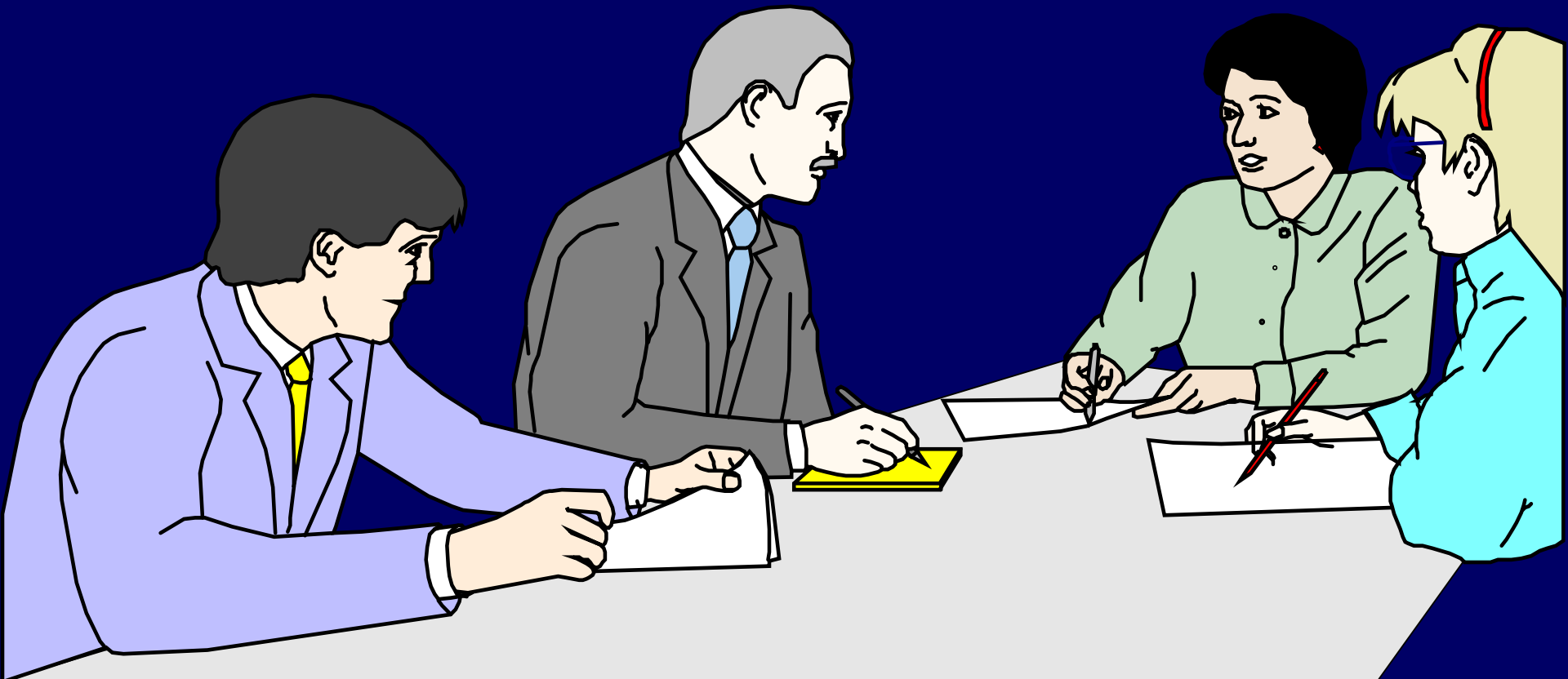


Case Management

A Model for Consultation and Collaboration



References

- Beaglehole R, Bonita R and Kjellstrom T 1993. *Basic Epidemiology*. Geneva, World Health Organization.
- Burt Sir C 1965. *The Backward Child*. London, University of London Press.
- Howell K W, Fox S L and Morehead M K 1993. *Curriculum-Based Evaluation. Teaching and Decision Making*. California, Brooks/Cole Publishing Company.
- Kavale K A and Forness S R 2000. What Definitions of Learning Disability Say and Don't Say. A Critical Analysis. *Journal of Learning Disabilities*, 33 (3), May/June, 239-256.
- Monroe M 1932. *Children Who Cannot Read*. Chicago, University of Chicago Press.
- Rothman K J and Greenland S with 15 contributors 1998. *Modern Epidemiology Second Edition*. Philadelphia, Lippincott – Raven Publishers.
- Westwood P 1994. *Learning Difficulties: Some background information*. Unpublished lecture notes for students at Flinders University, Adelaide.
- Wedell K (ed) 1975. *Orientations in Special Education*. UK, John Wiley & Sons.

Introductions

- Myself as teacher and researcher
- Participants: teacher; tutor; parent; researcher
- Focus of my research
- The outline of this workshop:
 - Presentation: use of a medical model to understand learning difficulties
 - Discussion and questions
 - Presentation: case management for consultation and collaboration
 - Discussion and questions
 - Concluding remarks

(Note: This slide presentation will be available on the web)

What is the Question?

- The teacher practitioner asks: “How do I help this child?”
- The researcher asks “What is the problem?”
- The teacher seeks knowledge for action in a particular case
- The researcher seeks to understand the issue

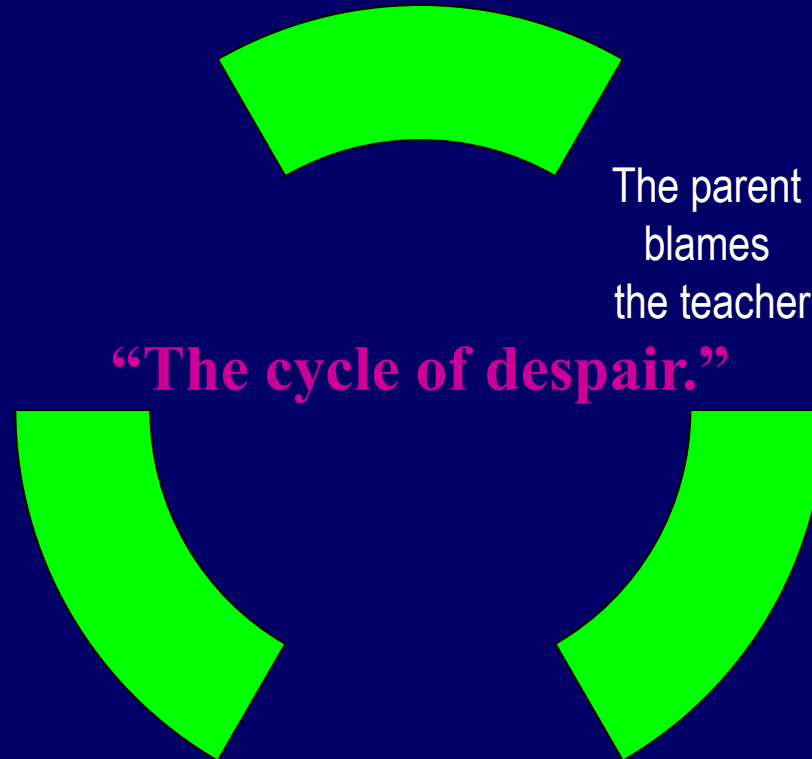
What is the Question?

Whose fault is it?

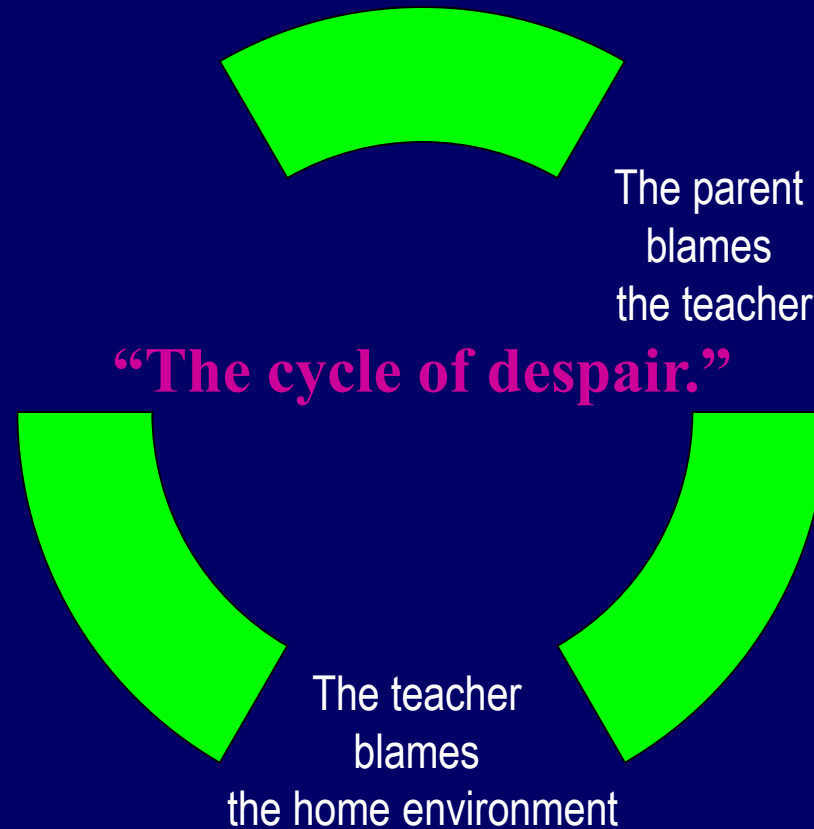
The Cycle of Blame: School Level



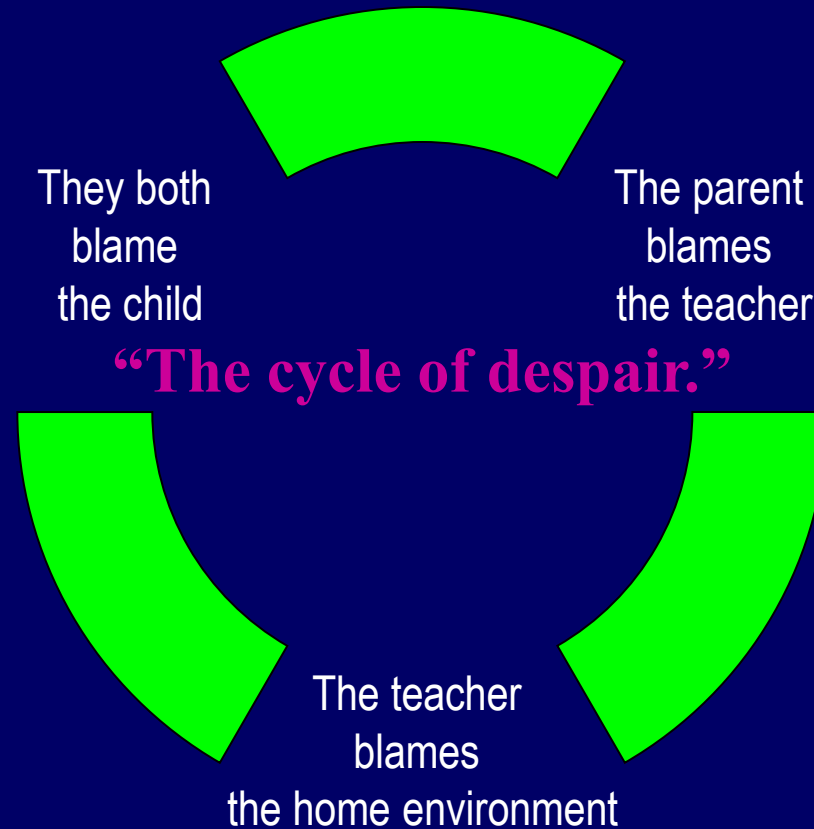
The Cycle of Blame: School Level



The Cycle of Blame: School Level



The Cycle of Blame: School Level



What is the Question?

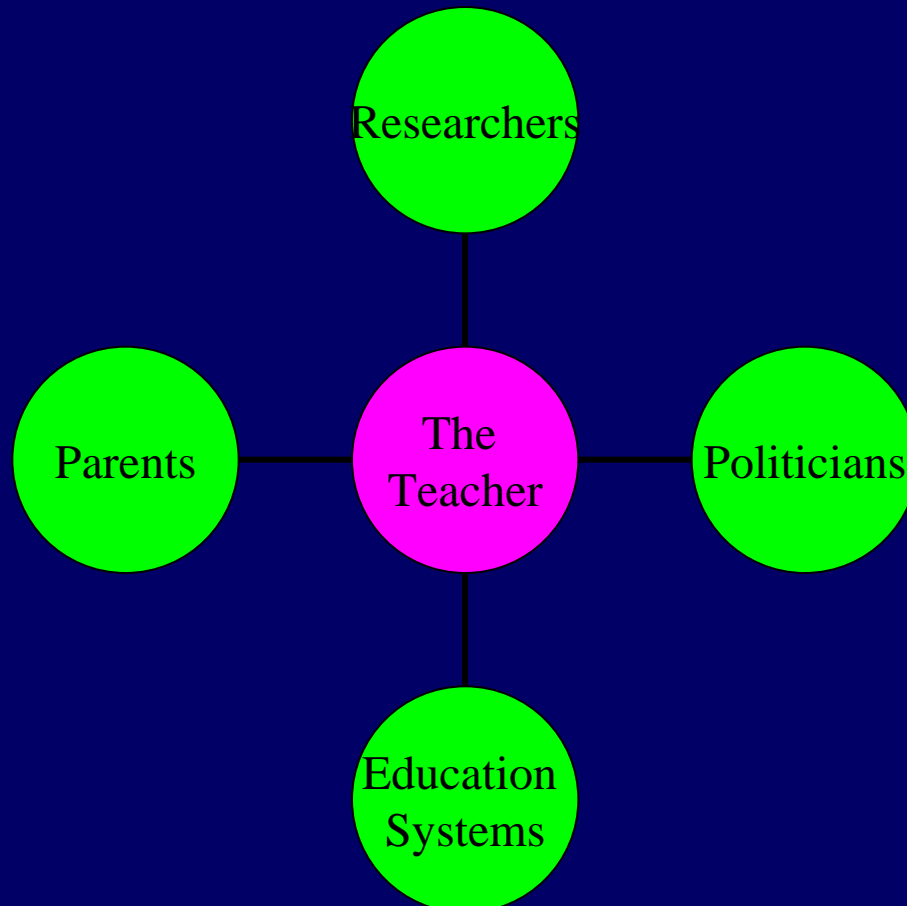
What causes learning difficulties?

If we know the cause then it is possible to know what can affect the outcome and purposeful interventions can be planned.

What is the cause of learning difficulties?

- The locus of “blame” has shifted from *within-child* factors
- The focus was moved to *environmental* factors . . . but still the blame had to allocated . . .

The Community “Cycle of Blame” about learning difficulties



What is the cause of learning difficulties?

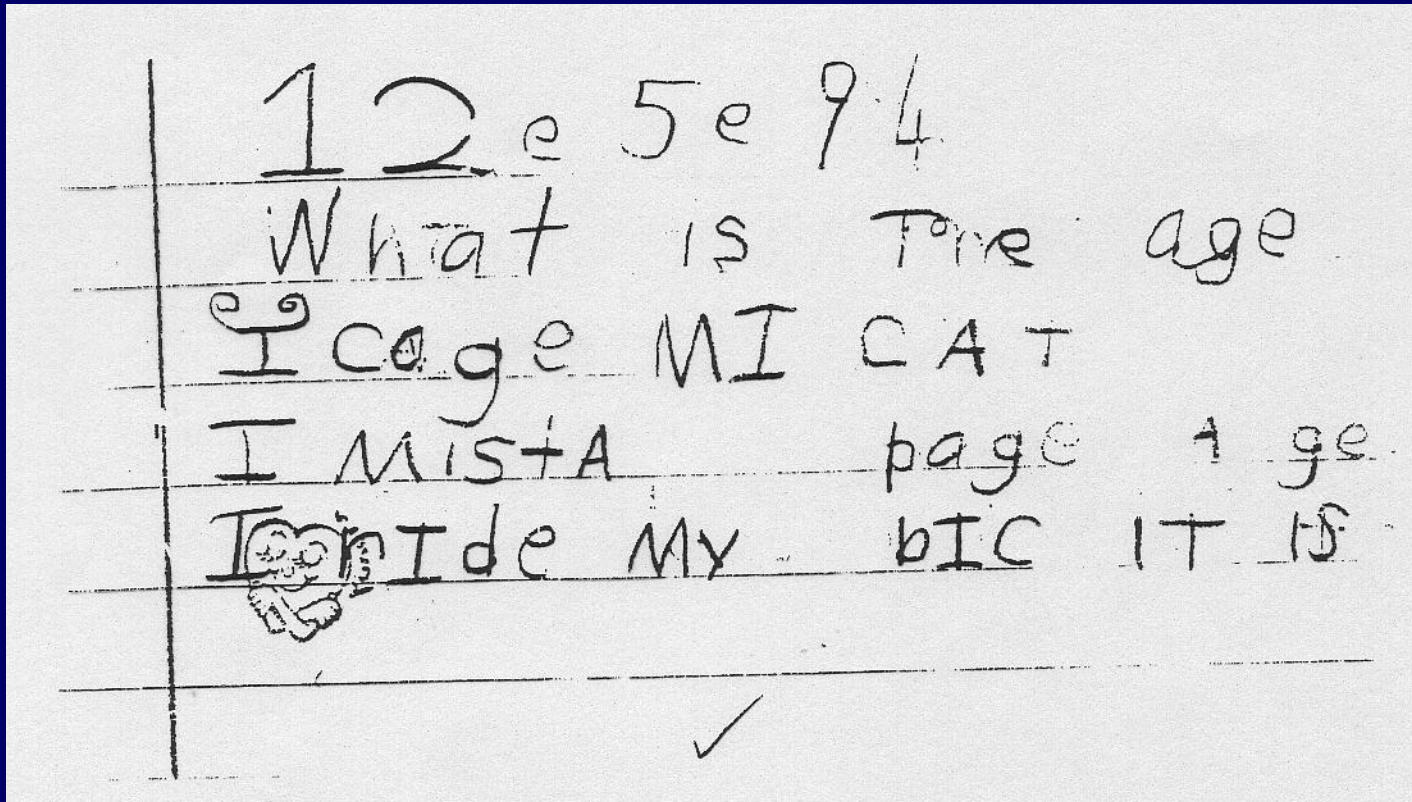
We need to step out of the 'blame' cycle and develop ways of collaborating for the benefit of those who struggle with learning difficulties.

We need to develop a view of cause and effect that allows for the complexity of human beings and learning.

My Research

- Arose from my classroom teaching experiences
- Was focused on answering a question:
*“ Why is it that, for no readily obvious reason ,
some children struggle with learning to read and write?”*
- Began with a series of individual case studies
- Was followed by a project researching the relationship between visual function and reading
- Evolved into a more comprehensive exploration of a “multiple factor” explanation using an epidemiological perspective

First hint of an answer -



3 months later with glasses and after exercises -

11.8.94
When I go to my
friend's house. I am
hoping to be very good to
my Auntie Rō. And she
is the best Auntie in
the world. The end!
How!

My Research

When researching the relationship between visual function and reading . . .

The correlations between the vision screening and reading were not as strong as I had expected and differed from the earlier case studies.

Epidemiology

In epidemiology:

no event has a single agent as the cause

(Rothman and Greenland 1998, p13).

This is not a new idea in regard to learning difficulties but it has not been applied to research into the causal factors of learning difficulties.

Monroe: “A Constellation of Causal Factors”

In 1932 Monroe wrote about the possibility of a multifactorial cause when she suggested that

It is probable that the reading deficit is caused by a constellation of factors rather than by one isolated factor.

And

The reading defect may result in those cases in which the number or strength of the impeding factors is greater than the number or strength of the facilitating factors.

(Monroe 1932 p110)

Sir Cyril Burt : “ Plurality of causes”

Educational backwardness has no one specific cause.

It is merely a superficial symptom, a complex resultant attributable to a variety, and usually to a multiplicity, of alternative and converging influences.

It is this plurality of causes that stultifies our simple rough-and-ready remedies.

It is not the last straw, but the accumulation of straws, that breaks the camel's back. We must unload every one.

(Burt Sir Cyril 1961, p109.)

Westwood: “All the possible factors?”

Again, this time in 1994, Westwood wrote that

It is seldom that a single cause can be found to account for a child’s failure to learn. An ecological perspective on learning difficulties moves away from asking ‘What’s wrong with this student?’ to asking ‘What are all the possible factors which are contributing to the child’s difficulties?’

(Westwood 1994, p3)

Using a medical model for research

In 1975 Yule recognised the possible application of epidemiology to the study of learning difficulties when she said that:

Strangely, despite the pioneering work of Burt (1925, 1937), the epidemiological approach has rarely been applied in the area of educational disorders

(Yule in Wedell, 1975, p18.)

Issues with Research into Learning Difficulties

And yet again in 2000 Kavale and Forness point out that:

The difficulty thus appears to be in delineating the effects of any single deficit upon performance . . .

and that

A new perspective is required if there is to be any hope of resolving a long-standing and vexing problem.

(Kavale and Forness 2000, p242, 245)

Epidemiology

...is the study of the distribution and determinants of health-related states or events in specified populations,

and

the application of this study to the control of health problems.

Reference: Beaglehole R, Bonita R and Kjellstrom T 1993. *Basic Epidemiology*.
Geneva, World Health Organisation.

An epidemiological study of learning difficulties would involve -

- Determining the distribution of learning difficulties in school populations (16-20%)
- Defining the determinants (causal factors) of learning difficulties
- The application of this knowledge to the control of learning difficulties

Causation

..... is more commonly the result of an interaction between genetic and environmental factors.

..... environment is defined broadly to include any biological, chemical, physical, psychological or other factors that can affect health.

Ref: Beaglehole R, Bonita R and Kjellstrom T 1993. *Basic Epidemiology*. Geneva, World Health Organisation.

Causation

A cause of a disease event is **an event, condition or characteristic that preceded** the disease event and without which the disease event either would not have occurred at all or would not have occurred until some later time.

What event, condition or characteristic could be considered to precede the development of learning difficulties in literacy and thus be identified as possible contributing factors?

Task Analysis:

The idea behind task analysis is that a student must learn the components of a task in order to learn the task. Teachers using task analysis attempt to identify these components and to test the student's knowledge of them in order to decide what a student needs to be taught.

(Howell, Fox and Morehead, 1993, p46)

What is involved in the reading process?

Reading: Developmental Perspectives

Predisposing Factors (Genetic):

- Reasoning ability
- Memory
- Auditory acuity
- Visual acuity

Reading: Developmental Perspectives

Early Learning (Home):

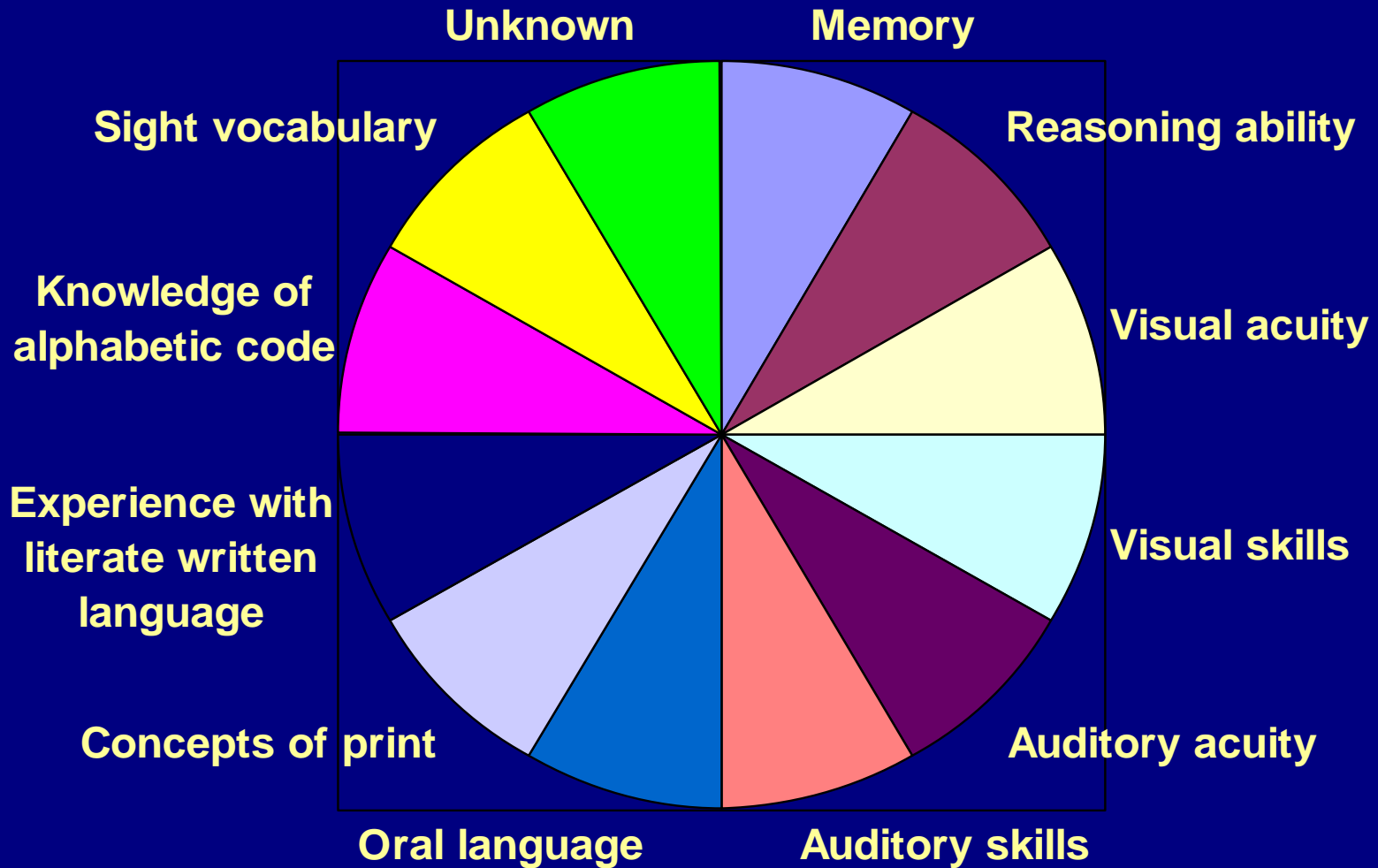
- Oral language
- Visual skills
- Concepts of print
- Auditory discrimination

Reading: Developmental Perspectives

Education (Schooling):

- The alphabetic code
 - sound/symbol
 - spelling rules
- Auditory blending and segmenting skills
- Visual skills, including left-to-right scanning
- Sight vocabulary
- Decoding skills
 - picture clues
 - context
 - 'chunking' (syllables, morphemes or phonemes)

Factors in reading . . .



Writing

Uses more sensory systems than reading.

Not only:

- Vision (Seeing)
- Audition (Hearing)

But also:

- Proprioception (Body awareness)
- Vestibular (Movement)

And:

- Sensory-motor development and sensory integration

Sensory Motor Development and Integration

- Postural security
- Left/right awareness
- Motor planning
- Eye-hand coordination
- Fine motor skills (Handwriting/writing)

Writing is a Graphological skill and requires:

Knowledge of correct letter formation

Accuracy → Mastery → Automaticity

Knowledge of conventions

Flow of written language (L→R, Top→Bottom)

Spelling

Punctuation

Grammar eg word order, subject/verb agreement, use of pronouns etc.

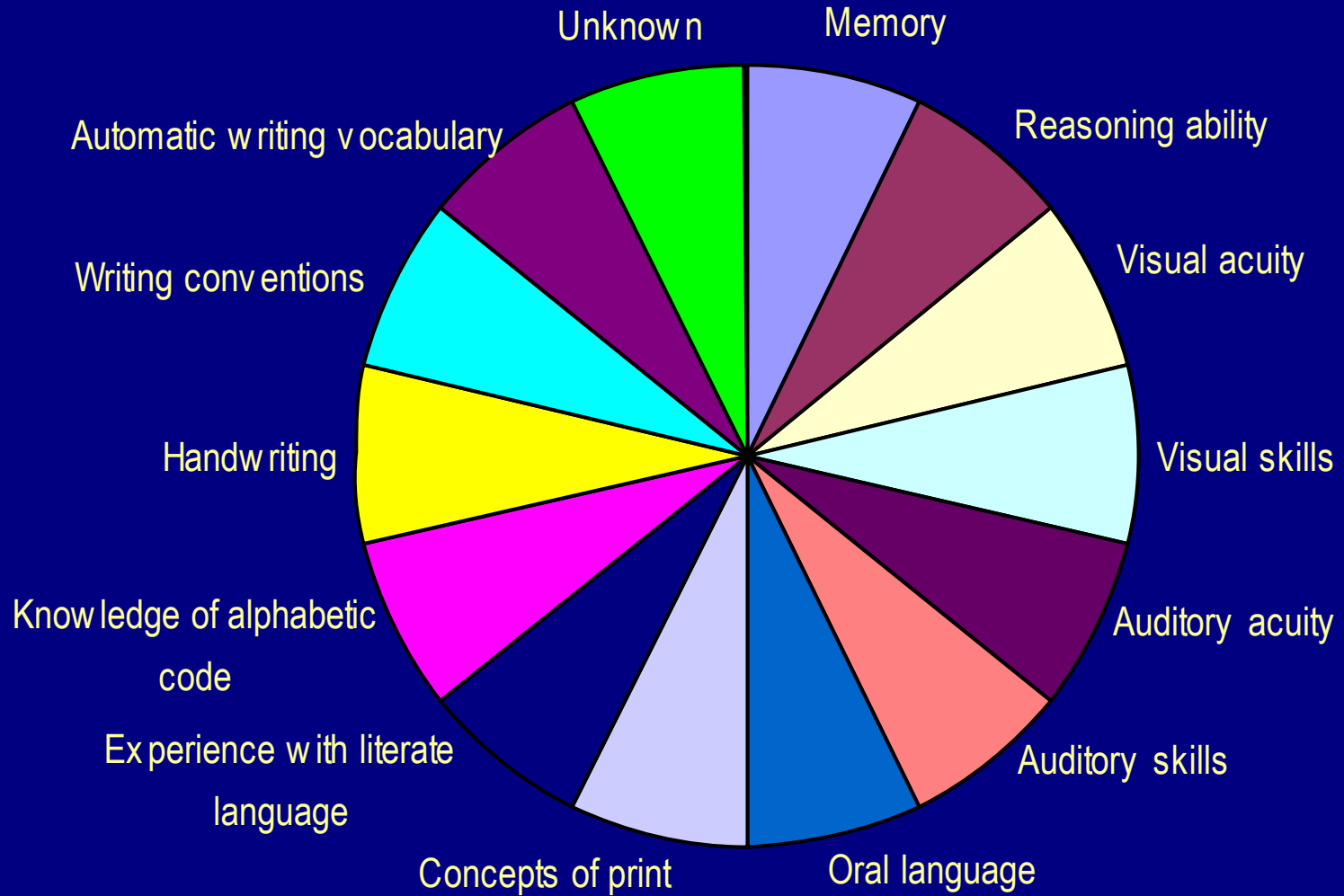
Writing presumes a message or purpose . . .

Personal experience

- Oral language or vocabulary
- Syntactic knowledge (of literate, written language)
- Knowledge of writing forms (Genres)
- Purpose or idea - Creativity?

The pragmatic view taken in epidemiology means that the primary focus is on those factors that can be most easily influenced. . .

Factors in Writing



Research Results

| Number of Factors Identified | Students in 90 th – 100 th Percentile | Students in 0 – 10 th Percentile |
|------------------------------|-------------------------------------------------------------|---------------------------------------------|
| 0 | 6 | |
| 1 | 4 | |
| 2 | 2 | 1 |
| 3 | | 6 |
| 4 | | 4 |
| 5 | | 2 |
| 6 | | |
| Total number of students | 12 | 13 |

Table 1

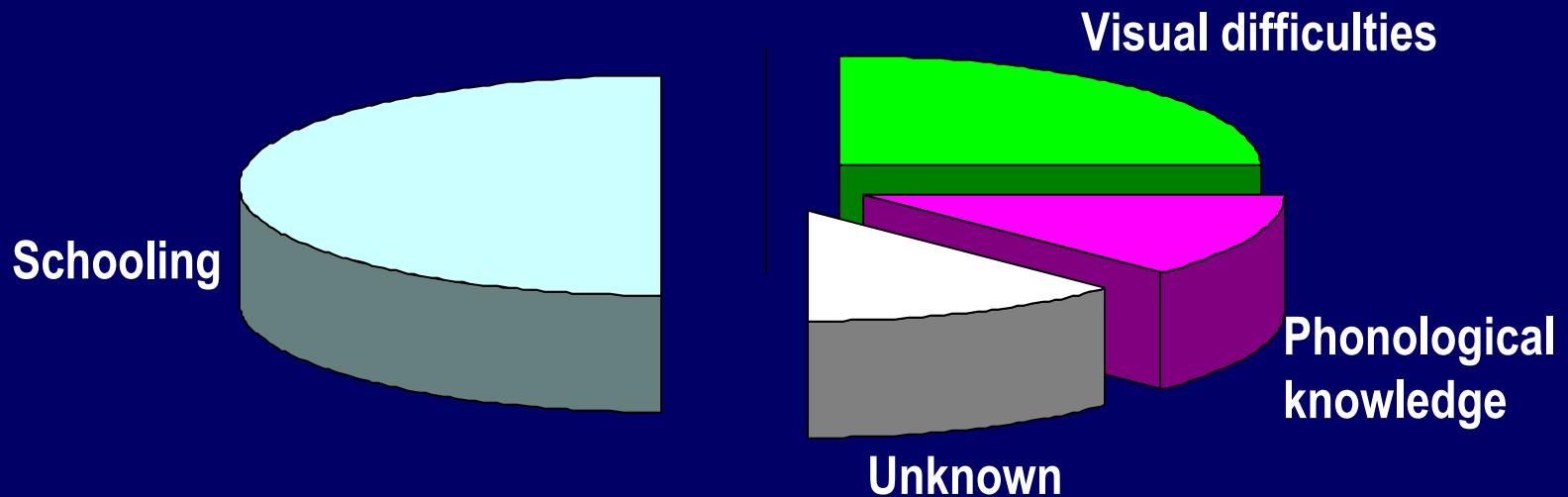
Research Results

| Factor | Students in 90 th – 100 th Percentile | Students in 0 – 10 th Percentile |
|--------------------------------------------|-------------------------------------------------------------|---------------------------------------------|
| Oral language | 1 | 7 |
| Reasoning | 0 | 7 |
| Vision | 4 | 13 |
| Auditory discrimination of sounds in words | 2 | 6 |
| Blending | 0 | 6 |
| Knowledge of sounds of the alphabet | 1 | 7 |

Table 2

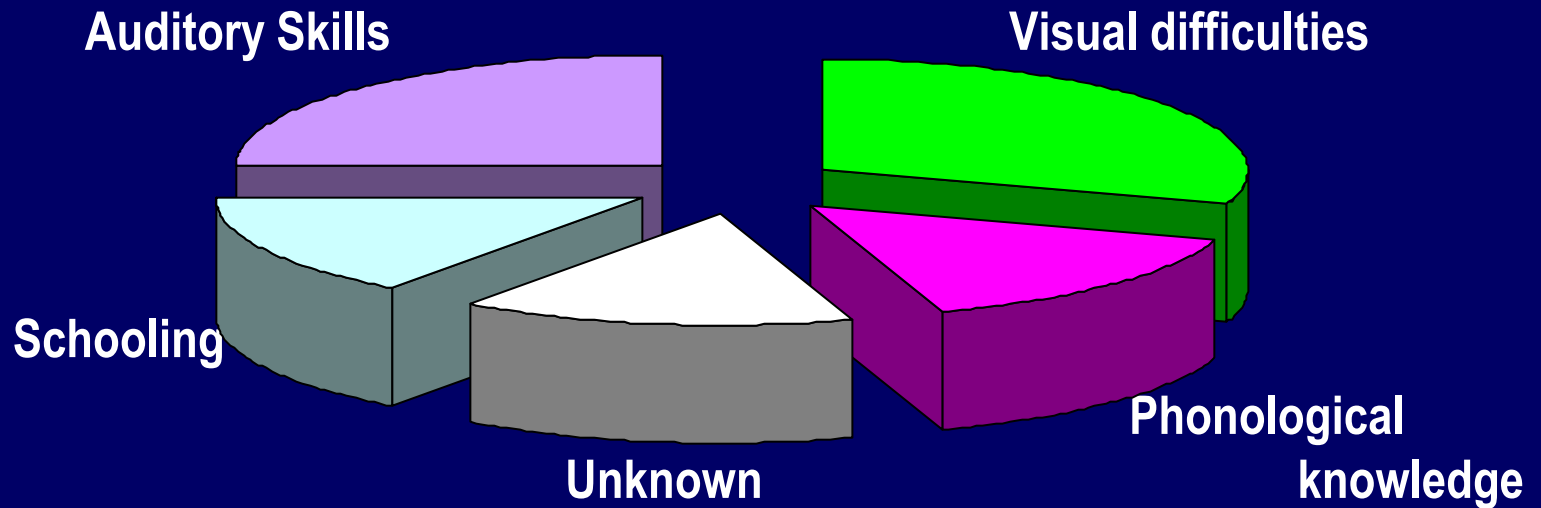
Learning Difficulties in Literacy

A Case Study



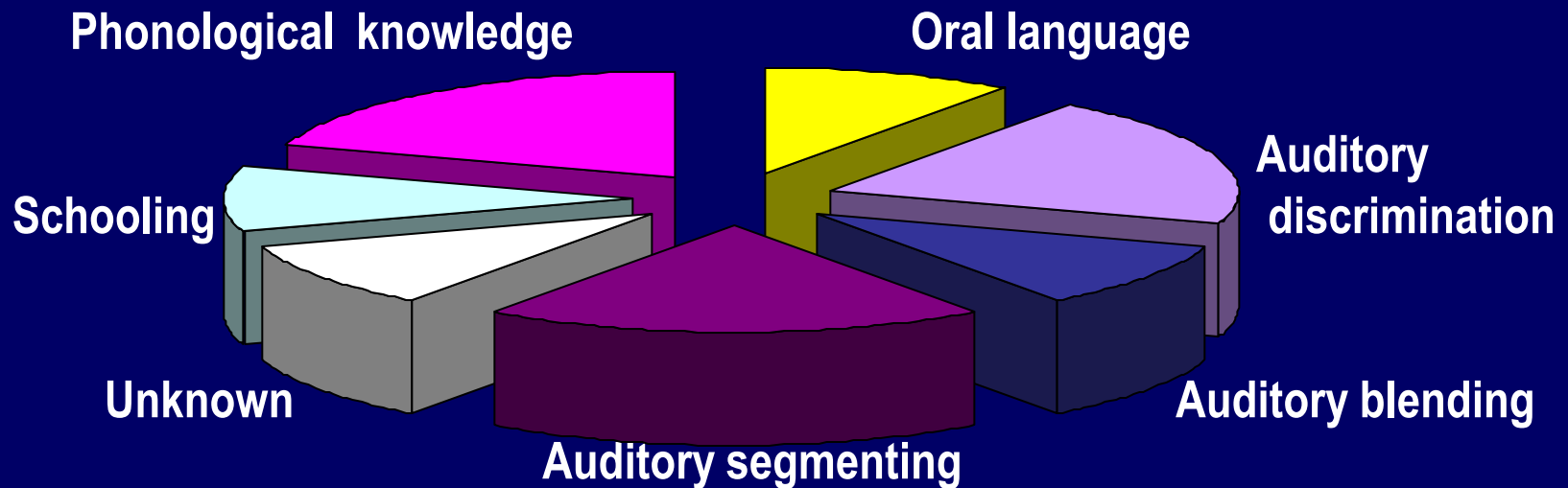
Learning Difficulties in Literacy

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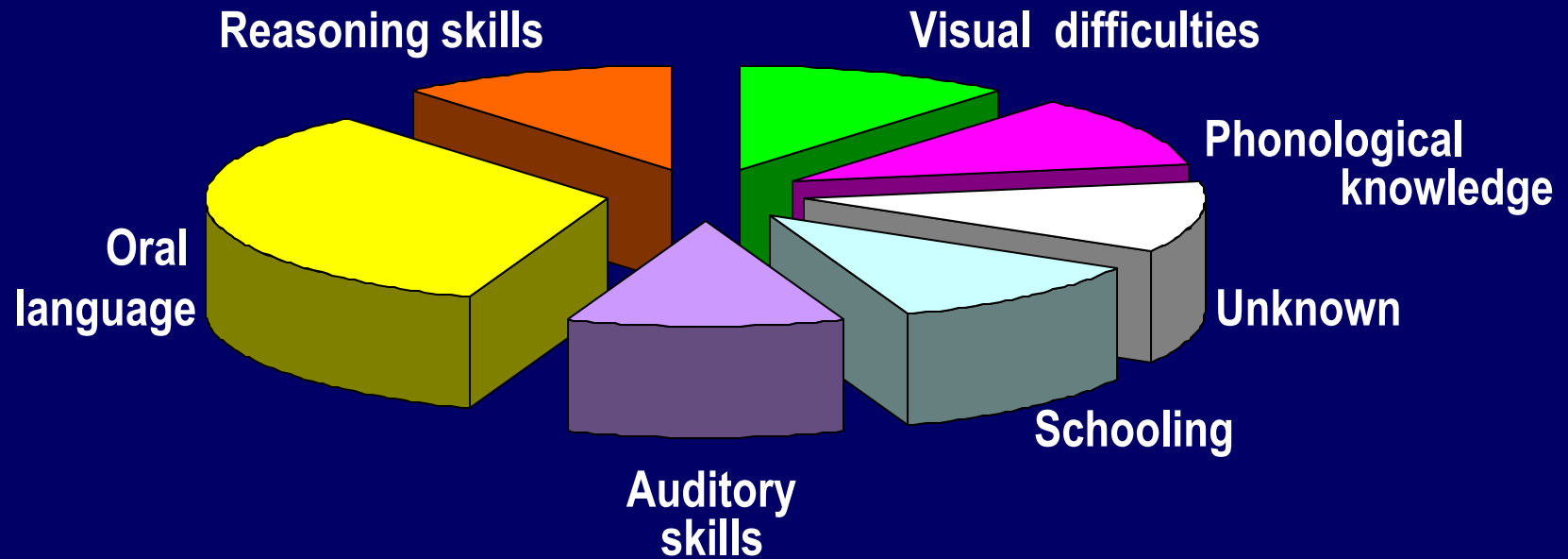
Learning Difficulties in Literacy

A Case Study



Learning Difficulties in Literacy

A Case Study



An Epidemiological Perspective recognises:

- Causation is both biological and environmental
- There may be relationships between the causal factors
- Causal factors can differ in affected individuals
- There may be unknown or unidentified factors

It allows:

- Newly identified factors to be easily included in the possible constellation of causal factors
- Teachers to act even in the light of incomplete or imperfect knowledge
- Action to be seen as prevention or management rather than cure

Discussion and Questions

Teachers need to Act

- School systems want to know what to do as a general policy or strategy
- Teachers want to know what to do for this particular child or group of children
- Even in the light of incomplete or imperfect knowledge teachers are required to act

A Medical Model for Educational Research

The Epidemiological Research Perspective:

- Causation is researched as a constellation of interacting factors
- Provides useful research and data management strategies for biologic research

Medical Practice and Educational Practice

- Epidemiological research can provide answers about causation and the effect of interventions in open systems where people are acting or behaving
- Epidemiological findings can guide practice: “The science and art of using imperfect and often scanty evidence as an input to decision-making”
- Medical research is used to guide actions at the macro level of governance
- Medical research is used to guide the general practitioner in their Individual case management
- Can we position the teacher as the GP of learning difficulties? What would this mean?

Case Management: The General Practitioner

- Presenting problem
- History
- Investigate: questions, observations, samples and tests
- Prescription and/or Referrals (including GP to Physician)
- On-going management

Teachers as GPs or 'Physicians' of Learning Difficulties

- What is the role of the Teacher/Specialist Teacher in the case management of children with learning difficulties?
- Who manages negotiated education plans?
- Who 'manages' a child with learning difficulties?
 - Teacher?
 - Specialist teacher or school principal?
 - Tutor?
 - School assistant?
 - Parent?

Teaching Practitioner as Case Manager

- Presenting problem
- History
- Investigate: questions, observations, samples and tests
- **Prescription and/or Referrals** (including teaching specialists and outside professionals)
- **On-going management**

Sir Jim Rose

“We need the diagnostics to pick up the sub-skills or which sub-skill is missing.”

Even pre-service teachers can undertake a case study if given some guidance . . .

Case Study Investigations

- The starting points for assessment:
- Oral language
- Visual function
- Auditory function
 - *Discrimination*
 - *Phonemic awareness (Including rhyme)*
 - *Auditory skills (blending and segmenting)*
- Knowledge of the alphabetic code
 - *Alphabet*
 - *Consonant and vowel digraphs*

CASE STUDY CHECKLIST

1. BASIC INFORMATION IS RECORDED

- First name (not family name)
- Year level
- Date of birth (Used to establish chronological age - CA - at time of assessment)
- Every assessment and anecdotal record is dated (and signed?)

2. ORAL LANGUAGE ASSESSMENTS

- Receptive AND expressive language checklists must be completed
- Anecdotal records of oral language should be kept as examples

3. AUDITORY ASSESSMENTS

- Observation checklist for auditory difficulties completed
(Used on several occasions in different situations and at different times)
- *Auditory discrimination assessment completed*
- *Years R-1 Phonological Awareness (an auditory skill)*
- *Years 2-7 Phonemic blending and segmenting*

4. VISUAL OBSERVATIONS

- Visual checklist completed
(Used on several occasions in different situations and at different times)

5. PHONICS AND SPELLING ASSESSMENTS

- *R-7 Sounds of the alphabet*
- *Years 2-? Diagnostic spelling test (Use professional judgement to decide when to use this assessment and also whether you should stop before completion,)*

6. READING ASSESSMENTS

- Reading level noted
- *Anecdotal records of several reading conferences should be included*

7. WRITING SKILLS ASSESSMENT

- Anecdotal observations of handwriting skill
- 2-3 samples of purposeful writing. May only be from handwriting lessons in R-1, but should include narrative writing for years 2-7.

PLEASE NOTE:

- You are being guided through observations and assessments that can be undertaken by any classroom teacher as they seek to understand what difficulties a child may be experiencing and therefore what can be done to help the 20% of children who struggle with literacy.
- Any teacher can devise the sort of checklists and assessments that you are using. They are not standardised or normed tests but they are valid because they do assess what they are purported to assess. Many have been developed by me and used/refined over the years and some have been developed by others. I supply them for your use because it is too early in your career to expect you to develop your own.
- The one-to-one assessments are recorded in italic script.
- If the class teacher offers you the results of standardised tests then you may quote them if you wish. Please ensure that you name the test and give the chronological age (CA) **as well as** the reading or spelling age at the time of testing, otherwise it is meaningless data.

Barbara Nielsen 2009

VISION CHECKLIST

**A Teacher Observation Guide
for
Visual Difficulties or Visual Stress
in
Students**

Student Name:

(Copy for the behavioural optometrist)

© B Nielsen 2004

INSTRUCTIONS FOR TEACHER USE

This observation tool is designed to be used by classroom teachers. It is designed to be used over a period of time, say 2-4 weeks, to observe the behaviours of a student who is struggling with reading, writing or spelling.

The purpose of this observation tool is to help teachers assess whether a child's difficulties might have a visual basis, and if a visual assessment by a behavioural optometrist should be sought.

Procedure:

1. Familiarise yourself with the behaviours to be noted
2. Observe the child briefly during different activities and on different days
3. Note any listed behaviours that may be observed
4. If **one or more** of the listed behaviours is noted on several occasions then a behavioural optometric examination should be advised in order to establish whether or not the child's vision is impacting on their learning

NOTE: There is no harm in getting the vision checked

VISION CHECKLIST for TEACHER USE

Student name: _____

Year Level: _____ **Date:** _____

Teacher: _____

Fine and Gross Motor Skills

| | |
|--|---------------------------------------------------------------------|
| | Difficulty colouring in: unable to keep within lines |
| | Tracing skills are poor |
| | Inappropriate size or placement of drawings in relation to the page |
| | Difficulty with cutting and pasting |
| | Unable to judge distances/poor coordination |
| | Unable to develop age-appropriate ball skills |

Reading Behaviours

| | |
|--|---------------------------------------------------------------|
| | Holds book very close |
| | Holds head at an angle or turns it from side to side |
| | Screws up eyes, or peers closely at print |
| | Covers or closes one eye when reading |
| | Slow to develop sound/ symbol relationships |
| | Slow to develop sight vocabulary |
| | Re-reads or skips words or lines |
| | Loses their place – needs to use a finger to keep their place |
| | Comprehension is poor, or declines as reading continues |

Writing Behaviours

| | |
|--|----------------------------------------------|
| | Poor posture |
| | Slow with book work |
| | Irregular letter or word spacing |
| | Reversals of letters, words or numbers |
| | Loses their place on work-sheets or in books |
| | Writes crookedly with poor spacing |
| | Difficulty with writing on lines |
| | In maths misaligns digits in rows or lines |
| | Lack of progress in spelling |
| | Difficulty copying from books or board |

General behaviour

| | |
|--|-------------------------------------------------------------------------|
| | Performance in literacy is behind that in mathematics |
| | Short attention span |
| | Avoidance behaviour – Looking at others' work |
| | Avoidance behaviour – Gazing into space or out of window |
| | Avoidance/disruptive behaviour - Talking, not working |
| | Avoidance/disruptive behaviour - Leaving their seat |
| | Complains of tiredness or sore eyes (May blink a lot or rub their eyes) |
| | Complains of headaches |

Sir Jim Rose

“We need the diagnostics to pick up the sub-skills or which sub-skill is missing.”

Pre-service teachers can undertake a case study if given some guidance . . .

Class teachers, like GP's are required to act even in the light of imperfect or incomplete knowledge.

Class teachers or specialist teachers can be seen as the GP's of education diagnosing the constellation of factors for the child who presents with learning difficulties and thus the interventions.

Researchers need to develop easy-to-use diagnostic tools to help teachers identify the contributing factors and so guide tselection of the appropriate interventions for each particular 'case' or child.

References

- Beaglehole R, Bonita R and Kjellstrom T 1993. *Basic Epidemiology*. Geneva, World Health Organization.
- Burt Sir C 1965. *The Backward Child*. London, University of London Press.
- Howell K W, Fox S L and Morehead M K 1993. *Curriculum-Based Evaluation. Teaching and Decision Making*. California, Brooks/Cole Publishing Company.
- Kavale K A and Forness S R 2000. What Definitions of Learning Disability Say and Don't Say. A Critical Analysis. *Journal of Learning Disabilities*, 33 (3), May/June, 239-256.
- Monroe M 1932. *Children Who Cannot Read*. Chicago, University of Chicago Press.
- Rothman K J and Greenland S with 15 contributors 1998. *Modern Epidemiology Second Edition*. Philadelphia, Lippincott – Raven Publishers.
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