

Interview for Error Analysis

Interviewing Children with Learning Difficulties in Maths Children with learning difficulties often find it difficult to explain how they got an answer after completing a problem. Using the 'Talk Me Through' approach when interviewing for Error Analysis allows the teacher to hear, as well as see, the child's errors. This type of assessment encourages the child to verbalise the procedure or 'Think Aloud'.

Starting point for the Interview

Choose the appropriate starting point by identifying an example of an apparent area of difficulty from the child's previous work: child's copy, standardised test booklet or referring to class grid of results (www.pdds.ie/maths.htm).

Begin the interview with the example identified, or a similar example. Continue with other examples, gradually introducing simpler questions or problems until you have obtained sufficient information to plan a Learning Programme.

Before the Interview

- **Talk to child;** 'Do you like maths?', 'What part do you like best?'
- **Explain what you are doing...**

I'm going to ask you to '**Talk Me Through**' some maths questions so that your teacher and I will know which areas you are good at, and which ways we can help you in maths. I'm using the tape recorder, to help me remember later, what we've talked about.

During the Interview

- **Take note of child's behaviour during the test**
Does s/he appear confident? Does the child appear nervous/ stressed? Does there appear to be a fear of failure? Does the child show due concern for accuracy?
- **Notice what s/he has understood and what s/he can do;**
Observe strengths, strategies the child is using; Is s/he using the correct language? Is the language consistent? Does s/he show an understanding of underlying concepts e.g. place value for computation? Does the child self-correct? Does the child use Estimation?

Remember you are observing not teaching, allow the child to make errors, these will provide the information needed to plan teaching goals **Note errors** **Record all information.**

After the Interview

Summarise findings Discuss outcome with the Class Teacher

Prioritise learning needs, set appropriate learning targets, and decide on appropriate learning programme including strategies for use by Class Teacher and Learning Support Teacher. Decide on appropriate ideas for support at home. Inform the child of the targets/ goals and areas to practice.

Example: John 3rd Class Individual Profile and Learning Programme

Priority Learning Needs

- Place Value
- Subtraction with renaming

Learning Targets for the Period	Date Achieved
That John will • write down any 2 or 3 digit number correctly when dictated by Teacher • talk through a subtraction with renaming problem accurately, using consistent language for example always starting at the top and saying 'Take' on three different occasions	
Learning Support Activities -Learning Support Teacher Place Value activities: Placing Base Ten Blocks on H T U place value mats, or notation boards. Using euro money stencils and abacus. Writing numbers on blackboard when dictated. Using Base Ten Blocks, add 2, 20 and 200 to '3', then write the number. Using Transition Boards, 'Talk through/ think aloud' examples of subtraction with renaming, Teacher models, then guides, leading to independent work. Incorporate real life situations for subtraction.	
Learning Support Activities –Class Teacher Whole Class: Regular activities in Estimation, whole class and group work...predict an appropriate or relevant answer before each calculation. Mental and Oral Maths; Place Value e.g. add 2, 20 and 200 to '3'. Teacher model 'thinking aloud' while completing subtraction work on blackboard. Individual: Teacher listens to John 'talk through' a subtraction sum 3 to 5 times during each week.	
Learning Support Activities – Home Listen to John talk through a subtraction sum each evening. Ask John to write down some three digit numbers each evening.	

Suggested Further Reading:

Primary School Curriculum, 1999, Mathematics Curriculum, Assessment p 115 – 121.

Dockrell J. and Mc Shane J (1992) Children's Learning Difficulties – A Cognitive Approach .

Blackwell. Ginsburg H., Jacobs S., Lopez L., (1998) The Teacher's Guide to Flexible Interviewing in the Classroom, Learning What Children Know About Math ISBN 0205265677

Peter Westwood Commonsense Methods for Children with Special Educational Needs ISBN 0-415-29849-0

John A Van de Valle Elementary and Middle School Mathematics ISBN 0-205-49396-3