

*InDirect Learning (I D L)*

*Evaluation in Mainstream Settings*

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Margaret Duffy  
Senior Specialist Teacher  
Psychological Service

## **InDirect Learning (I D L)**

### **Evaluation in Mainstream Settings**

#### **Background**

The InDirect Learning computer system is available in a number of private centres throughout Britain and in several other countries. Tuition at these centres can be difficult to arrange and on to the child's school day and can also prove costly in terms of both time and money. The benefits of the system as presented in IDL Centres have been well researched and documented. As Clackmannanshire was the only authority in Britain to provide the same system, at no cost to pupils, in mainstream schools, it was necessary to ensure that pupils were making similar gains in reading and spelling as their Centre tutored counterparts.

#### **Implementation**

The InDirect Learning (IDL) computer system was introduced to Clackmannanshire in October 2001. An authority wide site licence was negotiated which would eventually allow the system to be introduced to all primary and secondary schools. The computer technicians undertook a planned programme of disk installation on stand-alone computers, which had a sound card, but were not linked to the networked systems. To date the system is available in 16 primary schools and 3 secondary schools.

#### **Costs**

In addition to the site licence there is an ongoing cost to provide the lessons via a 'dongle'. Typically the 'dongle' contains 200 lessons, and each lesson costs approximately 50p. Additional materials, which require to be purchased for each school, are the Operations Manual, Lesson Lists and keyboard stickers.

#### **Installation**

The system is relatively easy to install. When this has been carried out and the keyboard stickers and dongle are in place, a staff training session is arranged and carried out by the Specialist Teacher, Psychological Service. All Supervisory and Classroom Assistants currently working in the school are trained together in order to accommodate staff absences or changes in personnel. The training takes approximately 1 hour 15 minutes and staff are encouraged to have some additional hands on experience before introducing the pupil to the system. The system is not introduced to the pupil by the Specialist Teacher as it is intended that the programme be viewed as something the school is managing and implementing rather than an outside agency.

## **Assessment**

The Psychological Service will have assessed pupils who are selected to use this system. The nature and degree of difficulty is therefore well documented. A short assessment is carried out to determine the correct starting point on the programme. This is done using the Shonnel Spelling Test and Graded Word Reading Test from the Aston Index. The tests are available in all Primary Schools and can be administered by Support for Learning Teachers, or Pupil Support Co-ordinators.

## **Why might IDL work when many reading schemes and teaching methods used with these pupils have had limited success rates?**

There are three main components which, when combined, may provide an explanation. These are;

1. ***Use of colour.*** The background colour of the screen has been chosen by the pupil from a range of colour filters. Each line of print is in a different colour, which aids visual tracking. The individual keys are coloured to correspond with the coloured dots used for the fingertips for correct fingering.
2. ***Inclusion of kinaesthetic element.*** The typing practice included at the beginning of every lesson helps pupils establish a movement memory in the fingers.
3. ***Repeat reading.*** At the end of each lesson, the pupil reads aloud what has been typed on screen. The voice is recorded and played back immediately.

The inclusion of the kinaesthetic element provides an additional channel for children who have weaknesses in auditory or visual processing, or both. It is well known that hearing the sound of ones own voice is a very powerful reinforcement for reading and the use of colour also provides an extra stimulus for improving visual memory.

## **Evaluation**

Eighteen pupils who had been using IDL for a period of more than three months were re-assessed in October 2002. In addition to the actual reading and spelling ages being recorded, pupils were asked to provide their own views on the system. The Supervisory Assistants were also asked to say how they viewed the system and whether they felt it was benefiting their pupils. The Supervisory Assistants will usually have worked with these pupils using other methods of teaching reading and spelling and therefore they are in an ideal position to provide an evaluation.

A selection of comments from pupils and Supervisory Assistants is attached. In order to preserve confidentiality, each pupil has been given a reference number. The information gathered included;

***Chronological age at start of programme and at date of re-test***

***Reading and spelling ages at start and at date of re-test***

***Number of lessons completed***

***Length of period of tuition***

***Gains made in reading and spelling in months.***

This information is tabled in the Appendix.

*Note: period length refers to tuition time in school/establishment excluding holidays.*

### **Analysis**

- Student ages range from 7y2m, to adult.
- Establishments include Primary and Secondary schools, Further Education and primary and secondary behaviour support centres.
- Half of the pupils had reading and spelling ages between 6 and 7 years. The remainder were recording scores at 7 to 8 years.
- All pupils gained in both reading and spelling age.
- 50% pupils showed greater gains in reading than in spelling
- 33↓% showed greater gains in spelling
- 16°% achieved exactly the same gains in reading and spelling.
- Total gains in reading = 190 months
- Total gains in spelling = 173 months
- Average gains in reading = 10 months
- Average gains in spelling = 9 months
- **Average gains in reading per month on programme = 6 weeks.**
- **Average gains in spelling per month on programme = 5 weeks.**

## **SUMMARY**

The system has been tested to the full as the pupils chosen to undertake this programme are those whose difficulties have proved most resistant to traditional methods. The rate of gains pupils have achieved is certainly greater than they would have been expected to achieve prior to this system being introduced. The pupil comments and those of the Supervisory assistants indicate that pupils are not only achieving greater success but are also enjoying the whole experience. Gains in pupil confidence and self esteem are not easily measured, however these are also a feature of early success on the programme. It is in this area that improvements are very often commented upon by parents and by class teachers.

There is an ongoing cost to maintaining access to this programme across all Primary and Secondary schools. The costs to society of large numbers of young people failing to learn to read and spell would however be considerably greater. Within Clackmannanshire we are committed to securing the funding to allow this programme to continue to be available to all who would be expected to benefit from it.

Note;

There are now 45 pupils in Clackmannanshire using the system on a regular basis. (January 2003)

## IDL EVALUATION

Name	School	IDL Started	C.A.	R.A.	S.A.	Lessons completed	C.A.	R.A.	S.A.	Gains R.A.	Gains S.A.	Pd.
1	Coalsnaughton Primary School	25.01.02	9y	6y 11m	6y 4m	65	9y 8m	8y 1m	7y 1m	+14m	+9m	8m
2	Alloa Academy	Nov 2001	12y 10m	7y 3m	7y 4m	98	13y 11m	8y 10m	8y 2m	+19m	+10m	12m
3	Strathdevon Primary School	March 2002	7y 2m	6y 11m	6y 8m	19	7y 10m	7y 5m	7y 3m	+9m	+7m	5m
4	Strathdevon Primary School	March 2002	7y 4m	6y 8m	6y 4m	17	7y 11m	7y 9m	7y 7m	+13m	+15m	5m
5	St John's Primary School	February 2002	9y 2m	7y	7y	174	9y 10m	7y 4m	7y 3m	+4m	+3m	5m
6	Clackmannan Primary School	15.05.01	9y 10m	6y	6y	134	11y 1m	7y 7m	7y 6m	+19m	+18m	14m
7	Clackmannan Primary School	May 2001	8y 4m	6y 3m	5 11m	167	10y 8m	7y 1m	6y 7m	+10m	+8m	15m
8	Alva Academy	October 2001	12y 6m	7y 2m	6y 6m	102	13y 6m	8y 2m	8y	+12m	+18m	12m
9	Park Primary School	May 2002	8y 6m	6y	5y 11m	29	8y 11m	6y4m	6y 7m	+4m	+8m	4m
10	Park Primary School	May 2002	8y 11m	7y 10m	7y 1m	37	9y 4m	9y	8y 7m	+14m	+18m	4m
11	Clackmannan College	13.06.02	Adult	6y	6y	51	Adult	7y 9m	7y 8m	+21m	+20m	4m
12	St Bernadette's Primary School		8y 8m	7y 1m	6y 8m	18	9y	7y 3m	6y 10m	+2m	+2m	4m
13	SSSS	September 2001	12y 5m	8y	7y 8m	113	13y 6m	9y 9m	8y 4m	+21m	+8m	13m

<b>Name</b>	<b>School</b>	<b>IDL Started</b>	<b>C.A.</b>	<b>R.A.</b>	<b>S.A.</b>	<b>Lessons completed</b>	<b>C.A.</b>	<b>R.A.</b>	<b>S.A.</b>	<b>Gains R.A.</b>	<b>Gains S.A.</b>	<b>P'</b>
14	Lornshill Academy	May 2002	11y 11m,	7y 9m	7y 5m	20	13y 1m	8y	8y	+3m	+7m	3m
15	Abercromby Primary School	May 2002	8y 10m	7y 6m	7y 5m	16	9y 4m	8y 1m	8y 3m	+7m	+10m	4m
16	Abercromby Primary School	May 2002	8y 10m	7y 4m	6y 7m	15	9y 3m	7y 7m	7y 1m	+3m	+6m	4m
17	Abercromby Primary School	April 2002	10y 10m	6y 4m	6y 7m	18	11y 2m	7y 4m	6y 9m	+12m	+2m	4m
18	Abercromby Primary School	December 2001	8y 2m	7y 3m	6y 8m	36	8y 10m	7y 7m	7y	+4m	+4m	8m

A's keyboard skills are excellent and she enjoys the lessons.

The programme has helped J with his reading and spelling. There is a definite improvement in his class work and confidence.

L enjoys recording the lesson at the end and listening to the playback.

I was amazed at how E's typing speed increased after only a few lessons.

### Supervisory Assistant Comments

It is great to see S's confidence and self esteem increase with every lesson.

I think there have been huge benefits. A still enjoys using it after 14 months.

**It's a good system. Children get a lot out of it. I think it improves concentration and confidence in reading aloud.**

Very efficient and structured.  
Focuses students.  
Mind calming effect.

Adult Tutor

It had definitely helped B. Sounds are reinforced, memory is improving also spelling. I can see a big difference in attitude and confidence.

Typing and keyboard recognition are slowly improving. Reading is definitely improving

G is really keen to use it. He always knows when it is time for his lesson and comes looking for me.

I like reading it out because you get to hear your voice

Sheila aged 10

I like hearing myself say the words and I like Beetle Run and the Memory Game.

Sean aged 10

I can read car magazine now. It can still be difficult but I can get the information I need. I want to carry on using it.

Aaron aged 15

It's good. I get most of it right and the lady always says I was very good.

Logan aged 6

It's easy to use. Beetle Run is best game. I am at level 16.

Pupil comments on IDL.

It was hard for me in the beginning but now I think it's brilliant.

Margaret Adult

Barry aged 11

I think it's helping my touch-typing and my reading. It's incredible!

I like it because it's fun doing it and I think it's helping me.

John aged 8

It helps me to read and spell and I like the games. Beetle Run is the best game.

Lisa aged 8

I like it. It's easy to use. They give you lots of letters and it helps you do your work.

Stuart aged 7