



Early Language and Communication Project

FIFE COUNCIL – CO-CONSTRUCTION OF LANGUAGE MEASURE SCALE FOR TWO YEAR OLDS ACCESSING ELC

The Issue

The Early Language in Play Settings (eLIPS) tool was created in Fife using action research methodology to allow educators to capture their observations of children's language during play and to raise awareness of language development by facilitating discussion with colleagues (Duncan, Gollek & Potter, 2020). The eLIPS tool enables language support to be targeted at a level appropriate for each individual child and has now been used successfully with the 3-5-year-old age group across all Fife ELC settings since 2017. As well as increasing the quality of the day-to-day support of individual children, the data from eLIPS is used at cohort level to inform Fife ELC policy and planning in relation to early language development.

Since the original Fife eLIPS action research project (2013-2016), the Scottish Government has extended the provision of Early Learning and Childcare (ELC) to offer funded places for two-year olds. These places preferentially target children who are growing up in disadvantaged circumstances (approximately 25% of this age group in Scotland). High quality support for language and communication skills is critical for these early entrants since research shows that they are at risk of language delay (Hoff, 2006), which unresolved will have serious consequences for school attainment and social integration later in life (Duff et al, 2015; Chow et al, 2018). Therefore, the current version of eLIPS is now in need of extension to accommodate this younger population of children and to provide continuity in the support offered to children in early years settings in Fife.

The two-year-old phase is pivotal in language development making it crucial that the design of the extended eLIPS scale was fit for purpose by being both evidence-based and adapted to practice. Development typically occurs at pace in this age group with an "explosion" in vocabulary preceding entrance to the two-year-old phase, with utterances gradually lengthening and showing sensitivity to grammatical rules by the exit point (Brooks & Kempe, 2012). For children who are delayed or are suffering from developmental language disorders, the picture differs considerably as understanding is weakened and communication may be largely non-verbal.

A novel aspect of the study was to integrate the extended eLIPS scale with intervention strategies. High standards already exist in relation to intervention in Fife ELC and the focus in this project was to better integrate these with the eLIPS tool for the two-year-old phase. This need was identified in a consultation initiated by the eLIPS Steering Group and conducted in a partnership between Dundee University and Fife Council Educational Psychology Service using focus groups and questionnaires (Unpublished report; Duncan & Titley, 2021). Although referring to the wider early years age range, feedback from both EYOs and senior leaders revealed that additional strategies, resources and training in relation to the next steps would be valuable. In response, this project aimed to explore the benefit of techniques and interactional strategies (e.g. guided play or playful learning (Weisberg et al, 2016)) and to increase the availability of examples of good practice in early intervention to assist in getting it right for every child.

Thus, the project aligns with the Scottish Government's (2021) strategy for Education Recovery by working with ELC to support children whose language and communication is at risk due to the negative impact of Covid-19.

The Team

- Partnership research project with Dr Lynne G. Duncan, Psychology, from Dundee University of Dundee.
- Project managed by a multi-agency steering group, including ELC staff, Educational Psychologists, Dundee University research staff, MSc Psychology Students and Fife NHS Speech and Language Service
- Tool tested in a sample of Fife Council local authority and funded provider settings.

Our Idea

- Early Language in Play Settings (eLIPS) among early entrants
 - To establish entry-and exit-level language benchmarks for two-year-olds
 - To produce a new eLIPS scale that is valid and reliable
 - To integrate the two-year-old scale with the main eLIPS tool
- Implementation of new eLIPS scale
 - To establish usability with early years staff
 - To integrate the tool with existing guidance
 - To produce training and support materials for the new tool

What We Did

The project was built on the foundation of the existing partnership between Fife ELC and Dundee University Psychology Department. The research arm of this partnership is led by Dr Lynne Duncan (Psychology, University of Dundee) and together the partnership successfully established a collaborative approach to raising awareness of language development in early years practice and provided support for disadvantaged children at risk of language delay in Fife.

A post-doctoral research assistant (PDRA) was employed to ensure a high degree of familiarity with the developmental research literature, early years assessment, research methodology, project coordination, statistical analyses and capacity for the write-up and dissemination of findings. Dr Conny Gollek (Education, University of the West of Scotland) provided consultancy support to the project, specifically around the design of training for staff in the new eLIPS methods due to her expertise in early years CPD.

Students from the MSc in Developmental Psychology course at Dundee University assisted the project team in gathering staff feedback and collating examples of practice. A Research Assistant helped with data collection at key nursery entry and exit points.

a. Literature review

The PDRA produced a review of the background literature that includes the latest findings on language development, assessment and intervention among 2-year-olds.

b. Design of eLIPS scale for 2-year-olds

Observations of 2-year-old language during naturalistic play and in interaction with early years staff informed the design of the new scale. The action research methodology brought educators and researchers together in Workshops to highlight the linguistic characteristics of this age group. These discussions involved topics such as non-verbal communication, the development of play and early language difficulties.

The research engaged Fife Council early years settings and private partners to represent the range of 2-year-olds present in Fife. The combination of observations, discussions and material from the research literature informed the new scale.

c. Integration with early Intervention strategies

Intervention in the context of Fife child-centred early years playrooms draws upon input that cuts across professional spheres (e.g. Early Years Officers, Educational Psychology, Speech & Language Therapy) and this collaborative approach was the focus of a further Workshop. The priority in this project was to embed procedures for the younger 2-year-old age group, which are modelled on 3-5-year-old practice but adapted to 2-year-old needs (as established by the new eLIPS scale) and suited to the play behaviour of these early entrants. The action research methodology created a forum for exploration of different approaches to early language intervention and piloted interactional strategies and playful learning techniques.

d. Pilot work, reliability and validity testing

To create the new scale, initial observations of language skills were made at the 2- and 3-year-old nursery entry points, with the latter approximating the 2-year-old exit point. The new scale was piloted by early years staff, the PDRA and MSc students. This provided the basis for the construction of a more precise scale, which was trialled by the PDRA and early years staff to determine whether the psychometric requirements for evidence-based research are satisfied (e.g. generalizability, reliability, validity, sensitivity, usability). This involved the collection of comparison data on language and more general development using standardised tests (e.g. Preschool Language Scale, Zimmerman et al, 2014). Piloting of the resources and strategies for integrating the new eLIPS scale with early intervention procedures paralleled this during this last 6 months of the project.

e. Implementation & training

Particular attention was given to planning the implementation of the new eLIPS scale. Modifications to the eLIPS tool incorporated the new scale and age-based performance levels to produce a RAG analysis for educator use. A final workshop brought together the action research group with focus on implementation, with discussions around how best to train staff on both the use of eLIPS and in the choice of resources and strategies for early intervention. Training expertise was provided by Dr Conny Gollek and the current eLIPS training methods was subsequently updated

f. Documentation & impact assessment

Several forms of documentation will accompany the construction of the new eLIPS materials. Academic records of the development and pilot work were produced in the form of Dundee MSc students' course work. PDRA-generated records documented the more formal research findings which will be written up for training

purposes and for publication. A training programme, described together with a list of resources for educator use will be included in the final package.

Range of Project Activities Undertaken (Green are completed)

PDRA visits to participating nurseries; observing and getting to know children; shadowing staff use of eLIPS with August intake
Commencement of literature review (PDRA)
Workshop: Understanding language development at age 2
New eLIPS scale piloted with early years staff (PDRA; MSc students)
Further observation of 2-year-olds; interviews with EYOs & senior leaders about intervention strategies (MSc students)
Entry testing of 50 x 2-year-olds (plus 25 at-risk 3-year-olds) on new eLIPS compared to standardised diagnostic and developmental measures (PDRA, temp RA)
December Collation and analysis of (August-intake) entry testing data (PDRA)
Further modifications to eLIPS scale piloted with early years staff (MSc students)
Pilot of playful learning & interactional techniques with early years staff (PDRA)
Workshop: Integrating eLIPSage2 with early language intervention (ALL)
Filming of best practice intervention strategies (MSc students)
Piloting with staff of strategies for integrating new eLIPS outcomes to early intervention (PDRA; MSc students)
Entry testing of 50 x 2-year-olds from January intake on new eLIPS compared to standardised diagnostic measures (PDRA)
Collation and analysis of (January intake) entry testing data (PDRA)
Collecting feedback from early years staff about strategies for integrating new eLIPS outcomes to early intervention (MSc students)
Modifications to eLIPS training materials (PDRA)
Pilot new training materials with early years staff (PDRA)
Entry testing on eLIPSage2 with April intake for reliability analysis (PDRA, EYOs)
Exit testing of 50 x 2-year-olds (plus 25 at-risk 3-year-olds) on eLIPSage2 compared to standardised diagnostic and developmental measures (PDRA, temp RA)
Workshop: Implementing eLIPSage2 to ensure continuity in support (ALL)
Collation and analysis of exit testing data (PDRA)
Finalising eLIPSage2 tool and training procedures (PDRA)
Collating staff feedback, writing up project outputs & gathering impact documentation (PDRA)
Implementation of new training & support materials for new school year (ALL)

The Intended Impact

- We know from our eLIPS 3 – 5 tool the positive impact this has on supporting ELC practitioners in identifying gaps in children’s language development
- The tool will help practitioners focus clearly on the quality of play experiences being offered to children
- Using the intervention tools will help plan appropriate next steps for individual children to ensure all children are meeting their potential.
- Improved support and continuity in planning for children at the point of transition into their funded 3-year-old place
- Strengthening practitioner understanding of early language development and use of expressive language

Our Learning and Next Steps

References

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