



Doodle Den Efficacy Report



School
Completion
Programme
Dublin 1 & 7

What is Doodle Den?

- Doodle Den is a manualised evidence-based literacy programme for 5-6 year old children.
- The programme runs for 32 weeks during the academic year.
- Each week there are three 90 minute sessions after school within which children get to engage in fun, energetic and creative activities which are designed to improve their literacy skills.
- There is a strong emphasis on the involvement of parents in the programme. As well as the work with children, the facilitators deliver parent sessions that help parents to understand the work done by their children in Doodle Den, help them to encourage the literacy work at home and build links with the local library. Please see Appendix 1 for an outline of a typical session structure, and an outline of parent and family session topics.

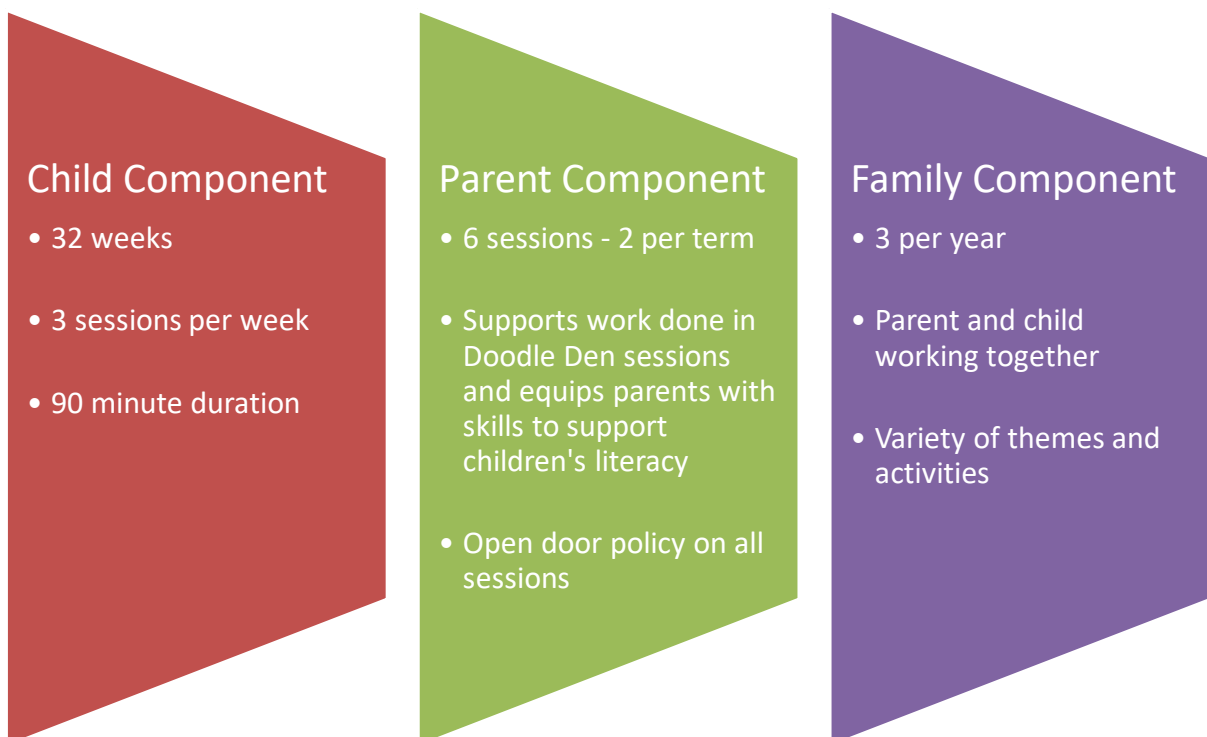


Figure 1: Overview of Doodle Den Programme Structure

Doodle Den Structure in Dublin 7

- Currently run in four schools in the Dublin 7 area.
- Doodle Den is offered to 15 children per site, 60% of whom have a high literacy need, 25% with a medium literacy need and 15% with a low literacy need. The use of mixed ability grouping is an important feature of the programme, and one which is extensively shown by research to yield positive results (Tymms et al., 2011).
- Each session is staffed by two facilitators. These facilitators are not school staff, and this is vital to ensuring the children distinguish Doodle Den as separate to their school day.
- The SCP employs a Doodle Den programme coordinator for 16 hours per week to oversee the programme, ensure fidelity to the programme, to recruit, train and supervise facilitators and ensure a coherent approach across all venues. This has resulted in a high and consistent rate of staff retention for the programme.
- The Doodle Den programme, as operated through the Dublin 1 & 7 SCP, discriminates positively towards those students referred with behavioural and social needs. In the instance where Doodle Den is deemed not to be the most suitable programme to the child's needs, the SCP, as an agency embedded within the community, endeavours to identify the programme or agency most likely to meet these needs.
- Fidelity to the programme is ensured through comprehensive staff training and on-site inspection visits conducted by CDI.
- The efficacy of the programme is measured through the use of pre and post-programme assessments.

The Importance of Doodle Den

Literacy is one of the most important abilities children acquire as they advance through their early school years. It is the basis for learning across all subjects. Furthermore, it is vital to determine each child's trajectory through life, his or her economic wellbeing, and the ability to dynamically and fully participate in broader society (Mullis et al., 2011; OECD, 2013).

When children learn to read, this opens up opportunities to be a social being and to participate in communities, in school to learn and participate in everyday life.

Literacy is related to family income and thus, poverty. Hourly wages are strongly associated with reading proficiency. The median hourly wage of workers with high scores in literacy is 94% higher than that of workers with a low score (Carneiro, 2013). The current pandemic has placed increasing strain on the economy that could see child income poverty rates rising as high as 23 per cent and a one-third increase in the rate of child income poverty relative to the start of 2020 (ESRI, 2020). This places an increasing need for the gap of achievement to be narrowed to allow all children to realise their full potential, and reaching their full potential inarguably begins with the development of basic literacy skills (Barron & Emmett, 2020b). Research has shown that children who score in the lowest quintile for reading at age 9 years (GUI, 2019) are 49% more likely to leave school early. The importance of early intervention in the development of literacy skills in disadvantaged areas remains crucial and Doodle Den has proven results in improving literacy outcomes longitudinally for children who take part (CDI, 2014).

National Impact

Doodle Den began in 2008 as an after-school literacy programme targeted at 5-6 year olds in Senior Infant classes in Tallaght.

A randomised control trial evaluation of the programme conducted by Queen's University Belfast in 2012 confirmed that it improved children's overall literacy, school attendance and social skills, as well as family library use and reading (Biggart et al., 2013).

A longitudinal study conducted by CDI in 2014, examined the outcomes at both two and three years after completion of the programme. It found that two years after completing the Doodle Den programme, children had maintained a statistically significant improvement in their overall literacy, reading attitude and teacher rated literacy ability when compared with a control group. The same effects in maintaining the improvement in overall literacy and teacher rated literacy ability were also observed at three year post-programme follow up assessment (CDI, 2014).

Research has also indicated that there are a number of favourable indirect outcomes for children which result from taking part in the programme including improvements in class behaviour, increased confidence and improved concentration ability (Reid & Kelly, 2013).

Doodle Den has been highly rated internationally – and is now listed in the Early Intervention Foundation (EIF) guidebook. The UK based EIF rates the strength of evidence and costs of early intervention programmes internationally against rigorous criteria. Doodle Den has been accredited as a ‘level 3’ programme on a scale of 0-4. In doing so, it becomes only the second Irish intervention to achieve EIF accreditation, the other being Parents Plus. It has been ranked 2 in terms of cost, meaning it has a low-medium cost to set up and deliver as an intervention and has been deemed a cost-effective early intervention.

Local Impact

The results below are related to 8 Doodle Den sites in the north inner city, 4 of which were in the Grangegorman ABC. The Doodle Den programme was conducted in 8 schools in Dublin from September 2018 to May 2019, with 117 children participating; 94 of these children completed both the pre and post-programme assessments across four areas; phonics, writing, sight vocabulary and social skills. Below the results are displayed in both table and graph format, and clearly illustrate the statistically significant improvement made by the children in all four areas.

Result Interpretation Guide:	
• Phonics: Scored on a scale of 0-26.	• Writing: Scored on a scale of 0-6.
• Sight Vocabulary: Scored on a scale from 0-65.	• Social Skills: Measured on a scale from 0-25.

Table 1: Pre and post-programme results for Doodle Den.

	n	Pre-programme	Post-programme	Average Change	p-value
Phonics	93	16.16 (7.6)	23.91 (3.84)	7.7 (6.3)	<0.001
Writing	94	1.85 (1.59)	4.21 (1.64)	2.3 (1.6)	<0.001
Sight Vocabulary	94	16.25 (16.0)	48.02 (18.9)	31.8 (16.9)	<0.001
Social Skills	94	13.65 (3.7)	21.01 (10.7)	7.3 (10.6)	<0.001

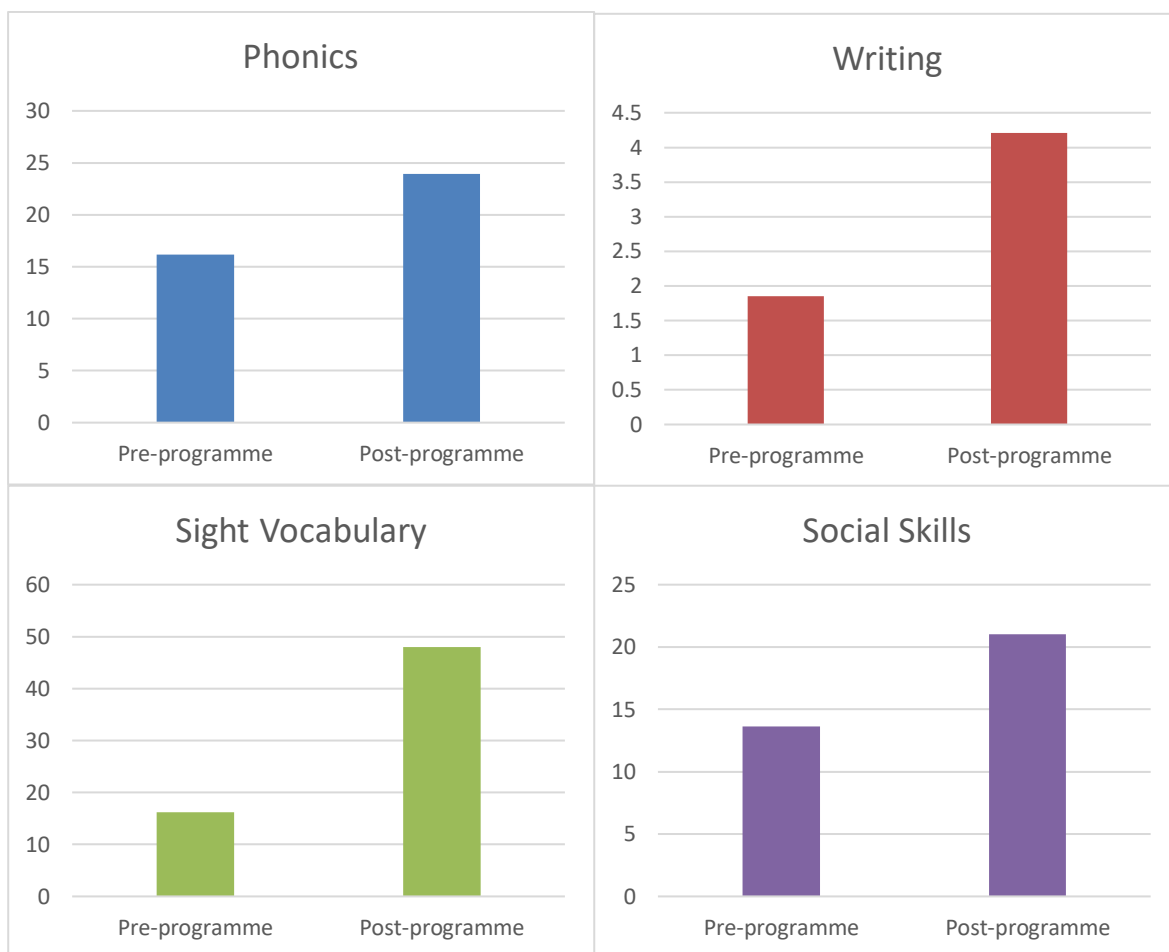


Figure 2: Comparison of pre and post-programme assessment means across four target areas.

Doodle Den in Dublin 7 has also consistently maintained high attendance rates with an average of 90% and 89% attendance rates across all venues during 2017-2018 and 2018-2019 respectively.

Feedback acquired from relevant stakeholders including the children taking part, their parents, and class teachers have been included as Appendix B.

References

- Barron, C. and Emmett, M.J. (2020b). *Report on the Impact of COVID-19 on Children's Play and Friendships in the Dublin City Council Area*. Dublin: DCU.
- Biggart, A., Kerr, K., O'Hare, L. & Connolly, P. (2013). A randomised control trial evaluation of a literacy after-school programme for struggling beginning readers. *International Journal of Educational Research*, 62, 129-40.
- Carneiro, R. (2013). *Literacy: is Europe fit for the future*. *European journal of education*, 48(4), 471-596.
- Childhood Development Initiative (CDI), (2014). *A Longitudinal Follow-up Study of the Doodle Den After-school Programme*. Dublin: Childhood Development Initiative
- ESRI (Economic Social & Research Institute), (2020). *Child poverty in Ireland and the pandemic recession*. ESRI: Dublin. <https://doi.org/10.26504/bp202104>
- Growing Up in Ireland Study Team (2019). *Key Findings: Cohort '98 at 20 Years Old in 2018/19, Education, Training and Employment (No. 4)*. Dublin: ESRI/TCD/DCYA.
- Mullis, I.V.S., Martin, M.O., Foy, P., & Drucker, K.T. (2012). *PIRLS 2011 international results in reading*. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Boston College.
- OECD (2013). *PISA 2012 Results: Excellence through Equity (Volume II): Giving Every Student the Chance to Succeed*. OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264201156-en>.
- Reid, A-M. & Kelly, M. (2013) Doodle Den: A Community-led literacy intervention. In: H. Willoughby, B. Culligan, A. Kelly and G. Mehigan (eds.) *From literacy research to classroom practice: Insights and inspiration: Proceedings of the 2012 Annual Conference of the Reading Association of Ireland*. Dublin: Reading Association of Ireland.
- Tymms, P., Merrell, C., Thurston, A., Andor, J., Topping, K. & Miller, D. (2011). *Improving attainment across a whole district: School reform through peer tutoring in a randomized controlled trial*. *School Effectiveness and School Improvement*, 22(3), 265-89.

Appendix A

Typical Session Structure

Each session begins with a snack and sign-in routine, followed by various aspects of literacy teaching and activities, and concludes with a 'fun' element (such as art, physical education, drama or music). A sample outline of each element of the programme is given below:

- **Snack and sign-in (10 minutes):** The evidence-based Doodle Den manual outlines links between nutrition, behaviour and learning. Therefore, the children sit together to eat a snack. During this time, they are also exposed to environmental print, defined as 'print of the everyday world of the child' which 'allows children to gain an initial level of comfort within the group'.
- **Shared reading (Big Book reading; 20–30 minutes):** This element includes subsections on 'before reading activities', 'during reading activities', 'after reading activities' and 'reflection'. A Big Book is used over several weeks, taking a different focus or revisiting previous learning outcomes.
- **Shared writing (10–30 minutes):** The time allocated to the shared writing element gradually increases throughout the year. This element includes specified focus vocabulary, a list of comprehension skills and guidelines on the 'introduction', 'writing' and 'reflection' subsections of the mini-lesson, such as sequencing events and sentence structure.
- **Phonics mini-lesson (10 minutes):** The phonics section progresses from the individual sounds letters make to blending two, three and four-phoneme words and segmenting two, three and four-phoneme words into word families. Each mini-lesson has a 'focus sound' with details on the activities to be used. Jolly Phonics flashcards are used, as well as mini whiteboards, magnetic letters, sound pictures, oral segmentation boxes and word family flashcards.
- **Sight vocabulary (10 minutes):** This mini-lesson focuses on whole words and, for example, involves placing them in sentences or on an alphabetical 'word wall' or

playing word games/rhymes. Each mini-lesson has a 'focus word' and the words become more difficult as the programme progresses.

- **Reading independently (10 minutes):** Facilitators are directed to listen to two or three children reading independently from an appropriate book within a 'levelled text scheme'. Children also select a new book to take home.
- **Centres (10–20 minutes):** These are small-group work activities/games involving combinations of reading, writing, sight vocabulary and phonics work, using a variety of fun, educational and interactive resources.
- **Fun elements (art/music/drama/physical education, 20–30 minutes):** Each of these activities is carried out at least once a week and involves a variety of games/activities. Art and drama are Big Book-related; music reinforces sounds and rhymes covered; PE promote physical activity and incorporate games using letters, sounds and words.

Parent Sessions

The parent sessions are entitled: Introduction to Doodle Den; Reading is Fun; Making Story Sacks; Picking Books; Using the Library Service; and Writing and Supporting your child after Doodle Den. These sessions are designed to inform parents about what their children are doing in Doodle Den, and to provide information about using the local library and tips for supporting their children's reading and writing at home.

Family Sessions

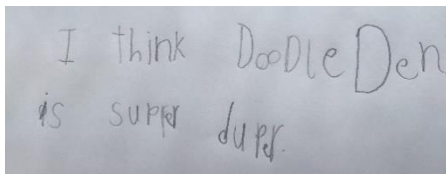
Parent and child sessions: As well as encouraging parents to read and engage with the books sent home with their children, the Doodle Den programme also has a parent/family element aimed at promoting enhanced confidence among parents and children, celebration of achievements, and enhanced relationships. This element is made up of six parent sessions and one family day (for example, involving a visit to the local library, attending plays or story-telling sessions).

Appendix B

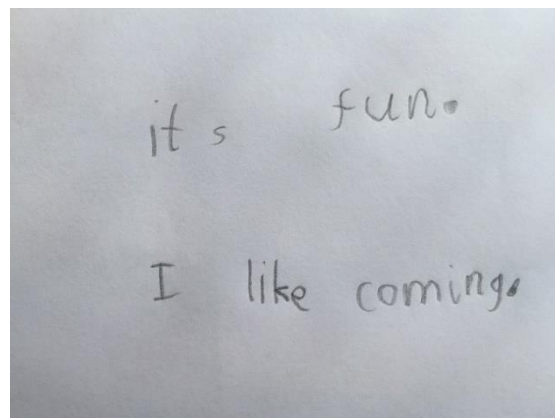
Participant & Stakeholder Feedback

Children

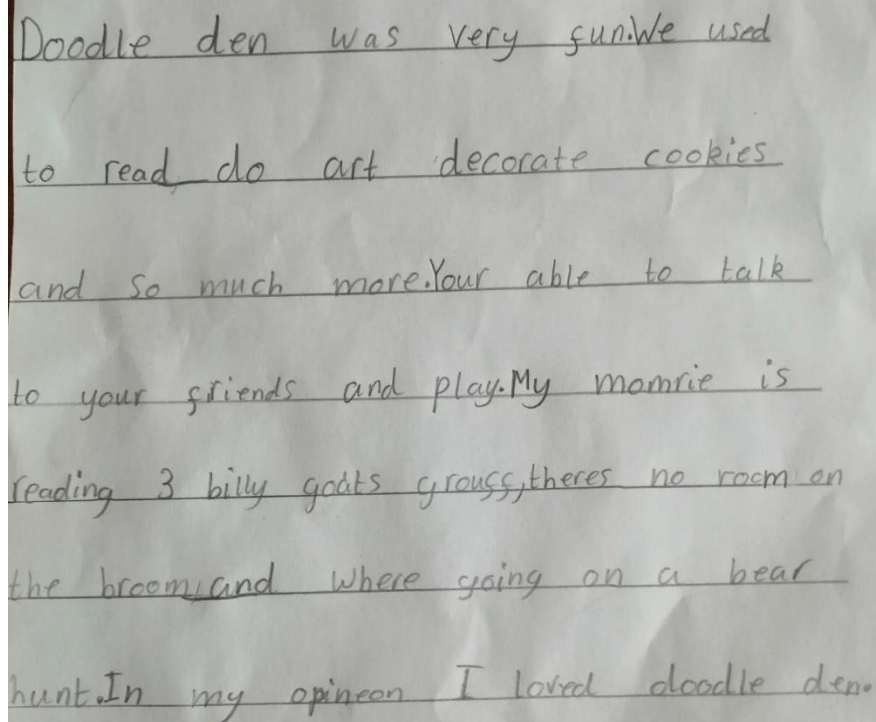
(6 year olds)



I think Doodle Den
is super duper.



it's fun.
I like coming.



Doodle den was very fun. We used
to read, do art, decorate cookies
and so much more. You're able to talk
to your friends and play. My mamie is
reading 3 billy goats grass, there's no room on
the broom, and we're going on a bear
hunt. In my opinion I loved doodle den.

Parent feedback

- “It’s really building his confidence”
- “My daughter was very shy, but now she interacts more with other children”
- “His learning has improved, he’s using his imagination more”
- “It was brilliant when we went up to see them doing it”

“I feel Mary benefitted greatly from Doodle den especially learning through play as she didn’t feel like it was extra work more like a fun experience. **Her reading improved so much, she was reading road signs and shop signs while we were outside words she wouldn’t have heard.** Mary learned about authors of books and even now she is still interested in writing her own stories at home as a result.. (Facilitator) and (Facilitator) were fantastic at making everything fun for the children. Marys social skills really improved. It’s a fantastic thing the school offers the children and any child will benefit greatly from doing it.. thank you”

Teacher feedback

- “There are many positive changes evident in the children who attend the Doodle Den programme.”
- “Class teachers see **major improvements in literacy skills, reading, writing, oral communication, phonics, sight vocabulary, etc.**”
- “We’ve seen an overall improvement in the children’s **confidence and attitude to learning** since starting in Doodle Den”.
- “**As parents are included in the programme, they are feeling more equipped to help their children with their literacy skills**”.

“Doodle Den is a very important literacy programme in our school. As a class teacher of children in Senior Infants over the years and having previously been a doodle Den facilitator, I have witnessed the amazing progress children attending the programme make, **both academically and socially.** Children’s literacy skills (reading, word recognition, phonics, writing, oral language) really advance and interestingly so too does their **confidence in themselves and their abilities.** Parents have in the past noted positive changes in terms of having **more confidence to socialise and initiate conversations with their peers** and praised Doodle Den. It has become such a popular programme that demand often exceeds the places available.”