to interpret these errors as indications of a delay or disorder but attribute them to the children learning a new language, as even they sometimes make similar errors when speaking. These Filipino-influenced English features are similar to the findings found in Lofranco et al. (2006) and Hamilton et al. (2018) studies with Filipino children.

Views on the CBDA

Overall, the Filipino parents were pleased with the CBDA's approach to assess their children's language abilities. Its repeated assessment and individualized approach gave parents confidence in the assessment, and they stated that comparing Filipino children's narrative

abilities to children from other cultures and languages was unfair. Parents also appreciated that the CBDA's mediation phases allowed children to learn new skills using strategies, as well a learning pace and encouragement tailored to the child, which they recognized as helpful to all children including ones with language difficulties. Further, parents identified the benefit of examiners being active during mediation as it encourages and makes children feel comfortable to engage in more talk as Filipino children may not have had the same encouragement to talk freely. Lastly, parents expressed that the CBDA helps identify each child's language abilities, and that the assessment tool is beneficial for both Filipino children and other immigrant children since these children may arrive at school with a different set of skills, language, and culture unrecognized by assessments.

Limitations and Future Directions

The present study has several limitations. First, it only contained eight participants. While they agreed with each other on the points discussed, it is unwise to suggest that the findings are generalizable to all Filipino parents whose children attend Canadian schools, as Filipinos are diverse and may have vary in their cultural values, socialization practices, educational expectations, and language. Second, the parents participated in focus groups in their L2, and therefore, their answers may not have been as rich and may not have gotten across exactly what they wanted if the focus groups were conducted in Filipino. To mitigate this, the Filipino-speaking assistant moderator helped clarify quotes during and after each focus group. Third, the second focus group occurred virtually. With the more rigid nature of virtual communication and a few connection issues, it resulted in fewer rich discussions between participants compared with the in-person focus group. Traditionally, Filipinos enjoy gathering around food and the in-person focus group allowed participants to gather informally before the session began, and this likely

enhanced the comfort level of participants. For future focus group research with Filipinos, in-person is preferred as ensuring a comfortable setting is recommended (Kruger & Casey, 2014). Lastly, a different set of children's narratives based on a different picture may have changed the direction of the conversation as the parents might have picked up on other narrative features to discuss.

Despite the limitations, the study demonstrated that parents can inform educators on Filipino cultural and linguistic elements of stories and this information could, in turn, help differentiate between language difference and disorder when concerns about a child's language arise. Additionally, involving parents as experts on school practices is lacking in research (Garg, 2021; Gillanders et al., 2021). The present study helps fill this gap by giving the parents an opportunity to have their voices heard regarding a dynamic assessment of narrative and skills represented in the school curriculum. Parents' positive views on the CBDA are encouraging in terms of expanding and further validating the assessment for future use.

General Discussion

The overall goal of the dissertation research was to develop and implement a curriculum-based dynamic assessment (CBDA) of narratives for bilingual Filipino elementary-school-aged children. Of particular interest was the effectiveness of the CBDA in classifying the children to either a language difficulties (LD) group or a typically developing (TD) language group, compared with a widely-used *Test of Narrative Language-Second Edition* (TNL-2; Gillam & Pearson, 2017). Additionally, the research compared the gain scores between the two language groups, investigated the performance of kindergarten children with language difficulties, and gathered parents' perspectives on Filipino children's stories and the utility of the CBDA.

Key Findings

The four studies reported in this dissertation contribute to the growing body of literature examining the benefits of dynamic assessments for culturally- and linguistically-diverse children. To the best of my knowledge, the dissertation represents the first set of studies to examine a dynamic assessment of narratives from diverse angles and for bilingual Filipino- and English-speaking children. The incorporation of curricular outcomes to the dynamic assessment and the study of parents' views are also original contributions.

The initial key finding was that the CBDA variables were better at classifying Filipino bilingual children to either a TD or LD language ability group than were the children's pretest scores on the standardized and normed-referenced (on English monolinguals) TNL-2. Specifically, measures taken during or after the mediation sessions (i.e., modifiability ratings and posttest scores on both a novel single-picture task and the TNL-2) demonstrated higher sensitivity and specificity than pretest measures. Receiver operating characteristics curve analyses suggested that if clinicians were to solely administer the TNL-2 with this sample of Filipino children, they would need to apply a considerably lower cutoff score than the one recommended by the assessment's authors. Conversely, when the TNL-2 was administered post-mediation, the score that differentiated the two language groups was nearly identical with the TNL's normative cutoff score. Therefore, integrating the TNL-2 within a CBDA offers clinicians a valuable tool for assessing bilingual Filipino children's narrative abilities, yielding richer and more accurate information compared to the one-time assessment approach typical of standardized testing.

In terms of pre-to-post gains, Study 2 revealed that TD children made significant gains on the Index of Microstructure's productivity index (Justice et al., 2006). Both language groups had

relatively close scores at pretest, but the gap widened at posttest due to the substantial gains made by the TD group and negligible gains in the LD group. The TD group did not show gains on the complexity index, but their scores on the subcomponents of this index were largely in the expected direction (i.e., higher at posttest), while the LD group's scores changed negligibly. These findings should be of interest to researchers and clinicians who wish to include microstructural elements in a dynamic assessment of oral narratives and can help guide expectations of TD and LD children in this area. Even though the LD group did not show higher scores following mediation, it is important not to simply dismiss dynamic assessment for this group in favour of assessments that are less time consuming. As Study 3 demonstrated, the CBDA was informative; four kindergarten children with LD from the larger sample exhibited varying levels of modifiability and responded in distinct ways to a range of mediation strategies. The results indicate that clinicians who conduct CBDA can gain valuable and detailed information on the children's current narrative abilities, on the most effective and ineffective strategies for each child, and on children's learning potential that could inform future intervention.

School-based practitioners should be aware of potential differences between the expectations for storytelling in the curriculum and the children's home culture and/or L1. However, for Filipino children, such information is not readily available. Therefore, in the final study, focus groups were conducted with Filipino parents to explore their responses to narratives gathered as part of the CBDA. Parents noticed that in the children's narratives elicited with one of the 'single-picture' stimuli, the adult was depicted as an authority figure and the child was portrayed as doing something wrong and needing to correct it. As the parents explained, the portrayal of the characters might be due to the children's past experiences and parent-child

dynamics in Filipino homes. As far as the focus group parents' expectations of a good story, they alluded to story grammar elements seen in the local curriculum and often examined in the literature on children's storytelling. They also valued lengthy and elaborate stories that conveyed lots of emotion. Parents also noted occasional linguistic errors in the children's stories, such as incorrect gendered pronouns or inaccurate direct translations, pointing out that these are common among Filipinos who speak English as L2. The parents expressed that these errors in the L2 may give a false impression of the children's true language abilities.

Regarding parents' views on the CBDA, parents appreciated that it did not compare children's performance to pre-established norms but instead focused on the individual learner. Parents pointed out that this assessment approach can help not only Filipino children but all children, particularly newcomers, as it provides personalized mediation and generates information that can benefit both the children and the school-based practitioners who work with them. Overall, the findings across these four studies provided strong support for the value of the CBDA, suggesting that it has a rightful place within the school system.

Theoretical Implications

Although dynamic assessments with culturally- and linguistically-diverse children have been studied in the past (e.g., Kramer et al., 2009; Gutiérrez-Clellen & Peña, 2001; Henderson et al., 2018; Lidz et Peña, 1996; Peña et al., 2006; Peña et al., 2014; Petersen et al., 2017, 2020), to the best of my knowledge, this collection of studies is the first to incorporate curricular outcomes and examine the assessment's accuracy in predicting language group classification with bilingual Filipino children. As the children had opportunities to engage in learning tasks with the help of a more capable individual, both Vygotsky's (1978) model of cognitive development and Feuerstein's (1977) structural cognitive modifiability model provided frameworks for this

research. These theories postulate that social interaction serves as the channel through which cognition and language develop (Lantolf & Poehner, 2004; Vygotsky, 1978; 1986). That is, children are believed to learn through scaffolding provided by a more capable learner (Feuerstein et al., 1998). As children's cognitive ability to attend, recall, and self-regulate strengthens, they can begin using newly-acquired skills independently (Gutiérrez-Clellen & Peña, 2001).

The outcomes observable in the first three studies are consistent with these theories. In Study 1, the children's posttest scores on the TNL-2 emerged as a more accurate predictor of language group than pretest scores. In cases where children initially scored low on the TNL-2 pretest possibly due to assessment biases (e.g., norming on monolingual and non-Filipino children), they were afforded the opportunity to learn new skills, and to apply them on the posttest. For the TD group, this led to an improvement in their TNL-2 scores (as shown in Study 1, Table 3), which surpassed the TNL-2 cut-off for DLD and in turn, yielded higher accuracy in classification than the TNL-2 at pretest. The results in Study 2 further substantiated the findings by revealing that the TD group of children demonstrated gains on microstructural measures, supporting existing theory on children's ability to change given a supportive environment (Feuerstein, 1977; 1980; Vygotsky, 1986). Although change was not observed in the LD group, direct scaffolding of microstructure could still support learning.

Study 3, which examined the performance of four children from the LD group during mediation, provided evidence for the need for more intense scaffolding generally with this group, compared with TD. The findings revealed that their low modifiability score was due to children in the LD group being less responsive to the teaching, having more difficulties understanding inferential questions and in learning new strategies, and requiring greater effort on the part of the

examiner, aligned with past research (Peña et al., 2000). As a result, the four children struggled to learn the targeted skills and thus their posttest scores were below the TNL-2's cutoff for DLD.

Study 4 contributes to cross-cultural studies of children's narrative structures. The literature on the narratives of English-Filipino speaking children is limited to a few studies (e.g., Amora et al., 2020; Chua et al., 2017; Lofranco et al., 2006). These studies have found that the narratives of Filipino children generally exhibit the story grammar structure and level of macrostructural complexity observed for Euro-American children (e.g., Gorman et al., 2011; Peterson & McCabe, 1983). In Study 4, Filipino parents suggested that expectations in Filipino schools follow a story grammar model. However, parents also emphasized that 'good' stories are ones that capture the listener's attention, are creative and elaborate, and include lots of emotion: features that might be valued differently depending on culture. Moreover, parents pointed out Filipino influences on children's English narratives, such as subject omissions by children and gendered pronoun errors, confirming findings reported for children exposed to Filipino in Lofranco et al. (2006) and thus contributing to the literature on the narratives of children exposed to more than one language.

Implications for School-Based Practice

One of the purposes of the dissertation research was to develop an assessment tool that could be used by school practitioners such as speech-language pathologists, resource educators, and English as an Additional Language educators, working especially with children from culturally- and linguistically-diverse backgrounds. This need is underscored by the increasing number of immigrant children entering the English public school system in Canada each year. Currently, there is a lack of validated resources and tools in schools to effectively identify

bilingual children with language difficulties/disorders while avoiding overdiagnoses of such problems. The CBDA helps fill this gap.

One of the benefits of CBDA is its suitability for administration mere months after a child has entered a school system where the language of instruction is not their L1. Unlike standardized language assessments, which typically require a certain level of language exposure and proficiency, CBDA focuses primarily on a children's modifiability, does not rely on pre-established norms, and as shown in the dissertation, can focus on oral storytelling, a form of expression that has been described as universal. As a result, a CBDA of narratives can be administered early in a child's language learning journey. In contrast, the TNL-2 recommends that clinicians only use the assessment with children who have had at least one year of English language exposure for at least 25% of the time. Unfortunately, this approach can lead to some children being overlooked, as practitioners may attribute their underperformance solely to linguistic and cultural differences, potentially missing delays or disorders (Ball et al., 2005). Moreover, in many school systems, the time from referral to a professional and assessment is long, and assessments may take place only after the child is failing academically. Identifying difficulties early allows for timely allocation of resources to children who need them.

Clinicians such as speech-language pathologists and school psychologists can benefit from implementing the CBDA or receiving the assessment results if other school personnel implement it. This can inform the clinicians' practice by providing valuable information about the children's narrative and language skills, their modifiability, their learning preferences, their responsiveness to mediation, and the most effective strategies used by the examiner during mediation. By having access to this detailed information, clinicians can expand on existing efforts and tailor their intervention planning accordingly.

Furthermore, CBDA offered a positive experience to children, as highlighted by parents in Study 4. It is important to recognize that the assessment process itself can be intimidating for children, irrespective of their language ability. Children may experience anxiety or shyness, which can hinder their performance and prevent them from showcasing their true capabilities (Tyler & Tolbert, 2017). The likelihood of children not performing to their full potential may be heightened when they transition to a new school that operates in a different language and cultural context than their own. Children may be, as Boudreau (2008) suggests, natural storytellers, but the one-on-one mediation sessions offered by CBDA provide them with a supportive and collaborative environment that can help them realize their full potential. Creating a supportive environment is crucial for alleviating anxiety and promoting a successful school transition for children (West et al., 2010) and could be especially beneficial when assessing Filipino children who may feel intimidated in an unfamiliar environment. As one parent expressed in the focus groups, children who were taught in the Philippines to remain quiet unless explicitly asked to speak may find traditional assessment methods challenging. Therefore, CBDA may offer a more comfortable and suitable approach for assessing Filipino children as they transition to Canadian schools.

Curriculum-based assessments, that is, assessments which are directly relevant to classroom instruction, enable school-based practitioners to easily understand the assessment goals, interpret the child's performance in light of classroom demands, and can provide valuable insights to other school personnel, including resource teachers, educational assistants, and principals (Meaux & Norris, 2018). By aligning the practitioners' strategies with the classroom curriculum and goals, they can provide more relevant and meaningful support to the children, maximizing their language development and academic success.

Moreover, collaborating with parents allows practitioners to gain insight on potential cultural and linguistic features to provide culturally responsive support for the children (Hampton et al., 2023; Maul, 2015; Verdon et al., 2016). Canadian providers of services to immigrant families and models such as the Care for Newcomer Children (2013) recognize the importance of establishing good relationships with families in supporting child development. The findings from Study 4 suggest that when parents are seen as experts in their culture and language, they can provide crucial information to help clinicians interpret Filipino children's English narratives and overall language skills. By inviting parents' input, clinicians can build relationship and trust with the parents and with the Filipino children, and this can, in turn, lead to effective and successful service delivery.

Implications for Non-Filipino Researchers Conducting Research with Filipinos Families

When conducting research with immigrant children and their parents, establishing a positive relationship between the researcher and participants is also crucial. In my study, Filipino parents emphasized the importance of an assessor who is encouraging and fosters a positive connection with the children. In their view, these factors can enhance children's performance in an assessment situation. Personal connections can also increase adults' and children's willingness to participate in research. For instance, participation in my research was supported by my personal connections to the local Filipino community and recruitment happened largely by word-of-mouth. Once the studies began, I also did my best to build rapport and trust by following cultural norms for gatherings (e.g., offering a meal at the focus group meeting and accepting offers of food at homes); respecting participants' choices of how to address me (e.g., as Miss Anne or Tita Anne, literally translated as "auntie"); and engaging in informal interactions with parents during home visits. These provided opportunities for parents to know me better and for

me to know them and their children better and thus create a comfortable research experience. Similar strategies, if used by others, could contribute to successful interactions and research with Filipino families.

Limitations

Although this dissertation examined a novel CBDA of narratives for bilingual Filipino children, it is important to acknowledge the limitations that ensued and should be considered for future research. One important limitation was the relatively small sample size. This was mostly due to conducting in-person research in 2021, during the COVID-19 pandemic. In addition to causing delays in beginning the research, the pandemic-related public health guidelines restricting in-person contact made recruitment difficult. With 27 children in the TD group and 7 children in the LD group, the sample size for each group was relatively small. A larger sample and more balanced numbers in the LD and TD groups would have provided more statistical power, particularly in Study 2 that examined the groups' pretest and posttest scores. A larger sample would have also helped mitigate the issue of scale inequality within the Narrative Feature Rating Scale. The current study had varying scales for story components, story ideas and complexity (0-4 scales), compared with episode structure (0-1 scale), which affected the opportunity for change as the skills chosen for mediation were based on children's performance at pretest. With a larger sample, children could be grouped based on the opportunity for change in their scores, and this would allow for a more comprehensive examination of narrative macrostructure, including gain scores.

Another limitation is the lack of formal diagnosis as a requirement for children to be assigned to the language difficulty (LD) group. The children in this group were identified as having language difficulties based on the ALDeQ (Paradis et al., 2010), a tool designed for

clinicians to assess children's L1 abilities and general development. The ALDeQ classification was followed by a parent questionnaire and follow-up questions to parents. While these revealed that four of the seven children either had a formal diagnosis of a language delay or disorder, or were receiving services by a speech-language pathologist for language, we did not set formal diagnosis as a criterion given the challenges in diagnosing bilingual children noted throughout the dissertation. Notwithstanding this limitation, a follow-up call to parents of children in the LD group a year after the study was completed revealed that six out of the seven children were receiving some form of language services, while the remaining child's parents expressed frustration that their child was not receiving any language services to help them succeed in language learning at school.

Lastly, the CBDA was not checked for parallel forms reliability which refers to the consistency of results obtained from different versions of the same assessment tool. In the case of the CBDA, all children were presented with the same pictures at baseline (when applicable), pretest, and posttest. Therefore, children's performance at different time points may have been influenced by factors such as richness of the image or personal preferences. By employing counterbalancing, any potential bias or influence due to the pictures could have been minimized. However, given the delayed-experimental design in Study 1 (see Figure 1), we were able to compare the pretest measure for the first experimental group to the baseline measure for the delayed experimental group; these used two different pictures and no significant differences were found, providing some support for a lack of differences between pictures.

Future Directions: Practice and Research

The findings reported in this dissertation open new avenues which I am currently developing through a project aimed at implementing dynamic assessment of narratives in schools

across Canada. This endeavour will involve further development of the CBDA and extensions of the research described in the dissertation, as summarized next.

First, a secure online platform will be created to support the in-person dynamic assessments. All the materials needed will be readily available and some processes (e.g., generating the modifiability rating score) will be automated. Dynamic assessments are often considered time-consuming and this could explain in part why they are less widely used than standardized assessments (Haywood & Tzuriel, 2002). Through the online platform, the process can become more feasible. The use of technology in assessment is increasing in clinical practice and in research (Wales et al., 2017). For instance, a recent study by Magimairaj et al. (2021) showed that when the TNL-2 was administered online to school-aged children, it had similar psychometric properties to those found with in-person administration. Although in my planned studies, the dynamic assessment will be offered in person, future research could investigate users' experiences and satisfaction with the online platform and resources it will offer.

Second, the platform and the CBDA will be made available in French, Canada's second official language. This will help ensure children entering the French school system can be assessed in the language of instruction. Furthermore, having the assessment available in both English and French can benefit practitioners working with Anglophone children attending school in French, and vice versa, as these children could be assessed on the CBDA in both English and French, allowing for a cross-linguistic examination of their narrative skills in a dynamic assessment context and a more comprehensive profile of each child's language abilities in both their L1 and their L2.

Third, school-based practitioners across Canada will be trained to use the CBDA and its online platform to administer the assessment to newcomers, immigrants, or any child they wish

to evaluate in terms of their narrative abilities and learning potential. Training practitioners to use the CBDA is crucial to ensure they possess knowledge of the theoretical basis of dynamic assessment and of narrative development required to deliver high-quality mediation. This training is critical given that mediation relies heavily on the examiner's expertise. This expanded implementation will help school-based practitioners in deciding what a child needs: continued exposure to the language instruction or further testing to possibly identify a language delay or disorder. Practitioners will be asked to use the online platform to enter the results of the CBDA, in instances where parents consent to this use of the data. The child data could then be analyzed to establish classification accuracy of the CBDA on a larger sample and to compare children's narratives across ages, cultures, and languages.

The child data from the online platform could also be used to further establish the reliability and validity of the CBDA. For example, I plan to examine the data for the single-picture task in the CBDA protocol to ensure there are no picture effects. Inter-rater reliability could also be tested by examining ratings by two or more assessors on both the Narrative Feature Rating Scale and the Modifiability Rating Scales. Another psychometric property of the CBDA one could investigate is predictive validity (Elliott, 2003). A couple of years after administering the CBDA to children, one could gather data on their language ability and academic achievement to determine whether the CBDA is effective at predicting later performance.

Lastly, a future direction is to ensure the assessment is useful for everyone involved with the children's learning. This will happen through collaboration with other experts in the children's language (e.g., families and community members) to guarantee the assessment resources and mediation strategies are culturally-relevant for children who may arrive at school with a different set of learning styles. Collaborating with families, has been recommended in the

literature to ensure culturally-sensitive service delivery (e.g., Maul, 2015), and collaborating with school-based clinicians can allow them to contribute their perspectives, insights, and expertise in the design and implementation of CBDA approaches. This collaboration will ensure the CBDA is a useful tool for understanding children's abilities and could provide direction for any necessary interventions with a child following CBDA.

These future directions can help advance dynamic assessment research and help turn research into practice. Continuing research on the CBDA will also aid in the development of evidence-based interventions for culturally and linguistically diverse children and the individuals working with them. This work is paramount to guarantee all children are represented and have equal opportunities to succeed in Canada's education system (Awad et al., 2016).

Conclusion

In summary, though Canadian schools and classrooms are becoming increasingly diverse in terms of children's cultural and linguistic backgrounds, our assessment methods have yet to adapt to this (Orellana et al., 2019). Immediate changes to educational approaches and assessments are needed to address the potential for low educational achievement and over- and under-diagnosing of speech and language disorders, especially among children who are learning the language of school instruction as a second or additional language (Fiestas & Peña, 2004; Peña et al., 2001). This collection of studies on the development and implementation of a CBDA with Filipino bilinguals offers a valuable contribution towards addressing this urgent need.

References

- Altman, C., Armon-Lotem, S., Fichman, S., & Walters, J. (2016). Macrostructure, microstructure, and mental state terms in the narratives of English–Hebrew bilingual preschool children with and without specific language impairment. *Applied Psycholinguistics*, 37(1), 165–193. <https://doi.org/10.1017/S0142716415000466>
- American Speech-Language-Hearing Association. (2022). *Public policy agenda*. <https://www.asha.org/advocacy/2022-asha-publicpolicy-agenda/>
- Amora, K. K., Garcia, R., & Gagarina, N. (2020). Tagalog adaptation of the Multilingual Assessment Instrument for Narratives: History, process and preliminary results. In N. Gagarina & J. Lindgren (Eds.), *New language versions of MAIN: Multilingual Assessment Instrument for Narratives—revised* (pp. 221–233). ZASPiL
- Antony-Newman, M. (2019). Parental involvement of immigrant parents: A meta-synthesis. *Educational Review*, 71(3), 362–381. <https://doi.org/10.1080/00131911.2017.1423278>
- Awad, G. H., Patall, E. A., Rackley, K. R., & Reilly, E. D. (2016). Recommendations for culturally sensitive research methods. *Journal of Educational and Psychological Consultation*, 26(3), 283–303. <https://doi.org/10.1080/10474412.2015.1046600>
- Ball, J. (2007). *Aboriginal young children's language and literacy development: Research evaluating progress, promising practices, and needs*. Canadian Language and Literacy Networked Centre of Excellence.
- Ball, J. (2009). Supporting young indigenous children's language development in Canada: A review of research on needs and promising practices. *Canadian Modern Language Review*, 66(1), 19–47. <https://doi.org/10.3138/cmlr.66.1.019>
- Ball, J., & Bernhardt, B. M. (2008). First Nations English dialects in Canada: Implications for

- speech-language pathology. *Clinical Linguistics & Phonetics*, 22(8), 570–588.
<https://doi.org/10.1080/02699200802221620>
- Ball, J., Bernhardt, B., & Deby, J. (2005, November 27-December 1). *Implications of First Nations English dialects for supporting children's language development*. [Paper presentation]. World Indigenous Peoples' Conference on Education, Hamilton, Aotearoa-New Zealand.
- Bamford, C. K., Masso, S., Baker, E., & Ballard, K. J. (2022). Dynamic assessment for children with communication disorders: A systematic scoping review and framework. *American Journal of Speech-Language Pathology*, 31(4), 1878–1893.
https://doi.org/10.1044/2022_AJSLP-21-00349
- Banerjee, R., & Guiberson, M. (2012). Evaluating young children from culturally and linguistically diverse backgrounds for special education services. *Young Exceptional Children*, 15(1), 33–45. <https://doi.org/10.1177/1096250611435368>
- Bernardo, A. B. (2008). Exploring epistemological beliefs of bilingual Filipino preservice teachers in the Filipino and English languages. *The Journal of Psychology*, 142(2), 193–208. <https://doi.org/10.3200/JRLP.142.2.193-208>
- Bernardo, A. B. I. (2019). Sociocultural dimensions of student motivation: Research approaches and insights from the Philippines. In G. A. D. Liem & S. H. Tan (Eds.), *Asian education miracles: In search of sociocultural and psychological explanations* (pp. 139–154). Routledge.
- Barrera, M. (2003). Curriculum-based dynamic assessment for new-or second-language learners with learning disabilities in secondary education settings. *Assessment for Effective Intervention*, 29(1), 69–84. <https://doi.org/10.1177/073724770302900107>

- Bedore, L. M., & Peña, E. D. (2008). Assessment of bilingual children for identification of language impairment: Current findings and implications for practice. *International Journal of Bilingual Education and Bilingualism*, 11(1), 1–29.
<https://doi.org/10.2167/beb392.0>
- Bishop, D., and Donlan, C. (2005) The role of syntax in encoding and recall of pictorial narratives: Evidence from specific language impairment. *British Journal of Developmental Psychology*, 23(1), 25–46. <https://doi.org/10.1348/026151004X20685>
- Bishop, D. V. M., Snowling, M., Thompson, P., Greenhalgh, T., & the CATALISE-2 consortium (2017). Phase 2 of CATALISE: A multinational and multidisciplinary Delphi consensus study of problems with language development: Terminology. *The Journal of Child Psychology and Psychiatry*, 58(10), 1068–1080. <https://doi.org/10.1111/jcpp.12721>
- Botting, N. (2002). Narrative as a tool for the assessment of linguistic and pragmatic impairments. *Child Language Teaching and Therapy*, 18(1), 1–21.
<https://doi.org/10.1191/0265659002ct224oa>
- Boudreau, D. (2008). Narrative abilities: Advances in research and implications for clinical practice. *Topics in Language Disorders*, 28(2), 99–114.
<https://doi.org/10.1097/01.TLD.0000318932.08807.da>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Brewer, C. (1985) The story schema: Universal and cultural-specific properties. In D. R. Olson, N. Torrance & A. Hildyard (Eds.), *Literacy and learning: The nature and consequences of reading and writing* (pp. 167-194). Cambridge University Press.
- Brice, A. (2002). *The Hispanic child: Speech, language, culture and education*. Allyn & Bacon.

- Brockman, D. (2022). *Parents as partners: Collaborating with parents is better for children's language development*. Toronto: The Hanen Centre.
- Brown, A. L., & Ferrara, R. A. (1985). Diagnosing zones of proximal development. In J. Wersch (Ed.), *Culture, communication and cognition: Vygotskian perspectives* (pp. 273–305). Cambridge University Press.
- Bruner, J. (1991). The narrative construction of reality. *Critical Inquiry*, 18(1), 1–21.
<https://doi.org/10.1086/448619>
- Budiman, A. (2021). *Filipinos in the U.S. fact sheet*. Pew Research Center.
<https://www.pewresearch.org/social-trends/fact-sheet/asianamericans-filipinos-in-the-u-s/>
- Camilleri, B. & Botting, N. (2013) Beyond static assessment of children's receptive vocabulary: The dynamic assessment of word learning (DAWL). *International Journal of Language and Communication Disorders*, 48(5), 565–581. <https://doi.org/10.1111/1460-6984.12033>
- Campione, J. C., & Brown, A. L. (1987). Linking dynamic assessment with school achievement. In C. S. Lidz (Ed.), *Dynamic assessment: An interactional approach to evaluating learning potential* (p. 82–115). Guilford Press.
- Campione, J. C., Brown, A. L., Ferrera, R. A., & Bryant, N. R. (1984). The zone of proximal development: Implications for individual differences and learning. In B. Rogoff & J. V. Wertsch (Eds.), *Children's learning in the "zone of proximal development"* (pp. 77–91). Jossey-Bass.
- Care for Newcomer Children. (2013). *About CMAS*. <https://cmascanada.ca/cnc/about-cmas/>
- Carter, J. A., Lees, J. A., Murira, G. M., Gona, J., Neville, B. G., & Newton, C. R. (2005). Issues in the development of cross-cultural assessments of speech and language for children. *International Journal of Language & Communication Disorders*, 40(4), 385–401.

<https://doi.org/10.1080/13682820500057301>

Charity Hudley, A. H., & Mallinson, C. (2011). *Understanding English language variation in U.S. schools*. Teachers College Press.

Cheatham, G. A., & Jimenez-Silva, M. (2011). What makes a good story?: Supporting oral narratives of young children from culturally and linguistically diverse backgrounds. *Childhood Education*, 87(4), 261–268. <https://doi.org/10.1080/00094056.2011.10523188>

Chichester Clark, E. (2009). *It was you! Blue kangaroo*. Harper-Collins Children's Books.

Childs, S., Finnie, R., & Mueller, R. E. (2018). Assessing the importance of cultural capital on post-secondary education attendance in Canada. *Journal of Further and Higher Education*, 42(1), 57–91. <https://doi.org/10.1080/0309877X.2016.1206853>

Choyce, L. (2006). *Skunks for breakfast*. Nimbus Publishing.

Chua, R. M., Fabella, K. C., Quijano, L. J., & Santos, J. A. (2017). Filipino preschool narrative structures: A look into male and female post-narrative scaffolding as a reflection of children's communicative competence. *Journal of Child Language*, 46(3), 547–570. <https://doi.org/10.1017/S0305000918000324>

Cicchetti, D. V. (1994). Guidelines, criteria, and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychological Assessment*, 6(4), 284–290. <https://doi.org/10.1037/1040-3590.6.4.284>

Cleave, P. L., Girolametto, L. E., Chen, X., & Johnson, C. J. (2010). Narrative abilities in monolingual and dual language learning children with specific language impairment. *Journal of Communication Disorders*, 43(6), 511–522.

<https://doi.org/10.1016/j.jcomdis.2010.05.005>

Cornwall, G. (2017). *Jabari jumps*. Candlewick Press.

- Costigan, C., Lehr, S., & Miao, S. (2016). Beyond economics: Broadening perspectives on immigration to Canada. *Canadian Ethnic Studies*, 48(1), 19–44.
<https://doi.org/10.1353/ces.2016.0006>
- Davies, P., Shanks, B., & Davies, K. (2004). Improving narrative skills in young children with delayed language development. *Educational Review*, 56(3), 271–286.
<https://doi.org/10.1080/0013191042000201181>
- De Feyter, J. J., & Winsler, A. (2009). The early developmental competencies and school readiness of low-income, immigrant children: Influences of generation, race/ethnicity, and national origins. *Early Childhood Research Quarterly*, 24(4), 411–431.
<https://doi.org/10.1016/j.ecresq.2009.07.004>
- Devanadera, A., & Alieto, E. (2019). Lexical bias among Tagalog-speaking Filipino preschool children. *Asian EFL Journal*, 24(4.1), 207–225.
- Diaz Larenas, C., Boero, N. A., Rodríguez, B. R., & Sánchez, I. R. (2021). English language assessment: Unfolding school students’ and parents’ views. *Educação e Pesquisa*, 47(e226529), 1–27. <https://doi.org/10.1590/S1678-4634202147226529>
- Dillon, R. F. (1997). Dynamic testing. In R. F. Dillon (Ed.), *Handbook on testing* (pp. 164–186). Greenwood Press.
- Dodd, B. (2013). *Differential diagnosis and treatment of children with speech disorder*. John Wiley & Sons.
- Dorner, L. M. (2010). English and Spanish “para un futuro”—Or just English?: Immigrant family perspectives on two-way immersion. *International Journal of Bilingual Education and Bilingualism*, 13(3), 303–323. <https://doi.org/10.1080/13670050903229851>
- Drew, C. J. (1973). Criterion-referenced and norm-referenced assessment of minority group

- children. *Journal of School Psychology*, 11(4), 323–329. [https://doi.org/10.1016/0022-4405\(93\)90046-L](https://doi.org/10.1016/0022-4405(93)90046-L)
- Elliott, J. (2003). Dynamic assessment in educational settings: Realising potential. *Educational Review*, 55(1), 15-32. <https://doi.org/10.1080/00131910303253>
- Eriks-Brophy, A. (2014). Assessing the language of Aboriginal Canadian children: Towards a More culturally valid approach. *Canadian Journal of Speech-Language Pathology & Audiology*, 38(2), 152–173.
- Fiestas, C. E., & Peña, E. D. (2004). Narrative discourse in bilingual children: Language and task effects. *Language, Speech, and Hearing Services in Schools*, 35(2), 155–168. [https://doi.org/10.1044/0161-1461\(2004/016\)](https://doi.org/10.1044/0161-1461(2004/016))
- Feuerstein, R. (1977). Mediated learning experience: A theoretical basis for cognitive modifiability. In P. Mittler (Ed.), *Research to practice in mental retardation* (Vol. 2, pp. 105–115). University Park.
- Feuerstein, R. (1981). Mediated learning experience in the acquisition of kinesics. In B. L. Hoffer & R. N. St. Clair (Eds.), *Development kinesics: The emerging paradigm* (pp. 91–106). University Park Press.
- Feuerstein, R. (1990). The theory of structural cognitive modifiability. In B. Z. Presseisen (Ed.), *Learning and thinking styles: Classroom interaction* (pp. 68–134). National Education Association.
- Feuerstein, R., Falik, L., & Feuerstein, R. (1998). Feuerstein’s LPAD. In R. Samuda (Ed.), *Advances in Cross-Cultural Assessment*. Sage.
- Feuerstein, R., Feuerstein, R. S., Falik, L. H., & Rand, Y. (2002). *The dynamic assessment of cognitive modifiability*. ICELP Press.

- Feuerstein, R., Rand, Y., Y & Hoffman, M. B. (1979). *The dynamic assessment of retarded performers: The Learning Potential Assessment Device, theory, instruments, and techniques*. University Park Press.
- Feuerstein, R., Rand, Y., Hoffman, M. B., & Miller, R. (1980). *Instrumental enrichment: An intervention program for cognitive modifiability*. University Park Press.
- File, N., Mueller, J. J., Wisneski, D. B., & Stremmel, A. J. (2016). *Understanding research in early childhood education: Quantitative and qualitative methods*. Routledge.
- Fuertes, R. F., & Licerias, J. M. (2018). Bilingualism as a first language: Language dominance and crosslinguistic influence. In: Cuza A and Guijarro-Fuentes P (Eds.), *Language Acquisition and Contact in the Iberian Peninsula*. Boston/Berlin: de Gruyter, pp.159–186.
- Gagarina, N., Klop, D., Kunnari, S., Tantele, K., Välimaa, T., Bohnacker, U. & Walters, J. (2019). *MAIN: Multilingual assessment instrument for narratives – revised*. ZAS Papers in Linguistics, 63. <https://www.leibniz-zas.de/index.php?id=964>
- Gándara, P., Maxwell-Jolly, J., & Driscoll, A. (2005). *Listening to teachers of English language learners: A survey of California teachers' challenges, experiences, and professional development needs*. University of California Linguistic Minority Research Institute. <https://escholarship.org/uc/item/6430628z>
- Garg, R. (2021). Conceptualizing (immigrant) parents as knowledgeable adults in their children's lives. *Penn GSE Perspectives on Urban Education*, 18(2), 1–6. <https://urbanedjournal.gse.upenn.edu/archive/volume-18-issue-2-spring-2021/conceptualizing-immigrant-parents-knowledgeable-adults-their>
- Gillam, R. B., & Pearson, N. (2017). *Test of Narrative Language-Second Edition*. Pro Ed.

- Gillanders, C., Iruka, I. U., Bagwell, C., & Adejumo, T. (2021). Parents' perceptions of a k-3 formative assessment. *School Community Journal, 31*(2), 239–266.
<https://eric.ed.gov/?id=EJ1323055>
- Gingrich, D. M. (2019). *Critical review: Investigating the classification accuracy of dynamic assessment with culturally and linguistically diverse children* (n.d.). Evidence Based Practice for Clinicians. University of Western Ontario: School of Communication Sciences and Disorders. London, Canada.
https://www.uwo.ca/fhs/lwm/teaching/EBP/2018_19/Gingrich.pdf
- Go, M., & Gustilo, L. (2013). Tagalog or Taglish: The lingua franca of Filipino urban factory workers. *Philippine ESL Journal, 10*, 57–87.
- Gorman, B. K., Fiestas, C. E., Peña, E. D., & Clark, M. R. (2011). Creative and stylistic devices employed by children during a storybook narrative task: A cross-cultural study. *Language, Speech, and Hearing Services in Schools, 42*(2), 167–181.
[https://doi.org/10.1044/0161-1461\(2010/10-0052\)](https://doi.org/10.1044/0161-1461(2010/10-0052))
- Green, L. B. (2020). The specific language impairment/developmental language disorders forum: Fostering a discussion of terminology. *Perspectives of the ASHA Special Interest Groups, 5*(1), 3–5. https://doi.org/10.1044/2019_PERSP-19-00184
- Griffin, T. M., Hemphill, L., Camp, L., & Wolf, D. P. (2004). Oral discourse in the preschool years and later literacy skills. *First Language, 24*(2), 123–147.
<https://doi.org/10.1177/0142723704042369>
- Grigorenko, E. L., & Sternberg, R. J. (1998). Dynamic testing. *Psychological Bulletin, 124*(1), 75-111. <https://doi.org/10.1037/0033-2909.124.1.75>

- Gutiérrez-Clellen, V. F., Brown, S., Robinson-Zañartu, C., & Conboy, B. (1998). Modifiability. *Journal of Children's Communication Development, 19*(2), 31–43.
<https://doi.org/10.1177/152574019801900204>
- Gutiérrez-Clellen, V. F., & Peña, E. (2001). Dynamic assessment of diverse children: A tutorial. *Language, Speech, and Hearing Services in Schools, 32*(4), 212–224.
[https://doi.org/10.1044/0161-1461\(2001/019\)](https://doi.org/10.1044/0161-1461(2001/019))
- Gutiérrez-Clellen, V. F., & Quinn, R. (1993). Assessing narratives in diverse cultural/linguistic populations: Clinical implications. *Language, Speech, and Hearing Services in Schools, 24*(1), 2–9. <https://doi.org/10.1044/0161-1461.2401.02>
- Hair, J., Black, W. C., Babin, B. J. & Anderson, R. E. (2014). *Multivariate data analysis* (7th ed.). Pearson Educational Limited.
- Hajisoteriou, C., Karousiou, C., & Angelides, P. (2018). Successful components of school improvement in culturally diverse schools. *School Effectiveness and School Improvement, 29*(1), 91–112. <https://doi.org/10.1080/09243453.2017.1385490>
- Hamilton, M. B., Angulo-Jiménez, H., Taylo, C., & DeThorne, L. S. (2018). Clinical implications for working with nonmainstream dialect speakers: A focus on two Filipino kindergartners. *Language, Speech, and Hearing Services in Schools, 49*(3), 497–508.
https://doi.org/10.1044/2018_LSHSS-17-0060
- Hampton, L. H., Stern, Y., & Rodriguez, E. (2023). Building effective partnerships with parents to support language development in young children. *Intervention in School and Clinic, 58*(3), 183–189. <https://doi.org/10.1177/10534512221081260>

- Hasson N., Camilleri, B., Jones, C., Smith, J., & Dodd, B. (2012) Discriminating disorder from difference using dynamic assessment with bilingual children. *Child Language Teaching and Therapy* 29(1), 57–75. <https://doi.org/10.1177/0265659012459526>
- Hasson, N. (2018). *The dynamic assessment of language learning*. Routledge.
- Hasson, N., & Joffe, V. (2007). The case of dynamic assessment in speech and language therapy. *Child Language Teaching and Therapy*, 23(1), 9–25. <https://doi.org/10.1177/0265659007072142>
- Haywood, H. C. (1997). Interactive assessment. In R. L. Taylor (Ed.), *Assessment of individuals with mental retardation* (pp. 100–140). Singular Publishing Group.
- Haywood, H. C., & Lidz, C. S. (2007). *Dynamic assessment in practice: Clinical and educational applications*. Cambridge University Press.
- Haywood, H. C., & Tzuriel, D. (2002). Applications and challenges in dynamic assessment. *Peabody Journal of Education*, 77(2), 40–63. <http://www.jstor.org/stable/1492933>
- Heath, L., Kendzierski, D., & Borgida, E. (1982). Evaluation of social programs. *Evaluation Review*, 6(2), 233–246. <https://doi.org/10.1177/0193841x8200600205>
- Hegde, M., & Pomaville, F. (2013). *Assessment of communication disorders in children*. Plural.
- Henderson, D. E., Restrepo, M. A., & Aiken, L. S. (2018). Dynamic assessment of narratives among Navajo preschoolers. *Journal of Speech, Language, and Hearing Research*, 61(10), 2547–2560. https://doi.org/10.1044/2018_JSLHR-L-17-0313
- Hintze, J. M., & Marcotte, A. M. (2010). Student assessment and data-based decision making. In T. A. Glover & S. Vaughn (Eds.), *The promise of response to intervention: Evaluating current science and practice* (pp. 57–77). Guilford Press.

- Hoff, E. (2013). Interpreting the early language trajectories of children from low-SES and language minority homes: Implications for closing achievement gaps. *Developmental Psychology*, 49(1), 4–14. <https://doi.org/10.1037/a0027238>
- Hoffman, L. M. (2009). The utility of school-age narrative microstructure indices: INMIS and the proportion of restricted utterances. *Language, Speech, and Hearing Services in Schools*, 40(4), 365–375. [https://doi.org/10.1044/0161-1461\(2009/08-0017\)](https://doi.org/10.1044/0161-1461(2009/08-0017))
- Hudson, J. A., & Shapiro, L. R. (1991). From knowing to telling: The development of children's scripts, stories, and personal narratives. In A. McCabe & C. Peterson (Eds.), *Developing narrative structure* (pp. 89–136). Erlbaum.
- Hühn, P., Meister, J., Pier, J., & Schmid, W. (2014). *Handbook of narratology*. De Gruyter. <https://doi.org/10.1515/9783110316469>
- Hunt, E., Nang, C., Meldrum, S., & Armstrong, E. (2022). Can dynamic assessment identify language disorder in multilingual children? Clinical applications from a systematic review. *Language, Speech, and Hearing Services in Schools*, 53(2), 598–625. https://doi.org/10.1044/2021_LSHSS-21-00094
- Justice, L. M., Bowles, R. P., Kaderavek, J. N., Ukrainetz, T. A., Eisenberg, S. L., & Gillam, R. B. (2006). The index of narrative microstructure: A clinical tool for analyzing school-age children's narrative performances. *American Journal of Speech-Language Pathology*, 15(2), 177–191. [https://doi.org/10.1044/1058-0360\(2006/017\)](https://doi.org/10.1044/1058-0360(2006/017))
- Kaderavek, J. N., & Sulzby, E. (2000). Narrative production by children with and without specific language impairment: Oral narratives and emergent readings. *Journal of Speech, Language, and Hearing Research*, 43(1), 34–49. <https://doi.org/10.1044/jslhr.4301.34>

- Kapantzoglou, M., Fergadiotis, G., & Restrepo, M. A. (2017). Language sample analysis and elicitation technique effects in bilingual children with and without language impairment. *Journal of Speech, Language, and Hearing Research, 60*(10), 2852–2864. https://doi.org/10.1044/2017_JSLHR-L-16-0335
- Kapantzoglou, M., Restrepo, M. A., & Thompson, M. S. (2012). Dynamic assessment of word learning skills: Identifying language impairment in bilingual children. *Language, Speech, and Hearing Services in Schools, 43*(1), 81–96. [https://doi.org/10.1044/0161-1461\(2011/10-0095\)](https://doi.org/10.1044/0161-1461(2011/10-0095))
- Kieffer, M. J. (2008). Catching up or falling behind? Initial English proficiency, concentrated poverty, and the reading growth of language minority learners in the United States. *Journal of Educational Psychology, 100*(4), 851–868. <https://doi.org/10.1037/0022-0663.100.4.851>
- Koury, A., & Votruba-Drzal, E. (2014). School readiness of children from immigrant families: Contributions of region of origin, home, and childcare. *Journal of Educational Psychology, 106*(1), 268–288. <https://doi.org/10.1037/a0034374>
- Kramer, K., Mallett, P., Schneider, P., & Hayward, D. (2009). Dynamic assessment of narratives with Grade 3 children in a First Nations community. *Canadian Journal of Speech-Language Pathology & Audiology, 33*(3), 119–128.
- Krueger, R.A. and Casey, M.A. (2014). *Focus groups: A practical guide for applied research*. SAGE Publications, Thousand Oaks.
- Laing, S. P., & Kamhi, A. (2003). Alternative assessment of language and literacy in culturally and linguistically diverse populations. *Language, Speech, and Hearing Services in Schools, 34*(1), 44–55. [https://doi.org/10.1044/0161-1461\(2003/005\)](https://doi.org/10.1044/0161-1461(2003/005))

- Landis, J. R., & Koch, G. G. (1977). An application of hierarchical kappa-type statistics in the assessment of majority agreement among multiple observers. *Biometrics*, 33(2), 363–374. <https://doi.org/10.2307/2529786>
- Lantolf, J. P., & Poehner, M. E. (2004). Dynamic assessment of L2 development: Bringing the past into the future. *Journal of Applied Linguistics*, 1(2), 49–74. <https://doi.org/10.1558/japl.v1.i1.49>
- Laurie, A., & Pesco, D. (2023). Curriculum-based dynamic assessments of narratives for bilingual Filipino children. *Language, Speech, and Hearing Services in Schools*, 54(2), 489–503. https://doi.org/10.1044/2022_LSHSS-22-00117
- Lazewnik, R., Creaghead, N. A., Smith, A. B., Prendeville, J.-A., Raiser-Becker, L., & Silbert, N. (2019). Identifiers of language impairment for Spanish–English dual language learners. *Language, Speech & Hearing Services in Schools*, 50(1), 126–137. https://doi.org/10.1044/2018_LSHSS-17-0046
- Lidz, C. S. (1983). Dynamic assessment and the preschool child. *Journal of Psychoeducational Assessment*, 1(1), 59–72. <https://doi.org/10.1177/073428298300100106>
- Lidz, C. S. E. (1987). *Dynamic assessment: An interactional approach to evaluating learning potential*. Guilford Press.
- Lidz, C. S. (1991). *Practitioner's guide to dynamic assessment*. Guilford Press.
- Lidz, C. S. (2002). *Early childhood assessment*. John Wiley & Sons.
- Lidz, C. S., & Peña, E. D. (1996). Dynamic assessment: The model, its relevance as a nonbiased approach, and its application to Latino American preschool children. *Language, Speech, and Hearing Services in Schools*, 27(4), 367–372. <https://doi.org/10.1044/0161-1461.2704.367>

- Liles, B. Z., Duffy, R. J., Merritt, D. D., & Purcell, S. L. (1995). Measurement of narrative discourse ability in children with language disorders. *Journal of Speech, Language, and Hearing Research, 38*(2), 415–425. <https://doi.org/10.1044/jshr.3802.415>
- Lofranco, L. A. L., Peña, E. D., & Bedore, L. M. (2006). English language narratives of Filipino children. *Language, Speech, and Hearing Services in Schools, 37*(1), 28–38. [https://doi.org/10.1044/0161-1461\(2006/004\)](https://doi.org/10.1044/0161-1461(2006/004))
- Lucas, R. I. G., Bernardo, A. B., & Rojo-Laurilla, M. A. (2016). Amotivation in Filipino ESL learners: Exploring some correlates. *Porta Linguarum: Revista Internacional de Didáctica de Las Lenguas Extranjeras, 26*(1), 109–119. <https://doi.org/10.30827/digibug.53938>
- MacLeod, A. A., & Pesco, D. (2022). Narratives by bilingual children: A tale of strengths and growth during kindergarten. *International Journal of Bilingual Education and Bilingualism, 1*–13. <https://doi.org/10.1080/13670050.2022.2132107>
- Magimairaj, B. M., Capin, P., Gillam, S. L., Vaughn, S., Roberts, G., Fall, A. M., & Gillam, R. B. (2022). Online administration of the Test of Narrative Language–Second Edition: Psychometrics and considerations for remote assessment. *Language, Speech, and Hearing Services in Schools, 53*(2), 404–416. https://doi.org/10.1044/2021_LSHSS-21-00129
- Malek, J. (2021). *Filipinos in Canada*. The Canadian historical association: Immigration and ethnicity in Canada series. <https://cha-shc.ca/uploads/6172d313bce1a.pdf>
- Masten, A. S., Liebkind, K., & Hernandez, D. J. (2012). *Realizing the potential of immigrant youth*. Cambridge University Press.

- Maul, C. A. (2015). Working with culturally and linguistically diverse students and their families: Perceptions and practices of school speech-language therapists in the United States. *International Journal of Language & Communication Disorders, 50*(6), 750–762. <https://doi.org/10.1111/1460-6984.12176>
- McClintock, B., Pesco, D., & Martin-Chang, S. (2014). Thinking aloud: Effects on text comprehension by children with specific language impairment and their peers. *International Journal of Language & Communication Disorders, 49*(6), 637–648. <https://doi.org/10.1111/1460-6984.12081>
- McCormack, J., McLeod, S., McAllister, L., & Harrison, L. J. (2009). A systematic review of the association between childhood speech impairment and participation across the lifespan. *International Journal of Speech-Language Pathology, 11*(2), 155–170. <https://doi.org/10.1080/17549500802676859>
- McKeough, A., Bird, S., Tourigny, E., Romaine, A., Graham, S., Ottmann, J., & Jeary, J. (2008). Storytelling as a foundation to literacy development for Aboriginal children: Culturally and developmentally appropriate practices. *Canadian Psychology, 49*(2), 148–154. <https://10.1037/0708-5591.49.2.148>
- Meaux, A. B., & Norris, J. A. (2018). Curriculum-based language interventions: What, who, why, where, and how? *Language, Speech, and Hearing Services in Schools, 49*(2), 165–175. https://doi.org/10.1044/2017_LSHSS-17-0057
- Miller, L., Gillam, R., & Peña, E. (2001). *Dynamic assessment and intervention: Improving children's narrative abilities*. PRO-ED.
- Miller, J. F., & Iglesias, A. (2020). *Systematic Analysis of Language Transcripts* [Computersoftware]. Salt Software, LLC.

- OECD. (2017). *Catching up? Intergenerational mobility and children of immigrants*. OECD Publishing.
- Orellana, C. I., Wada, R., & Gillam, R. B. (2019). The use of dynamic assessment for the diagnosis of language disorders in bilingual children: A meta-analysis. *American Journal of Speech-Language Pathology*, 28(3), 1298–1317. https://doi.org/10.1044/2019_ajslp-18-0202
- Ortiz, A. A., & Wilkinson, C. Y. (1991). Assessment and intervention model for the bilingual exceptional student (AIM for the BEST). *Teacher Education and Special Education*, 14(1), 35–42. <https://doi.org/10.1177/088840649101400107>
- Owens Jr, R. E. (2013). *Language disorders: A functional approach to assessment and intervention*. Pearson Higher Ed.
- Paradis, J., Emmerzael, K., & Duncan, T. S. (2010). Assessment of English language learners: Using parent report on first language development. *Journal of Communication Disorders*, 43(6), 474–497. <https://doi.org/10.1016/j.jcomdis.2010.01.002>
- Paradis, J., Schneider, P., & Duncan, T. S. (2013). Discriminating children with language impairment among English-language learners from diverse first-language backgrounds. *Journal of Speech, Language, and Hearing Research*, 56(1), 971–981. [https://doi.org/10.1044/1092-4388\(2012/12-0050\)](https://doi.org/10.1044/1092-4388(2012/12-0050))
- Peltier, S. (2011). Providing culturally sensitive and linguistically appropriate services: An insider construct. *Canadian Journal of Speech-Language Pathology & Audiology*, 35(2), 126–134. https://cjslpa.ca/files/2011_CJSLPA_Vol_35/No_02_103-213/Peltier_CJSLPA_2011.pdf

- Peltier, S. (2014). Assessing Anishinaabe children's narratives: An ethnographic exploration of elder's perspectives. *Canadian Journal of Speech-Language Pathology and Audiology*, 38(2), 174–193.
https://cjslpa.ca/files/2014_CJSLPA_Vol_38/No_02/CJSLPA_Summer_2014_Vol_38_No_2_Paper_3_Peltier.pdf
- Peña, E. D. (2000). Measurement of modifiability in children from culturally and linguistically diverse backgrounds. *Communication Disorders Quarterly*, 21(2), 87–97.
<https://doi.org/10.1177/152574010002100203>
- Peña, E. D., Bedore, L. M., Lugo-Neris, M. J., & Albudoor, N. (2020). Identifying developmental language disorder in school age bilinguals: Semantics, grammar, and narratives. *Language Assessment Quarterly*, 17(5), 541–558.
<https://doi.org/10.1080/15434303.2020.1827258>
- Peña, E. D., Gillam, R. B., & Bedore, L. M. (2014). Dynamic assessment of narrative ability in English accurately identifies language impairment in English language learners. *Journal of Speech, Language, and Hearing Research*, 57(6), 2208–2220.
https://doi.org/10.1044/2014_JSLHR-L-13-0151
- Peña, E. D., Gillam, R. B., Malek, M., Ruiz-Felter, R., Resendiz, M., Fiestas, C., & Sabel, T. (2006). Dynamic assessment of school-age children's narrative ability: An experimental investigation of classification accuracy. *Journal of Speech, Language, and Hearing Research*, 49(5), 1037–1057. [https://doi.org/10.1044/1092-4388\(2006/074\)](https://doi.org/10.1044/1092-4388(2006/074))
- Peña, E., Iglesias, A., & Lidz, C. S. (2001). Reducing test bias through dynamic assessment of children's word learning ability. *American Journal of Speech-Language Pathology*, 10(2), 138–154. [https://doi.org/10.1044/1058-0360\(2001/014\)](https://doi.org/10.1044/1058-0360(2001/014))

- Peña, E., Quinn, R., & Iglesias, A. (1992). The application of dynamic methods to language assessment: A nonbiased procedure. *The Journal of Special Education*, 26(3), 269–280. <https://doi.org/10.1177/002246699202600304>
- Peña, E. D., Reséndiz, M., & Gillam, R. B. (2007). The role of clinical judgements of modifiability in the diagnosis of language impairment. *Advances in Speech Language Pathology*, 9(4), 332–345. <https://doi.org/10.1080/14417040701413738>
- Petersen, D. B., Chanthongthip, H., Ukrainetz, T. A., Spencer, T. D., & Steeve, R. W. (2017). Dynamic assessment of narratives: Efficient, accurate identification of language impairment in bilingual students. *Journal of Speech, Language, and Hearing Research*, 60(4), 983–998. https://doi.org/10.1044/2016_JSLHR-L-15-0426
- Petersen, D. B., & Spencer, T. D. (2012). The narrative language measures: Tools for language screening, progress monitoring, and intervention planning. *Perspectives on Language Learning and Education*, 19(4), 119–129. <https://doi.org/10.1044/1le19.4.119>
- Petersen, D. B., Tonn, P., Spencer, T. D., & Foster, M. E. (2020). The classification accuracy of a dynamic assessment of inferential word learning for bilingual English/Spanish-speaking school-age children. *Language, Speech, and Hearing Services in Schools*, 51(1), 144–164. https://doi.org/10.1044/2019_LSHSS-18-0129
- Peterson, C., & McCabe, A. (2013). *Developmental psycholinguistics: Three ways of looking at a child's narrative*. Springer Science & Business Media.
- Plante, E., & Vance, R. (1994). Selection of preschool language tests: A data-based approach. *Language, Speech, and Hearing Services in Schools*, 25(1), 15–24. <https://doi.org/10.1044/0161-1461.2501.15>

- Powell, R. K. (2018). Unique contributors to the curriculum: From research to practice for speech-language pathologist in schools. *Language, Speech, and Hearing Services in Schools, 49*(2), 140–147. https://doi.org/10.1044/2017_LSHSS-17-0059
- Powell, M. B., & Snow, P. C. (2007). Guide to questioning children during the free-narrative phase of an investigative interview. *Australian Psychologist, 42*(1), 57–65. <https://doi.org/10.1080/00050060600976032>
- Preston, J. P., Cottrell, M., Pelletier, T. R., & Pearce, J. V. (2012). Aboriginal early childhood education in Canada: Issues of context. *Journal of Early Childhood Research, 10*(1), 3–18. <https://doi.org/10.1177/1476718X11402753>
- Prevoo, M. J., Malda, M., Mesman, J., & van IJzendoorn, M. H. (2016). Within-and cross-language relations between oral language proficiency and school outcomes in bilingual children with an immigrant background: A meta-analytical study. *Review of Educational Research, 86*(1), 237–276. <https://doi.org/10.3102/0034654315584685>
- Reynolds, C. R., Altmann, R. A., Allen, D. N. (2021). *The problem of bias in psychological assessment in mastering modern psychological testing*. Springer, Cham. https://doi.org/10.1007/978-3-030-59455-8_15
- Rezzonico, S., Chen, X., Cleave, P. L., Greenberg, J., & Hipner-Boucher, K., & Johnson, C. J., & Milburn, T., & Pelletier, J., Weitzman, E., & Girolametto, L. (2015). Oral narratives in monolingual and bilingual preschoolers with SLI. *International Journal of Language and Communication Disorders, 50*(6), 830–841. <https://doi.org/10.1111/1460-6984.12179>
- Ripich, D. N., & Griffith, P. L. (1988). Narrative abilities of children with learning disabilities and nondisabled children: Story structure, cohesion, and propositions. *Journal of Learning Disabilities, 21*(3), 165–173. <https://doi.org/10.1177/002221948802100309>

- Roseberry-McKibbin, C. (1997). Understanding Filipino families: A foundation for effective service delivery. *American Journal of Speech-Language Pathology*, 6(3), 5–14.
<https://doi.org/10.1044/1058-0360.0603.05>
- Roessingh, H. (2020). Culturally responsive pedagogy and academic vocabulary teaching and learning: An integrated approach in the elementary classroom. *TESL Canada Journal*, 37(1), 51–62. <https://doi.org/10.18806/tesl.v37i1.1334>
- Saenz, T. I. and Huer, M. B. (2003). Testing strategies involving least biased language assessment of bilingual children. *Communication Disorders Quarterly*, 24(4), 184–193.
<https://doi.org/10.1177/15257401030240040401>
- Schick, A., & Melzi, G. (2010). The development of children's oral narratives across contexts. *Early Education and Development*, 21(3), 293–317.
<https://doi.org/10.1080/10409281003680578>
- Schneider, P., Hayward, D., & Dubé, R. V. (2006). Storytelling from pictures using the Edmonton Narrative Norms Instrument. *Journal of Speech Language Pathology and Audiology*, 30(4), 224–238. https://cjslpa.ca/files/2006_JSLPA_Vol_30/No_04_209-263/Schneider_Hayward_Dube_JSLPA_2006.pdf
- Sices, L., Taylor, H. G., Freebairn, L., Hansen, A., & Lewis, B. (2007). Relationship between speech-sound disorders and early literacy skills in preschool-age children: Impact of comorbid language impairment. *Journal of Developmental and Behavioral Pediatrics*, 28(6), 438–447. <https://10.1097/DBP.0b013e31811ff8ca>
- Slavkov, N. (2017). Family language policy and school language choice: Pathways to bilingualism and multilingualism in a Canadian context. *International Journal of Multilingualism*, 14(4), 378–400. <https://doi.org/10.1080/14790718.2016.1229319>

- Song (2019) Immigrant parents' ideological positioning on bilingualism. *Theory Into Practice*, 58(3), 254–262. <https://doi.org/10.1080/00405841.2019.1599228>
- Speech-Language & Audiology Canada (2021). *Learning an additional language in the context of language disorder*. <https://audiospeech.ubc.ca/sac-position-statement-on-learning-an-additional-language-in-the-context-of-language-disorder/>
- Stadler, M. A., & Ward, G. C. (2005). Supporting the narrative development of young children. *Early Childhood Education Journal*, 33(2), 73–80. <https://doi.org/10.1007/s10643-005-0024-4>
- Statistics Canada. (2017). *Top 10 countries of birth of recent immigrants, Canada 2016*. <https://www150.statcan.gc.ca/n1/daily-quotidien/171025/t002b-eng.htm>
- Statistics Canada (2022). *Immigrants make up the largest share of the population in over 150 years and continue to shape who we are as Canadians*. Ottawa. Released October 26, 2022. <https://www150.statcan.gc.ca/n1/daily-quotidien/221026/dq221026a-eng.htm#shrp0>
- Statistics Canada (2023a). *Census Profile. 2021 Census of Population*. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Released December 15, 2022. <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E>
- Statistics Canada (2023b). *Table 98-10-0307-01. Immigrant status and period of immigration by place of birth: Canada, provinces and territories, census divisions and census subdivisions*. <https://doi.org/10.25318/9810030701-eng>
- Stein, N. L. & Glenn, C. G. (1979). An analysis of story comprehension in elementary school children. In R. Freedle (Ed.), *New directions in discourse processing* (pp. 53–120). Ablex.

- Stevenson, C. E., Heiser, W. J., & Resing, W. C. (2016). Dynamic testing: Assessing cognitive potential of children with culturally diverse backgrounds. *Learning and Individual Differences, 47*, 27–36. <https://doi.org/10.1016/j.lindif.2015.12.025>
- Storch, S. A., & Whitehurst, G. J. (2002). Oral language and code-related precursors to reading: Evidence from a longitudinal structural model. *Developmental Psychology, 38*(6), 934–947. <https://doi.org/10.1037/0012-1649.38.6.934>
- Stow C., & Dodd, B. (2005). A survey of bilingual children referred for investigation of communication disorders: A comparison with monolingual children referred in one area in England. *Journal of Multilingual Communication Disorders, 3*(1), 1–23. <https://doi.org/10.1080/14769670400009959>
- Tabachnick, B. G. & Fidell, L. S., (2013). *Using multivariate statistics* (6th ed.). Pearson.
- Taylor, O. L., & Payne, K. T. (1983). Culturally valid testing: A proactive approach. *Topics in Language Disorders, 3*(3), 8–20. <https://doi.org/10.1097/00011363-198306000-00005>
- Thompson, R. M. (2003). *Filipino English and Taglish: Language switching from multiple perspectives*. John Benjamins Publishing Company.
- Uccelli, P., & Paez, M. M. (2007). Narrative and vocabulary development of bilingual children from kindergarten to first grade: Developmental changes and associations among English and Spanish skills. *Language, Speech, and Hearing Services in Schools, 38*(3), 225–236. [https://doi.org/10.1044/0161-1461\(2007/024\)](https://doi.org/10.1044/0161-1461(2007/024))
- Ukrainetz, T. A., Harpell, S., Walsh, C., & Coyle, C. (2000). A preliminary investigation of dynamic assessment with Native American kindergartners. *Language, Speech, and Hearing Services in Schools, 31*(2), 142–154. <https://doi.org/10.1044/0161-1461.3102.142>

- Verdon, S., Wong, S., & McLeod, S. (2016). Shared knowledge and mutual respect: Enhancing culturally competent practice through collaboration with families and communities. *Child Language Teaching and Therapy*, 32(2), 205-221.
<https://doi.org/10.1177/0265659015620254>
- Votruba-Drzal, E., Coley, R. L., Collins, M., & Miller, P. (2015). Center-based preschool and school readiness skills of children from immigrant families. *Early Education and Development*, 26(4), 549–573. <https://doi.org/10.1080/10409289.2015.1000220>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Vygotsky, L. S. (1986). *Thought and language*. MIT Press.
- Wales, D., Skinner, L., & Hayman, M. (2017). The efficacy of telehealth-delivered speech and language intervention for primary school-age children: A systematic review. *International Journal of Telerehabilitation*, 9(1), 55–70. <https://doi.org/10.5195/ijt.2017.6219>
- Walker, A. & Riordan, G. (2010). Leading collective capacity in culturally diverse schools. *School Leadership and Management*, 3(1), 51–63.
<https://doi.org/10.1080/13632430903509766>
- Wang, Q., & Leichtman, M. D. (2000). Same beginnings, different stories: A comparison of American and Chinese children's narratives. *Child Development*, 71(5), 1329–1346.
<https://doi.org/10.1111/1467-8624.00231>
- West, P., Sweeting, H., & Young, R. (2010). Transition matters: Pupils' experiences of primary secondary school transition in the West of Scotland and consequences for well-being and attainment. *Research Papers in Education*, 25(1), 21–50.
<https://doi.org/10.1080/02671520802308677>

Westby, C., Moore, C., & Roman, R. (2002). Reinventing the enemy's language: Developing narratives in Native American children. *Linguistics and Education, 13*(2), 235–269.

[https://doi.org/10.1016/S0898-5898\(01\)00063-8](https://doi.org/10.1016/S0898-5898(01)00063-8)

Westerveld, M. F., & Gillon, G. T. (2010). Profiling oral narrative ability in young school-aged children. *International Journal of Speech-Language Pathology, 12*(3), 178–189.

<https://doi.org/10.3109/17549500903194125>

Winters, K. L., Jasso, J., Pustejovsky, J. E., & Byrd, C. T. (2022). Investigating narrative performance in children with developmental language disorder: A systematic review and meta-analysis. *Journal of Speech, Language, and Hearing Research, 65*(10), 3908–3929.

https://doi.org/10.1044/2022_JSLHR-22-00017

Appendix A

Certification of Ethical Acceptability for Research Involving Human Subjects



CERTIFICATION OF ETHICAL ACCEPTABILITY FOR RESEARCH INVOLVING HUMAN SUBJECTS

Name of Applicant: Anne Laurie
Department: Faculty of Arts and Science\Education
Agency: N/A
Title of Project: Curriculum-Based Dynamic Assessment of Narrative:
Benefits for Filipino Children?
Certification Number: 30014225

Valid From: November 10, 2022 To: November 09, 2023

The members of the University Human Research Ethics Committee have examined the application for a grant to support the above-named project, and consider the experimental procedures, as outlined by the applicant, to be acceptable on ethical grounds for research involving human subjects.

A handwritten signature in black ink, appearing to be "David Waddington", followed by a horizontal line.

Dr. David Waddington, Chair, University Human Research Ethics Committee

Appendix B
Recruitment Ad

Inviting Filipino Children in the Fredericton and Saint John Areas to Tell Stories!

My name is Anne, and my research study is exploring how Filipino children in **kindergarten to Grade 5** of all language abilities tell stories and how I can best support their language and storytelling skills.

As parents, I will ask you to provide information on your child's language. Then, children will have the opportunity to listen to and tell stories using a variety of pictures and will receive individual support by me. I will visit with them at home 4-5 times for about 20 minutes a visit. They will receive a small present after each visit as a token of appreciation.

This information will help me understand how to support children's storytelling and develop assessment strategies that fit your children's school curriculum.

For more information, please contact:

Anne Laurie, PhD Candidate in Education

Concordia University

anne.laurie0142@gmail.com

call or text at (506) 471-9004

or here on Facebook



Appendix C

Language Questionnaire in English

LANGUAGE EXPOSURE

1. What is your child's mother tongue?
2. What language or languages was your child exposed to since he or she was born?
3. Please list the languages your child <u>speaks</u> now.
4. Please list the languages your child <u>understands</u> now.
5. What languages do you or other adults in your home speak with your child (list in the order of the languages the adults speak most often)
6. Does your child live with sisters, brothers, or other children?
7. What languages do your child's siblings or any other children in your home speak with your child? (list in the order of the languages the children speak most often to one another).

CURRENT LANGUAGE LEARNING

<p>1. Do you or any of your child's teachers have any concerns about your child's language development?</p>
<p>2. Has your child been diagnosed with any conditions that might affect their language and communication, such as Autism Spectrum Disorder, a language delay, hearing impairment, or a developmental delay? If so, please list below.</p>
<p>3. Is your child currently receiving any of the following services? If so, please highlight all that apply.</p> <ul style="list-style-type: none">a) Instruction in English as an additional languageb) Resource teacher support for language or readingc) Speech and language therapyd) Other (please specify)

Appendix D

Language Questionnaire in Filipino

Talatanungan patungkol sa Wika

Pagkahantad sa Wika

8. Ano ang katutubong wika ng iyong anak?
9. Sa anong wika o mga wika nahantad ang iyong anak magmula ng siya ay pinanganak?
10. Isulat o itala ang mga wikang sinasalita ng iyong anak
11. (Isulat o itala ang mga wikang naiintindihan ng iyong anak
12. Anong wika ang ginagamit mo o ng mga kasamahan mo sa bahay sa pakikipag usap sa iyong anak (Isulat o itala ang mga wikang ginagamit base sa kung ano ang madalas na ginagamit sa inyong bahay
13. Naninirahan ba ang bata kasama ang iba niyang mga kapatid?
14. Anong wika ang sinasalita ng ibang kapatid ng anak mo sa inyong bahay? (Isulat o itala ang mga wikang kanilang madalas na ginagamit sa pakikipag usap sa isa't-isa.)

Kasalukuyang kaalaman sa wika

4. Mayroon ka bang kakaibang napapansin sa kakayahan ng iyong anak sa paggamit ng wika?

5. Ang iyo bang anak ay nasuri na may kondisyon na nakakaapekto sa kanyang pagsasalita o pakikipag usap, gaya ng Autism Spectrum Disorder, mabagal na pagkatutong magsalita, mahinang pandinig o mabagal na kakayahang matuto? Kung Oo, pakisulat sa ibaba

6. Ang iyo bang anak ay kasalukuyang tumatanggap ng mga sumusunod na serbisyo

- e) Pag-aaral ng Ingles bilang dagdag na wika
- f) May guro na gumagabay sa pag-aaral ng wika at pagbabasa
- g) Terapi para sa pagsasalita at wika
- h) At iba pa (Itala)

Appendix E

Child Consent Form - English



Study Title: Curriculum-Based Dynamic Assessment of Narrative: Benefits for Filipino Children

Researcher: Anne Laurie

Contact Information: an_laur@live.concordia.ca; phone (506) 471-9004

Faculty Supervisor: Dr. Diane Pesco

Contact Information: diane.pesco@concordia.ca; phone (514) 848-2424 extension 7338

Source of funding for the study: N/A

Your child is invited to participate in the research study mentioned above. This form provides information about what participating would mean. Please read it carefully before deciding if you want your child to participate or not. If there is anything you do not understand, or if you want more information, please ask the researcher.

A. PURPOSE

The purpose of the study is to determine the accuracy and usefulness of a curriculum-based dynamic assessment of children's storytelling skills. This assessment uses curriculum content and a teaching component to identify what children can do on their own and with my help.

B. PROCEDURES

If you agree to your child's participation, your child will participate in four to five 20-minute sessions. Each session will be audio-recorded so I can examine the results more closely later. First, he or she will be asked to listen to and tell fictional stories based on various pictures. Then, I will review your child's stories and identify two storytelling skills that I will teach them during two short teaching sessions. These sessions are to give your child an opportunity to learn new skills. Once the two teaching sessions are complete, your child will be asked to listen to and tell stories once again so I can assess whether the teaching sessions were helpful.

C. RISKS AND BENEFITS

Participating in this study has no risks for your child but your child might feel uncomfortable or shy working with me. In order to prevent this, I will spend some time speaking with your child to establish a rapport. Your child may enjoy telling stories and learning how to tell stories and might be inspired to continue telling stories to you, their teacher, or with their friends. For older children, telling stories may also help them formulate their ideas when writing stories. This practice and the direct teaching I provide could help your child improve their language and storytelling skills.

D. CONFIDENTIALITY

We will keep any identifying information about your child confidential. We will not allow anyone to access this information, except people directly involved in conducting the research (me, my supervisor, and a research assistant). Also, we will only use the information gathered from you and your child for the purposes described in this form.

The information gathered will be coded. This means that your child's name will not appear on any documents except this consent form. I will keep a list that links your child's name to the code I assign. The list will be stored in a digital (computer) file protected by a password. All other files, such as audio recordings and transcripts, will also be kept in password-protected digital folders.

We will keep the information for five years after the end of the study on a password-protected computer. After that, all the files will be deleted securely.

F. CONDITIONS OF PARTICIPATION

You do not have to allow your child to participate in this research. It is purely your decision. If you agree that your child participates but later change your mind, you can ask that the information gathered about your child not be used, and your choice will be respected. You may withdraw your child from the study up to one month after my last session with him or her.

If you agree to your child's participation, I will also ask your child if they wish to participate. If they do not, they will not be involved in the study. If your child agrees but later changes their mind, their participation will end. If your child stops participating, all documents and recordings pertaining to your child alone will be destroyed.

There are no negative consequences for not participating or asking us not to use your information later.

Your child will receive stickers, pencils, or erasers at the end of each session as a thank you for participating in this study.

G. PARTICIPANT'S DECLARATION

I have read and understood this form. I have had the chance to ask questions and any questions have been answered. I agree to participate in this research under the conditions described.

I understand that the researcher may later wish to share the audio-recordings for educational purposes (for example, to share findings with other educators), but my child's identities will not be disclosed. I understand that my child is still welcome to participate even if I do not agree to this use of the audio-recordings.

I agree that audio recordings of my child can be shared for educational purposes with the understanding that my child's identity will be hidden.

CHILD'S NAME (please print)

CHILD'S DATE OF BIRTH

PARENT'S NAME (please print)

PARENT'S SIGNATURE

PARENT'S PHONE NUMBER

DATE

If you have questions about the scientific or scholarly aspects of this research, please contact me. My contact information is on page 1. You may also contact my faculty supervisor.

If you have concerns about ethical issues in this research, please contact the Manager, Research Ethics, Concordia University, 514.848.2424 ex. 7481 or oor.ethics@concordia.ca.

Appendix F

Child Consent Form - Filipino



Pamagat ng pag-aaral: Curriculum-Based Dynamic Assessment of Narrative: Benefits for Filipino Children?

Mananaliksik: Anne Laurie

Impormasyon sa pakikipag-ugnay: an_laur@live.concordia.ca; phone (506) 471-9004

Gurong Tagapangasiwa: Dr. Diane Pesco

Impormasyon sa pakikipag-ugnay: diane.pesco@concordia.ca; phone (514) 848-2424 extension 7338

Mapagkukunan ng pondo para sa pag-aaral: N/A

Inaanyayahan ang iyong anak na makilahok sa pananaliksik na nabanggit sa itaas. Ang mga nakasulat sa form na ito ay magbibigay ng impormasyon sa kung ano ang kahalagahan ng inyong pakikilahok. Mangyaring basahin itong mabuti bago magpasya kung nais mong makilahok ang iyong anak o hindi. Kung may anumang hindi mo naiintindihan, o kung nais mo ng karagdagang impormasyon, mangyaring tanungin ang mananaliksik.

LAYUNIN

Ang layunin ng pag-aaral na ito ay upang matukoy ang kawastuhan at pagiging kapaki-pakinabang ng dinamikong pagtatasa ng mga kasanayan sa pagkukwento ng mga bata batay sa kurikulum. Ang pagtatasa na ito ay gumagamit ng nilalaman ng kurikulum at sangkap sa pagtuturo upang malaman kung ano ang mga kayang gawin ng mga bata batay sa kanilang kakayahan at sa tulong ko.

B. PAMAMARAAN

Kung sumasang-ayon ka sa pakikilahok ng iyong anak, siya ay magkakaroon ng apat hanggang limang sesyon na tatagal ng 20-minuto bawat sesyon. Ang bawat sesyon ay irerekord sa audio

upang masuri ko ng mas mabuti ang mga resulta. Una, hihilingin sa kanya na makinig at magkuwento ng kathang-isip na hango sa iba't ibang larawan. Pagkatapos, susuriin ko ang mga kwento ng iyong anak at ipapakilala ko ang dalawang kasanayan sa pagkukuwento na ituturo ko sa kanya sa loob ng dalawang maikling sesyon. Ang mga sesyon na ito ay upang bigyan ang iyong anak ng pagkakataon na malaman ang mga bagong kasanayan. Kapag natapos na ang dalawang sesyon, hihilingin ko sa kanya na makinig at magkwento muli upang masuri ko kung nakatulong ang mga sesyon ng pagtuturo.

C. PANGANIB AT BENEPISYO

Ang pakikilahok sa pag-aaral na ito ay walang panganib na dulot para sa iyong anak, ngunit siya ay maaaring makaramdam ng pagkailang o mahiya siyang makipagtulungan sa akin. Upang maiwasan ito, gugugol ako ng oras sa pakikipag-usap sa kanya upang mabuo ang aming ugnayan. Maaaring masiyahan ang iyong anak na magkuwento, matuto ng mga pamamaraan sa pagkukwento o magpatuloy sa pagkukwento sa iyo, sa kanyang guro, o sa kanyang mga kaibigan. Para sa mga mas matandang mga bata, ang pagkukwento ay maaari ding makatulong sa kanilang bumuo ng mga ideya habang nagsusulat ng mga kuwento. Ang pagsasanay na ito at ang direktang pagtuturo ko ay maaaring makatulong sa iyong anak na mapabuti ang kanyang mga kasanayan sa wika at pagkukwento.

D. PAGIGING KOMPIDENSIYAL

Ang mga impormasyon tungkol sa iyong anak ay aming iingat at itatago. Hindi namin hahayaan ang sino man na kumuha ng impormasyon tungkol sa iyong anak, maliban sa mga taong may kaugnayan sa pananaliksik na ito (Ako, aking superbisor, at isang kasamahan sa pananaliksik). Gayundin, gagamitin lamang namin ang mga impormasyong nakalap mula sa iyo at sa iyong anak para sa mga hangaring inilarawan sa form na ito.

Ang impormasyon na nakalap ay lalagyan ng code. Nangangahulugan ito na ang pangalan ng iyong anak ay hindi lilitaw sa anumang dokumento maliban sa form na ito na humihingi ng pahintulot. Itatago ko ang listahan na nag-uugnay sa pangalan ng inyong anak sa code na aking itinalaga. Ang listahan ay itatago sa isang digital (kompyuter) na file na protektado ng isang password. Ang lahat ng iba pang file, tulad ng mga record ng audio at mga transcript, ay itatago din sa mga digital na folder na protektado ng password.

Itatago naming lahat ng impormasyon sa isang kompyuter na protektado ng password sa loob ng limang taon pagkatapos ng pag-aaral. Pagkatapos, ang lahat ng file ay buburahin nang ligtas.

F. MGA KUNDISYON NG PAKIKILAHOK

Hindi sapilitan na payagan mo ang iyong anak na makilahok sa pananaliksik na ito. Ito ay iyong desisyon. Kung sumasang-ayon ka na makilahok ang iyong anak ngunit sa paglaon ay magbago ang iyong isip, maaari mong hilingin na hindi magamit ang impormasyong nakalap tungkol sa kanya. Maaari mong bawiin ang iyong anak mula sa pag-aaral hanggang sa isang buwan pagkatapos ng aking huling sesyon sa kanya.

Kung sumasang-ayon ka sa pakikilahok ng iyong anak, tatanungin ko rin siya kung nais niyang lumahok. Kung hindi, siya ay hindi isasama sa pananaliksik. Kung sumasang-ayon ang iyong anak ngunit sa paglaon ay nagbago ang kanyang isip, siya ay tatanggalin sa pananaliksik. Kung ang iyong anak ay titigil sa paglahok, lahat ng mga dokumento at mga recording ng audio na patungkol sa kanya ay buburahin.

Ang hindi pakikiisa ng iyong anak o pagsasabi sa amin na huwag gamitin ang anumang impormasyon ay walang negatibong kahihinatnan.

Makatanggap ang iyong anak ng sticker, lapis, o pambura pagkatapos ng bawat sesyon bilang pasasalamat sa pakikiisa sa pag-aaral na ito.

G. DEKLARASYON NG KALAHOK

Nabasa at naintindihan ko ang nilalaman ng form na ito. Nagkaroon ako ng pagkakataong magtanong at ang mga ito ay nasagot. Sumasang-ayon ako na lumahok sa pananaliksik na ito sa ilalim ng mga kondisyong inilarawan.

Naiintindihan ko na ang mananaliksik ay maaaring magnais na ibahagi sa iba ang mga rekord ng audio para sa mga hangaring pang-edukasyon (halimbawa, upang ibahagi ang mga natuklasan sa iba pang mga tagapagturo), ngunit ang pagkakakilanlan ng aking anak ay hindi isisiwalat. Nauunawaan ko na ang aking anak ay malugod parin na lumahok kahit na hindi ako sumasang-ayon sa paggamit ng pagrekord ng audio na ito.

Sumasang-ayon ako na ang mga rekord ng audio ng aking anak ay maaaring ibahagi para sa mga hangaring pang-edukasyon at naiintindihan ko na ang pagkakakilanlan ng aking anak ay maitatago.

PANGALAN NG ANAK (Isulat)

KAPANGANAKAN NG ANAK

PANGALAN NG MAGULANG (Isulat)

LAGDA NG MAGULANG

PETSA

Kung mayroon kang katanungan tungkol sa pananaliksik na ito, mangyaring makipag-ugnayan sa akin. Ang aking mga impormasyon ay nasa pahina 1. Maaari ka ring makipag-ugnayan sa aking gurong tagapangasiwa.

Kung mayroon kang mga alalahanin tungkol sa mga isyu sa etika sa pananaliksik na ito, mangyaring makipag-ugnayan sa Manager, Research Ethics, Concordia University 514.848.2424 ex. 7481 or oor.ethics@concordia.ca.

Appendix G

Information Letter to Parents – English

Hello,

My name is Anne Laurie. I am a Ph.D. candidate in Child Studies at Concordia University. I am writing to ask permission to work with your child for my dissertation research.

My research goals are to explore children's storytelling and to develop assessment strategies that give a true picture of children's abilities and fit with the school curriculum. For my research, I will first ask children to listen to and tell stories based on pictures. Then, I will review your child's stories and identify two storytelling skills that I will work on with them during two short teaching sessions. These sessions are to give your child an opportunity to learn new skills. Once the two teaching sessions are complete, your child will be asked to listen to and tell stories once again so I can assess whether the teaching sessions were helpful. Each teaching session will take roughly 20 minutes. I will audio record the stories and teaching sessions so that I can examine them more closely later. I will see your child four to five times for about 20 minutes in each session over a period of a couple of weeks.

Once the sessions are completed, you will also have an opportunity to share your views about children's storytelling and my study, and to help interpret my findings, along with other parents. This part of the study is completely voluntary and has no impact on whether your child can participate. If you do wish to participate, you will be given a choice to do so in person or via videoconference.

The safety of your child is my main priority*. During my time in your home, I will follow the COVID-19 physical distancing and health guidelines provided at the time of data collection by The Government of New Brunswick and the office of the Chief Medical Officer of Public Health. If you have any concerns how I will ensure your child's safety, please feel free to contact me directly at an_laur@live.concordia.ca or by phone at (506) 471-9004.

The consent form attached to this letter gives more information about the study and your rights and your child's right if you should agree to participate.

I hope this gives you insight into my study and allows you to come to a decision. My research supervisor at Concordia University, Diane Pesco, is also happy to speak with you. You can reach her directly at diane.pesco@concordia.ca

Best,
Anne

Appendix H

Information Letter to Parents – Filipino

Kamusta,

Ang pangalan ko ay Anne Laurie. Ako ay kandidato sa pagka-Ph.D ng Child Studies sa Concordia University. Sumusulat ako upang humingi ng pahintulot na makipagtulungan sa iyong anak para sa aking pagsasaliksik sa disertasyon.

Ang aking mga layunin sa pagsasaliksik ay upang tuklasin ang pagkukwento ng mga bata at upang bumuo ng mga estratehiya sa pagtatasa na maglalarawan ng mga kakayahan ng mga bata at akma sa kurikulum ng paaralan. Para sa aking pagsasaliksik, hihilingin ko muna sa mga bata na makinig at magkwento batay sa mga larawan. Pagkatapos, susuriin ko ang mga kwento ng iyong anak at ipapakilala ko ang dalawang kasanayan sa pagkukwento na gagawin ko kasama nila sa loob ng dalawang maikling sesyon ng pagtuturo. Ang mga sesyon na ito ay upang bigyan ang iyong anak ng pagkakataon na malaman ang mga bagong kasanayan. Kapag kumpleto na ang dalawang sesyon ng pagtuturo, hihilingin ko sa iyong anak na makinig at magkwento muli upang masuri ko kung nakatulong ang mga sesyon ng pagtuturo. Ang bawat sesyon ng pagtuturo ay tatagal ng halos 20 minuto. Irerekord ko sa audio ang mga kwento at sesyon ng pagtuturo upang masuri ko sila nang mas mabuti. Kikitain ko ang iyong anak apat hanggang limang beses sa loob ng 20 minuto sa bawat sesyon sa loob ng ilang linggo.

Kapag natapos ang mga sesyon, magkakaroon ka rin ng pagkakataon na ibahagi ang iyong mga pananaw tungkol sa pagkukuwento ng mga bata at sa aking pag-aaral, at upang makatulong na mabigyang kahulugan ang aking mga natuklasan, kasama ang iba pang mga magulang. Ang bahaging ito ng pag-aaral ay ganap na kusang-loob at walang epekto sa kung ang iyong anak ay maaaring lumahok. Kung nais mong lumahok, bibigyan ka ng pagpipilian na gawin ito nang personal o sa pamamagitan ng videoconference.

Ang kaligtasan ng iyong anak ang aking pangunahing priyoridad *. Sa aking oras sa iyong bahay, susundin ko ang mga alituntunin sa pisikal na distansya at kalusugan patungkol sa COVID-19 na ibinigay sa oras ng pagkolekta ng data ng The Government of New Brunswick at ang tanggapan ng Chief Medical Officer ng Public Health. Kung mayroon kang anumang mga alalahanin kung paano ko masisiguro ang kaligtasan ng iyong anak, mangyaring huwag mag-atubiling makipag-ugnayan sa akin nang direkta sa an_laur@live.concordia.ca o sa pamamagitan ng telepono sa (506) 471-9004.

Ang form ng pahintulot na kasama sa liham na ito ay magbibigay ng karagdagang impormasyon tungkol sa pag-aaral at iyong mga karapatan at karapatan ng iyong anak kung sakaling sumang-ayon ka na lumahok.

Inaasahan kong mabigyan ka nito ng pananaw sa aking pag-aaral at tulungan kang magpasya.

Ang aking tagapangasiwa sa pananaliksik sa Concordia University, si Diane Pesco, ay masaya ring makikipag-usap sa iyo. Maaari mong makausap siya nang direkta sa

diane.pesco@concordia.ca

Gumagalang, Anne

Appendix I

Resume In-Person Research Approval Letter



**OFFICE OF THE VICE-PRESIDENT,
RESEARCH AND GRADUATE STUDIES**

01-20201218 / Laurie / Approved

Date: 2020-12-04

Re: Curriculum-Based Dynamic Assessment of Narrative: Benefits for Filipino Children?

Dear Ms. Laurie,

Your request to resume the above mentioned project was reviewed by the central committee responsible for the resumption of in-person human research and has been approved with conditions:

- That you submit a translated version of your questionnaire and consent form for ethics approval before resuming;
- That you check provincial government resources on a daily basis to ensure your full compliance with colour code requirements;
- That you follow best practices when visiting each home by washing/sanitizing your hands immediately upon entering, wear a face mask at all times, and maintain a minimum distance of 2 metres during each visit.

Best wishes for a safe and productive return to your research.

Sincerely,

A handwritten signature in black ink, appearing to read "Monica E. Mulrennan".

Dr Monica E. Mulrennan
Associate Vice-President, Research
Office of the Vice-President, Research and Graduate Studies

Appendix J

Parent Consent Form – English



Study Title: Curriculum-Based Dynamic Assessment of Narrative: Benefits for Filipino Children?

Researcher: Anne Laurie

Contact Information: an_laur@live.concordia.ca; phone (506) 471-9004

Faculty Supervisor: Dr. Diane Pesco

Contact Information: diane.pesco@concordia.ca; phone (514) 848-2424 extension 7338

Source of funding for the study: N/A

You are being invited to participate in the research study mentioned above. You have already agreed to your child's participation in the study. This form provides information about what participating in an optional meeting for parents would mean. Please read it carefully before deciding if you want to participate or not. If there is anything you do not understand, or if you want more information, please ask the researcher.

A. PURPOSE

The purpose of your participation in this portion of the study is to help interpret the stories told by children during curriculum-based dynamic assessment. This will help me evaluate its usefulness as a narrative assessment.

B. PROCEDURES

If you agree to participate, you will participate in a meeting (a focus group) after I gather and analyze data from the children. You may choose to participate in a meeting in-person or via videoconference. The meeting will last roughly 90 minutes. I will audio-record the focus group sessions so that I can examine them more closely later. During the meeting, you will be asked to consider my findings, to give your own interpretations of the findings, and to share your perspective on the utility of a curriculum-based dynamic assessment. Then, I will write up a summary of the results from the focus group and send it to you via email or mail to ensure I interpreted your comments accurately.

C. RISKS AND BENEFITS

There is minimal risk associated with participation in this study. You will not be identified in any documents stemming from this study. If during the focus group you feel any discomfort, you are free to temporarily stop for a break or withdraw entirely from participating in the study. If you withdraw, you will not be asked to disclose your reason for stopping or withdrawing your participation.

Your participation may also have some benefits. Your voice will be heard and will play a role in the analysis and interpretation of the study's results. Additionally, you will learn about Filipino children's stories and how they relate to mainstream narrative models. You may find this information useful in supporting children's language and storytelling.

D. CONFIDENTIALITY

We will keep any identifying information about you confidential. All focus group members will also be asked to keep each other's identities confidential. Outside of focus group members, we will not allow anyone to access identifying information, except people directly involved in conducting the research (me, my supervisor, and a research assistant). Also, we will only use the information gathered from you for the purposes described in this form. Please be assured that if you decide not to participate, your decision will not have any negative consequences for your child.

The information gathered will be coded. This means that your name will not appear on any documents except this consent form. I will keep a list that links your name to the code I assign. The list will be stored in a digital (computer) file protected by a password. All other files, such as audio recordings and transcripts, will also be kept in password-protected digital folders.

We will keep the information for five years after the end of the study on an encrypted password-protected computer. After that, all the files will be deleted securely.

F. CONDITIONS OF PARTICIPATION

Your participation in this work is completely voluntary. Should you decide to participate, you can choose to withdraw from the study at any time, and you can withdraw any or all materials and information you provide by contacting me at the email address or phone number listed above. If you decide to withdraw from the study once the focus group has been conducted, I will not use your data for any analyses. However, given that focus groups typically involve exchanges between participants, I may need to keep your audio and transcript data so that I can understand the remaining participants' contributions. I will inform you if I need to keep your data, but in any event, your comments will be hidden or deleted from any research reports that I share with others.

There are no negative consequences for not participating or asking us not to use your information later.

For your participation and expertise, you will be compensated \$30.

G. PARTICIPANT'S DECLARATION

I intend to participate in a focus group in person
I may later wish to share the audio recordings, without disclosing your identities, for educational purposes (for example, to share my findings with other educators. If you agree, please check the box below. You are still welcome to participate even if you do not agree to this use of the audio recordings.

I agree that audio recordings can be shown for educational purposes with the understanding that my
identity will not be disclosed.

Your signature indicates that you voluntarily agree to participate in this study, that the study has been explained to you and that any questions have been satisfactorily answered. It has been made clear that your participation in this study is completely voluntary and that you may withdraw from the project at any time. No personal identifying information will be reported at any time to ensure your privacy and confidentiality throughout and beyond the life of the project.

PARTICIPANT'S NAME (please print)

PARTICIPANT'S SIGNATURE

PARTICIPANT'S EMAIL ADDRESS

DATE

If you have questions about the scientific or scholarly aspects of this research, please contact me. My contact information is on page 1. You may also contact my faculty supervisor.

If you have concerns about ethical issues in this research, please contact the Manager, Research Ethics, Concordia University, 514.848.2424 ex. 7481 or oor.ethics@concordia.ca.

Appendix K

Parent Consent Form – Filipino



Pamagat ng pag-aaral: Curriculum-Based Dynamic Assessment of Narrative: Benefits for Filipino Children?

Mananaliksik: Anne Laurie
Impormasyon sa pakikipag-ugnay: an_laur@live.concordia.ca; phone (506) 471-9004
Gurong Tagapangasiwa: Dr. Diane Pesco
Impormasyon sa pakikipag-ugnay: diane.pesco@concordia.ca; phone (514) 848-2424 extension 7338

Mapagkukunan ng pondo para sa pag-aaral: N/A

Inaanyayahan kang lumahok sa pananaliksik na nabanggit sa itaas. Sumang-ayon ka na sa pakikilahok ng iyong anak sa pag-aaral. Nagbibigay ang form na ito ng impormasyon tungkol sa kung ano ang ibig sabihin ng pakikilahok ng magulang sa isang opsyonal na pagpupulong. Mangyaring basahin itong mabuti bago magpasya kung nais mong makilahok ang iyong anak o hindi. Kung may anumang hindi mo naiintindihan, o kung nais mo ng karagdagang impormasyon, mangyaring tanungin ang mananaliksik.

A. LAYUNIN

Ang layunin ng iyong paglahok sa bahaging ito ng pag-aaral ay upang makatulong na mabigyang kahulugan ang mga kwentong sinabi ng mga bata habang isinasagawa ang dinamikong pagtatasa batay sa kurikulum. Ito ay makakatulong sa aking suriin ang kapakinabangan nito bilang isang pagtatasa ng pagsasalaysay.

B. PAMAMARAAN

Kung sumasang-ayon kang lumahok, ikaw ay makakasali sa isang pagpupulong (Isang pokus ng grupo) pagkatapos kong makatipon at masuri ang datos mula sa mga bata. Maaari kang pumili upang lumahok sa isang pagpupulong nang personal o sa pamamagitan ng videoconference. Ang pulong ay tatagal ng halos 90 minuto. Irerekord ko ang mga sesyon upang masuri ko ito ng mas mabuti. Sa panahon ng pagpupulong, hihilingin sa iyo na isalang-alang ang aking mga natuklasan, upang ikaw ay makapagbigay ng sarili mong interpretasyon, at ibahagi ang iyong pananaw sa pakinabang ng dinamikong pagtatasa batay sa kurikulum. Pagkatapos, gagawa ako ng isang buod ng mga resulta mula sa grupo at ito'y ipapadala ko sa iyo sa pamamagitan ng email o mail upang matiyak na naiintindihan ko nang wasto ang iyong mga komento.

C. PANGANIB AT BENEPISYO

Mayroong kaunting panganib na nauugnay sa pakikilahok sa pag-aaral na ito. Hindi ka makikilala sa anumang mga dokumento na nagmula sa pag-aaral na ito. Kung sa kalagitnaan ay maramdaman mo ang hindi pagkakomportable, maaari kang pansamantalang huminto para magpahinga o ganap na umalis mula sa paglahok sa pag-aaral. Kung ikaw ay aalis, hindi mo kailangang isiwalat ang iyong dahilan sa pagtigil o pag-atras.

Ang iyong pakikilahok ay maaari ding magkaroon ng ilang benepisyo. Ang boses mo ay maririnig at ikaw ay may gampanin sa pag-aaral at interpretasyon ng mga resulta. Bilang karadagan, malalaman mo ang tungkol sa mga kwentong pambata ng mg Pilipino at kung paano sila nauugnay sa pangunahing mga modelo ng pagsasalaysay. Maaari mong makita ang kapakinabangan ng impormasyong ito sa pagsuporta sa wika at pagkukwento.

D. PAGIGING KOMPIDENSIYAL

Itatago namin ang anumang impormasyon tungkol sa iyo. Hihilingin din sa lahat ng mga miyembro ng pangkat na panatilihing kumpidensyal ang pagkakakilanlan ng bawat isa. Hindi namin hahayaan ang sino man na kumuha ng impormasyon, maliban sa mga taong may kaugnayan sa pananaliksik na ito (Ako, aking superbisor, at isang kasamahan sa pananaliksik.) Gayundin, gagamitin lamang namin ang mga impormasyong nakalap mula sa iyo para sa mga hangaring inilarawan sa form na ito. Kung ikaw ay magpasya na hindi lumahok, ang iyong desisyon ay hindi magkakaroon ng anumang negatibong kahihinatnan para sa iyong anak.

Ang impormasyon na nakalap ay lalagyan ng code. Nangangahulugan ito na ang pangalan ng iyong anak ay hindi lilitaw sa anumang dokumento maliban sa form na ito na humihingi ng pahintulot. Itatago ko ang listahan na nag-uugnay sa pangalan ng inyong anak sa code na aking itinalaga. Ang listahan ay itatago sa isang digital (kompyuter) na file na protektado ng isang password. Ang lahat ng iba pang file, tulad ng mga rekord ng audio at mga transcript, ay itatago din sa mga digital na folder na protektado ng password.

Itatago namin lahat ng impormasyon sa isang kompyuter na protektado ng password sa loob ng limang taon pagkatapos ng pag-aaral. Pagkatapos, ang lahat ng file ay buburahin nang ligtas.

F. MGA KUNDISYON NG PAKIKILAHOK

Ang iyong pakikilahok sa gawaing ito ay kusang-loob. Kung magpapasya kang lumahok, maaari kang umalis mula sa pag-aaral sa anumang oras, at maaari mong bawiin ang anuman o lahat ng mga materyales at impormasyon na ibibigay mo sa pamamagitan ng pakikipag-uugnay sa akin sa email address o numero ng telepono na nakalista sa itaas. Kung sa kalagitnaan, magpasya kang umalis mula sa pag-aaral na isinasagawa, hindi ko gagamitin ang iyong datos para sa anumang pagsusuri. Gayunpaman, dahil sa ang mga grupo ay karaniwang nasasangkot sa pagkakapalitan, kailangan kong panatilihin ang iyong datos ng audio at transcript upang maunawaan ko ang mga natitirang kontribusyon ng mga kalahok. Ipapaalam ko sa iyo kung kailangan kong panatilihin ang iyong datos, ngunit sa anumang kaganapan, ang iyong mga komento ay itatago o tatanggalin mula sa anumang mga ulat sa pagsasaliksik na ibinabahagi ko sa iba.

Walang negatibong kahihinatnan ang hindi pakikilahok o pagsasabi sa amin paglaon na huwag gamitin ang iyong impormasyon.

Para sa iyong pakikilahok at kadalubhasaan, ikaw ay makakatanggap ng \$30.

G. DEKLARASYON NG KALAHOK

Nilalayan kong lumahok sa isang pokus na grupo nang personal

o

Nilalayan kong lumahok sa isang pokus na grupo sa pamamagitan ng videoconference

Maaari kong hilingin na ibahagi ang mga rekording ng audio, nang hindi isinisiwalat ang iyong mga pagkakakilanlan, para sa mga hangaring pang-edukasyon (halimbawa, upang ibahagi ang aking mga natuklasan sa ibang mga tagapagturo. Kung sumasang-ayon ka, mangyaring suriin ang kahon sa ibaba. Malugod ka pa ring makilahok kahit na nais mong hindi sumang-ayon sa paggamit na ito ng pagrekord ng audio.

Sumasang-ayon ako na maaaring ipakita ang mga record ng audio para sa mga hangaring pang-edukasyon na may pag-unawa na hindi isisiwalat ang aking pagkakakilanlan.

Ipinapahiwatig ng iyong lagda na kusang-loob kang sumasang-ayon na lumahok sa pag-aaral na ito, na ang pag-aaral ay naipaliwanag sa iyo at ang anumang mga katanungan ay nasagot ng maayos. Nilinaw na ang iyong pakikilahok sa pag-aaral na ito ay ganap na kusang-loob at maaari kang umalis mula sa proyekto sa anumang oras. Walang impormasyong personal na pagkakakilanlan ang maiuulat sa anumang oras upang matiyak ang iyong pagkapribado at pagiging kumpidensyal habang isinasagawa at kahit matapos na ang proyekto.

PANGALAN NG KALAHOK (Isulat)

LAGDA NG KALAHOK

EMAIL ADDRESS NG KALAHOK

PETSA

Kung mayroon kang katanungan tungkol sa pananaliksik na ito, mangyaring makipag-ugnayan sa akin. Ang aking mga impormasyon ay nasa pahina I. Maaari ka ring makipag-ugnayan sa aking gurong tagapangasiwa.

Kung mayroon kang mga alalahanin tungkol sa mga isyu sa etika sa pananaliksik na ito, mangyaring makipag-ugnayan sa Manager, Research Ethics, Concordia University 514.848.2424 ex. 7481 or oor.ethics@concordia.ca.

Appendix L

Modifiability Rating Scale

<u>Examiner Effort</u>	0 Extreme	1 High-Moderate	2 Moderate	3 Slight
How intense an effort was required to induce change?	<ul style="list-style-type: none"> • Examiner requested direct verbal imitation on several occasions • Examiner needed to provide several explanations throughout entire session • Examiner did almost all the on task talking • Examiner reduced content (e.g., did not complete transcendence) • Examiner used slowed speech rate • Examiner repeated questions, rephrased, and prompted often throughout the session 	<ul style="list-style-type: none"> • Examiner requested direct verbal imitation on a few occasions • Examiner needed to provide several explanations up until the end of the session • Examiner did most of the on task talking • Examiner modelled several correct responses • Examiner used slowed speech rate • Examiner provided repetition, rephrasing or prompting roughly half of the questions 	<ul style="list-style-type: none"> • Examiner did not request direct verbal imitation • Examiner provided a couple of examples for clarification throughout the entire session • Examiner talked on task a bit more than child • Examiner modelled a couple of correct responses • Examiner used a typical or slightly slowed speech rate • Examiner provided some repetition, rephrasing, or prompting 	<ul style="list-style-type: none"> • Examiner did not request direct verbal imitation • Examiner needed to provide one or no examples for clarification throughout the entire session • Examiner and child had good back and forth on task discussions • Examiner did not have to model correct answers • Examiner maintained typical speech rate • Examiner needed to provide little to no repetition, rephrasing, or prompting

<u>Child Responsivity</u>	0 Not At All	1 Slightly	2 Moderately	3 Highly
How responsive was the child to the intervention?	<ul style="list-style-type: none"> • Child required constant support to complete task OR couldn't complete task • Child had difficulty maintaining attention to task • Child demonstrated no learning strategies • Child did not verbalize an understanding of the skill at the end of the session • Child provided inaccurate or confusing answers to most questions • Child used long pauses before answering most questions 	<ul style="list-style-type: none"> • Child needed lots of support • Child had some challenges maintaining attention • Child demonstrated one or two learning strategies • Child did not verbalize a complete understanding of the skill at the end of the session (even with prompting) • Child provided some inaccurate answers • Child used long pauses before answering some questions 	<ul style="list-style-type: none"> • Child needed some support and practice to learn skill • Child maintained good attention to task most of the time • Child demonstrated some learning strategies • Child verbalized an understanding of the skill after receiving some support • Child provided mostly accurate/logical answers to questions • Child rarely paused 	<ul style="list-style-type: none"> • Child needed little support to learn skill • Child maintained good attention throughout the session • Child demonstrated efficient learning strategies (e.g., provided independent examples; provided examples across multiple narrative genres) • Child verbalized a good understanding of the skill at the end of the session • Child provided accurate/logical answers to questions • Child rarely paused
<u>Transfer</u>	0 No	1 Some	2 Yes	
Was there any indication of transfer?	<ul style="list-style-type: none"> • Child continued to require prompting (showed no evidence of achieving goal independently) • Child did not demonstrate skill transfer by not understanding its meaning and importance for a "good" narrative 	<ul style="list-style-type: none"> • Child performed independently on same picture within the session but not on a different • Child demonstrated some transfer, but it was incomplete (partially meets target or provides a vague but logical response when asked about the skill's meaning and importance) 	<ul style="list-style-type: none"> • Child demonstrated good and independent skill transfer to a similar task (i.e., fulfills target goal with a new picture or story). • Child demonstrated an understanding of the skill's meaning and importance for "good" narratives 	

Appendix M

Children's Stories

Story #1

One Tuesday, Lily, a little girl...she asked her mom to wash the dishes. And her mom said "yes".

Then, one day, she washed the dishes and then she wanted to check on something.

A few minutes after, he checked on something, she came back and saw the sink bursting with water.

She called her mom, and her mom was really mad.

She told Lily to go to her room and then she took care of it.

After, she took care of it, she asked Lily to help a bit.

And when Lily helped her, the house started to get all better again.

And when the house was dry, the mom asked Lily where did she put the water.

And Lily said she put it on the grass.

Story #2

Once upon a time, there was a family who lived in a house.

The children made a lot of trouble.

And the mother was really upset.

Then, the one child went to the sink and overflowed the sink, and the mother said, "don't, don't do it again".

Story #3

Once, there is a mom and she is trying a do a dishes 'til her daughter see her mom doing the dishes. So, she asked, "Can I do the dishes?"

So, she ask, "Yes".

So, 'til she open the water and she, she cleaned all of it, but she cannot turn it off.

And 'til she mom came and now she, she was angry. And she said "gone".

So, her mom turn off.

And she said to go to timeout.

And now she decided to fix everything.

And her mom was proud at her.

The end.

Story #4

So, the kid forgot to close the faucet.

Then, it was a lot of water.

And then, falling from this floor.

And then, it started to flood there, but it is just a bit.

And then, her mom going to the kitchen because he see the faucet forgot to close.

And then, the kid is saying that the water is open.

Appendix N

Focus Group Questions

Part 1: Regarding children's narratives

4 Stories

1. Did anything about the children's stories catch your eye?
2. Do you think your culture was represented in the children's stories, in any way?

Skills Assessed: Strengths and skills that were worked on

3. In your view, can any of the findings be explained by storytelling style amongst Filipinos or any other aspect of Filipino culture?
 - a. What do you think about these findings?
 - b. Are you surprised by these?
 - c. Was there something you expected to see but didn't?
4. Are there times your child might hear other people tell stories (of real or fictional events) outside of school? (Stories in books or oral stories).
 - a. What about church? Conversation? Storybooks?
 - i. What kind
 - ii. How often?

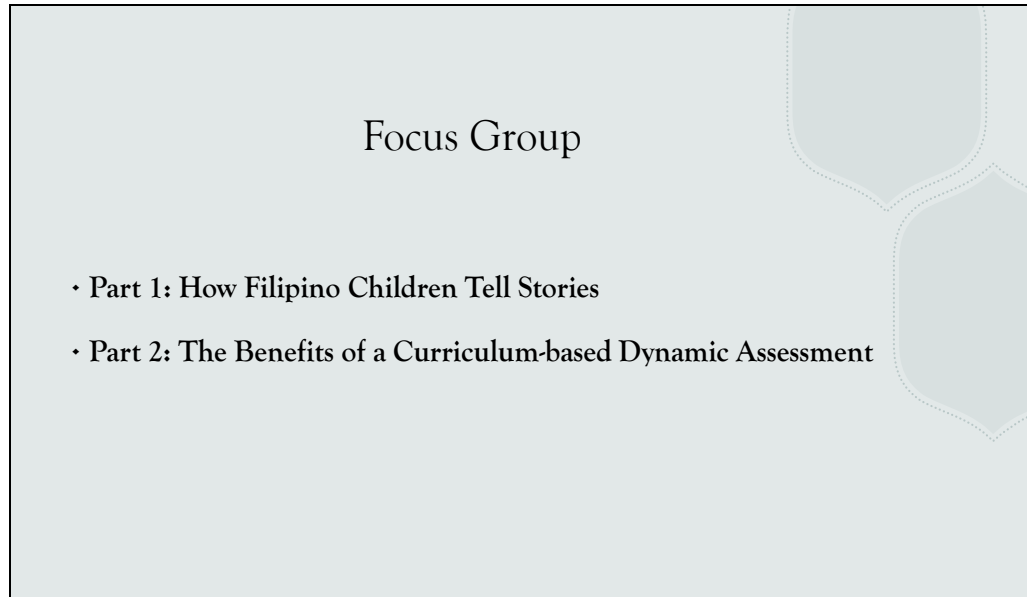
Part 2: Regarding the curriculum-based dynamic assessment

1. What are your initial thoughts about the assessment I did?
2. What did you like most about it?
 - a. Why?
3. If you could change anything about it, or how I carried it out, what would it/they be?
 - a. Why?
4. Do you think this kind of an assessment would be good at showing Filipino children's true story abilities?
 - a. Why?
 - b. Why not?
5. Is there anything else you would like to add about any of the stories presented, Filipino story structure, or on the study's main findings about Filipino stories?

Appendix O

PowerPoint Sides to Support the Focus Group Discussions

Slide 1

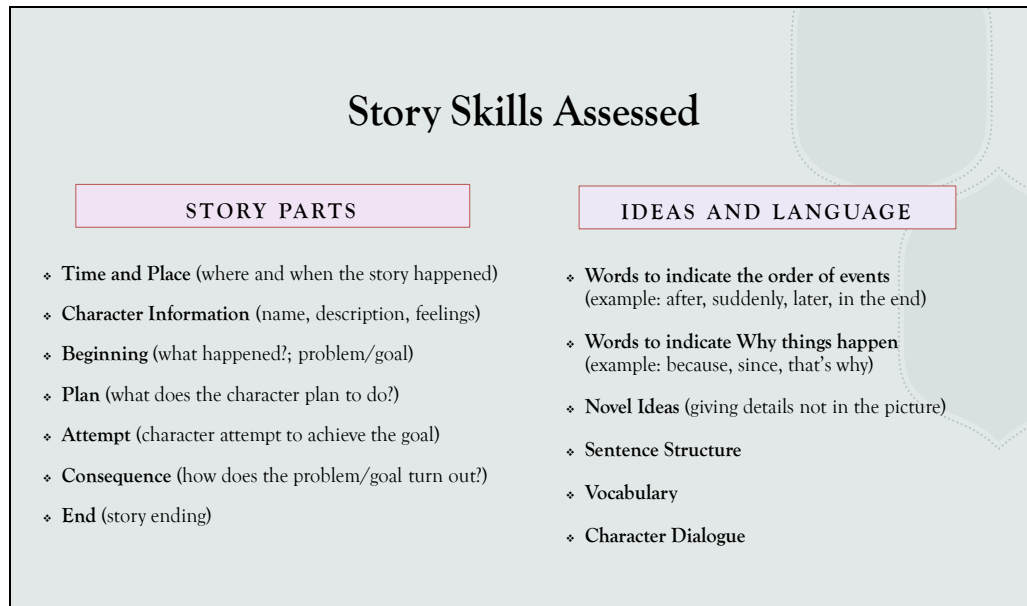


Focus Group

- Part 1: How Filipino Children Tell Stories
- Part 2: The Benefits of a Curriculum-based Dynamic Assessment

The slide has a light blue background with a decorative pattern of white dotted lines on the right side.

Slide 2



Story Skills Assessed

STORY PARTS	IDEAS AND LANGUAGE
<ul style="list-style-type: none">❖ Time and Place (where and when the story happened)❖ Character Information (name, description, feelings)❖ Beginning (what happened?; problem/goal)❖ Plan (what does the character plan to do?)❖ Attempt (character attempt to achieve the goal)❖ Consequence (how does the problem/goal turn out?)❖ End (story ending)	<ul style="list-style-type: none">❖ Words to indicate the order of events (example: after, suddenly, later, in the end)❖ Words to indicate Why things happen (example: because, since, that's why)❖ Novel Ideas (giving details not in the picture)❖ Sentence Structure❖ Vocabulary❖ Character Dialogue

The slide has a light blue background with a decorative pattern of white dotted lines on the right side. The two columns of skills are enclosed in light pink boxes.

Slide 3

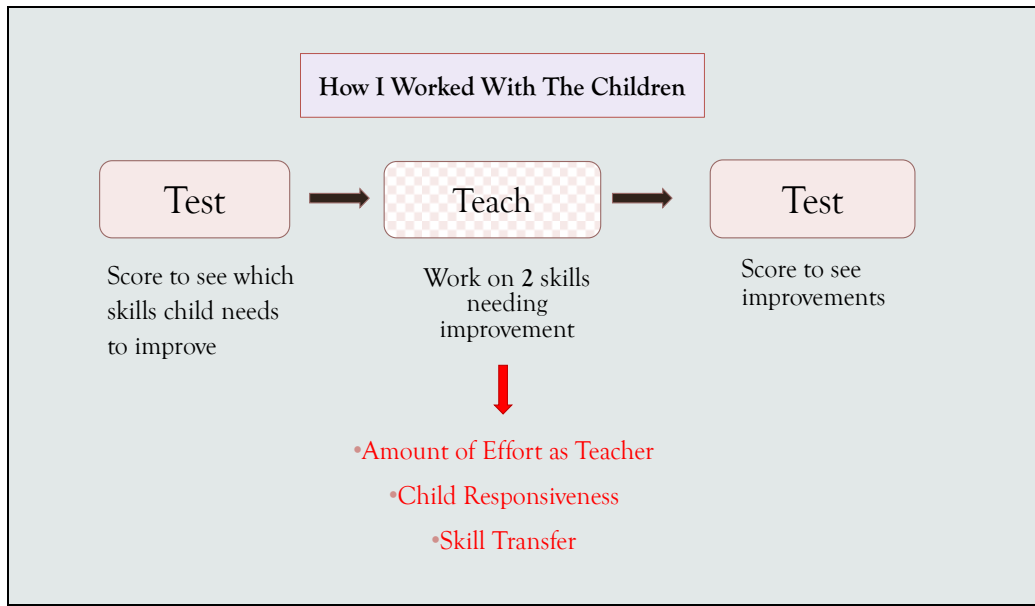
SKILLS CHILDREN SHOWED WELL	SKILLS NEEDING IMPROVEMENT
<ul style="list-style-type: none">❖ Time and Place – older children❖ Words to indicate the order of events (example: after, suddenly, later, in the end)❖ Words to indicate Why things happen (example: because, since, that's why)❖ Novel Ideas❖ Sentence Structure	<ul style="list-style-type: none">❖ Time and Place – younger children❖ Character information – across all ages❖ Story Attempt (character attempt to achieve the goal) – younger children❖ Story Ending – across all ages

Slide 4

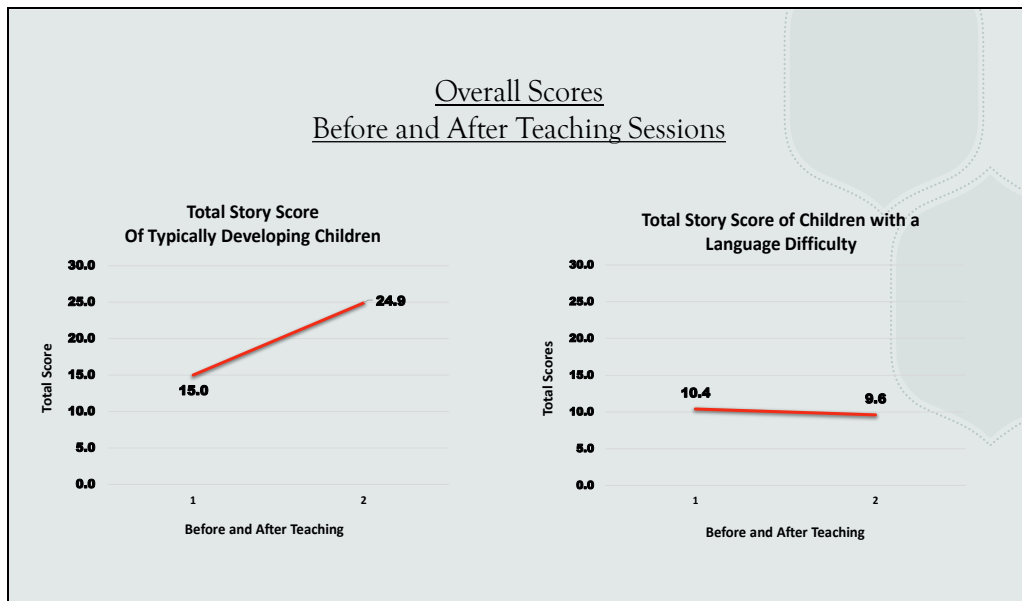
MY ASSESSMENT

- **Who?**
 - Filipino children in elementary school in various regions across New Brunswick
- **Why?**
 - To capture children's true language abilities
 - To help solve the problem of culturally-diverse children being misdiagnosed
 - Having a language difficulty when they do not
 - A language difficulty goes unnoticed to school staff and others
 - I used parent report and interviews to classify children

Slide 5



Slide 6



Slide 7

BEFORE

There was once a girl who was a little bit mischievous sometimes.

So, one day, when it was a very snowy day, she went in the kitchen to get some to get a glove, but she saw the window was covered with snow.

So, she opened the window and didn't realize the snow would come in and melt in the kitchen. once she said, "Wow, snow".

Her mom ran in the kitchen and said "No!", and then tried to close the window but it was too late.

She opened it then the snow came out.

The end.

Slide 8

AFTER

There was one little boy named David. He came from school and dropped his backpack, when he entered the door. He rushed upstairs and said to Mom, "mom, my friend Kaylin is going to the pool". And his mom said, "which pool because we haven't been in a pool for a long time?". David said, "it's the Bush Family Park". And his mom said, "okay, pack your stuff. And when we get back home, you better study". When they got in the car, David realized he had forgotten his goggles. He asked his Mom, "Mom, can I go back for my goggles?" Mum said, "all right, just be quick". David rushed inside upstairs and into his room to find his goggles. He was searching through his stuff. He was looking for his yellow and blue goggles. He was feeling a bit nervous if he couldn't find his goggles, but he grabbed something up with his hand and said "finally! My goggles!". And he shouted with glee. Once they went to the pool, David rushed quickly and got his swimsuit on. He climbed up something he never knew. He says, "what's this?" And he climbed up and jumped in, jumped with his goggles. And he jumped up and down he went floating in the pool. After a few hours playing with him, his mom said, "David it's time to go". Kaylin said "oops. Maybe there's no more time to play. Well, we'll see if we can play again next time". David said, "All right." He went home and did studies, and his mom was really happy. The end.

Slide 9

Before and After Teaching Sessions
(Example of a Child With a Language Difficulty)

BEFORE

So, the kid forgot to close the faucet. Then, it was a lot of water. and then falling from this floor. And then it started to flood there. But it's just a bit. and then, her mom going to the kitchen because he see the faucet forgot to close. And then the is kid saying that the water is the water is open.

AFTER

The boy, the boy wants to swim in the pool. And then there was a lot of people there. And then the boy was excited to go to swim in the pool and play with his friends there in the pool and play with the other kids. and it was the boy was having some fun to play with each other with the toys with the beach toys and then that's it.

Slide 10

<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Teach</div> <p>Worked on skills needing improvement</p> <ul style="list-style-type: none">•Amount of effort (0-3)•Child Responsiveness (0-3)•Skill Transfer (0-2) <p>Maximum Score = 8</p>	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Learning Potential</div> <table border="0" style="margin: 10px auto;"><tr><td>Children with Language Difficulties:</td><td style="text-align: right;">2.2</td></tr><tr><td>Children who are Typically Developing:</td><td style="text-align: right;">6.6</td></tr></table>	Children with Language Difficulties:	2.2	Children who are Typically Developing:	6.6
Children with Language Difficulties:	2.2				
Children who are Typically Developing:	6.6				

**Slide
11**

<u>Differences Between Assessments</u>		
	Popular Assessment	My Assessment
Same	<ul style="list-style-type: none"> Assesses what child knows and doesn't know Helps detect language delays/difficulties 	
Different	<ul style="list-style-type: none"> Assesses and compares children of same age <ul style="list-style-type: none"> Often developed without data from Filipino children One-time assessment Focuses on results May not capture children's true abilities 	<ul style="list-style-type: none"> Does not compare children to others Assessed over several sessions (4 times) Provides opportunities to work on skills that need improvement <ul style="list-style-type: none"> Identifies children's learning potential through the teaching sessions May captures true abilities (results correspond better to how parents described your children's language abilities.