Evaluation of the Doodle Den Literacy Programme
Dataset summary guide

Background

This document provides a brief overview of the dataset pertaining to the evaluation of an after-school programme (*Doodle Den*) which aimed to promote literacy among children in Senior Infants (age 5 and 6 years). The programme is part of a wider 10-year strategy that began in 2003, led by the Childhood Development Initiative (CDI), which aimed to improve the health, safety and learning of children. The *Doodle Den* programme encompassed a balanced literacy framework in the sense that the main elements, within a given session, included a combination of various modalities of literacy instruction: phonics 'mini-lessons', sight vocabulary, shared reading, independent reading, shared writing, independent writing and comprehension. *Doodle Den* ran for 36 weeks throughout the normal school year, and involved 3 after-schools sessions (each lasting 1½ hours) per week. In addition, there were 3 family and 6 parental sessions.

Ethical approval

Ethical approval was granted by the Research Ethics Committee of the School of Education at Queen's University Belfast, ensuring that the study complied with the ethical standards set out by the American Education Research Association and the British Education Research Association (BERA, 2004).

Sample

The evaluation of *Doodle Den* utilised a 3-year rolling cohort randomised controlled trial design. The rolling cohort nature of the study means that the randomization was carried out in three consecutive calendar years and the cohorts combined at the end of the trial to produce a sample with sufficient size and study power to detect effects if they were present. The children were referred on the basis of literacy difficulties from 7 schools among their Senior Infant classes[1] and were individually randomly assigned within each of these schools. Each school contributed children to the intervention and control groups for each cohort and therefore there was an experimental balance. In short, the data is individually pupil randomised and clustered at school level. Overall, the trial had two arms i.e., children were randomly allocated to the intervention group (which received the programme), or the control group (which did not receive the programme). A total of 618 children were randomised to the intervention (n=309) and control conditions (n=309). Table 1 shows the number of pupils randomised at cohort and school levels.

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[1] One school (number 7) had small numbers of children. This creates an anonymity issue as it can lead to small identifiable cell sizes (<5). So children in this school have been re-labelled under School 1 in the data-set. The reason for labelling them under School 1 is that they attended the DD programme in the same delivery settings as School 1 children.

Table 1 shows School attended * Intervention group * Cohort Crosstabulation

Count				Intervention group		Total
Cohort				Control	Intervention	
1	School attended		1	33	34	67
			2	11	12	23
			3	14	15	29
			4	11	11	22
			5	15	15	30
			6	15	15	30
	Total			99	102	201
2	School attended		1	34	29	63
			2	10	12	22
			3	14	15	29
			4	16	15	31
			5	15	15	30
			6	15	15	30
	Total			104	101	205
3	School attended		1	31	31	62
			2	15	15	30
			3	15	15	30
			4	14	14	28
			5	16	16	32
			6	15	15	30
	Total			106	106	212
Total	School attended		1	98	94	192
			2	36	39	75
			3	43	45	88
			4	41	40	81
			5	46	46	92
			6	45	45	90
	Total			309	309	618

Measures

Table 2 displays the numbers of different respondents (pupils, teachers and parents) completing questionnaires at pre- and post-test.

Table 2: Number of questionnaires completed by children, teachers and parents at pre- and post-test

	Intervention group	Control group	Total
Child-completed measures			
Pre-test	269	262	531
Post-test	237	227	464
Teacher-completed measures			
Pre-test	249	232	481
Post-test	245	226	471
Parent-completed measures			
Pre-test	169	145	314
Post-test	113	84	197

Respondents in both groups completed a range of outcome measures (Table 3) at baseline and again at the end of the programme. These outcomes reflect the core aims and objectives of the programme and were agreed in conjunction with the implementation team.

Table 3: Summary of outcome variables and measurement

Source	Outcome	Measure	Mode	Summary of content
Child	**Reading ability**[1]	Drumcondra Reading test (Sheil, 2008); Cronbach's alpha=0.79	Test	Word recognition Picture recognition Sentence structure Word choice Reading ability
	Child attitudes to literacy	National Assessment of English ERC 2004 and National Literacy Trust; Cronbach's alpha=0.74	Self-complete questionnaire	
Teacher	**Child's general literacy ability**[1]	National Assessment of English ERC 2004 (adapted); Cronbach's alpha=0.94	Teacher-rated questionnaire	Perceptions of literacy ability
	Child ADHD-related behaviour	Attention Deficit Hyperactivity Disorder Rating Scale (DuPaul, 1991); Cronbach's alpha=0.96	Teacher-rated questionnaire	Concentration and behaviour in class
Parent	Child home literacy activity	Family Literacy Questionnaire (Saracho, 2000); Cronbach's alpha=0.94	Parent-rated questionnaire	Frequency of literacy activity in the home
	Child library activity	Family Literacy Questionnaire (Saracho, 2000); Cronbach's alpha=0.75	Parent-rated questionnaire	Frequency of library activity
	Child home reading activity	Family Literacy Questionnaire	Parent-rated questionnaire	Frequency of child reading activity at

		(Saracho, 2000); Cronbach's alpha=0.62		home
	Parent reading attitudes	Family Literacy Questionnaire (Saracho, 2000); Cronbach's alpha=0.65	Parent-rated questionnaire	Parent attitude to and enjoyment of reading
School	School attendance		School records	

[1]Primary outcome

Structure and content of the data file

The data file begins with a number of background and contextual variables, as follows:

Name	Label
Cohort:	Cohort number (1, 2 or 3);
ID:	Child unique ID number;
School ID:	School attended (1 through to 6);
DDGroup:	Delivery Setting (0=control, 1-7=delivery settings)
Group:	Intervention group (0=control, 1=intervention)
Dosage:	Number of sessions attended
Gender:	Child gender (1=male, 2=gender)
Ethnic:	Child member of ethnic background (1=yes, 2=no)
Attend_school:	Attendance at school (%)

The remaining variables are grouped in the following order (variable prefixes are shown in brackets):

• Child-completed tests/questionnaire (C)

Pre-test (CPre)

Name	Label
CPre_live:	Who does child live with?
CPre_own_car:	Does child's family own a car, van or truck?
CPre_own_bedroom:	Do you have your own bedroom for yourself?
CPre_hol_pastyr:	During the past 12 months, how many times did you travel away on holiday with your family?
CPre_comp_own:	How many computers does your family own?
CPre_ATT variables:	17 items relating to child literacy attitudes (5-point scale).
CPre_Word_recog variables:	15 items testing child word recognition (0=incorrect, 1=correct).
CPre_Comp2a_PR variables:	5 items testing child picture recognition (0=incorrect, 1=correct).
CPre_Comp2b_SS variables:	5 items testing child sentence structure (0=incorrect, 1=correct).
CPre_Comp2c_WC variables:	5 items testing child word choice (0=incorrect, 1=correct).
CPre_Books variables:	25 items testing child exposure to print (0=no, 1=yes).

Mid-test (CMid)

Name	Label
CMid_MCI variables:	20 items measuring child experience of Doodle Den using the My Classroom Inventory (5-point scale).

| CMid_CSQ variables: | 12 items measuring child experience of Doodle Den using the Client Satisfaction Questionnaire (5-point scale). |
| CMid_fac1/fac 2 variables: | 10 items measuring child feelings about the facilitator (5-point scale). |

Post-test (CPost)

Name	Label
CPost_ATT variables:	17 items relating to child literacy attitudes (5-point scale).
CPost_Word_recog variables:	15 items testing child word recognition (0=incorrect, 1=correct).
CPost_Comp2a_PR variables:	5 items testing child picture recognition (0=incorrect, 1=correct).
CPost_Comp2b_SS variables:	5 items testing child sentence structure (0=incorrect, 1=correct).
CPost_Comp2c_WC variables:	5 items testing child word choice (0=incorrect, 1=correct).
CPost_Books variables:	25 items testing child exposure to print (0=no, 1=yes).

• Parent-completed questionnaire (P)

Pre-test (PPre)
Name	Label
PPre_INFL variables:	8 items measuring Home Literacy Environment? (5-point scale).
PPre_READ variables:	17 items measuring child home reading activity.
PPre_BOOKS_Q4:	How many books are there in your home?
PPre_GAMES variables:	5 items measuring use of educational games at home (5-point scale).
PPre_LIB variables:	12 items measuring library activity.
PPre_EAL variables:	2 items measuring use of English as an Additional Language at home (1=another language only, 2=English and another language, 3=English only).
PPre_RES variables:	4 items measuring availability of learning resources in the home.
PPre_IT variables:	2 items measuring availability of computer and internet in the home.
PPre_WRI variables:	5 items measuring child writing activity in the home.
PPre_ATT variables:	7 items measuring parent attitudes to reading.
PPre_HOUSE variables:	13 items relating to familial socio-demographic characteristics, including parental education, employment, number of siblings and family income.

Post-test (PPost)
Name	Label
PPost_INFL variables:	8 items measuring Home Literacy Environment? (5-point scale).
PPost_READ variables:	17 items measuring child home reading activity.
PPost_BOOKS_Q4:	How many books are there in your home?
PPost_GAMES variables:	5 items measuring use of educational games at home (5-point scale).
PPost_LIB variables:	12 items measuring library activity.
PPost_EAL variables:	2 items measuring use of English as an Additional Language at home (1=another language only, 2=English and another language, 3=English only).
PPost_RES variables:	4 items measuring availability of learning resources in the home.
PPost_IT variables:	2 items measuring availability of computer and internet in the home.
PPost_WRI variables:	5 items measuring child writing activity in the home.
PPost_ATT variables:	7 items measuring parent attitudes to reading.
PPost_HOUSE variables:	13 items relating to familial socio-demographic characteristics, including parental education, employment, number of siblings and family income.

• Teacher-completed questionnaire (T)

Pre-test (TPre)

TPre_Q5a:	Is English spoken as the first language in the home?
TPre_Q7:	Where do you think this pupil would score on a nationally standardised test of English reading for Senior Infants' if the pupil was the sit the test now?
TPre_Q8:	How well supported was the child's literacy development in the home environment?
TPre_LIT variables:	8 items measuring child general literacy ability.
TPre_LIT variables:	14 items measuring child concentration and behaviour in class.

Post-test (TPost)

TPost_Q5a:	Is English spoken as the first language in the home?
TPost_Q7:	Where do you think this pupil would score on a nationally standardised test of English reading for Senior Infants' if the pupil was the sit the test now?
TPost_Q8:	How well supported was the child's literacy development in the home environment?
TPost_LIT variables:	8 items measuring child general literacy ability.
TPost_LIT variables:	14 items measuring child concentration and behaviour in class.

Derived variables are found at the end of the dataset:

Name	Label
CPre_Writing_ability:	Child pre-test: Writing ability score
CPost_Writing_ability:	Child post-test: Writing ability score
CPre_Literacy_attitude:	Child pre-test: Literacy attitude score
CPost_Literacy_attitude:	Child post-test: Literacy attitude score
CPre_Word_recog:	Child pre-test: Reading ability - Word Recognition score
CPost_Word_recog:	Child post-test: Reading ability - Word Recognition score
CPre_Picture_recog:	Child pre-test: Reading ability - Picture Recognition score
CPost_Picture_recog:	Child post-test: Reading ability - Picture Recognition score
CPre_Sentence_structure:	Child pre-test: Reading ability - Sentence Structure score
CPost_Sentence_structure:	Child post-test: Reading ability - Sentence Structure score
CPre_Word_choice:	Child pre-test: Reading ability - Word Choice score
CPost_Word_choice:	Child post-test: Reading ability - Word Choice score
CPre_Literacy_ability:	Child pre-test: Literacy ability score
CPost_Literacy_ability:	Child post-test: Literacy ability score
CPre_PrintExp:	Child pre-test: Exposure to print score
CPost_PrintExp:	Child post-test: Exposure to print score
CMid_MCI_score:	Child mid-test: My Classroom Inventory score
CMid_CSQ_score:	Child mid-test: Client Satisfaction Questionnaire score
CMid_Facil1:	Child mid-test: Child rating of facilitator 1
CMid_Facil2:	Child mid-test: Child rating of facilitator 2
PPre_Parent_influence:	Parent pre-test: Home Literacy Environment

PPost_Parent_influence:	Parent post-test: Home Literacy Environment
PPre_Child_read_at_home:	Parent pre-test: Child reading at home
PPost_Child_read_at_home:	Parent post-test: Child reading at home
PPre_Literacy_activity:	Parent pre-test: Literacy activity
PPost_Literacy_activity:	Parent post-test: Literacy activity
PPre_Library_activity:	Parent pre-test: Library activity
PPost_Library_activity:	Parent post-test: Library activity
PPre_Reading_attitude:	Parent pre-test: Parent reading attitudes
PPost_Reading_attitude:	Parent post-test: Parent reading attitudes
TPre_Literacy_ability:	Teacher pre-test: Rating of general literacy ability
TPost_Literacy_ability:	Teacher post-test: Rating of general literacy ability
TPre_ADHD_behaviours:	Teacher pre-test: Rating of ADHD-related behaviours
TPost_ADHD_behaviours:	Teacher post-test: Rating of ADHD-related behaviours