4-1-1960

The Use of Diagnostic Procedures in Assessing an Educational Problem

Louis A. Govatos
Western Michigan University

Follow this and additional works at: https://scholarworks.wmich.edu/reading_horizons

Part of the Education Commons

Recommended Citation
The Use of Diagnostic Procedures in Assessing an Educational Problem

By Louis A. Govatos
Western Michigan University

In every classroom there are pupils who fail to make satisfactory progress in their language development. Some youngsters do poorly in reading while others are unable to spell or write effectively. The pupil who continually performs at a sub-standard level of accomplishment in reading and spelling is often looked upon as being either "stupid" or lazy by his teacher. Today it is not uncommon to find youngsters being labelled in this manner.

Much of this difficulty stems from the traditional "lock-step" approach of providing uniform reading assignments from the same basal text without any consideration being given to the inherent and experiential differences that exist between individuals. Too frequently children are "herded" into learning experiences which are devoid of meaning and purpose. Moreover, this problem is further accentuated by the blatant disregard of research evidence which has been, and is still being, collected empirically on the developmental status of children and on the learning process as well. Consequently, many children who encounter reading difficulties in our schools today are not deserving the appellation which places a stigma on their poor achievement. What is needed, then, is a more detailed diagnostic approach to their educational difficulties rather than a cursory examination per se.

Much that has been said in the preceding paragraphs leads one to pose the following questions. Why do some children experience difficulty with the language process? Does this difficulty stem from a lack of understanding of the child's total developmental status by the teacher? Are most teachers unsophisticated in using the processes for examining and interpreting pertinent information which might provide clues to the child's difficulties? Is it possible that most teachers operate on insufficient evidence in planning the child's learning experiences? What provisions are made by the administration in supplying teachers with sufficient data to help them better understand their pupils? It is quite obvious that constructive answers to
the above questions would help provide needed information on the
effectiveness of the teaching-learning process.

However, this paper does not attempt to provide ready-made
answers to the queries raised in the preceding paragraph. Their
importance will become apparent to the reader as he examines the
following case study and attempts to interpret its information in the
light of his own needs and experiences. It becomes imperative, then,
that the teacher should examine all facets of the student's behavior
for clues to his difficulty. Just as the medical practitioner seeks to
trace symptoms back to their origin, so should the teacher utilize
educational instruments which provide information on the child's
physical, mental, social and emotional development. Hence, the
role of the teacher should be that of a diagnostician who attempts
to analyze the child's problem, and then proceeds to provide an edu-
cational program which is commensurate with the child's level of
understanding and needs. The teacher should also seek assistance
from other agencies when he realizes that the problem cannot be
resolved solely by classroom procedures.

Reason for Referral

The following study is an actual case history which came to the
writer's attention while studying in the Reading Clinic at the Uni-
versity of Michigan during a six week's summer session. The boy's
name has been changed for obvious reasons. I shall call him Jimmy.
Jimmy was a nice looking negro boy who was twelve-and-a-half years
of age at the time this study was made. Jimmy was referred to the
Reading Clinic by his parents, since he was having considerable
difficulty with reading in school.

Test Results and Their Interpretation

Before a satisfactory reading program could be established for
him, it was necessary to assess his total developmental status. Con-
sequently, several tests had been administered earlier to Jimmy by
the Bureau of Psychological Services at the University of Michigan.
Their report, which follows, included the following information
relative to Jimmy's performance and developmental status. Jimmy
was twelve years and five months old at the time of testing by the
Bureau of Psychological Services.

Jimmy's performance on Form M of the Stanford-Binet Intelligence
Scale indicated that he was of average intelligence. His intelligence
quotient was 106, and his mental age 13-3. The range of successes on this examination was quite wide. His earliest failures occurred at year XI on the following items: finding reasons, bead chain, and similarities. His highest successes were on memory-for-digits items at the Superior Adult I and II level. He was able to repeat eight digits forward and six in reverse order. In general, Jimmy showed weakness on items involving vocabulary, whereas his immediate memory was very good.

On the Arthur Point Scale of Performance Tests which is used with children who are suspected of having difficulty with verbal responses, Jimmy's performance ranged from a C. A. of 9-5 to 15-5 even though his C.A. was 12-5 at the time of testing. His highest level of performance was on the Mare and Foal and also on the Healy Completion Test, with only one inset not being completely correct in the latter. In spite of his reading difficulties, Jimmy's performance on the Healy test tends to indicate that his verbal ability was quite high. His lowest level of performance was made on the Kohs Block Design Test which gave evidence that Jimmy was having visual-motor difficulties. According to the Bureau of Psychological Services, visual-motor difficulties are not unusual in reading disability cases. For the most part, Jimmy's performance on this test was trial and error in nature. He tended to give up before the expiration of the time limit on the more difficult designs and refused to continue working. His performance on the Porteus mazes gave evidence of good planning ability.

On the Goodenough Draw-A-Man Test, Jimmy obtained an I.Q. of 90 which was in the lower limits of the average range of intelligence. Jimmy's drawing of a man showed good proportion and fairly good detail. The figure was rather rigid, and the lines were bold and decisive. The man was apparently a railroad worker, since he was carrying a flag in one hand a lantern in the other.

Jimmy's performance on the Hildreth Personality and Interest Inventory, Elementary Form, gave indications that he enjoyed many school activities, with highest interest values being placed on gymnasium, writing stories, and music in this order of importance. His comments during the day indicated that he was most interested in athletics, and would like to be a professional athlete. Engineering was indicated as his second vocational choice, in the event of failure in his primary interest. His favorite friends were boys who could
participate in athletic events. His preferred leisure time activities included riding horseback, bicycling and cooking. His interest in cooking was explained by the fact that his father was a caterer.

The Rogers Test of Personality Adjustment indicated that Jimmy's personal, social, and family adjustments were average. The validity of these scores was questionable since the questions were presented orally to the subject. In ranking members of his family, Jimmy asked permission to include the family's two dogs in his rating. An interest in reading was indicated. In spite of his athletic prowess, Jimmy did not want to be the best ball player in school.

On the Bender-Gestalt Test, Jimmy showed some signs of possible immaturity. His approach to the task was easy and Jimmy was careful in reproducing the precise number and patterns. On Card 3 Jimmy made the four horizontal dots first, and then oriented the rest of the figure around them. This performance gave indication that Jimmy had some planning ability. This total impression was that of a normal twelve-and-a-half year old boy.

The results on the A O Sight Screener Record revealed that Jimmy's vision was adequate for reading. His color vision was normal.

The following test results and their interpretations were made by the writer at the Reading Clinic.

The Durrell-Sullivan Reading Capacity and Achievement Tests were administered to Jimmy who obtained the following scores:

<table>
<thead>
<tr>
<th>Grade Equivalent</th>
<th>Age Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Capacity Test</td>
<td>7.7</td>
</tr>
<tr>
<td>Reading Achievement Test</td>
<td>3.8</td>
</tr>
<tr>
<td>Spelling</td>
<td>3.5</td>
</tr>
</tbody>
</table>

In examining the above results it was noted that Jimmy had sufficient mental capacity for comprehension of seventh grade reading materials. His age equivalent on the reading capacity test corresponded almost identically with his mental age of 13-3 on the Stanford-Binet Intelligence Scale. In considering his reading achievement, however, Jimmy was severely retarded by at least three years. His reading achievement age was comparable to that of a nine-year-old. His spelling score was also very low.

On the Gray's Standardized Oral Reading Paragraphs, Jimmy's oral reading level was, at least, four and a half years retarded. His greatest difficulty with oral reading seemed to be in attacking begin-
nings of words, as well as middles. Jimmy made very few substitutions, and when confronted with a difficult word he usually omitted it. Mispronunciations were frequent, whereas, reversals were negligible. He frequently repeated words that didn’t provide too great an obstacle to pronunciation, since he was aware of their meanings. However, repetitions were too frequent in Jimmy’s case, and these did not seem to help him attack the more difficult words. In general, it appeared that Jimmy did not exert enough effort in achieving a level equal to his silent reading ability. He was motivated to complete the test as quickly as possible irrespective of the quality of his performance.

On being tested by the writer, Jimmy showed decided preferences for his right hand and foot. He also showed a preference for his right eye when tested with the Miles Peep Hole Test.

Interview

In an interview with Jimmy’s father, the following information revealed that both parents were fond of him, even though the father had wanted a girl. Jimmy’s prenatal and birth history were normal. He was breast fed for a period of six months with no apparent feeding difficulties. He walked at the age of eight-and-one-half months, and bowel and bladder training were begun during the end of his first year. Jimmy was able to dress himself at the age of two. He had the usual childhood diseases without any subsequent physical impairment.

Concerning his emotional development, Jimmy’s father considered him to be a happy, friendly, stubborn, self-confident, active, jealous, cautious, irritable and reserved youngster. His father reported that Jimmy spent two years in the third grade and that it was at this time that he had become aware of his racial status. His teacher was a southerner who had never had the experience of teaching colored children. Consequently difficulties had ensued between Jimmy and the teacher, causing him to retrogress in his school work. During his stay in the third, fourth, fifth and sixth grades Jimmy was continually getting into difficulty with other children and his teachers. While in the sixth grade his apparent difficulty with reading and spelling became more pronounced than in the earlier grades. His best subject was arithmetic.

His father stated that Jimmy enjoyed working in the former’s catering business. Jimmy frequently checked out food to wagons, and also assisted at the cash register. He was always meticulous about
the way he dressed, and frequently bought his own clothing accessories.

**Behavioral Observations at the Reading Clinic**

While observing Jimmy in his play activities, he was found to be well-coordinated. When playing with other boys, Jimmy was very aggressive and frequently took command of situations which should have been arbitrated by group consensus. When he failed to have his way, Jimmy often became sullen and showed less enthusiasm for group activities. Even though Jimmy enjoyed participating in sports activities, he nevertheless displayed poor sportsmanship qualities as a competitor. This same undercurrent of resentment seemed to prevail in the classroom situation, since he had already made up his mind that most reading situations were drudgery. In talking about his sixth grade school experience Jimmy made the following remark, "Last year I missed every word in spelling!" He displayed ambivalent feelings about reading. One moment Jimmy stated that he liked reading, and then in another period of reflection, he stated that his parents had difficulty in persuading him to read. He was very reticent in talking about his reading difficulty. When asked to work independently on a reading assignment, Jimmy reacted with indifference and became passive. On one particular occasion when Jimmy was asked to build words from a given family ending, he became emotionally upset. He replied, "Do we have to do this again, we did this yesterday!" This had been the second attempt in helping Jimmy with word building over a two-week period. Hence his behavior could not have been attributed to the infrequent word drill, but rather to some underlying disagreeable experience he might have had previously with word recognition.

**Analysis of the Problem**

In analyzing this problem, Jimmy's attitude toward reading was one of defeatism. Jimmy's previous experiences with his third grade teacher did not provide the incentives and encouragement he needed in improving his reading skills. Jimmy was well aware of his reading difficulty and he made no effort to improve. It was also a problem of correcting faulty habits in word attack skills. Jimmy's verbal approach to a specific word was accomplished by means of a trial and error process. He made many mispronunciations, repetitions, and read very slowly. When Jimmy attempted to read rapidly, his comprehension suffered. He made many errors on the beginnings and
middles of words. Often his errors were made on the little words which he knew. His errors on many of the words in the Dolch Word List indicated that his sight vocabulary was limited, and that independent word drill was necessary. Jimmy needed considerable help in spelling, syllabication, and word recognition. However, he did well in spelling many words correctly when using word families.

Treatment

In order to offset Jimmy's negative attitude toward reading, his interest was aroused by having him prepare a story on boxing, since Sugar Ray Robinson and Joe Louis had been his idols. He had identified himself as the heavyweight boxing champion of the world and had also described a fight that he had with a leading challenger. Jimmy drew pictures on slides which he illustrated by giving a "blow by blow" description of the fight for the heavyweight championship of the world. He was encouraged to bring pictures and stories of athletic events to the Reading Clinic. Many of the stories had to be rewritten so that Jimmy could read them without faltering. By using this technique Jimmy was able to build on his limited vocabulary and develop more confidence in reading. He showed considerable interest in word drills involving words of high stimulus value. Jimmy enjoyed word drills which involved the use of the tachistoscope, for he was able to recognize words at the rate of one-tenth of a second.

Emphasis was also placed on syllabication, the use of phonograms and letter sounds of words. Spelling of words presented a problem to Jimmy, so word families were developed. Jimmy learned to spell words very rapidly when he saw the relationship between certain elements within the total configuration of a word as being contained in other words with similar components. However, he did not display too much enthusiasm for studying word families.

Card games involving drill on initial consonants, blendings, vowel sounds, phonograms and compound words served as a basis for improving word attack skills. Even smaller words were noted in larger words. Dictionary exercises were conducted by placing a word on an individual card with its accompanying definition on another card. Jimmy developed skill in identifying the meanings of various words.

Two recordings had been made of his reading, one at the beginning of the six weeks summer session and the other at its termination.
Improvement in his reading was noted during the six weeks period. Filmstrips and films pertaining to athletic events and aviation were also utilized in developing his vocabulary. Additional emphasis was also placed on those materials which were at Jimmy's level of reading. Only when he showed a desire to read more difficult materials was there any emphasis given to increasing his reading level. Reading devices such as reading from left to right, reading for contextual clues, word endings, voice-eye spans, word wheels, suffixes and prefixes, synonyms, antonyms and homonyms were used to good advantage. Jimmy also wrote sports events for the class newspaper. He also enjoyed using the typewriter which aided him in his spelling.

Summary and Conclusions

In view of what has been said about Jimmy's problem, it seemed reasonable to establish certain guide lines which could be used in helping him establish a more adequate self-concept through satisfactory progress in his reading and also in his relations with other people. By examining the various aspects of Jimmy's behavior, a teacher can proceed more effectively and with understanding in providing an intelligent approach to his language problems. In his case, it wasn't a problem which centered around an inferior mental age nor inadequate personality development. Rather, Jimmy's problem was aggravated by his inability to use verbal skills effectively. Hence Jimmy's poor performance in school further accentuated his aggressiveness and disinterest in reading. It is only through a careful manipulation of the learning environment that a teacher can succeed in making progress with Jimmy. Care should be exercised in providing him with learning experiences that will also bring approbation from his peer group. Since he enjoyed comic books, stories were rewritten with more attention being given to literary style without minimizing the humor involved. Materials written about famous historical and contemporary people were also utilized in expanding Jimmy's interest in reading. His reading activities consisted of frequent but brief sessions in order to insure daily successes. When failure in reading was imminent, the activity was changed to one that provided Jimmy with a measure of success. Only when his morale and interest in reading were high was there any attempt to challenge him with more difficult materials. Since he enjoyed working with a band saw, Jimmy was provided with many illustrations consisting of simple instructions for making things.
Furthermore, in playing with other children Jimmy was given ample opportunity to examine his own inadequate feelings and actions without fear of being punished. He was encouraged to respect the rights of others through examples of fair play and good sportsmanship.

In the final analysis, teachers need to be aware of the conditions which make non-readers out of some children. Whether it be a child whose mental development functions at a sub-normal level or one who is extremely advanced in intellect, it is the teacher's responsibility to take into account these differences and provide a reading program which will enhance learning at all levels. This is a worthy objective to which dedicated teachers can make a substantial contribution.

Instructional Problems in Reading as Viewed By the Teacher and By Her Administrators

Research Committee
Western Michigan University Chapter
International Reading Association
Kalamazoo, Michigan

Introduction

Nine years ago a group of interested students of reading formed the Western Michigan University Chapter of the International Reading Association. Their purposes then, as now, were to encourage the study of reading problems at all educational levels, to stimulate and promote research in developmental, corrective and remedial reading, to study the various factors that influence progress in reading, to assist in the development of more adequate teacher-training programs, to disseminate knowledge helpful in the solution of problems related to reading, and to sponsor conferences and meetings planned to implement the purposes of the association. The group, which has

The Research Committee is composed of the following members of the Chapter: Dorothy J. McGinnis, chairman, Fran Baden, Homer L. J. Carter, Lillian Mulvaney, Ruth Penty, Alice Perejda, and Helen Wise.