

# Evidence-informed early language and literacy practice: Implementation of a new formative assessment for early language and literacy development

**Sarah Groom, Mary-Ruth Mendel, Eric Brace and Philippa Pryor**

The Australian Literacy and Numeracy Foundation

<https://doi.org/10.37517/978-1-74286-685-7-11>

*Sarah Groom is an Early Language and Literacy (EL&L) Trainer with the Australian Literacy and Numeracy Foundation (ALNF). Sarah teaches ALNF's Certificate IV in Early Language and Literacy, supporting early childhood and primary educators in disadvantaged areas of regional Australia to integrate EL&L strategies and resources in their everyday planning and practice to support children's early language and literacy development. Sarah is also ALNF's Early Language and Literacy Developmental Index (ELLDI) Advisor, overseeing the rollout of the ELLDI – a world-first formative assessment tool that places children on a progression for early language and literacy development and makes practical recommendations for planning and practice based on the child's location along the progression. She has created an online training course for educators to learn how to conduct ELLDI interviews and use ELLDI feedback in planning to best support children's growth along the early language and literacy progression. Sarah is passionate about how early language and literacy assessment tools can be designed with educators (and their workloads) in mind, as accessible and helpful tools that place information and recommended learning activities in educators' hands to facilitate individualised planning and maximum growth for every child.*

*Mary-Ruth Mendel is Co-founder, Co-chair and an Executive Director of the Australian Literacy and Numeracy Foundation (ALNF). She is an experienced speech pathologist, author of two courses: 11027NAT Certificate IV in Early Language and Literacy (EL&L) and 10756NAT Certificate III in Coding Aboriginal Languages for Indigenous Literacy (CALIL), and Team Leader of the Early Language and Literacy Developmental Index (ELLDI). She championed the development of the ELLDI instrument to provide a statistically reliable scale that is easy for all to administer, understand and act upon by selecting activities informed by the evidence of each child's growth profile. Mary-Ruth is passionate about offering the dual EL&L and ELLDI to fill a service gap by bringing together a blend of foundational speech pathology strategies, quality education activities and the ELLDI scale to provide visibility across the seven subdomains of vital oral language and literacy development. Mary-Ruth is dedicated to empowering community members to confidently and effectively support children in oral language and literacy development for their robust education and life opportunities.*

*Eric Brace is the Director Programs for the Australian Literacy and Numeracy Foundation (ALNF). He oversees the delivery of initiatives across urban, regional and remote Australia, such as the Early Language and Literacy Program, ALNF's Living First Languages Program, which includes the digital Living First Languages Platform, and the Refugee Action Support Program. Eric has a depth of experience in literacy teaching and learning, in supporting English language learners, in addressing barriers to educational equality, and in advocating for the needs of diverse communities.*

## Abstract

With one in five Australian children starting school developmentally vulnerable, there is a need in this critical period for visibility over children's oral language and early literacy development. The Australian Literacy and Numeracy Foundation (ALNF) partnered with a Northern Territory primary school to implement the Early Language and Literacy Developmental Index (ELLDI), a newly-created valid and reliable assessment which places children on a progression scale for oral language and early literacy development and provides meaningful, accessible recommendations for educational

practice. Twenty-three children in the school's transition<sup>1</sup> cohort were measured using the ELLDI at the beginning and end of the school year. Educators' capacity to interpret children's ELLDI Feedback (assessment results) was built during regular online co-planning sessions, driving adaptations to pedagogical approaches to best suit each child's need. Significant growth from pre-test to post-test was observed for children in the case study group. Additional changes were also observed at the educator, school, and community level as a result of the school's use of the ELLDI to inform planning and practice. The ELLDI, when linked to pedagogical approaches, provides a catalyst for systemic change which can then change children's educational trajectories.

## Introduction

One in five Australian children start school developmentally vulnerable, with a higher concentration of vulnerability occurring in regional/remote areas (AEDC, 2021). The 2021 AEDC found that developmental vulnerability increased since the 2018 AEDC for children who are Aboriginal and Torres Strait Islander, from socio-economically disadvantaged communities and/or from regional/remote areas – a widening of the gap in part attributed to decline in the language and cognitive skill domain. Disadvantage impacts children's ability to achieve at school, particularly their ability to gain and maintain expected literacy levels (NELLC, 2021). Generally, children who start behind, stay behind with reading development (Stanovich, 1986), highlighting an urgency to disrupt vulnerability early.

The Australian Literacy and Numeracy Foundation (ALNF) seeks to address this inequity through its Early Language and Literacy program (EL&L), providing educators with speech pathology-meets-education EL&L strategies and resources suitable for both early childhood education and care (ECEC) and primary school settings. An ongoing longitudinal random control study by the Australian Council for Education Research (ACER) has provided evidence to support the effectiveness of EL&L. As described by Cloney and Picker (2021), children in the intervention group (attending EL&L-trained preschools/schools) began marginally behind the control group but grew to be significantly above the control group one year later.

With crucial oral language and early literacy skills developing in the early years (Brown, 2014), visibility over these skills in this critical period facilitates children entering school ready for learning. However, there has previously been a lack of quality valid and reliable oral language and pre-literacy assessment instruments which inform individualised practice and are ready to be used more widely in early years education (Centre for Education Statistics and Evaluation, 2020).

Acknowledging the need for an assessment and progression scale for early language and literacy skills, ALNF commissioned ACER to develop the Early Language and Literacy Development Index (ELLDI). The ELLDI is a valid and reliable formative assessment which places children along an empirically-derived progression scale for early language and literacy development (the ELLDI Scale) (Cloney & Picker, 2021). The ELLDI Scale and assessment are unique, beginning at 2-3 years of age, spanning ECEC and early primary development, and applying item response modelling to oral language and early literacy assessment using authentic joint attention tasks. The ELLDI provides a new capacity for insight into 7 subdomains of early language and literacy development across these sensitive stages.

The ELLDI connects with EL&L through detailed feedback for each child, including practical recommendations for EL&L-trained educators based on what the child knows and is ready to learn. This case study examines how quality formative assessment for early language and literacy development, with recommendations for practice, can amplify children's growth.

---

<sup>1</sup> The first year of formal schooling in the Northern Territory.

## An ELLDI/EL&L case study at a Northern Territory primary school

In 2016, ALNF partnered with a Northern Territory school ('the school') through the EL&L Program. Most students at the school experience significantly disadvantaged educational backgrounds. In 2020, the school's ICSEA percentile was in the lowest 5%, with most children in the bottom quartile. Almost two-thirds of enrolled children in 2020 were Indigenous, and over 50% of children had a home language other than English. The school readily implemented EL&L to support the students. At the commencement of the 2020 case study, educators were providing EL&L programming at two tiers for early primary. This comprised whole-class EL&L-integrated instruction and additional small-group EL&L intervention sessions, resulting in high dosage EL&L support.

Throughout 2020, ALNF supported the school to implement the ELLDI for their transition cohort. Feedback which contains considerable information and detail is most effective (Wisniewski et al., 2020), and mentoring or coaching supports educators to learn, adapt and embed pedagogical practices (Page & Eadie, 2019). With this in mind, ELLDI assessments (referred to as ELLDI Interviews) were conducted and quality feedback and resources provided at the beginning and end of 2020, in conjunction with regular co-planning workshops between ALNF and the school's educators. This collegiate approach aimed to build educators' capacity in understanding ELLDI feedback and to support ELLDI-informed EL&L planning and practice.

## Method

### Participants

The case study involved 23 children across 2 transition classrooms in a Northern Territory primary school. Two classroom teachers, two intervention staff, two Special Education Teachers (SETs) and 1 member of school leadership were involved in fortnightly/monthly online co-planning sessions throughout the year.

### Instrumentation

ELLDI Interviews were conducted twice per child in 2020, in Term 1 and Term 4. ELLDI Feedback was provided to educators each time, along with boutique resources designed based on educator feedback to support ELLDI data-driven EL&L planning and practice.

### Analysis

Quantitative analysis was conducted. The mean change in ELLDI scores was calculated using a paired two sample for means t-test in Excel. Qualitative data was gathered via meeting notes from online co-planning sessions and semi-structured interviews following the case study year, and coded in NVivo.

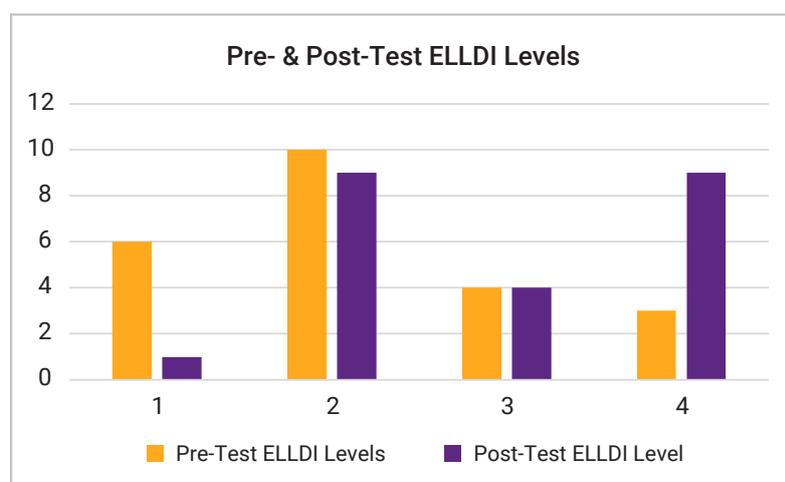
## Results

### Observed growth – the children

The ELLDI provides a numerical ability estimate for each child, corresponding to a location along the ELLDI Scale. The numeric scale is divided into meaningful ELLDI Levels which describe what children know and are ready to learn next, informing the selection of EL&L strategies and resources to best support each child's growth.

Comparing children's Pre-Test and Post-Test ability estimates, the difference of the means was significant ( $T=-4.59, p<0.001$ ). Figure 1 illustrates children's change in ELLDI Levels.

**Figure 1** Pre-Test vs. Post-Test ELLDI Levels



An ELLDI Level 1 child has a very low vocabulary (speaking in single-word utterances), limited comprehension for explicitly-stated illustrated events, and no phonological awareness skills. An ELLDI Level 4 child speaks in increasingly complex sentences with an expanding vocabulary, demonstrates inferential comprehension, and is aware of sounds in words (for example, syllables and initial sounds). ELLDI Level 4 contains the skills which are developed in readiness for formal literacy instruction, such as syllable and first sound awareness (Paulson, 2004) – therefore, a child in Level 4 at the end of preschool is on track for learning success in transition.

Although all children in this transition case study group would ideally be in ELLDI Level 4 at Post-Test, this is not a realistic expectation for a highly disadvantaged cohort. If we compare these children to expected levels, we only notice that they are behind. Instead, re-measuring children along the ELLDI Scale allows us to observe each child's individual growth. One child in this cohort grew from ELLDI Level 1 to ELLDI Level 4 within a year; this is meaningful growth, representing a shift in this child's educational trajectory and future. This powerful story is not captured when comparing to norms. Educators at the school acknowledged this, as described by a transition teacher:

Yes, they are still behind, but at least I haven't just done a whole year of blending and segmenting and expecting them to read; I understand now that they need to build their oral language, they need to build (foundational skills) before they can read, and so I've done that... So when they move on to Year One - yes, they're not reading, but the teacher in Year One can continue building them up and they're not going to have massive gaps in literacy development.

## Observed changes – educators, school and community

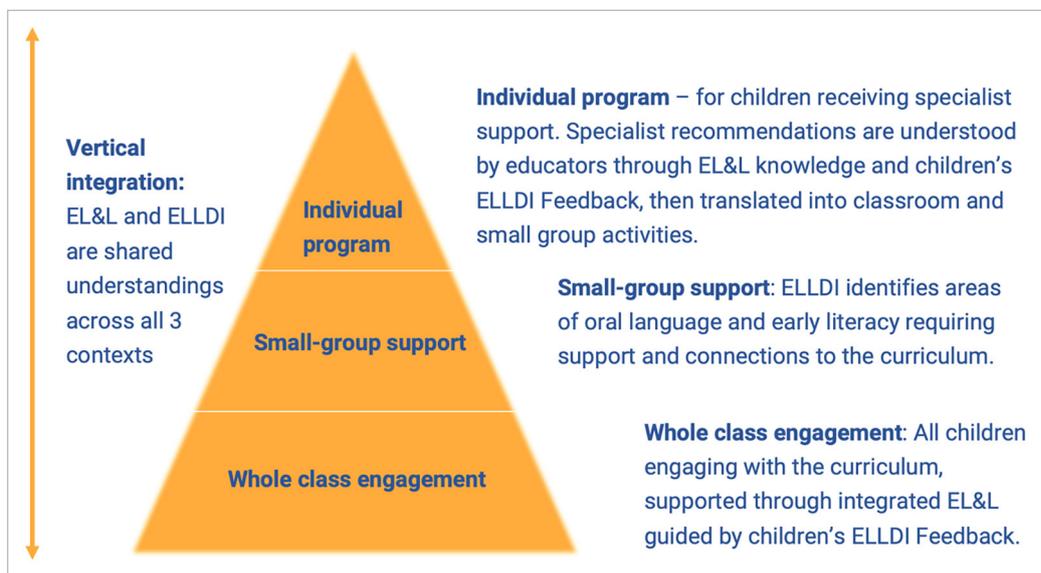
During the case study, changes were also observed at the educator, school, and community levels. Educators reported increased and more intentional use of EL&L strategies, understanding of the benefits of teaching to each child’s level before and in conjunction with the Curriculum, and a deeper understanding of early language and literacy development. This played a key role in altering practice, described by a transition teacher:

To know where the child was and how far back we had to go with their abilities, that’s where the ELLDI data really did help with our planning. Before (the ELLDI), we didn’t have that information, so a lot of the language we were using the classroom was probably pitched too high for them... Having this knowledge now, after ELLDI, you really can target your strategies, your activities and your language that you use around those children to build them up to where they need to get.

Educators also reported increased confidence and independence implementing data-informed EL&L strategies for developmentally-vulnerable children whilst awaiting allied health professional assessments.

Responding to this increased capacity and access to data, the school has embedded data-driven EL&L practice across three tiers of intervention. School staff now have common language to express what each child needs, enabling effective communication and targeted responses to children’s ELLDI Feedback. Figure 2 illustrates this.

**Figure 2** Vertical integration of EL&L and ELLDI allows for a common language between staff, more effective use of EL&L, and ultimately maximum growth in early language and literacy for children.



These changes have also impacted beyond the school. Multiple staff were nominated as finalists for Educator of the Year Awards, and one teacher won an award. The school’s Leadership Team discussed the changes at a Leadership Summit with Principals from across the Northern Territory. The SETs have also shared the school’s story of change with SETs throughout their region.

Engagement between speech pathologists and the school also improved. Educators report that speech pathologists are more eager to work with children from the school because reports now inform intervention rather than simply providing diagnoses and recommendations. The school's SET summarised this change:

(ELLDI) really changed the way we do Special Ed here at the school, it's changed the way speech pathologists are working with us now... They can see the impact of what we're doing, what impact it has on these kids, and we're getting the results.

## Discussion

Following the case study year, educators at the school continued using the ELLDI more efficiently and broadly. This included: reflecting on Pre- and Post-Test ELLDI Feedback to refine educational practice for future cohorts; implementing ELLDI in the on-site preschool in late 2020 to inform transition planning; conducting ELLDI Interviews for older children from 2020; and in 2022, deploying ELLDI in the preschool to inform ECEC planning and practice.

The school continues to refine its use of the ELLDI in the preschool and school. As a result: ELLDI-informed EL&L practice during preschool means children are more 'school ready'; the school is more ready to plan for the children's needs; and the school is better equipped to act on Allied Health professionals' recommendations.

One in five children in Australia enter school developmentally vulnerable, with a higher concentration of disadvantage in regional/remote areas. There is a clear need to have visibility of and effectively support oral language and early literacy growth. The ELLDI is a quality formative assessment tool which can catch children before they fall, by providing visibility of children's understanding along an early language and literacy development scale alongside accessible information to support educators' EL&L planning and practice to achieve maximum growth for every child. This case study demonstrates that the ELLDI with EL&L leads to: significant, meaningful early language and literacy growth for developmentally-vulnerable children; growth in educators' understanding of early language and literacy; improved use of available strategies to facilitate maximum growth for every child; a more informed school transition; school-wide systemic change coordinating responses across all tiers of intervention; and broader systems change in the local community, including increased interaction between schools and external specialists. The experience at the school also demonstrates that this change carries forward over subsequent years, with the ELLDI/EL&L combination multiplying impact across ECEC and primary.

Ultimately, the ELLDI has the potential to strengthen educational practice in Australian ECEC and primary school settings thereby improving children's early language and literacy development and reducing the number of developmentally-disadvantaged children in Australian schools, changing the trajectory of children's education and therefore their lives.

## References

- AEDC. (2021). *Australia Early Development Census National Report 2021*. Canberra: Department of Education, Skills and Employment. <https://www.aedc.gov.au/resources/detail/2021-aedc-national-report>
- Brown, C. S. (2014). Language and Literacy Development in the Early Years: Foundational Skills that Support Emergent Readers. *Language and Literacy Spectrum, 24*, 35-49. <https://eric.ed.gov/?id=EJ1034914>
- Centre for Education Statistics and Evaluation. (2020). *Formative assessment practices in early childhood settings: evidence and implementation in NSW*, NSW Department of Education. <https://education.nsw.gov.au/about-us/educational-data/cese/publications/research-reports/formative-assessment-practices-in-early-childhood-settings>
- Cloney, D. & Picker, K. (2021). Developing an assessment of oral language and literacy: Measuring growth in the early years. In Australian Council for Educational Research, *Research Conference 2021: Excellent progress for every student: Proceedings and program* (pp. 31-41). <https://doi.org/10.37517/978-1-74286-638-3>
- NELLC. (2021). *Proposed National Early Language and Literacy Strategy* (p. 12-13) [Policy Brief]. National Early Language & Literacy Coalition (NELLC). <https://speechpathologyaustralia.cld.bz/Proposed-National-Early-Language-and-Literacy-Strategy-WEB>
- Page, J., & Eadie, P. (2019). Coaching for continuous improvement in collaborative, interdisciplinary early childhood teams. *Australasian Journal of Early Childhood, 44*(3), 270–284. <https://doi.org/10.1177/1836939119855542>
- Paulson, L. H. (2004). The development of phonological awareness skills in preschool children: From syllables to phonemes. *Graduate Student Theses, Dissertations, & Professional Papers. 9522*. <https://scholarworks.umt.edu/etd/9522/>
- Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly, 21*, 360-406. [https://www.psychologytoday.com/files/u81/Stanovich\\_\\_1986\\_.pdf](https://www.psychologytoday.com/files/u81/Stanovich__1986_.pdf)
- Wisniewski, B., Zierer, K., & Hattie, J. (2020). The power of feedback revisited: A meta-analysis of educational feedback research. *Frontiers in Psychology, 10*, 3087. <https://doi.org/10.3389/fpsyg.2019.03087>