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Every Toddler Talking

Interim Report

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2016

CONTENTS

Overview.....	4
Introduction.....	4
Methodology.....	4
Phase One: Development.....	5
Implementation of <i>Every Toddler Talking</i>	6
Identification of Trial Sites (Local Government Areas).....	7
‘Paired Professional’ Facilitator Training.....	7
<i>Learning Language and Loving It</i> TM Educator Training.....	8
Collaborative Working Groups.....	8
Expected Outcomes of <i>Every Toddler Talking</i>	8
Early Childhood Education and Care Services.....	8
Phase Two: Evaluation.....	9
Recruitment and Participants.....	10
Evaluation Measures.....	11
Quantitative Measures.....	11
Qualitative Measures.....	12
Evaluation Procedure.....	13
Baseline data collection.....	13
Outcome data (time point 1).....	13
Outcome data (time point 2).....	14
Results, Discussion & Conclusion.....	14
Demographics.....	14
Analytic Strategy.....	16
Evaluation of the impact of <i>Learning Language and Loving It</i>	16
Concluding statements.....	16
Appendix: Key Evaluation Questions.....	17
References.....	19

ACRONYMS

ACECQU	Australian Children' Education and Care Quality Authority
AEDC	Australian Early Development Census
CDI	MacArthur-Bates Communication Development Inventory
CHS	Community Health Service
CLASS	Classroom Assessment Scoring System
DET	Victorian Government Department of Education and Training
ECEC	Early Childhood Education and Care
EL	Educational Leader
ETT	Every Toddler Talking
ICC	Intra-Class Correlation
LGA	Local government area.
LLLI	Learning Language and Loving It™
MCRI	Murdoch Children's Research Institute
MGSE	Melbourne Graduate School of Education
NQF	National Quality Framework
SEIFA	Socio Economic Indexes for Areas
SP	Speech Pathologist
UoM	University of Melbourne
VEYLDF	Victorian Early Years Learning and Development Framework.

OVERVIEW

Every Toddler Talking is a key initiative of the Victorian Department of Education and Training (DET) to develop effective approaches for improving language and communication outcomes in early childhood (birth to three years). *Every Toddler Talking* aims to enhance the development of language and communication in infants and toddlers by facilitating collaboration between early childhood educators and allied health professionals. This interim report details the following:

- the aims of the *Every Toddler Talking* initiative;
- a description of the research methodology, including recruitment, and a participant overview;
- a description of key outcomes measures and data collection procedures;
- the proposed analysis approach.

The aims of the *Every Toddler Talking* initiative are to:

1. Strengthen early childhood (EC) educators' ability to promote children's language and communication (birth to three).
2. Strengthen collaboration between EC educators and speech pathologists.
3. Improve language and communication outcomes for babies and toddlers.

INTRODUCTION

The early years of childhood lay the foundation for health and wellbeing across the lifespan. Early childhood is a time when children experience enormous change and growth across a number of areas, including communication, social and emotional development and cognition. Early communication skills are known predict later social, emotional, academic and vocational achievement. It is for this reason that attention and investment in the early language learning environment is warranted. When looking at children beginning school in Victoria, the 2015 Australian Early Development Census found that 7% were developmentally vulnerable, and a further 13% of children considered 'at-risk' in regards to their communication skills.

Parents and caregivers in the home are the adults that exert greatest influence on the young child's early learning and experience. However, the importance of the early childhood education and care environment can positively influence children's early childhood experiences. Experiencing a high quality early language learning environment in an education and care setting can support and improve children's developing communication skills. Children from lower socio-economic backgrounds are more likely to begin school with vulnerabilities in one or more areas, and stand to benefit most from quality early childhood education.

By fostering collaborative partnerships between the health and education sectors, an opportunity is created to share expertise across professional boundaries, to the universal benefit of Victorian children.

METHODOLOGY

The *Every Toddler Talking* initiative is being conducted in two phases. Phase One involved a review of the literature and current practices supporting early communication and language development in early childhood education and was completed by the Murdoch Children's Research Institute (MCRI) in 2015. Phase Two, which will be completed across 2016 and

2017, is the evaluation of an intervention targeting communication support in early childhood education, and the development of a collaborative practice model to enable the continuation of this health and education cross sector initiative. Phase Two is currently being conducted by the Department of Early Childhood Care and Education at the Melbourne Graduate School of Education (MGSE) within the University of Melbourne. The design of *Every Toddler Talking* is described in detail below.

PHASE ONE: DEVELOPMENT

For the initial phase (Phase One), the DET engaged the Centre for Community Child Health (CCCH) and the Centre of Research Excellence in Child Language (CRE-CL) at the MCRI to undertake the following:

1. a rapid review of evidence-based programs and practices that have been shown to promote children's language and communication;
2. a review of current practices used in Victoria to promote children's language and communication; and
3. engagement of experts and professionals from relevant sectors in the design of a feasible and suitable evidence-informed model and recommendations for evaluation.

Based on the rapid and practice review findings, and in addition to consultation with the sector, four programs were considered to meet the requirements of *Every Toddler Talking*. These four programs were *Learning Language and Loving It*[™] (Weitzman & Greenberg, 2002), a joint attention program (Rudd, Cain, & Saxon, 2008), *Teacher Talk*[™] (Weitzman, 2002) and the possibility of developing a new program. Figure 1 details the questions that guided the consideration of each program.

1. Was there evidence to indicate the program's effectiveness against the desired *Every Toddler Talking* outcomes?
2. Did the program facilitate sustained collaboration between early childhood educators and allied health professionals?
3. Was the program in use in Victoria?
4. Did the program explicitly align to the VEYLDF?
5. Was it suitable for Victorian early childhood educators?
6. Was it suitable for Victorian allied health professionals?
7. Was it appropriate for Aboriginal and Torres Strait Islander communities?
8. Was it suitable for rural and regional areas?
9. Was the program replicable?
10. Was it feasible?
11. How much does it cost?

Figure 1: Considerations in the selection of an appropriate intervention during *Every Toddler Talking* Phase One (Murdoch Childrens Research Institute, 2015)

From MCRI's analysis of the four shortlisted options, The Hanen Centre's *Learning Language and Loving It*[™] was determined to be the most viable option for *Every Toddler Talking*. *Learning Language and Loving It*[™] was found to have the strongest evidence to support its effectiveness, and had some components which aligned with the principles underpinning collaborative practice. Furthermore, this program had been trialled and demonstrated positive outcomes among early childhood educators working in rural areas of the US, and had been replicated in multiple countries that have similar characteristics to Australia (Canada, United States of America and Ireland).

Learning Language and Loving It[™] was mapped against the eight Victorian Early Years Learning Development Framework (VEYLDF) Practice Principles (figure 2) (Victorian

Department of Education and Training, 2016). As a result of this, three enhancements to the program were recommended:

1. Multidisciplinary certification training and multidisciplinary delivery of *Learning Language and Loving It™* to enhance collaboration;
2. Inclusion of a VEYLDF and National Quality Standard (NQS) training component to *Every Toddler Talking* to enhance the program's appropriateness; and
3. Follow-up collaborative working groups across health and education sectors to enhance collaboration and sustainability.

The above recommendations were made to DET in December 2015.

1.	Reflective practice
2.	Partnerships with families
3.	High expectations for every child
4.	Respectful relationships and responsive engagement
5.	Equity and diversity
6.	Assessment for learning and development
7.	Integrated teaching and learning approaches
8.	Partnerships with professionals

Figure 2: VEYLDF Practice Principles (Victorian Department of Education and Training, 2016)

IMPLEMENTATION OF EVERY TODDLER TALKING

Following the recommendations made by MCRI at the conclusion of Phase One (Murdoch Childrens Research Institute, 2015), DET undertook to implement *Every Toddler Talking* across seven local government areas. A key component of the initiative is the delivery of the *Learning Language and Loving It™* professional learning program. It was determined that this would be delivered to early childhood educators from three Early Childhood Education and Care services (ECECs) in each of the seven LGAs, by a lead educator and a community health speech pathologist. This initial model of *Every Toddler Talking* is presented in figure 3 below.

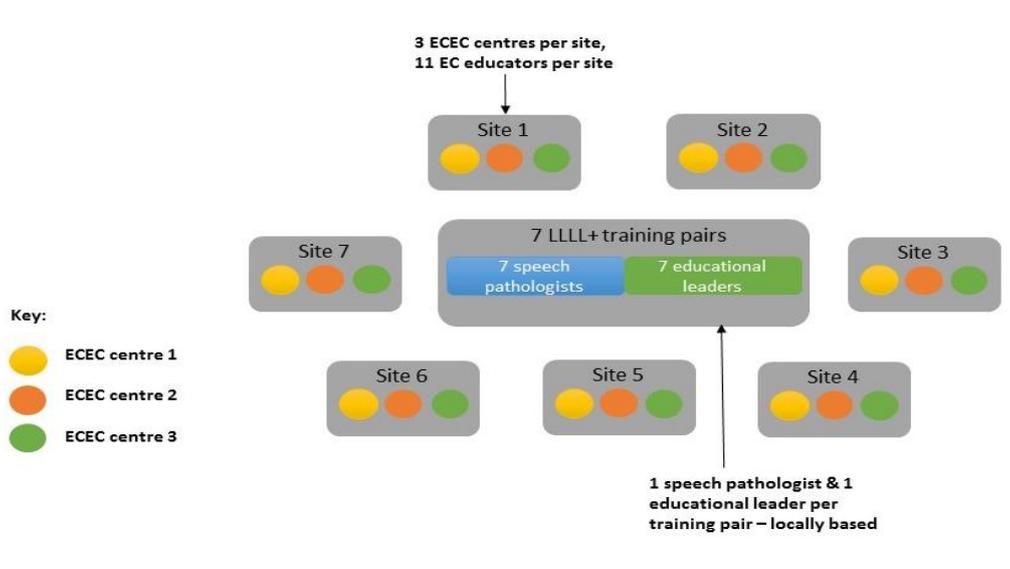


Figure 3: Proposed delivery of *Learning Language and Loving It™* and VEYLDF training to intervention sites (Murdoch Childrens Research Institute, 2015)

The implementation stages of the *Every Toddler Talking* Initiative include i) Facilitator Training for the ‘Paired Professionals’, ii) *Learning Language and Loving It™* educator training and coaching, and iii) Collaborative Working Group meetings. These are detailed below.

IDENTIFICATION OF TRIAL SITES (LOCAL GOVERNMENT AREAS)

Seven Local Government Areas (LGAs) were selected by DET to participate in *Every Toddler Talking*. responses to a call for expressions of interest (EOIs) from both CHSs and ECEC services. The eligibility criteria are detailed in figure 4.

<p>To meet eligibility criteria, ECEC services were required to:</p> <ul style="list-style-type: none"> • be providing centre-based long-day care; • have at least three educators working with children under age three; • have a minimum rating of ‘meeting’ in all National Quality Areas; • not be taking part in another research trial or professional learning program that focuses on language and communication; • submit a letter of support from the approved provider. 	<p>To meet eligibility criteria, community health services were required to:</p> <ul style="list-style-type: none"> • employ a speech pathologist with experience working with children aged birth to three; • not be taking part in another research trial that involved speech pathologists working with early childhood educators; • submit a letter of support from CEO.
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Figure 4: Requirements for participation in *Every Toddler Talking* (Intervention Sites).

From the received EOIs, the combination of suitable ECECs and CHSs, socioeconomic status (as measured by SEIFA) and the proportion of children considered to be vulnerable (as indicated by AEDC) were considered in the selection of LGAs. Specific cut off points were not specified by the DET during the selection process. Predominantly, services in lower socioeconomic areas, with higher prevalence of developmental vulnerabilities were selected. The selected locations include two rural (Alpine and Sunraysia), two regional (Barwon and Mornington) and three metropolitan areas (Hume, Dandenong, and Brimbank).

‘PAIRED PROFESSIONAL’ FACILITATOR TRAINING

An early childhood educational leader and a speech pathologist were selected through an expression of interest process to take a leadership role in each of the seven local government areas. Together these ‘Paired Professionals’ received facilitator certification training (in a ‘train-the-trainer’ model) in *Learning Language and Loving It™*. This training took place over three days in Melbourne and was delivered by an expert from the Hanen Centre. Paired Professionals also participated in a one day professional learning program that included leadership and coaching skills, the VEYLDF (Victorian Department of Education and Training, 2016), the ACEQA National Quality Framework (NQF), and Community Health Service guidelines.

LEARNING LANGUAGE AND LOVING IT™ EDUCATOR TRAINING

The Paired Professionals are currently delivering the *Learning Language and Loving It™* program, to a group of approximately 11 educators from the three ECEC services¹ at their trial location. The delivery of the eight sessions and four video coaching sessions commenced in late June or July, and will be completed in all seven LGAs during October. The delivery of this program is detailed later in this report.

COLLABORATIVE WORKING GROUPS

The Paired Professionals at each trial location, along with the educational leaders from the other two ECEC services at their location (and/or another ECEC centre representative who is leading the embedding of *Learning Language and Loving It™* in practice) will meet at regular intervals during early 2017 to critically reflect on their progress in supporting children's language and communication birth to three and their Quality Improvement Plan activities.

EXPECTED OUTCOMES OF EVERY TODDLER TALKING

At the end of the research trial (30 September 2017), it is expected that:

- a) strategies from the Hanen Centre's *Learning Language and Loving It™* will be embedded in ECEC services' quality improvement plans and be evident in the practice of educators;
- b) children within the ECEC trial services who attend the room(s) of participating educators, subject to level of attendance, will have improved language and communication outcomes;
- c) an intentional focus on supporting the language and communication learning of children aged birth to three will be evident in the participant educators' practice (e.g. in the form of improved interactions with children);
- d) educator knowledge and skills related to supporting language and communication learning for children aged birth to three will be increased;
- e) multidisciplinary approaches and collaboration between speech pathologists and educators (at the individual level), and between ECEC services and community health services (at the organisation/service level), will be in place to support language and communication learning for children aged birth to three in trial locations.

EARLY CHILDHOOD EDUCATION AND CARE SERVICES

The DET selection of ECECs to participate in *Every Toddler Talking* and attend *Learning Language and Loving It™* within each location was completed using the process outlined on the following page.

Where further information was required, DET and DHHS regional office staff were consulted. Trial locations where multiple educational leaders expressed interest in being paired professionals were asked to nominate one paired professional from one ECEC service. Participant fees, backfill and accommodation costs associated with educators' and speech pathologists' full participation in the trial was fully funded by the Department. In the event of services withdrawing from *Every Toddler Talking* before the commencement of the *Learning Language and Loving It™* sessions, ECECs that had not submitted an EOI but met the

¹ In the Sunraysia LGA one ECEC service is participating in the training.

criteria outlined above and were willing to engage with the intervention and evaluation were invited to participate as an intervention site.

1.1. Early childhood education and care (ECEC) services and community health services (CHS) were invited via DET and DHHS bulletins to submit an expression of interest (EOI) to participate in the trial. Peak bodies were invited to inform their networks of the opportunity and the EOI was open for over four weeks. There were 63 complete EOIs from ECEC services, and 34 from CHS.

1.2. The selection panel included key members of the *Every Toddler Talking* working group, including representatives from the DET and Department of Health and Human Services (DHHS) regional offices, the Early Learning and Development Reform Branch.

3. The panel undertook the following steps to make their recommendation:

- Determined eligibility of service applying (an approved centre based long day care service with children aged 0-3 in attendance, that met or exceeded National Quality Standard and had sound compliance with legislative requirements)
- Identified viable trial locations where a CHS and three ECEC services had applied
- Reviewed the quality of the service's online expression of interest
- Prioritised trial locations according to level of disadvantage using Australian Early Development Census (AEDC) and Socio-Economic Index for Areas (SEIFA) data (decile 1 to 10)
- Reviewed service characteristics to ensure a mix of legal entities, size of services, rural and metropolitan, and distribution across the four DET regions.

Figure 5: Requirements for participation in *Every Toddler Talking* (Intervention Sites).

PHASE TWO: EVALUATION

As previously specified, The University of Melbourne has been contracted by DET to evaluate *Every Toddler Talking*. This evaluation will have two foci:

1. **Evaluation of Impact** of *Learning Language and Loving It*[™] upon educator practice and child language & communication outcomes
2. **Evaluation of the Process** of implementing *Learning Language and Loving It*[™], including delivery, scalability, sustainability and collaboration between early childhood educators and speech pathologists at the individual, service and sector level.

This study is conducted under the approvals and protocols sanctioned by the University of Melbourne Human Research Ethics Committee (ID 1646484) and in accordance with linked approvals provided by the Victorian Government Department of Education and Training (2016_003028).

The *Every Toddler Talking* study design is based on a Pre- and Post-Test research model. In response to the conditions in place through the DET selection of intervention sites, the evaluation methodology adopted cluster sampling techniques to recruit the ECEC sites that will serve as controls for the DET intervention sites. The educators and children from targeted rooms within the ECEC intervention and control sites are the participants of this evaluation. Based upon the location of the intervention sites, a randomisation process was adopted to select the control ECEC sites. Pre and post intervention measures are utilised to allow for comparisons between the intervention and control arms. In line with the methodology, the evaluation sequence for the DET *Every Toddler Talking* project follows the intervention process set by the DET outcomes model, and consists of the following stages:

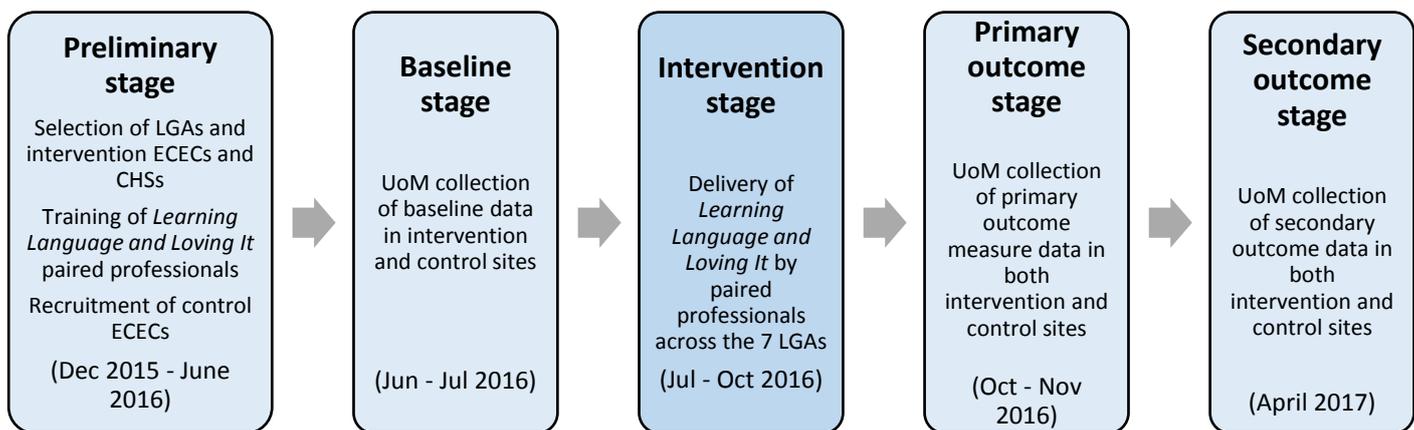


Figure 6: Every Toddler Talking Evaluation Design

RECRUITMENT AND PARTICIPANTS

CONTROL ECECS

The University of Melbourne's selection of control ECECs within each location was completed using the following criteria specified in figure 7 below.

1. All ECECs within the intervention implementation LGA were identified (Alpine, Brimbank, Greater Geelong, Greater Dandenong, Hume, Mornington and Sunraysia)
2. All ECECs not participating in *Every Toddler Talking* that met the following criteria were included as an intervention centre; providing a centre-based long day care service, meeting or exceeding NQS, having approved status and demonstrating compliance with legislative requirements.
3. Remaining ECECs were rank-ordered by those that did submit an EOI to participate as an intervention site and were not selected for the intervention, and those that did not, and then by 2011 SEIFA rating (decile 1 to 10), then randomised within SEIFA decile band.
4. Using the rank-ordered selection list, the first three ECECs were invited via letter to participate as a control site. Replacement ECECs were added as necessary by moving down the rank-ordered list until three sites in the relevant LGAs were recruited. When the list within an LGA was exhausted, the process was repeated within the neighbouring LGAs.

Figure 7: Requirements for participation in Every Toddler Talking (Control Sites).

PAIRED PROFESSIONALS

As detailed earlier, a speech pathologist and an educator in each LGA were confirmed as 'paired professionals' in the delivery of *Learning Language and Loving It*[™]. The nominated speech pathologist from each CHS and an educator from an intervention ECEC in each LGA, selected by DET, attended *Learning Language and Loving It*[™] training in February 2016. This training was provided by an expert *Learning Language and Loving It*[™] trainer from the Hanen Centre, Toronto, Canada.

One paired professional educator withdrew from the program following facilitator training, but before the commencement of the intervention. A replacement facilitator who is a speech pathologist with experience delivering *Learning Language and Loving It*[™] was recruited to fill this position.

EARLY CHILDHOOD EDUCATORS

Within the intervention ECEC sites, an educational leader and three educators who work in the same infant and/or toddler room were nominated by their service to participate in *Learning Language and Loving It™*. In some smaller services, two educators from one room, and a third educator from a second room were nominated. Participation in *Learning Language and Loving It™* requires attendance and participation in professional learning over 14 weeks, and includes eight group sessions, and six video coaching sessions. These educators were subsequently invited to participate in the evaluation. Within the control ECEC sites, educators from a nominated infant and/or toddler room were invited to participate in the evaluation. All educators provided consent to participate in the evaluation before the baseline data were collected. In total 135 educators were recruited to the evaluation; 58 consented from intervention sites and 77 from control sites (see Table 1).

Table 1. Sample Size: ECEC Service and Participants of Every Toddler Talking Evaluation

	<u>Intervention</u>	<u>Control</u>
Paired Professionals	14	.
ECEC services	19	19
Rooms	27	25
Educators	58	77
Children (consent returned)	221	196
Children (complete baseline data)	130	99

CHILDREN

Plain language statements and consent forms were distributed to parents (and/or caregivers) of all children aged between birth and three years who attend rooms where educators are participating in *Learning Language and Loving It™*. The study design aimed to recruit an average of between six to ten children in each room to participate in the *Every Toddler Talking* evaluation. A total of 417 children/parents returned consent forms and of those 219 have completed baseline data.

Formal written consent has been obtained from each participant in the intervention and control sites prior to the collection of any data, including the centre director, speech pathologist and lead educator and early childhood educators in the nominated rooms and the families of children attending the nominated rooms. The child's main caregiver consents for the child's participation in the evaluation, thereby enabling the collection of child language and communication evidence. No specific ethical issues have emerged to date during the study.

EVALUATION MEASURES

Within the evaluation of *Every Toddler Talking*, a selection of both quantitative and qualitative measures has been used. The utility of these measures to respond to the research questions specified by DET can be found in detail in the appendix.

QUANTITATIVE MEASURES

MEASUREMENT OF EDUCATOR PRACTICE

Every Toddler Talking aims to build educators' skills guided by and in collaboration with local speech pathologists in encouraging children to be active conversationalists, while facilitating interactions that promote language skills and enrich children's learning and understanding of

the world. In order to measure change in educator practice, the Classroom Assessment Scoring System (CLASS) is being utilised (La Paro, Hamre, & Pianta, 2012; Pianta, La Paro, & Hamre, 2008). CLASS provides a valid and reliable measure of classroom quality across the domains of Emotional Support, Classroom Organisation and Instructional Support, and in Infant/Toddler rooms Emotional and Behavioural Support, and Engaged Support for Learning.

Previous Victorian based research (e.g., E4Kids, Victorian Advancing Early Learning (VAEL) study) has documented consistent and relatively poorer performance in the Instructional Support (in three- year-old Pre-K rooms) and Engaged Support for Learning (Infant/Toddler rooms) domains which map well on to the aims of *Learning Language and Loving It*[™] (CLASS dimensions for this domain include facilitation, concept development, quality of feedback, and language modelling). CLASS maintains high levels of validity and reliability through the training and testing processes required for all users of the tool. A team of research assistants have been trained and Teachstone certified as clinically reliable in the use of the CLASS tool. These research assistants work to a specified data collection protocol in order to ensure consistency, and are also subject to an inter-rater reliability process while in the field.

CHILD LANGUAGE & COMMUNICATION OUTCOMES

The *MacArthur-Bates Communicative Development Inventories (MacArthur-Bates CDI)* (Fenson et al., 2007) parent report instruments that have been widely used in international studies of child language development (including Australian versions of vocabulary checklists) and have well documented validity and reliability data based on correlation studies of face-to-face assessment with *MacArthur-Bates CDI* outcomes are being used in this study. The use of the *MacArthur-Bates CDI* enables a consistent and scalable parent report tool across the possible age range specified. It provides total scores and percentile ranks suitable for comparison across time points. Versions of the *MacArthur-Bates CDI* are available for Infants (8-18 months) – Words and Gestures, as well as Toddlers (16-30 months) – Words and Sentences. In addition, a shorter upward extension (*CDI-III*) is suitable for children between 30-37 months.

Published research data on the *CDI-III* indicates it has been used on children as old as 4 years (Bishop, Price, Dale, & Plomin, 2003). The Australian Early Language in Victoria Study included the *MacArthur-Bates CDI* at 8, 12, 24, and 36 month data points with approximately 1800 Victorian participants and hence, adequate Australian comparison data are also available. Approval has been granted by Brookes Publishing for the adaptations of the *MacArthur-Bates CDI* into Redcap for electronic administration.

QUALITATIVE MEASURES

PAIRED PROFESSIONALS SURVEY

Paired professionals completed a survey prior to the commencement of *Learning Language and Loving It*. They were asked to provide details of their training, experience and career history, and were asked to share their knowledge, experience and understanding of collaborative practice.

POST PROGRAM PROFESSIONALS SURVEY

A survey is provided to paired professionals (speech pathologist and educational leader) and educators involved in the intervention, to gauge their feedback and information about their

experiences participating in *Learning Language and Loving It™* and the partnership with educators in ECEC services and allied health support.

POST PROGRAM PARENT SURVEY

Parents of children involved in the *Learning Language and Loving It™* program will be surveyed post-program (November and December 2016) to collect their reflections on and comments regarding program participation and partnership with educators in intervention ECEC services and allied health support.

INTERVIEWS AND FOCUS GROUPS

Focus groups will be scheduled between March and April 2017. Interviews and Focus Groups will be completed with the educators, the paired professionals trained as *Learning Language and Loving It™* facilitators, and the service level leaders, as detailed below.

EVALUATION PROCEDURE

As specified above, this is a pre- and post-test design evaluation, with data collected at baseline and at two time points following the completion of the *Learning Language and Loving It™* program. The evaluation response to the research questions specified by DET can be found in detail in the appendix.

BASELINE DATA COLLECTION

Baseline data were collected prior to the commencement of the *Learning Language and Loving It™* training in the intervention arm. Where possible, the CDI and parent survey were administered via REDCap (Harris et al., 2009), a secure web application for the distribution and management of online surveys and databases. The University of Melbourne is a member of a consortium of universities that utilise this web based application. Where respondents do not have access to the internet, or require support with reading and understanding the content, a paper based copy of the survey is provided. Participants who use a primary language that is not English have access to local support (including interpreter support as required) in order for the data to be obtained with fidelity.

ROOM LEVEL DATA

Research assistants visited each ECEC room and completed the CLASS (La Paro et al., 2012; Pianta et al., 2008) observation tool at baseline. Each observation was conducted over approximately two hours, and captured data on emotional support, classroom organisation and instructional support. The CLASS captures information about change (pre-to-post-test) in educator practice. A measure of inter-reliability between research assistants was also taken.

CHILD DATA

This survey was designed specifically for the *Every Toddler Talking* evaluation and was completed along with the MacArthur Bates Communicative Development Inventory (Fenson et al., 2007). The survey items included demographic information about the children who are participating in this study, for example the age, indigenous status and language background of the children. This questionnaire has been completed by parents and/or caregivers either via RedCap (Harris et al., 2009) or in hard copy. This tool captured information about children's communication vocabulary, and language development.

OUTCOME DATA (TIME POINT 1)

Measures of educator practice and child communication (The MacArthur-Bates CDI and the CLASS observation) will be repeated in both intervention and control sites in November 2016, providing the primary outcome measures for the evaluation of *Learning Language and Loving It™*. These data are collected at this end-stage of the year to minimise the risk of

participant attrition, both educator and child, due to the movement of families and staff that routinely occurs at the end of a calendar year.

POST PROGRAM SURVEY

Speech pathologists, educational leaders, educators and parents of children involved in the program will be surveyed post-program (November , 2016) to collect their reflections on and comments regarding program participation.

POST PROGRAM FOCUS GROUPS

The following focus groups will be conducted in early 2017 :

- a) Focus groups with ECEC educators will explore changes to their knowledge and practice with respect to the key *Learning Language and Loving It™* strategies, as well as exploring their beliefs and attitudes.
- b) Focus groups with paired professionals will explore their experiences of delivering *Learning Language and Loving It™* collaboratively and whether the program has changed, or has the potential to change, their collaborative practice.
- c) Focus groups with service level leaders will discuss whether *Every Toddler Talking* has made any observable change to collaboration and collaborative practice between speech pathologists and ECEC services, and whether new partnerships (suggested or developed) resulted between community health services, maternal child health nurses and early childhood education services.

OUTCOME DATA (TIME POINT 2)

Repeated measures of the outcomes of interest will be collected in the 19 ECECS in the intervention arm (i.e., 27 rooms) in April 2017, using the CLASS tool and the MacArthur Bates CDI. The purpose of this is to measure whether any change in educator practice and child communication observed during the primary outcome data collection in November 2016 is sustained 5-6 months later.

RESULTS, DISCUSSION & CONCLUSION

DEMOGRAPHICS

417 families returned consent forms agreeing to participate in the study (refer to table 1). Of these families, 219 (52%) returned completed parent surveys at the time of baseline data collection (details specified elsewhere in this report), either online through *RedCap* (Harris et al., 2009) or in a paper format. The distribution of completed baseline data across the seven LGAs and the intervention and control arms is detailed in table 2.

Table 2. Distribution of completed baseline data across the LGAs

<u>LGA</u>	<u>Intervention</u>	<u>Control</u>	<u>Total</u>
Alpine	17	31	48
Brimbank	24	18	42
Greater Dandenong	11	13	24
Greater Geelong	27	2	29
Hume	22	22	44
Mornington	24	10	34
Sunraysia	5	3	8
Total	130	99	229

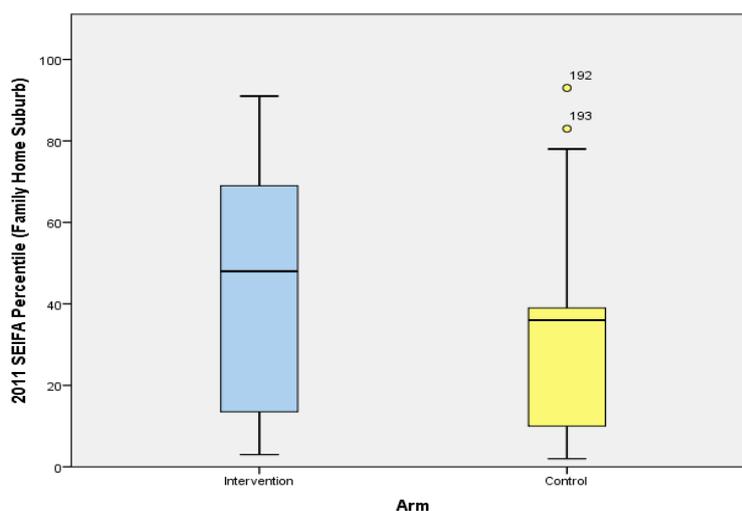
Initial analysis of the demographic data provided in the parent survey shows that there are no significant differences between the groups when gender, age, ECEC attendance, age of commencement in ECEC or NESB status are considered (table 3). It should be noted that boys are over represented in both the intervention and control groups.

Table 3. Comparison of intervention and control child participants

	<u>Intervention</u>	<u>Control</u>	<u>Sig.</u>
Gender (% male)	62%	61%	$p = 0.709$
Age (months)	27.42	27.6	$p = 0.370$
Days attending ECEC per week	2.86	3.14	$p = 0.169$
First language other than English (%)	12%	11%	$p = 0.86$
2011 SEIFA Home Suburb (percentile)	42.73	30.14	$p = 0.000$
2011 SEIFA ECEC location (percentile)	39.72	21.64	$p = 0.000$

Socioeconomic status was measured using the 2011 Socio Economic Indexes for Areas (SEIFA) data by both the postcode of the ECEC service, and the families' home address. There is a significant difference between the intervention and control groups in the socio-economic status when measured by the location of both the home (figure 8) and the ECEC centre.

Figure 8: Comparison of SEIFA percentile by family home location



It was anticipated that approximately 2% of the children recruited to participate in this research would identify as Aboriginal or Torres Strait Islander, however no completed questionnaires were returned for Aboriginal or Torres Strait Islander children. The intervention and control groups are similar in the percentage of children for whom English is not their first language. 25% of families speak more than one language in their home, with respondents listing 28 different languages that are spoken.

Table 4. Language spoken other than English

Arabic	Dutch	Irish	Madi	Serbian	Turkish
Bosnian	Farsi	Italian	Mandarin	Sinhalese	Urdu
Creole	Farsi	Japanese	Maori	Tagalog	Vietnamese
Croatian	Greek	Lao	Punjabi	Tamil	
Danish	Hindi	Macedonian	Russian	Thai	

ANALYTIC STRATEGY

The evaluation seeks to measure both the impact of *Every Toddler Talking*, and the process underlying this initiative. The response to the specified evaluation research questions is detailed in the appendix, with the purpose of each measure and data collection point further explained.

EVALUATION OF THE IMPACT OF *LEARNING LANGUAGE AND LOVING IT*

Utilising a Pre- and Post-Test Control Group Design, this evaluation will measure change educator practice and child language over time, in addition to comparison between the intervention and control arms. The variables to be considered in quantitative analysis, derived from the CLASS, CDI and demographic surveys are listed in table 5.

Table 5. Room and Child Level Variables

<u>Child Variables</u>	<u>Room variables</u>
Study arm (intervention or control)	Study arm (intervention or control)
Child gender	ECEC location (SEIFA)
Child age	Number of adults
Indigenous status (child)	Number of children
Indigenous status (parents)	Changes in staff
Child's place of birth	Emotional support (CLASS) (3 time points)
Language status	Classroom organization (CLASS) (3 time points)
Residential postcode (SEIFA)	Instructional support (CLASS) (3 time points)
Caregiver education	
Attendance at long day care centre	
Participation in other early childhood care and/or education	
Child vocabulary (CDI) (3 time points)	

The impact of *Every Toddler Talking* on service delivery and the experiences of families and professionals in participating in this initiative will be captured through interviews, focus groups and surveys with all key participants. Transcripts will be thematically analysed and will inform recommendations and identification of factors the enabled or restricted optimal implementation. The experiences of professionals who have participated in *Every Toddler Talking* will inform the development of a model of collaborative practice.

CONCLUDING STATEMENTS

Complete demographic and baseline data will be available in November 2016, and a final report detailing outcomes from the evaluation will be available in mid 2017. This will provide detail on both the impact upon child communication and educator practice, as well as an evaluation of the implementation process. A detailed time line for the evaluation of *Every Toddler Talking* is available upon request from the University of Melbourne.

APPENDIX: KEY EVALUATION QUESTIONS

	Key Evaluation Question	Evaluation Response
Implementation Process	1. Was Every Toddler Talking implemented as planned? If not, why not?	The implementation of <i>Every Toddler Talking</i> will be considered against the intended implementation, and factors that influenced the implementation will be considered by the UoM evaluation team.
	2. What did the initiative cost to implement? What are the implications for spread and scale of this initiative?	This cost of implementing the <i>Every Toddler Talking</i> initiative will be incorporated into the final evaluation report.
	3. What contextual factors influenced implementation of this project?	The contextual factors that influenced the implementation of the project will be explored qualitatively through post intervention surveys and focus groups.
Effectiveness	4. How did <i>Learning Language and Loving It</i> TM work in the Victorian context? How did the inclusion of VEYLDF/NQF/Community Health Service Guidelines affect the implementation?	This question will be considered both in terms of the impact of <i>Learning Language and Loving It</i> TM upon both educator practice and child communication, in addition to the practical and logistical issues around implementation. The inclusion of VEYLDF, NQF, and Community Health Service Guidelines will be discussed with speech pathologists, educational leaders and educators during post program surveys and focus groups.
	5. What difference did the initiative make to collaboration and collaborative practice between speech pathologists and educational leaders?	Speech pathologists and educational leaders were asked to explain their understanding of collaboration and collaborative practice prior to the <i>Learning Language and Loving It</i> TM intervention beginning. This will be explored again following the completion of <i>Learning Language and Loving It</i> TM , through both surveys and focus groups.
	6. What difference did the initiative make to partnerships between community health services and early childhood education and care services at the organisation level?	Similarly, speech pathologists and educational leaders were asked to describe their experiences working in partnerships between community health services and early childhood education and care services prior to the <i>Learning Language and Loving It</i> TM intervention beginning. This will be explored again following the completion of <i>Learning Language and Loving It</i> TM , including factors that enabled and limited the success of partnerships, through both surveys and focus groups.
	7. What changes in educator/speech pathologists knowledge and skills can be attributed to the intervention?	Educator knowledge of the strategies incorporated within <i>Learning Language and Loving It</i> TM will be measured at the completion of the program. Participants will also be asked to reflect on changes in their knowledge and skills as a result of being involved in <i>Learning Language and Loving It</i> TM and <i>Every Toddler Talking</i> .
	8. What difference has Every Toddler Talking made to children's outcomes in trial services?	The changes in children's communication skills will be measured using the <i>Macarthur Bates CDI</i> , which is being completed for children in the intervention and control arms both pre and post intervention. The growth in the vocabulary of children in the intervention arm will be compared against children in the control arm of the evaluation study.

Organisational Learning and Sustainability	9. How was the Every Toddler Talking model adapted through formative evaluation of the trial?	The adaptations to the model in implementation across the seven LGAs will be explored through focus groups, in addition to a review paired professional's records of how <i>Every Toddler Talking</i> has been implemented.
	10. What were the lessons learned from implementation?	Participants will be asked to reflect on their experiences in <i>Every Toddler Talking</i> , and both the components of <i>Learning Language and Loving It™</i> and the broader lessons and experiences that have and will influence their future practice.
	11. How important was the collaborative aspect of Every Toddler Talking for success?	Speech pathologists and educational leaders will be asked to reflect on the collaborative practice component of <i>Every Toddler Talking</i> , and whether this was critical for the success of the initiative.
	12. To what extent have the services (ECEC and CHS) embedded the Every Toddler Talking collaborative practice model in their every day practice? What changes have they made?	The extent to which services have embedded the <i>Every Toddler Talking</i> collaborative practice model in their every day practice will be explored in the post program survey and/or focus groups.
	13. Do services have an intention to continue to implement/offer training in the <i>Learning Language and Loving It™</i> program? How do they intend to do this?	This question will be included in the post program survey and/or focus groups.

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