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The School Guidance Worker

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Classroom Evaluation of Exceptional Children

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Regular classroom teachers face many challenges. Not least is the need to notice those students encountering difficulties with the academic and social tasks of the classroom, and to judge the severity of these difficulties. Teachers are the most important people among those in a position to identify children with problems and to establish programs to ameliorate these problems: teachers are the first diagnosticians and the first programmers. On their evaluation rests much of the educational future of the children in their care because they decide whether the children's needs can be met within a regular classroom or whether other resources are necessary.

Fortunately the great majority of regular classroom teachers possess the skills necessary to carry out adequate evaluations of most of their students. Once teachers accept the fact that part of their responsibility is continuing evaluative observation of students, they need only fix upon a method of observing and recording observations to accomplish the task. One useful system is generally known as the diagnostic teaching approach.

Diagnostic Teaching

Diagnostic teaching may be based on formal or informal approaches. The formal ones tend to be commercially prepared package programs with clearly defined teaching sequences and regular checks on the progress of the individual child. They relieve the teacher of a good deal of planning and active teaching. For the most part they are logically constructed, follow a particular set of principles, and are designed to touch on sub-skills or splinter skills considered basic to the acquisition of a particular ability. Diagnosis is periodic and centred on particular materials. As individualized diagnostic teaching tools, however, commercially prepared package programs are weak.

Informal diagnostic teaching programs are designed by the teacher to probe the learning abilities and styles of an individual child. The purpose is to continually monitor and adapt the normal instructional program to meet the changing needs of the child. The teacher is actively engaged observing the child in all learning situations. Instructional emphasis is placed on careful, step-by-step teaching of whatever learning task is proving difficult for the child. Diagnosis is continual and child centred.

The least difficult of the two approaches to pursue appropriately is the informal diagnostic teaching. First it calls for no extra expenditure and develops from routine teaching practice. In addition, it is more flexible, permitting the teacher to observe the learning difficulties of the child most clearly. It is also more educationally valid. The following points serve to outline important aspects of this approach.

The Diagnostic Teaching Cycle As with any program of diagnosis and rehabilitation, diagnostic teaching has a particular cycle. Using the example of diagnostic teaching in arithmetic, the following typical cycle might result.¹

Identify the child's weaknesses and strengths in arithmetic.

Hypothesize possible reasons for these weaknesses and strengths.

Formulate behavioural objectives to serve as a structure for the remediation of weaknesses or the enrichment of strengths.

Create and try corrective remedial procedures.

Continue evaluation of all phases of the diagnostic cycle to see if progress is being made.

The first two of these points are of particular interest. It is these two, specifying strengths and weaknesses and establishing their sources, that make the approach succeed or fail. It is also these two which tend not to be well-taught in teacher education courses and, therefore, methods to achieve them may be unclear to many teachers. Teachers tend almost universally to be competent programmers. If more teachers were able to combine their strength in programming with increased ability to identify and understand student weaknesses in learning, their effectiveness would increase significantly. Both skills – identification and understanding – will improve with thought and practice.

Tools of Identification

Checklists Checklists or inventories are easily maintained tools. They are applicable to a variety of children and possess some degree of objectivity. Checklists need not be maintained minute by minute because they record patterns of behaviour rather than individual occurrences of a specific behaviour. They are helpful in assisting in drawing out related behaviours that form common diagnostic patterns, and in identifying children who seldom draw the teacher's attention to themselves. Α significant strength of checklists is the ability of the teacher to use them with minimal special training.

Checklists and inventories may be commercially prepared or teacher prepared. An advantage of some of those sold commercially is the presence of norms against which behaviour can be evaluated. These norms, however, must be treated with caution because the reliability and validity of most published checklists are suspect or not demonstrated. An advantage of the teacherprepared checklist is its focus on selected behaviours of a child and that child's relationships with peers and with the teacher.

The following items are from an Early Identification Checklist that I recommend for teachers with little training in observation and identification. This particular checklist is extensive and is used for children in Grades K-4. It covers the academic areas of language arts (24 items), writing (15 items), memory (14 items), mathematics (10 items), and speech and language (12 items). It notes the presence of a problem and gives a rough estimate of the severity of it. All items derive directly from the typical teaching situation and would be noted as the child progresses through the instructional process. Let us look at several of the language arts items (see Table 1).

TABLE 1

Early Identification Checklist

	Mon.		Tues.		Wed.		Thurs.		Fri.	
	F	0	F	0	F	0	F	0	F	0
•										
								-		
			.							

Check "frequently" (F) or "occasionally" (O) if behaviour seen.

LANGUAGE

1. Cannot name common objects.

- 2. Confuses similar sounds.
- 3. Confuses similar words.

4. Watches teacher's lips as she talks.

5. Cannot recognize rhyming words.

6. Cannot give rhyming words.

7. Spells his name incorrectly.

These items range over a variety of areas in a quite general manner. The teacher simply has to observe specific children about whom he or she has some questions and then spend five minutes at lunch and at the end of the day keeping a record. By the end of the week the teacher will have considerable information. Problems that occur frequently indicate the need for further assessment which could be accomplished through the use of a more specific checklist and/or formal diagnostic assessment.

Process Analysis Diagnostic teaching makes use of other observationally based recording techniques as well. One of these, the method used by almost all teachers, is the examination and analysis of work completed by a student. Often such material yields little more than the number of items correct and incorrect. This "product analysis" is important, but it cannot stand alone. It requires "process analysis," the examination of *how* an individual child interacts with the learning task, to be truly useful. The following examples may assist in explaining this point:

a)	24 +3	15 +31	430 +123	42 +8	46 +25	38 +72	207 +5	392 9
	27	46	553	410	611	1010	212	3911
b)	27	18		35		42	37	
	+8		<u>+2</u>	+5		+3	+'	7
	17		11	13		9	1′	7

With reference to row a), product analysis tells us that the student obtained a score of 4/8. Product analysis, however, is superficial in this case. The teacher can move easily to process analysis. If this is done, it is discovered that the child not only makes four mistakes, he makes one error five times in the four questions. He fails to carry to the next column when adding. In row b) every question is wrong and the product is 0/5. Process analysis reveals that the child adds 8+7+2 = 17, 2+8+1 = 11 and so on. In both cases a simple process was misunderstood by the child. Once the teacher understood the child's incorrect pattern, the problem could be attacked directly through teaching. Sounds simple. However, the two children whose math is reproduced above were in a special math class in Grade 5. Somehow past teachers, while aware that the children had problems in addition, had failed to identify the exact problems. Once this was done, teaching was more effective and the error patterns were replaced by the appropriate correct patterns.

Graphing A third technique is to draw a picture or graph of abilities. This is especially effective when a child is working below class level in a major area, such as reading, and the teacher wishes to pinpoint the area or areas of greatest concern. The basic idea is to break the subject down into component parts and then to plot progresson a graph. For example, a Grade 3 teacher can, following close observation of a child over a period of days, plot the pupil's relative abilities. The teacher would lay out approximate levels for Grade 3 along the top of the graph and component behaviours along one side. Level of performance, based on knowledge of average child ability in the primary grades, is then estimated and from this exercise a clear indication of problem areas is revealed. One Grade 3 teacher, using this method, discovered a pupil having difficulty with basic phonic skills. This information was valuable for a number of reasons. First, the child was in a school that followed a phonics teaching approach to reading. All the skills checked had been taught, but the student was obviously unable to perform in areas of pure phonic skill. Second, the graph showed that the child did much better in sight reading situations. Third, the teacher was able to use the graph to interpret the child's problem to the principal, to the primary consultant, and to the parents, all of whom had to be informed of the need for a change in reading method for this child.

Comments on Identification

Only a few of the variety of identification techniques available to the teacher have been mentioned here. As can be seen, they are quite simple in design and implementation. Others call for much more commitment of time and resources. One point to remember is that simple techniques can be effective if well handled. They require less training, and are relatively inexpensive.

No matter what technique is used, it can be used in conjunction with the routine activities of the classroom or within the restraints of a special program. If a teacher does use a structured program for the remediation of a known or suspected problem, it is still necessary to practise diagnostic teaching. Most remedial materials are weak in general diagnosis. They examine specific skills, but these may not be the true source of weakness. A child can appear weak in reading because reading is scheduled immediately following physical education and physical education is so exciting that the child can't concentrate for thirty minutes afterwards. Reading skills may be intact while concentration and ability to shift tasks are weak. Careful and continuous teacher observation of a child exhibiting learning problems will reveal this type of information especially when combined with a recording method and process analysis.

Making Hypotheses

Once we have identified the learning patterns of a child, we must come to grips with what these patterns mean. Most commercial programs and teacher-prepared programs are designed to work on areas of specific or general weakness. While being gratified with observing strengths in a child, we, as teachers, must define the problem area and suggest remedial avenues. These activities can be undertaken only on the basis of what we observe and the teaching techniques at hand. Therefore, we must examine observable classroom behaviour, diagnose the general area of educational disability suggested and decide on appropriate group and individual instructional methods. We must go further still, and decide how we will introduce this material to the student. This latter point is a highly individual consideration and must take into account such factors as primary avenues of learning, emotional characteristics, social relationships, and degree of abstract ability. As noted earlier, teachers are strong programmers. They can decide on group and individual teaching methods once they have identified the problem and tried to understand its source and severity.

Summary

Diagnostic teaching is essentially a teacherchild based activity. It presupposes an intelligent, interested, and competent instructor with appropriate preparation for the job. Many individuals have attempted to produce packaged programs to relieve the teacher of some responsibility to work directly with individual children in the attempt to remediate learning problems. Such attempts have met with minimal success. Programs must be designed for individual children and it must be possible to change them as the child's needs change. A capable diagnostic teacher can employ many materials to good effect within a well-planned diagnostic teaching program, but the child must be the centre of the observation and the instruction.

Reference

1 F.K. Reisman, A Guide to the Diagnostic Teaching of Arithmetic. (Columbus, Ohio: Charles E. Merrill Publishing Company, 1972).

Sexual Communication: Improving Relationships

June 13-15, 1983

The University of Guelph's fifth annual conference on sexuality will examine current issues and teaching and counselling approaches.

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