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RESEARCH CONFERENCE ON THE PROBLEM OF DYSLEXIA AND RELATED DISORDERS IN PUBLIC SCHOOLS OF THE UNITED STATES. FINAL REPORT.

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SOUTHWEST TEXAS STATE COLL., SAN MARCOS

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A CLOSED CONFERENCE ON DYSLEXIA AND RELATED LEARNING DISORDERS WAS HELD AT SOUTHWEST TEXAS STATE COLLEGE ON MAY 15 AND 16, 1967. TWENTY-FIVE PARTICIPANTS REPRESENTED KEY PROFESSIONS AND RELEVANT INTEREST GROUPS, AND 10 OBSERVERS REPRESENTED FEDERAL AGENCIES. WITH RESPECT TO DYSLEXIA AND RELATED LEARNING DISABILITIES, THE CONFEREES ADDRESSED THEIR ATTENTIONS TO THE AREAS OF RESEARCH, DIAGNOSIS AND EVALUATION, TEACHER PREPARATION, AND CORRECTIVE EDUCATION. THE EXECUTIVE COMMITTEE ENDORSED THE REPORTS OF THE FOUR WORKING GROUPS AND RECOMMENDED THAT A COMMISSION OF NONFEDERAL SPECIALISTS BE APPOINTED AT THE HIGHEST POSSIBLE NATIONAL LEVEL TO (A) EXAMINE THE PROBLEM AREA IN DETAIL, (B) MAKE RECOMMENDATIONS CONCERNING THE NEED FOR A CONTINUING NATIONAL PROGRAM TO DEAL WITH THE PROBLEM, AND (C) DEVELOP GUIDELINES FOR ESTABLISHING A PROGRAM. A MAIL SURVEY OF THE 50 CHIEF STATE SCHOOL OFFICERS CONCERNING AN INVENTORY OF ACTIVITY IN THE FIELD IS INCLUDED. (BK)

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RELATED DISORDERS IN PUBLIC SCHOOLS OF THE UNITED STATES

July 12, 1967

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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RESEARCH CONFERENCE ON THE PROBLEM OF DYSLEXIA AND
RELATED DISORDERS IN PUBLIC SCHOOLS OF THE UNITED STATES

Project No. 7-8270
Grant No. OEG-4-7-08270-2684

Empress Y. Zedler

July 12, 1967

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Southwest Texas State College

San Marcos, Texas

RE 001 003

CONTENTS

Acknowledgement	iii
Introduction	1
Personnel	4
Participants	4
Observers	7
Synopsis of Proceedings	10
Conference Charge	13
Report of Executive Committee	18
Report of the Working Group on Research	19
Report of the Working Group on Diagnosis and Evaluation	22
Report of the Working Group on Teacher Preparation	24
Report of the Working Group on Corrective Education	27
Summary	30
Appendices	31
A. Proposal for Grant	31
B. Conference Agenda	44
C. First Postconference Letter to Working Group Participants	47
D. First Postconference Letter to Group Reporters	48
E. Second Postconference Letter	50
F. Mail Survey by Henry Toy	
G. Interview Survey by Roger Semerad	

ACKNOWLEDGEMENT

The Executive Committee wishes to express gratitude to the conference participants and federal observers who on short notice rearranged busy schedules to attend this conference.

We are especially grateful to Mr. James B. Hobbs and others from the staff of Southwest Texas State College who implemented the conference design, and provided the physical arrangements which made it possible for the conferees to work at peak efficiency.

We appreciate the services of Mr. William H. Lane, Jr. and his assistants who were responsible for the tape recording of the conference procedures.

We wish to thank Mrs. Patti Brink Key and Mrs. Mary Ann Hyatt McPherson for their excellent secretarial assistance.

The Executive Committee

INTRODUCTION

The Research Conference on the Problem of Dyslexia and Related Disorders in Public Schools of the United States was proposed by Southwest Texas State College; funded by grant from the United States Department of Health, Education, and Welfare, Office of Education; and held in San Marcos, Texas, on May 15 and 16, 1967.

The purpose of the conference was to assess at the highest level of competence the state of knowledge, the facilities, the programs, the efforts, and the current needs in the problem area of school children whose presenting complaint is overall academic deficiency but who have the basic potential for learning. Since language disability, manifest in defective reading, is an overt symptom in most of these children the term dyslexia was used in proposing the conference. It was recognized, however, that specific reading disability does not always occur in isolation. Frequently there are specific disabilities of cognitive function in understanding speech, speaking, and/or writing as well as in reading. Therefore, disorders related to dyslexia were also proposed for consideration by the conference.

The conference addressed itself to four specified areas of the problem of dyslexia and related disorders in the schools of the United States: a) recent and needed research, b) current and needed facilities for diagnosing and evaluating pupils, c) available and needed programs for preparing teachers, and d) available and needed programs for the corrective education of pupils.

Following notification of the grant award enabling such a conference an executive committee was appointed. This committee met on February 26, 1967, for the purpose of selecting conferees, and planning procedures. At this meeting it was proposed to the project director that a supplemental grant be requested to increase the number of conference participants from the originally proposed fifteen¹ to twenty-six. This committee felt the necessity for inviting the larger number because of the wide spectrum of professions and organizations relevant to and interested in dyslexia

¹See Appendix A, pp. 31-43 for Grant Proposal.

and related disorders. In issuing the invitations consideration was given to persons representing key professions, relevant interest groups, and different geographical areas.²

In the original proposal it had been assumed that the invited participants would prepare a state of the art document prior to the conference.³ Two factors militated against this procedure. First, because of factors beyond the control of the planning committee, the time between the invitations and the conference was sharply reduced. Second, as the committee's grasp of the situation broadened, the need was seen to invite other than prime subject matter authorities. For these reasons the planning committee decided to undertake a direct survey of the total problem area. Mr. Henry Toy, Jr., a member of the executive committee, agreed to plan and implement such a survey.⁴

To complement the Toy survey of state departments of education, the services of Mr. Roger Dale Semerad⁵ were enlisted and his expenses paid out of the grant to conduct interviews in depth with knowledgeable persons and agencies in ten of the United States.⁶

At the planning meeting of the executive committee Dr. James H. McCrocklin proposed that key government officials representing various federal agencies attend the conference as observers for the purpose of a) supplying information regarding current practices and programs, and b) explaining existing legislation related to the problem of dyslexia and related disorders. The executive committee endorsed this suggestion. It was subsequently implemented⁷ through the cooperation of the good offices of Dr. Paul A. Miller, Assistant Secretary for Education, Department of Health, Education, and Welfare.

It was decided at the planning session that, if the

²See pp. 4-7 for roster of participants.

³See Appendix A, p. 31.

⁴See Appendix F for report of the Toy survey.

⁵On leave from State University of New York.

⁶See Appendix G for report of the Semerad survey.

⁷See pp. 7-9 for roster of federal observers.

intended purpose was to be fulfilled, the conference should be designed so that a) it would be essentially a closed meeting with no formal papers and no audience, b) conditions would be conducive to free and open discussion in general sessions as well as in working groups, and c) proceedings in all scheduled meetings would be recorded on tape for reference and filing.

PERSONNEL

The data in the personnel rosters are, of course, selective. In order to keep each biographical listing uniform and of reasonable length, the executive committee abstracted from the biographical information supplied by each person the following items: degree, professional associations deemed most relevant to the conference, institutional or agency affiliation and/or address.

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SYNOPSIS OF PROCEEDINGS

May 15, 1967

The conference was officially opened at 8:00 AM by Dr. James H. McCrocklin, President of Southwest Texas State College, who said,

It is a pleasure to have you on our campus for this very significant research conference on Dyslexia and Related Disorders.

We believe that the proceedings of this conference will be a benchmark in American public education by focusing professional attention on this most important problem area. Southwest Texas State College is privileged to be your host during the duration of the conference, and we trust that you will not hesitate to allow us to be of assistance to you should the opportunity arise.

We look forward to working with you.

Dr. Empress Y. Zedler, Conference Coordinator and Chairman of the Executive Committee, delivered the conference charge. Mr. Henry Toy, Jr., a member of the Executive Committee, summarized the preconference surveys.⁸ Following the general meeting conferees went into their respective working groups as prearranged by the Executive Committee.⁹ The agenda as planned was followed without change throughout the day.¹⁰

May 16, 1967

At 8:45 AM conference participants assembled as a panel to hear and discuss reports from the four working groups. Federal observers were present as resource personnel.

Dr. John V. Irwin, a member of the executive committee, moderated the discussion. Reports from the working groups were presented by Mrs. Jane B. Levine for Research,

⁸Appendices F and G.

⁹See reports of working groups, pp. 18, 19, 22, 24, and 27 for names of group members.

¹⁰See Appendix B, pp. 44-46 for agenda.

by Dr. Stanton J. Barron for Diagnosis and Evaluation, by Dr. John R. Emens for Teacher Preparation, and by Dr. N. Dale Bryant for Corrective Education. The moderator entertained comments and recommendations for change in each of the reports from any conference participant. Relatively few substantive changes in the reports were recommended.

The participants resolved that the four reports had been more complete than had been expected, and that more time was needed for general discussion. Therefore, the meetings of original working groups, which had been scheduled for 10:15 AM for the purpose of revising the reports, were cancelled and the general panel discussion was resumed at 10:30 AM following the coffee-break.

The working group on Diagnosis and Evaluation elected to meet during the coffee-break to hear in more detail recommendations for revision of their report as suggested by participants from other working groups.

The conference reassembled in general meeting at 10:30 AM. Revised reports from each working group were again presented. After discussion and slight modification each report was accepted by the total conference.

The executive committee suggested the following procedures for editing the reports: a) each participant would receive by mail a copy of the report of his working group, b) all suggestions for change would be communicated directly to the appropriate group reporter, c) each reporter would collate the recommended changes and return a revised report to the chairman of the executive committee, d) the executive committee would assume responsibility for assembling the group reports in uniform form, and e) each participant would receive by mail copies of the edited reports of the four working groups and of the executive committee with instructions to communicate any recommended editorial changes directly to the chairman of the executive committee. These procedures were accepted by the conference.¹¹

The meeting adjourned for luncheon.

At 1:00 PM the reporters from the working groups

¹¹See Appendices C, D, and E for copies of the post-conference letters sent to participants along with the first and second drafts of reports.

submitted reports to the executive committee.¹² After discussion of these reports the executive committee a) prepared a preliminary draft of its report, and b) set up procedures for implementing the editing of the group reports according to principles agreed upon by the conference.

The five reports on pages 18 through 29 of this document are the final reports as styled and edited by the executive committee, and as approved by each working group and by all conference participants. These five reports represent the conclusions and recommendations of the conference.

¹-Since the chairman of the working group on Corrective Education had been unable to attend the meetings on May 16, Dr. Bryant and Mrs. Mesirov assumed the responsibility for assembling and submitting the report for this group. This necessitated their working for several hours after the conference was adjourned. The executive committee wishes to thank them for this assistance.

CONFERENCE CHARGE

Operational Procedures, Role and Scope of Committees

Empress Y. Zedler

Thank you for coming to Texas in the interest of a group of children in the schools of the United States whose presenting complaint is overall academic deficiency. They either fail grade-levels in school or make grade-marks far below their intellectual potential. Their failure to learn is not primarily the result of poor instruction, sociocultural deprivation, primary emotional conflict, intellectual deficit, or defective vision or hearing; but rather the result of a specific disability of cognitive function in one or more, and probably in all, of the aspects of language--understanding speech, speaking, reading, and writing.

We at Southwest Texas State College have long been involved in research about, preparation of teachers for, and the evaluation and treatment of such children. We have been fortunate in having the cooperation and active support of physicians in our study of these children. I am sure that this prestigious conference could not have been implemented without the endorsement of those physicians. But not every educational center has been so fortunate, for the coming together of medicine and pedagogy in the joint study of children with learning disabilities has occurred slowly. And communication between the two professions even now is not always in the best composite interest of the child as a patient and the child as a pupil.

Not too long ago the purpose of such a conference as this would have been to inform the public as to the nature of dyslexia and related learning disorders, and to alert teachers and physicians to the incidence in any group of underachievers. This is probably not our primary goal today. The interest of the public in the problem is now high, often rampant. Throughout the nation there seems to be awareness not only of primary learning problems but also of secondary behavioral results to be expected if the disorders are misdiagnosed or unidentified and untreated. Parents and teachers are demanding that something be done for these children.

You of the medical and we of the behavioral scientific communities know that there is no simple formula for teach-

ing the child with specific learning disorders. The job is complicated and arduous, calling for the combined efforts of many people. Research so far has emphasized only the difficulties and complexities of the problem rather than solutions. In all honesty we must say that we do not know what should be done. Therefore, the public, and in some instances professionals, have turned to panaceas and cults--methods based upon dogma set forth by their promulgators. Pseudoscientific articles appear regularly in popular publications and occasionally in professional journals.

If you are in any doubt that chaos reigns you should visit an academic classroom of underachievers and observe a trained teacher of reading interrupting her class in an attempt to develop motor coordination; or visit a gymnasium or special treatment center where attempts are being made to develop the ability to read from a prone position or a trampoline. For many of the remedies make up in the heat of their proponents' enthusiasm what is lacked in grasp of the complex issues they seek to solve. And because of the panaceas and the cults many lives of teachers, parents, and children have been made more miserable.

In an attempt to meet the need for positive action emanating from the scientific community we at Southwest Texas State College assumed the responsibility of assembling a small, competent group of persons representing key professions and organizations, to meet together informally to discuss their thinking on the problem of dyslexia and related learning disorders; and, as a result of their discussions, to assess at the highest level of competence the state of knowledge, the facilities, the programs, the efforts, and the current needs in this problem area. You are assembled. In a few minutes you will begin your discussions. Tomorrow you will prepare your assessments. If we can fulfill the purpose of the conference, it is to be hoped that the support which is needed to bring about change and improvement for academically disabled pupils in the schools of the United States will be forthcoming forcefully, soon, and at the national level.

We are deeply grateful to you for accepting our invitation on short notice to participate in this conference, and to you who on even shorter notice are representing your federal agencies as observers. You have rearranged busy schedules and postponed many duties. It would be redundant to recount the accomplishments which qualify

each of you for the task we have asked you to do.

Ours is not the first conference of distinguished persons on the subject of dyslexia. Since 1961 meetings and seminars have been held on the subject. Some of you have instigated or participated in these meetings, the purpose of which has usually been to inform educators, physicians, and the general public about the nature of the disorder, about procedures for identifying and diagnosing children who have the disorder, and, to less degree, about procedures for correcting the disability. It is likely that time, finances, and efforts are being dissipated because of repetitive investigations and meetings. If such repetitions are to be prevented and if our conference is to succeed, we should heed three admonitions.

First, we should not permit semantics to dissipate our time and energies. Many meetings and millions of words have not resolved the question of What is dyslexia? A variety of terms have been used to describe the children we are here to discuss. Dyslexia is probably the term most frequently used in the literature, and for this reason it was used in the proposal for this conference. If you prefer some other term use it, with the understanding that you are talking about the kind of child who cannot unscramble auditory and/or written symbols which reach the brain so that they have the same order-pattern and meaning which they have for others.

Second, we should not espouse etiology to the extent that it limits recommendations for the benefit of the children who have the learning problems. We should remember that our purpose is to determine what should be done about the disability, rather than what to name it, or what caused it. Most of us probably subscribe to the premise that the distinction between acquired and congenital dyslexia is not an academic one, and that the cause of the child's language disorder is something other than what is involved in the aphasic adult. The term "dyslexia and related disorders" as used in this conference probably describes a congenital constitutional difference which causes certain pupils to fail to profit from classroom instruction. There is the probability of a genetic factor in the etiology. On the other hand you have probably recognized that this constitutional difference resembles the aphasic sequelae of some brain injuries, and that therapeutic procedures which are effective with

the aphasic adult may also produce positive results with the child who has a developmental language disorder. Etiology cannot be ignored. However, for the purpose of this conference, it should be viewed in the perspective of corrective measures.

And third, let us not expound vested interest and enthusiasms. Let us remember that the purpose of the conference is to ascertain, summarize, and report the present state of knowledge, conditions, and procedures regarding the problem area in the schools of the nation. This is a meeting for open discussion and exploration. One of the major purposes of this conference is to hold the door of true, basic research open for the proponents of panaceas and special methods, urging them to avail themselves of the answers that unbiased investigation could produce.

Everyone says that something ought to be done about the problem of dyslexia and related disorders. The question is: What should be done? Hopefully at this conference we shall come up with guidelines for action.

Will you, the Working Group on Research, meeting in Room 3, concern yourselves with preparing guidelines as to what further research is needed to avoid duplication of what is already known, and to insure that the studies, while basically scientific, also contribute to improved services for the children who have the disability.

Will you, the Working Group on Diagnosis and Evaluation, meeting in the Conference Room, address your attentions to an appraisal of and suggestions for improving contemporary procedures for detecting, diagnosing, and evaluating. Will you suggest guidelines as to personnel, physical facilities, and evaluative instruments.

Will you, meeting in Room 5 to work on the Preparation of Teachers for children with dyslexia and related disorders, make an appraisal of what is needed for adequate pre- and in-service teacher training, and prepare suggestions as to the curriculum for such training to the end that state departments of education, colleges, universities, and school systems may use your suggestions as guidelines.

Will you in the Working Group on Corrective Education, meeting in Room 6, address your attentions to appraisal of and recommendations for improving the school's management of children with dyslexia and related disorders. Practical, clearly meaningful guidelines will be welcomed by school personnel.

We of the executive committee will divide our time between the four working groups. Shall we go to work.

REPORT OF THE EXECUTIVE COMMITTEE

John V. Irwin, Ph.D.

James H. McCrocklin, Ph.D.

Jose San Martin, O.D.

Henry Toy, Jr., M.A.

Empress Y. Zedler, Ph.D.
Chairman and Reporter

With respect to dyslexia and related disorders in the schools of the United States, the Executive Committee endorses the reports of the four conference working groups. The committee believes that these reports are consistent with the thinking of the majority of the participants.

In view of the discussions and conclusions generated at this conference, the executive committee suggests

- I. That at the highest possible national level a commission be appointed
- II. That this commission consist of non-federal specialists representing disciplines relevant to dyslexia and related learning disabilities
- III. That the functions of this commission be
 - A. To examine in detail the areas of research, diagnosis and evaluation, teacher preparation, and corrective education in dyslexia and related learning disabilities
 - B. To make recommendations concerning the need for a continuing national program to deal with this educational problem, and
 - C. If indicated, to develop guidelines for establishing such a national program

REPORT OF THE WORKING GROUP ON RESEARCH

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John B. Isom, M.D.

Ronald S. Tikofsky, Ph.D.

Steven G. Vandenberg, Ph.D.

Jane B. Levine, M.S.
Chairman and Reporter

With respect to dyslexia and related learning disabilities, the Working Group on Research

I. Recognizes

- A. That the definitions of dyslexia will differ depending on whether the intent is to emphasize behavior or etiology
- B. That much needs to be learned before a universally acceptable definition of dyslexia can be framed
- C. That, until more is known, each research project must formulate its own working definition as needed
- D. That the prevalence of dyslexia as reported will vary with the definition adopted
- E. That, without having framed a definition of dyslexia, the members of this group have a practical consensus with respect to the nature of the syndrome and of the relevant research problems¹³

II. Recommends

- A. Appointment of a National Advisory Committee
 1. To explore, and make recommendations for establishing, programs of research relevant to the problem
 2. To be composed of persons
 - a. Not directly employed in federal agencies

¹³ See the conference charge by Empress Y. Zedler, Chairman of the Executive Committee, pp. 13-17 for a fuller exposition of the matter of definition.

- b. Representing disciplines such as
 - (1) Medicine
 - (2) Education
 - (3) Psychology
 - (4) Linguistics
 - (5) Speech Pathology
 - (6) Sociology
 - (7) Genetics
 - 3. To be selected on bases of
 - a. Commitment to the problem of dyslexia and related learning disorders, and/or
 - b. Access to and knowledge of relevant research
 - 4. To meet in appropriate quarters at regular intervals
 - 5. To be provided with executive secretary and support personnel
- B. Implementation and support of coordinated, cross-disciplinary research
 - 1. Both basic and applied
 - 2. Both behavioral and biological
 - 3. Including
 - a. Longitudinal studies of dyslexic and normal children, and their families
 - b. Basic research in
 - (1) Perception
 - (2) Discrimination
 - (3) Cognition
 - (4) Memory
 - (5) Motivation
 - (6) Learning of
 - (a) Motor skills
 - (b) Visual skills
 - (c) Verbal skills
 - (7) Intersensory transfer and cross-modality investigation
 - (8) Relationships between academic skills and
 - (a) Gross motor skills
 - (b) Fine motor skills
 - (c) Perceptual skills
 - (9) The processes involved in reading and other interpretations of symbols
 - (10) The differences between normally achieving children and dyslexic children at comparable ages
 - (11) Role of environmental and familial factors

- (12) Anthropometrics
- (13) Neurology
- (14) Genetics
- (15) Biochemistry
- c. Applied research aimed at
 - (1) Implementing the findings from basic research studies
 - (2) Improving diagnosis
 - (3) Evaluating the relative effectiveness, for different children at different times, of various remedial and preventive measures, such as
 - (a) Materials
 - (b) Methods
 - (c) Type of instructor
 - (d) Size of class
- C. Development of appropriate techniques and facilities for
 - 1. The systematic storage and retrieval of data so that
 - a. Bibliographic information is made available to the researcher and clinician
 - b. Raw data are made available to the researcher
 - 2. The dissemination of research information to
 - a. Researchers
 - b. Teachers and clinicians
 - c. Administrators
- D. Training of research workers with fundamental knowledge and skills cutting across traditional disciplinary lines

REPORT OF THE WORKING GROUP ON DIAGNOSIS AND EVALUATION

Douglas Buchanan, M.D.

Arthur H. Keeney, M.D., D.Sc.

J. Tarlton Morrow, Jr., M.D.

J. Roswell Gallagher, M.D.
Chairman

Stanton J. Barron, Jr., M.D.
Reporter

With respect to the diagnosis and evaluation of dyslexia and related learning disabilities, the Working Group on Diagnosis and Evaluation

I. Recognizes

- A. That the medical profession, along with other professions, has an inescapable responsibility to be involved
- B. That medical education has a responsibility
 - 1. To become better informed
 - 2. To stimulate research
 - 3. To inform others
 - 4. To stimulate cooperation between the educational and medical communities

II. Recommends

- A. That the assessments would usually be outpatient, or office, procedures
- B. That the assessments would usually include
 - 1. An educational evaluation
 - a. Schol history¹⁴
 - b. Scholastic achievement
 - c. Peer relationships
 - d. Teacher-pupil relationships
 - 2. Medical history and physical examination
 - 3. Psychological evaluations of

¹⁴Items such as the following should be included: schools attended, teachers' grade-marks, grade-levels repeated, demotions, social promotions, and attendance.

- a. Intelligence
- b. Emotional status
- 4. Language evaluations of
 - a. Speech comprehension
 - b. Speech production
 - c. Reading
 - d. Writing
 - (1) Spelling
 - (2) Composition
 - e. Arithmetic¹⁵
 - (1) Reasoning
 - (2) Computation
- 5. Investigation of relevant environmental and social factors
- C. That the reports should be so written that they
 - 1. Are understandable to all members of the diagnostic and evaluative teams
 - 2. Provide, in so far as possible, bases for teaching and treating children

¹⁵In a traditional sense arithmetic is not always regarded as language. However, it is included here because a) learning disabilities are frequently general, and b) success in arithmetic depends upon the ability to comprehend verbally stated problems including such arithmetic terms as more than and less than.

REPORT OF THE WORKING GROUP ON TEACHER PREPARATION

Bruce Balow, Ph.D.

Dell C. Kjer, Ph.D.

Roy Kress, Ph.D.

Margaret B. Rawson, M.A.
Co-Chairman

John R. Emens, Ph.D.
Co-Chairman and reporter

With respect to dyslexia and related learning disabilities, the Working Group on Teacher Preparation

I. Recognizes

- A. That the following groups of pre- and in-service teachers need some degree of professional preparation for dealing with the problem
 - 1. Regular elementary and secondary classroom teachers
 - 2. Special education and remedial teachers who work with children individually or in small groups
 - 3. Coordinators such as supervisors, counselors, and school psychologists, who work with parents, teachers, and community agencies
 - 4. College and university teachers of teachers
 - 5. Other personnel, such as professional teachers of preschool children, and teachers' aides
- B. That, while the degree and depth of preparation of the various types of personnel may differ widely, each should have information, knowledge, and competency sufficient to
 - 1. Recognize the difficulty
 - 2. Identify the problem
 - 3. Make appropriate referral for screening and potential diagnosis
 - 4. Assist the child in continuous growth and development

II. Recommends

- A. That preservice teachers at the undergraduate level
 - 1. Be taught about dyslexia and related learning disabilities
 - 2. Have opportunities to observe, and to do supervised teaching of disabled as well as normal pupils in learning situations
- B. That a small task force of 6-10 knowledgeable persons prepare a pilot report which would epitomize for this field present knowledge, materials available, and techniques of corrective education; and would establish guidelines for an intensive resource unit¹⁶
 - 1. For college teachers and other teachers of teachers in the preparation of current or new courses in dyslexia and related learning disabilities, and in regular courses such as those in reading methods
 - 2. For background material in workshops, institutes, and conferences for in-service teachers to be given by teacher education centers, by public schools, and by both in cooperation with each other
 - 3. For national meetings, regional conferences, and state workshops as a basic professional publication
- C. That a national conference of some magnitude be held to call attention to the dimensions of this problem, to present known information, and to suggest further steps to be taken
 - 1. The pilot report previously referred to in Recommendation B above could be the spring board for this conference
 - 2. Representatives from relevant areas such as education, school administration, medicine, linguistics, psycholinguistics, psychology, and state and federal agencies should participate
 - 3. This national conference should encourage needed research so that the general quality of both pupil service and training in this area would be improved
- D. That presentation of basic materials, growing from the pilot report and the research conference, be

¹⁶Including such materials as: annotated bibliography, reproductions of articles, T.V. tapes, movies, kinescopes, and detailed teaching materials.

presented at the conventions of relevant professional associations such as: AACTE, CEEB, ACEI, IRA, ASCD, NEA, various medical groups, and the Association of School principals. In addition, summary presentations should be made, for example, at the regional offices of the Office of Education, at state and local conferences, and at conferences of teacher education. Presentations should also be made at the meetings of the 142 State Supervisors of Reading.

- E. That careful consideration be given to the possibility of grants to teacher education institutions, to school systems, and to special educational institutes for the implementation of
1. Pilot programs
 2. In-service training institutes
 3. Research and special training
 4. Educational programs for specialists and for supportive personnel

REPORT OF THE WORKING GROUP ON CORRECTIVE EDUCATION

Carroll F. Johnson, Ed.D.

Gilbert Schiffman, Ph.D.

Louise Mesrow

Don Partridge, M.Ed.
Chairman

N. Dale Bryant, Ph.D.
Reporter

With respect to dyslexia and related learning disabilities, the Working Group on Corrective Education

- I. Recognizes that consideration must be given both to short and long range goals, because of the following:
 - A. Critical pressures exist to give today's child the finest corrective education that contemporary concepts and technology permit even though, for the immediate future, some procedures must go beyond research and be based upon consensus of opinion and limited data
 - B. Major needs exist for comprehensive programs of research to develop more valid bases for corrective education
 - C. Effective corrective education depends not only upon adequate basic research but also upon intensive application of this research to such variables as definition, diagnosis and evaluation, and teacher preparation

II. Recommends

- A. That a national task force or commission be established to
 1. Agree upon operational definitions
 2. Determine prevalence
 3. Evaluate in depth existing techniques of identification, of diagnosis and evaluation, and of corrective education and management
 4. Study manpower utilization in such terms as present and future personnel needs, supply, necessary competencies, professional identi-

- fication, recruitment, and other personnel considerations
5. Identify and evaluate the nature, size, and number of training programs for professional personnel
 6. Monitor relevant federal, state, and local legislation
 7. Assess the relationship between cost and benefit of components of both present and projected programs
 8. Undertake other functions as may seem appropriate to such a task force or commission
- B. That this field have representation at the highest levels of national, state and local government; with this representation to be particularly concerned with Education, but with provision for coordination with related health and social programs
- C. That at all levels of public support, and particularly at the local level, additional funds be earmarked for pilot, experimental, and on-going service programs in this area, without reducing support of programs in other areas
- D. That regional centers be established to
1. Develop and utilize techniques by which present as well as new knowledge can be made immediately effective in corrective educational programs
 2. Conduct research and demonstration in identification, diagnosis and evaluation, and corrective education and management in this problem area
- E. That consideration be given to encourage state legislatures to mandate programs in this area
- F. That, since high level in-service training programs must be introduced not only for professionals currently working with the children but also for the staffs of institutions which train teachers, physicians, school administrators, and other professional personnel, adequate provision be made for the development of the personnel and facilities necessary to implement this training
- G. That additional traineeships and faculty support monies be given to already established college and university programs of merit to make them more available to in-training teachers
- H. That existing and anticipated school management programs be evaluated critically in terms of establishing necessary resources for

1. Early identification at the preschool level if possible
2. Multidisciplinary diagnostic as well as treatment teams, both of which shall include educationally knowledgeable specialists in child development and the learning processes
3. Personalized learning situations for each child¹⁷
4. Modification of the school program to reduce elements which cause or maintain failure and frustration for the child
5. Initiation of program changes to facilitate the child's academic progress¹⁸
6. Integrated programs from preschool through high school graduation, with special emphasis upon overcoming learning problems at the kindergarten and primary grade levels in an attempt to prevent academic failure
7. Coordination between school and outside programs, with particular emphasis upon meaningful assessment of pupils' abilities for vocational education
8. Release of time for in-service training of all school personnel with specific responsibilities in corrective education
9. Appropriate physical facilities and special materials

¹⁷Such situations might occur within the regular class, special class with limited numbers, one-to-one tutoring, skills class between two grades as an alternative to repeating a grade-level, preschool corrective programs, or a combination of these and other approaches.

¹⁸Examples of such changes might include: oral in lieu of written examinations, teacher aides, flexible time schedules.

SUMMARY

A research conference on the problem of dyslexia and related disorders in the schools of the United States was held at Southwest Texas State College in San Marcos, Texas, on May 15 and 16, 1967. There were twenty-five conferees representing key professions and relevant interest groups, and ten observers representing federal agencies.

The purpose of the conference was to assess at the highest level of competence the state of knowledge, the facilities, the programs, the efforts, and the current needs in the problem area of school children with reading and/or other learning disabilities, whose presenting complaint is overall academic deficiency, but who have the basic potential for learning.

The results of the conference are given in five reports prepared by the working groups on Research, on Diagnosis and Evaluation, on Teacher Preparation, and on Corrective Education, and by the Executive Committee. The Executive Committee endorsed the reports of the four working groups and recommended that at the highest possible national level a commission of non-federal specialists be appointed to examine, recommend, and develop guidelines for a national program.

APPENDIX A

PROPOSAL FOR RESEARCH AND/OR RELATED ACTIVITIES
 SUBMITTED TO THE U. S. COMMISSIONER OF EDUCATION FOR
 SUPPORT THROUGH AUTHORIZATION OF THE BUREAU OF RESEARCH

Title: Research Conference on the Problem of Dyslexia and Related
 Disorders in Public Schools of the United States

Cooperating agency: Southwest Texas State College

Initiator: /S/ James H. McCrocklin
 James H. McCrocklin, President
 Southwest Texas State College
 512/392-3311, Ext. 15

Principal investigator: /S/ Empress Y. Zedler
 Empress Y. Zedler, Chairman
 Department of Special Education
 Southwest Texas State College
 512/392-3311, Ext. 55

Transmitted by: /S/ James H. McCrocklin
 James H. McCrocklin, President
 Southwest Texas State College

Contracting officer: /S/ Jerome C. Cates
 Jerome C. Cates, Vice President
 for Fiscal Affairs

Duration of activity: January 15 - May 17, 1967

Date transmitted: 12-5-66

I. Abstract

The proposed conference is for the purpose of ascertaining, summarizing, and reporting the present state of knowledge, conditions, and procedures regarding dyslexia and related disorders in public schools of the U. S. The specified types of information to be accumulated and reported are:

- A. Recent research pertinent to dyslexia and related disorders
- B. Current facilities for diagnosing and evaluating pupils with risk of these disorders
- C. Available programs in colleges and universities for preparing teachers to correct these disorders
- D. Programs in public schools for correcting the disorders

Approximately 15 participants will be invited to accumulate the needed information in an eight week period prior to the conference. The information will be reported, classified, and summarized in a two day conference. Proceedings and findings will be compiled and distributed within two months after the conference.

II. Problem

During the past few years there has been a growth of interest in the child who is handicapped in learning. A variety of terms have been used to describe children who are underachievers in the regular classroom, but who have the basic potential for learning.¹

Language disability, manifest in defective reading, is the presenting symptom in most of these children. Developmental dyslexia is probably the term most frequently used in the literature² to describe a constitutional difference which causes certain pupils to fail to profit from classroom instruction in reading.

¹ Reprint from School Digest, School District 73 1/2, Skokie, Illinois, PERCEPTION, Vol, IV, October, 1966.

² McDonald Critchley, M.D., "Inborn Reading Disorders of Central Origin," Transactions of the Ophthalmological Society, Vol. LXXXI, 1961.

The characteristics of specific dyslexia are now being extensively discussed by educators and physicians throughout the nation.³ This coming together of medicine and pedagogy in a joint study of mutual interest has occurred slowly. There is still a substantial pedagogical tradition that views all reading disability as a problem either of defective instruction or lack of motivation on the part of the learner. On the other hand there is a growing body of opinion originating within the medical profession and reaching educators through literature, seminars, and conferences that a substantial number of cases of reading failure do not result from poor instruction, sociocultural deprivation, emotional blockage, intellectual deficit, or defective vision; but rather from specific disability of cognitional or gnostic function in written language and auditory-vocal communication. This constitutional difference resembles the aphasic sequelae of some brain injuries.⁴ The etiology of most cases, however, is generally attributed to a developmental (probably genetic⁵) disorder. Children with the disability cannot unscramble auditory or written symbols which reach the brain so that they have the same order pattern and meaning which they have for other pupils.

Nor does the specific reading disability always occur in isolation. It may be part of a larger entity of mental deficiency. It may be so severe as to produce pseudofeble-mindedness, or as to be analagous to a peripheral hearing loss. It is probable that adequate handling of cases of specific dyslexia might facilitate the acquisition of literacy in public schools. The dyslexic child may manifest numerous behavioral anomalies. His presenting complaint, however, is overall academic deficiency. He either fails

³John Emmett Peters, M.D., Sam D. Clements, Ph.D., "Diagnosis and Treatment of Minimal Brain Dysfunction in the School-Age Child," Feelings and Their Medical Significance, Vol. 8, September, 1966.

⁴John Money, Reading Disability, Progress and Research Needs in Dyslexia, Baltimore, The Johns Hopkins Press, 1961, pp. 12-13.

⁵Knud Hermann, M.D., Reading Disability, Springfield, C. C. Thomas, 1959, pp. 84-88.

grade levels in school or makes grade-marks below his intellectual potential. Too frequently he is misdiagnosed by teachers as "immature," lazy, or emotionally disturbed. The trauma of scholastic failure plus the guilt feelings resulting from misdiagnosis invariably lead to emotional conflict and distress within the family. It is probable that early diagnosis and adequate teaching of dyslexic children might contribute significantly to mental health within the family as well as the school.

The incidence of constitutionally (organically) based language disorders among school aged children of the United States has been variously estimated from 5%⁶ to 20% of the total school population.⁷

Since 1961 conferences and seminars have been held to inform educators, physicians, and the general public of: a) the nature of the disorder, b) procedures for screening and diagnosing children who have the disorder, and c) to less degree, procedures for correcting the disability. These meetings have been variously instigated and financed. For example in November, 1961, The John Hopkins Conference on Research Needs and Prospects in Dyslexia and Related Aphasic Disorders was under the auspices of the departments of Pediatrics, Psychiatry, and Ophthalmology at The Johns Hopkins Medical Institutions, and was financed by the Association for the Aid of Crippled Children.⁸ On September 16, 1966, the Speaker's Symposium on Language Disabilities met in Austin, Texas, under the auspices of the Speaker of the Texas House of Representatives. Several thousand persons, seeking insight into the problem of dyslexia, attended this symposium which was financed and sponsored by eight foundations in Texas. A common recommendation from all such meetings is that more research is needed. The Johns Hopkins Conference declared in favor of investigative experi-

⁶ Helmer Myklebust; Benjamin Boshes, "Psychoneurological Learning Disorders in Children," Archives of Pediatrics, Vol. 77, 1960, pp. 247-256.

⁷ House Simple Resolution, No. 323, Texas House of Representatives, 1966, p. 41, A-11, lines 13-14.

⁸ Money, Op. Cit., p. v.

mental studies and detailed clinical studies rather than large testing surveys.⁹

Federal grants have supported several research projects related to school children with specific language disabilities. Two of these grants have been awarded to Southwest Texas State College. One completed in 1964 concerned a psychological procedure for screening such children in public schools.¹⁰ The other completed in 1966 was a comparison between the effectiveness of two different methods of teaching such children in public schools.¹¹

Some state departments of education have provisions for teaching pupils with dyslexia and related disorders.¹² Others are beginning pilot projects. In many states the problem is not yet recognized. The lack of coordination of policy relative to educationally handicapped pupils in the nation was pointed out in the hearings before an Ad Hoc Subcommittee of the Eighty-Ninth Congress when the chairman, Mr. Hugh L. Carey, said,

You would agree, then, with the statement of Dr. Harris who appeared before the subcommittee and agreed with me, or when I asked him stated, rather, that in effect we have a hit-and-miss policy with regard to the training and education of the handicapped, depending upon the level of policy development in each individual State. Is this not so? That, depending upon the sophistication of the State

⁹ibid., p. 41.

¹⁰Empress Zedler, An Investigation of Relations Between WISC Results and Neurological Findings in Underachievers, U. S. Dept. H. E. W., P H S, Div. of Chronic Dis., NSD Service Project, Grant No. N4607A63, Southwest Texas State College, 1964.

¹¹Empress Zedler, Educational Programming for Pupils with Neurologically Based Language Disorders, U. S. Dept. H. E. W., Office of Ed., Coop. Research Project No. 2351, Southwest Texas State College, 1964-1967.

¹²State Plan for Special Education, Austin, Texas Ed Agency, November, 1965.

program, there will be the better or less effective training and care of the handicapped, State by State?¹³

Parents of children with dyslexia and related learning problems have organized state, national, and international associations.¹⁴ The annual meetings of these associations are widely attended. Interest in the problem is extensive.

It is likely that time, finances, and effort may be dissipated because of repetitive investigations. It is also likely that persons in the best positions to implement corrective programs may be unaware of current needs and implications from recent research.

In her statement before the Ad Hoc Subcommittee on the Handicapped, of the Committee on Education and Labor, House of Representatives, Eighty-Ninth Congress, Second Session, the president and executive secretary of the Association for Children with Learning Disabilities, Inc., said,

I would also like to ask this committee if they could do something about a survey of the needs of children with learning disabilities. There are no accurate figures available, no teacher training criteria that have been established, and there are no public residential treatment centers whatsoever for the purely learning disabled child.¹⁵

In his statement before the same Ad Hoc Subcommittee in June, 1966, the associate secretary of the American Speech

¹³EDUCATION AND TRAINING OF THE HANDICAPPED, Part 1, Hearings before the Ad Hoc Subcommittee on the Handicapped of the Committee on Education and Labor House of Representatives Eighty-Ninth Congress, Second Session, U. S. Government Printing Office, Washington: 1966, p. 382.

¹⁴Association for Children with Learning Disabilities, Inc., an international parent and professional association, 3739 S. Delaware Place, Tulsa, Oklahoma 74105. (See the summary statement of Louise Mesirow, EDUCATION AND TRAINING OF THE HANDICAPPED, op. cit., pp. 496-499.)

¹⁵EDUCATION AND TRAINING OF THE HANDICAPPED, op. cit., p. 541.

and Hearing Association stated,

The principal obstacle to meeting the needs of handicapped children and youth is inadequate coordination of services. In some locales necessary services exist. In others they do not. But even when all appropriate services are available, they are generally not brought to bear on the problem in a coordinated and efficient manner.¹⁶

Since the hearings before the Ad Hoc Subcommittee clearly show that there is no national policy for the education of children with dyslexia and related disorders, it is possible that a service could be rendered by bringing together the current state of knowledge regarding the problem of dyslexia and related disorders in the public schools of the United States. It is probable that a fact-finding committee working individually and in conference could make the much needed definitive investigation and summary report.

III. Objectives

The objectives of such a conference would be to identify, clarify, compile and distribute information by:

- A. Reporting results of recent research projects pertinent to dyslexia and related disorders in school aged children in the United States,
- B. Ascertaining what is being done in the public schools of the United States at the state and local levels to screen, diagnose, and teach pupils with dyslexia and related disorders,
- C. Determining what is being done in the colleges and universities of the United States to prepare teachers to correct dyslexia and related disorders in the public schools of the United States,
- D. Summarizing the acquired information and disseminating it among persons and agencies in positions to use it effectively to generate new research and to establish programs for teacher education and for pupil remediation.

¹⁶ EDUCATION AND TRAINING OF THE HANDICAPPED, op. cit., p. 513.

IV. Description of Activities

Approximately fifteen persons will be invited to participate on a fact-finding committee to accomplish the objectives. The participants will be selected on the basis of the following criteria: a) active and demonstrated knowledge of and concern about dyslexia and related disorders, b) access to sources of needed information, c) representing different geographical areas, interest groups, and professional backgrounds, and d) competence in acquiring, classifying, and/or reporting research materials. Education, medicine, business, and appropriate agencies and associations will be represented on the committee.

The conference director will appoint a committee of three to design procedures for: a) selecting other conference participants, b) accumulating information prior to the conference, c) assembling and classifying information during a two-day conference, and d) compiling the information for distribution following the conference.

This committee on design will prepare questionnaires and forms for recording four types of information pertinent to dyslexia and related disorders in the United States: recent research, evaluative and diagnostic services, teacher preparation, and corrective educational programs. These forms will be distributed to participants who will accumulate information in eight weeks prior to conference.

V. Personnel

James H. McCrocklin, Ph.D., Conference Director
(Dr. McCrocklin is president of Southwest Texas State College. He is a member of the Advisory Committee to the Interim Committee to study Language Disorders in Children, appointed by the Speaker of the Texas House of Representatives. 18)

Empress Y. Zedler, Ph.D., Conference Coordinator
(Professor Zedler is chairman of the Department of Special Education at Southwest Texas State College. She has been director of two federally funded re-

³See pp. 41-42.

search projects in the areas of: a) evaluating under-achieving pupils with neurologically based learning disorders, and b) designing educational programs for such pupils in public schools. She is a member of the Advisory Board Association for Children with Learning Disabilities, Inc.¹⁹ She is a Fellow in the American Speech and Hearing.²⁰⁾

John V. Irwin, Ph.D., Consultant on conference design (Dr. Irwin, former director of the University of Wisconsin Speech and Hearing Clinics, was awarded the Roy A. Roberts Distinguished Professorship in Speech Pathology at the University of Kansas in 1966. He is Executive Vice President of the American Speech and Hearing Association.²¹⁾

Mrs. Louise Mesirov
3739 S. Delaware Place
Tulsa, Oklahoma 74105

(Mrs. Mesirov is president of the Association for Children with Language Disabilities, Inc.²²⁾

Stanton J. Barron, M.D.
Abilene, Texas

(Dr. Barron is a pediatrician. He is chairman of the Interim Committee to study Language Disorders in Children in Texas.²³⁾

Ten other persons with comparable competencies who meet the four criteria for participants outlined on page A-8.

Two participants will be responsible for obtaining information on recent research. It is anticipated that the sources of this information will be funding agencies for research projects.

Each of twelve participants will be responsible for obtaining information on recent research. It is antici-

¹⁹EDUCATION AND TRAINING OF THE HANDICAPPED, op. cit., p. 496.

²⁰Ibid., p. 512.

²¹Loc. Cit.

²²Ibid., p. 496.

²³See A-12, Lines 1-5, p. 42.

pated that the sources of this information will be funding agencies for research projects.

Each of twelve participants will be responsible for accumulating information on evaluative and diagnostic services, teacher preparation, and corrective education for children with dyslexia and related disorders in four or more states in the United States. It is anticipated that this information will be acquired in communication by mail, telephone, and/or person with state education agencies and directors of college and university departments of education.

Each participant will bring the requested information to a conference for a two day period. At the conference each of the fifteen participants will be assigned to a group or team which will be responsible for one of the four major areas for investigation of dyslexia and related disorders: a) research, b) diagnostic and evaluative services, c) teacher preparation, and d) corrective education for pupils.

The first day of the conference will be spent in discussing, assembling, and classifying information within the four groups. The second day will be spent in reporting summarized information to the whole conference.

Conference proceedings and findings will be compiled and edited by competent personnel who are not necessarily conference participants. The report will be transmitted by the conference director to interested persons and agencies within twelve weeks after the conference date.

VI. Facilities

The conference will be held at Southwest Texas State College in San Marcos, Texas. This campus is within commutable distance of Austin and San Antonio Municipal Airports. Adequate living quarters and meeting rooms are available.

- VII. This conference on the Problem of Dyslexia and Related Disorders in Public Schools will be supported through the federal funds herewith requested and the offices of Southwest Texas State College. The proposal for this conference has not been submitted to any other agency for funding.

HOUSE SIMPLE RESOLUTION

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9 WHEREAS, Language disorders in children (often technically
10 categorized as dysphasia, dyslexia, and dysgraphia) represent a medical,
11 social, and educational problem of considerable, but at present largely
12 undefined, proportion;

13 WHEREAS, It is estimated that as much as 20% of the entire school
14 population is afflicted in greater or lesser degree with these disorders
15 which are organic in origin;

16 WHEREAS, A child with a language disorder often reads far too
17 slowly, and usually poorly, for his age; is generally a poor speller,
18 confusing word sounds and transposing letters; experiences difficulty
19 writing, usually doing so painfully, awkwardly, and with many untidy
20 mistakes; and sometimes stutters or lisps;

21 WHEREAS, These children, in the competitive environment of
22 neighborhood and classroom, are too often stigmatized as abnormal
23 because of their language disabilities, with resulting frustration,
24 withdrawal, and general emotional disturbance;

25 WHEREAS, The pioneer studies of Doctors Samuel T. Orton and
26 J. M. Nielsen and of educators Alfred A. Strauss and Laura Lehtinen
27 demonstrate that language disorders are often correctable in most
28 children after extensive diagnostic testing and considerable special
29 training;

30 WHEREAS, The Special Education Division of the Texas Education
31 Agency supervises and coordinates among the various school districts
32 the state a program designed to correct language disorders in children
33 (or minimally brain-injured children, as the Division classifies them)
34 through special education and training; and

35 WHEREAS, Substantial improvement in diagnosing and correcting
36 language disorders is not possible in the state at this time because

37 (1) diagnostic testing to discover language disorders in children
38 is complicated, time-consuming, and expensive but there is no state-
39 supported or operated diagnostic clinic nor any state money presently
40 available for diagnosis or testing;

41 (2) not enough competent teachers are available to participate
42 in special education programs necessary to correct language disorders
43 in children;

44 (3) there are no state grants or scholarships, and little
45 money, available for training the necessary additional teachers;

46 (4) no method presently exists to coordinate the activities of
47 private and governmental entities which are engaged on the state, local,
48 and national levels in research, testing, and corrective education in the
49 area of language disorders; and

50 (5) the people of this state are generally unaware of the
51 symptoms, consequences, and correctability of language disorders; and
52 therefore, be it

1 RESOLVED, by the House of Representatives of the State of Texas,
 2 That the Speaker of the House appoint five members of the House and
 3 five interested persons from the public at large, to serve as an interim
 4 committee to study the problem of language disorders in the children of
 5 this state; and, be it further

6 RESOLVED, That the House members appointed receive the trans-
 7 portation and per diem allowance provided in the general appropriations
 8 Act; and, be it further.

9 RESOLVED, That the Texas Legislative Council be requested to
 10 furnish staff and clerical assistance to the committee during its study;
 11 and, be it further

12 RESOLVED, That the committee study all aspects of the problem of
 13 language disorders in children, with special attention directed to

14 (1) ascertaining the prevalence and severity of language dis-
 15 orders among the children of this state;

16 (2) discovering what is presently being done, on both the state
 17 and local levels, to recognize, treat, and correct language disorders;

18 (3) discovering what federal programs and financial aid exist to
 19 deal with the problem;

20 (4) exploring the feasibility of establishing, at convenient
 21 locations throughout Texas, state-supported or operated diagnostic
 22 clinics to better assure the earliest possible recognition of language
 23 disorders and reduce the often prohibitive expense that painstaking and
 24 accurate diagnosis entails;

25 (5) exploring methods of financing, by the state, its local sub-
 26 divisions, the federal government, or a combination of the three,
 27 additional training programs designed to increase substantially the num-
 28 ber of teachers in this state competent to participate in special education
 29 programs administered to correct language disorders;

30 (6) devising means to coordinate the various activities of
 31 private and governmental entities on the state, local, and national levels
 32 in order to assure the widest possible dissemination of technical infor-
 33 mation about language disorders in children; and

34 (7) formulating a continuing, state-wide information program
 35 designed to apprise the people of Texas of the existence, recognizable
 36 symptoms, consequences, and available treatment of language disorders
 37 in children; and, be it further

38 RESOLVED, That the committee in conducting its study consult with
 39 the staff members of the Division of Special Education of the Texas
 40 Education Agency, and with all other departments, agencies, and boards
 41 of the state or its political subdivisions possessing special competence
 42 in the area of language disorders. The Division of Special Education,
 43 and all other departments, agencies, and boards of the state and its
 44 political subdivisions, are requested to assist and cooperate with the
 45 committee during its study to the greatest possible extent. All other
 46 individuals and entities, private or public, are specifically invited and
 47 encouraged to make known to the committee their views on language
 48 disorders in children and to contribute what other information and
 49 services they desire to its study; and, be it further

50 RESOLVED, That the committee report in writing its findings,
 51 together with recommendations in draft form of any legislation considered
 52 necessary, to the members of the 60th Legislature; and, be it further

1 RESOLVED, That copies of this resolution be distributed to the
2 following agencies and organizations: Division of Special Education,
3 Texas Education Agency; State Department of Health; Child Welfare
4 Division, State Department of Public Welfare; Austin State School;
5 Child Development Center at Galveston; Houston Council for Aphasic
6 Children; The Friscoll Foundation; The Hogg Foundation for Mental
7 Health; Texas Association for Retarded Children; Dean Memorial Division
8 of the Texas Scottish Rite Hospital for Crippled Children at Dallas; The
9 Nemours Foundation of Wilmington, Delaware; University of Plano,
10 Plano, Texas; and the Children's Bureau of the U. S. Department of
11 Health, Education, and Welfare.

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APPENDIX B

RESEARCH CONFERENCE ON THE PROBLEM OF DYSLEXIA AND
RELATED DISORDERS IN PUBLIC SCHOOLS OF THE UNITED STATES

Southwest Texas State College

San Marcos, Texas

May 15 - 16, 1967

Agenda

Monday, May 15

- 8:00 AM Breakfast, Aquarena Hotel Restaurant
"Welcome." James H. McCrocklin, President
Southwest Texas State College
- Following breakfast, the conferees and the observers from federal agencies will meet in front of restaurant for transportation to SWTSC campus.
- 8:45 AM General Meeting, SWTSC Student Union Building
Conference Room
- "Operational Procedures, Role and Scope of Committees," Empress Y. Zedler, Conference Coordinator
- "Report of Preconference National Survey," Henry Toy, Jr., Conference Consultant
- 9:30 AM Group Meetings Rooms 3, 4, 5, 6, and
Conference Room
- 10:45 AM Coffee Lounge Area
- 11:00 AM Working groups will resume meetings. Each chairman will appoint three participants from his group to attend each of the other three working groups meeting from 1:30 PM to 3:00 PM.
- 12:30 PM Luncheon Rooms 1 & 2

- 1:30 PM Working groups will reassemble. Each group will now include the chairman and one participant from the original group, and three visiting participants from the other groups.
- 3:00 PM Coffee Lounge Area
- 3:15 PM Meetings of original working groups.
- 4:30 PM Meetings of group chairmen with executive committee to prepare summaries
Conference Room
- 6:00 PM Participants and observers meet on terrace of Aquarena Hotel for transportation to Wimberley.
- 6:30 PM Barbecue Supper, Dr. & Mrs. McCrocklin's Wimberley Home

Tuesday, May 16

- 8:00 AM Breakfast, Aquarena Hotel Restaurant
- 8:30 AM Meet in front of restaurant for transportation to Student Union Building, SWTSC
- 8:45 AM General Meeting Conference Room
 "Panel discussion of reports from working groups," John V. Irwin, moderator
 Chairmen or appointees from each of the four groups.
- 10:00 AM Coffee Lounge Area
- 10:15 AM Meetings of original working groups in same rooms as Monday
- 11:45 AM Chairmen of working groups submit reports of group proceedings to executive committee
Room 4
- 12:00 PM Luncheon Rooms 1 & 2
- 1:00 PM General Meeting Conference Room

Report from executive committee
Open discussion

2:30 PM Adjourn. Return to Aquarena Hotel

3:00 PM Transportation to Austin and San Antonio Airports
will begin.

APPENDIX C

Letter Accompanying First Draft of Report to Working Group Participants

May 22, 1967

Dear Member of Working Group:

I am enclosing with this letter a copy of the report of your working group. In the interest of uniformity, it has been necessary to modify somewhat the physical format of each of the reports. Every attempt has been made, however, to keep intact the basic recommendations of the report.

As agreed at the conference, the reporter for your group has been officially charged with approval of this manuscripts. In order to facilitate his or her reactions with you, and also in order to give you a chance to advise the executive committee directly of your reactions, we are supplying you with the same version of your report as has been sent to your reporter.

Each reporter has been asked to return the corrected manuscript by June 3, 1967. He may call on you before that time for your reactions. It would be helpful to the executive committee, however, if you would send any suggestions which you may have directly to me at my home address below.

On behalf of the executive committee, I wish to thank you for this cooperation in the preparation of these reports.

Sincerely yours,

Empress Y. Zedler
Conference Coordinator, and
Chairman, Executive Committee

Home Address: P. O. Box 465
Luling, Texas 78648

EYZ:mam
Enclosure

APPENDIX D

Letter Accompanying First Draft of Report to Reporters of Working Group

May 22, 1967

Dear Reporter:

I am enclosing with this letter the report of your working group as edited by the Executive Committee. May I call your attention to certain features of the report in its present form.

You will note, first, that some changes have been made in general format. These changes were made in order to present each of the four working group reports in a uniform style. As you will remember, the original styles of the four reports varied considerably. In this draft the attempt has been made to capture the best stylistic features of each of the reports.

Your report may be somewhat shorter than the draft originally submitted. The Executive Committee has sought to shorten each report as much as possible in order to increase the readability of the total conference. Any compression or deletion, however, has been in expository material.

Finally, the essential nature of your report has not been altered. The Executive Committee has been scrupulous in its attempt to preserve the original intent of each recommendation. Your task now is to satisfy yourself as to the accuracy of the report in its present form.

Certain deadlines are relevant. This report was mailed to you on May 25. We want you to mail back the report--with any revisions which you deem necessary--on or before June 3, 1967. This will give you approximately seven days to work with the report. We hope that you will exercise your judgment as to the need for advice from other members of your working group. Each member will have received a copy of the report in its present form. Each has been invited to return to me any suggestions or criticisms which he cares to make. And, as agreed at the meeting, the Executive Committee will certainly value these suggestions. The official reaction, however, must come from you.

Please observe the deadline which has been indicated. We are aware that this puts some limitations on the amount of editing which can be done. But, as you will remember, we

are under considerable pressure to complete this manuscript and to get it in the hands of responsible authorities.

On behalf of the Executive Committee, I wish to thank you for your cooperation. If necessary, feel free to call me collect at my office 512/392-3311, Ext. 55A or my home TR5-2259. Return all manuscripts to my home address below.

Sincerely yours,

Empress Y. Zedler
Conference Coordinator and
Chairman of Executive Committee

Home Address: P. O. Box 465
Luling, Texas 78648

EYZ/mam
Enclosure

APPENDIX E

Letter Accompanying Second Draft of Reports Mailed to
Reporters and to Group Members

June 14, 1967

Dear :

Re: Research Conference on the
Problem of Dyslexia and
Related Disorders in Schools
of the United States May
15 and 16, 1967

I am enclosing the "finalized" drafts of the reports of the four working groups and of the executive committee. These versions incorporate the changes suggested by the designated reporters and, so far as possible, the additional suggestions of group members as sent directly to me on or before June 3.

The deadline for submission of the total conference report has been advanced to July 14. Therefore, unless you telephone me (collect, 512/392-3311, Ext. 55A) by June 19 with suggested editorial changes it will be impossible to incorporate them.

Thank you for your cooperation during and following the conference.

Sincerely yours,

Empress Y. Zedler, Ph.D.
Conference Coordinator, and
Chairman of Executive Committee

EYZ/mam
Enclosure

APPENDIX F

A M A I L S U R V E Y

conducted for

The Executive Committee
of the
Conference on Dyslexia and Related Learning Disorders

Southwest Texas State College
May 15 - 16, 1967

by: Henry Toy, Jr. and Associates
1735 DeSales Street, N.W.
Washington, D. C. 20036

A M A I L S U R V E Y

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SUMMARY

1. There is an urgency for a clear definition of the term "dyslexia."
2. In too many instances there seems to be a feeling that physicians and educators should not use the same term.
3. There is need to gain wide understanding and acceptance of the definition to avoid confusion in the future.
4. Although there is not universal concern for the problem of the dyslexic there are numerous promising programs occurring in some states and widely scattered communities.
5. Where there is concern it appears to be a truly dedicated one.
6. Recent Federal legislation seems to have stimulated research in the field but those concerned with dyslexia wish more evidence.
7. When more is known concerning the techniques of diagnosis, screening, and treatment of dyslexics a major task will be presented to those responsible for pre- and in-service teacher education.
8. Practitioners in the field were most generous in sharing their knowledge and extend best wishes to the participants of the Southwest Texas State College Conference. They are anxious that the results of the deliberations, in turn, be shared with them.

BACKGROUND

At the request of the Executive Committee for the Conference on Dyslexia, a mail survey was conducted to take an exploratory inventory of activity in the field. On March 27, 1967, a letter was sent to each of the 50 Chief State School Officers. They were asked:

1. Which colleges and universities in your State are offering credit courses and are certifying individuals as reading specialists?
2. Does the above include work with dyslexics?
3. How many school systems in your State have services for diagnosing, screening and/or treatment of dyslexics? (If there are only a few, would you identify them, please?)

By May 8, the close-out date to prepare this report, 41 states (82%) had responded. These responses offered a total of 172 special leads where

additional information could be obtained. By the end of April, 139 of these leads were followed and over one-half of them had responded by May 8. The foregoing "Summary" and the report that follows are the results of these replies.

This analysis is not purported to be a final statement of the total activity within the 50 States. Too little time was afforded for that. It does suggest the degree of activity, however, and provides a base upon which others can build. For the most part this report consists of excerpts, without attribution, from typical replies. They are arranged according to subject, since this seemed the best way to retain the flavor of the responses.

Meaning of Dyslexia

The most conclusive point developed from the survey was the fact that there is very little agreement as to the meaning of the term dyslexia. Definitions were not solicited in the inquiry yet, almost without exception, responses clearly showed this to be a concern. The following few excerpts attest to this:

- ... "If you mean by 'dyslexia' an inability to read, then the answer is yes."
- ... ". . .in the area of reading disability, or to use a term that once again is attaining prominence, dyslexia."
- ... "No special course is offered for studying dyslexics but students who enroll in Clinical Procedures in Reading are informed of the many causes of reading difficulties which includes dyslexia."
- ... "With respect to the vaguely defined condition known as dyslexia which you know simply means 'poor reading,' we consider this as part of a total reading program rather than as a separate subject."
- ... "Yes, we work extensively with the so-called 'dyslexic' child as an integrated part of our learning disabilities division."
- ... "We are concerned that many so-called 'Reading Experts' are using the label, 'Dyslexia' almost as a scapegoat. We find these people do not agree as to its definition, diagnosis nor treatment. I, personally, hope some definitive helpful materials will come from your research."
- ... "Our school system is not presently using the term dyslexia to label cases of reading disability. In this area this term is chiefly used by physicians and is not a helpful designation for instructional purposes."
- ... "To be honest, we do not seek out and treat 'dyslexic' children, although I guess we always have a few of that type around. We reserve that label for children who have been medically diagnosed."
- ... "I am sure that you will agree that the term Dyslexia has not been well defined over the nation. Here in . . . many physicians and some other people are diagnosing children with any kind of reading, educational, neurological, and sometimes personal problems as Dyslexia. It is difficult to tell what they mean, when sometimes

their diagnosis will not stand up under educational or general examination. We have not had all of the scientific research that is necessary in this field and although the . . . school system is sympathetic toward the entire proposal, we attempt to examine the needs of each child and react accordingly from an educational viewpoint, rather than going headlong into an acceptance of any diagnosis that a group of unorganized outsiders might make. We do have a positive and favorable program here, but it is not in conformity with what some of the leaders in the 'Dyslexic' fraternity would accept."

- ... "The writer has read some forty-five definitions of Dyslexia. If dyslexics are described as persons with severe reading problems, the program at the University does include work with such children. Each candidate has sixty hours of clinical work in his graduate program. The children who attend these practica are screened before entrance and are true remedial cases. If Dyslexia is defined in the more narrow context of perceptual factors, it should be noted that training includes the study of all types of diagnosis and remediation since research evidence supports the use of an eclectic approach. Students investigate and apply a comprehensive, multi-disciplinary approach to the prevention, diagnosis, and remediation of reading disabilities."
- ... "Your question regarding our concern with the dyslexic child will likely lead us into some semantic confusion. Dyslexia, as you know, is a term which is sometimes broadly applied to children with reading difficulties. In that sense we are, of course, working with dyslexic children. If, by dyslexia we attempt to distinguish congenital from acquired reading dysfunction, then these children do constitute a portion of our clinical population. If, by dyslexia you refer to cases of primary reading disability, then we encounter very few children of that classification in our present state of development."
- ... "My work at the University is to a large extent concerned with the problems of children who have difficulty in learning to read. This type problem has often been referred to as dyslexia. The term, however, as you well know, is also used by physicians. I am not sure whether you are referring in your letter to a 'congenital deficiency causing learning disability' or to the incidence of learning disability."
- ... "If your use of the term dyslexia includes all types of reading disabilities - all those not related to speech disability - then we give a great deal of attention in a variety of courses to diagnosing and remediating such cases. If your use of the term restricts it to those with brain impairment then the attention we give is within the frame work of the broad area of reading disability. I never know these days just how to interpret the term 'dyslexia' unless I know the background of the person who is asking the question."
- ... "I do not know how you define dyslexia and we do not use this term due to the looseness with which it is being used."

"Our reading clinic specializes in working with children who have severe reading disability and who have a marked discrepancy between their obtained intelligence scores (on an individual test of intelligence) and their reading achievement."

- ... "As you may well realize, only a small percentage of our clinic cases could truly be called dyslexics in the most accurate sense of the term."
- ... "In our school we refer to dyslexia as specific language difficulties or the multi-sensory method of teaching our students."
- ... "Customarily, we do not speak of any particular reading problem as dyslexia, nor do we use the terms specific language disability, word blindness, specific reading disability, developmental dyslexia. We interpret these terms to mean inability to use written language at a level somewhat commensurate with instructional opportunity and intellectual capacity, when no related interfering factor is discernible."
- ... "My own view of dyslexia is that it is a paramedical term for reading disability covering a number of neurological assumptions in a class with strephosymbolia and mixed dominance. This emphasis or approach is currently popular."
- ... One State Department of Education respondent said "... interprets dyslexia as inability to read," and then quoted from John Money's book Reading Disability Progress and Research Needs in Dyslexia (1962, The Johns Hopkins Press). "... the inability to read even with adequate teaching. Dyslexia has no single cause. Poor hearing and seeing may be implicated, or low intelligence. Early brain damage may hinder the learning of reading, and brain injury in adults may cause even complete loss of reading skills. Dyslexia may also be due to congenital, perhaps familial, specific disability which is sometimes given the name of word blindness."

The following excerpt from a letter written by Willis Vandiver, Professor of Education, Montana State University, seems to summarize all of the above:

- ... "Professionally this term 'dyslexia' is used to mean so many different things, to me, it has become meaningless. The current dictionary simply states as a definition, 'A disturbance of the ability to read.' Some professionals indicate it simply means a child has difficulty in word perception while others indicate dyslexia means the transposition of letters or words possibly symptomatic of brain damage. Some medical people use the term in connection with mixed dominance.

"May I respectfully suggest that your search for information is, in my opinion, a hopeless cause until the term dyslexia is defined."

Promising Programs

In an effort to determine where, in the elementary and secondary schools, services were available for diagnosing, screening and/or treatment

of dyslexics, State Departments of Education were asked to identify such schools if a list of them would not be too long. Only two states reported such heavy activity. A few regretted that none of their schools provided these services. Others furnished leads to schools with promising programs. Taken as a whole, it seems clear that special services for the dyslexic child are very rare.

Responses are still being received from identified schools. Some are in too great detail to be included in this report but will be useful to researchers following the conference. Many other responses surely will be received and they will be turned over to the conference sponsors. The conferees may find the following typical excerpts from some of the respondents useful in gaining an overview of the nature of programs currently available:

... "At present we have little to offer you from the standpoint of depth diagnosis and treatment. Our practice has been referral of extreme 'unknowns' to the reading clinics of Temple University and the University of Delaware. In our own system, we do have individual screening and diagnosis with our reading and psychological services that gives a point of reference as to which children can be taught in our system and which need depth study.

"Perhaps in the future we may know more about learning disabilities. We have just received a grant under E.S.E.A., Title III for study, diagnosis and programming for children with learning disabilities. Our study tied up with the institutions which have done depth studies in the areas of cognitive learning, motor perception, psycholinguistics and social-emotional development gives us, I think, great promise to get to the root of learning disabilities."

... "We in . . . stress the role of the teacher to be one involving constant informal diagnosis of children's learning. We stress the changing of presentation of materials according to what will work best with a specific child or various groups of children.

"In spite of what we consider to be a well-balanced and worthwhile program of instruction, we find youngsters with average and better intelligence who are not successful in learning. The youngsters begin to portray learning inadequacy early in the first grade. Their inability to learn can be further influenced depending upon varying pressures. Self-confidence and academic successes are impeded. Because of our interest in these children, we are attempting to acquire a district understanding for and more empathy with them.

"Presently, our course of action involves the acquiring of information about the problems of dyslexia and assisting teachers to use the limited curriculum tools available. It is difficult to obtain materials and suggested teaching methods for children with minimal brain dysfunction.

"In acquiring information, elementary principals and selected junior high school principals are accompanying a school psychologist and me on visits to two large city school systems: Washington and Baltimore; two private schools: Pathway and Vanguard; and the Oakland County School System in Pontiac, Michigan. Enclosed is a copy of the guidelines currently used for study when making the visit. The inform-

tion will assist us in expediting a future program for children with specific learning disabilities.

"We are initiating our teachers to working with children having specific language disabilities through the use of the Frostig Program for the Development of Visual Perception and the Cuisenaire Rods. When both tools are first introduced, we request refraining from the tendency to 'teach.' We ask that the materials be provided to students so as to set a stage for observation of behavioral changes. The teachers are encouraged to seek reasons for the changes and to discuss their efforts and findings with their principals, psychologists, and myself.

"We are hopeful that a company supplying school materials will soon provide some guidance in auditory perception as opposed to auditory discrimination. As yet, we have found nothing to be available in this area. We are, also, desirous of more tools to stimulate tactile learning and better screening devices.

"We have submitted a proposal under ESEA, Title III which would establish a pilot project in the area of chronic reading disabilities involving children in which you also express an interest. We are anxiously awaiting its fate.

"In correlation to regular content areas in all elementary grades, we encourage individualized reading and language arts' oral and written activities. Within language arts, teachers assist in strengthening children's awareness to their feelings and environment.

"Art and music are medias for strengthening body imagery, imagination, processes of self-identification, and gross motor movements.

"Some of our schools have 'readiness classes' for children who are entering first grade and could not be successful in a regular class setting.

"To state we have a class or a specific program at this time for children with minimal brain damage would be false. Such is our goal. Our activities need further refinement, better tools, and more commitment. All of these we feel are forthcoming."

... "Our program deals with the education and diagnosis of dyslexia and related disorders. It is an explosive program and is continually growing in both methodology and number of students served. We are doing our best to keep up with the most recent data dealing with this ever present problem, but in so doing have not had the time to put any of our program in writing or publication form."

... "In capsule form, let me describe our program: We designed and purchased four trailers (12 x 45 ft.). We trained a staff of five clinicians to operate each trailer. We accept referrals from principals of all schools in our county. We diagnose all case referrals (three hours individual diagnoses). At present we take under instruction all reading disability cases on the basis of first come first served. We give special attention to those children diagnosed

as dyslexic, using Fernald, Gillingham-Stillman techniques, etc. Obviously, in the near future, we will restrict the intake in these Mobile Reading Centers largely to dyslexic children.

"I used the term Mobile Reading Centers since these trailers are moved by private contractors approximately twice a year to different schools in an attempt to serve more than 90 schools with the four trailers.

"In our diagnoses we used the telebinocular visual screening. Next year we hope to include audiometric testing also. We give an IRI, a Spache Diagnostic Reading Scales, and/or Gates Reading Tests. Our feeling is that no intelligence test gives a true picture of the dyslexic's ability. We used listening comprehension as an indication of reading potential. We used the Benton Visual Memory Test, the Wertheimer Gestalts, and several informal questionnaires.

"In addition, we have mounted a program of perceptual development for first grade children in some 40 of our elementary schools. We strongly believe that a preventive approach is necessary in order to combat this problem. Surely it is obvious that no remedial program can keep up with the flow of reading disability problems that stem from our classrooms.

"I hope this information is of interest and of some value to you and your researchers. On behalf of Superintendent Fulton and Palm Beach County, we extend a cordial invitation to you and any researchers who would be interested in visiting our programs."

- ... "The treatment of the child in the reading clinic would depend upon his needs as indicated by the diagnosis. While most of our instruction is heavily flavored by the Orton theories as prescribed by the Gillingham approach, our clinicians modify to meet the children's needs."
- ... "Our State Department of Education here in Nevada provides for the education of the neurologically handicapped child. It is within this proviso that we here in this school district try to accommodate the rather unique educational needs of the child with a cerebral dysfunction.

"Once a child has been identified both by the school psychological services and the medical consultant as being neurologically handicapped this youngster is placed in a special classroom situation with similar children. These youngsters are grouped by maturation level and have teachers who are specially trained in dealing with this type of child.

"Our instructional program is not unique in any manner other than the inclusion of the kinesthetic approach to learning. If our instructional program is unique in any single aspect, it may well be in the area of increased patience, acceptance and understanding on behalf of the instructors within these areas. Specifically, the dyslexic child does receive additional help in the area of reading via a trained reading specialist. This person is not restricted solely to this type of child, however because of specialized training she does work very well with this youngster.

"Because many of these youngsters are identified within the first year of schooling and because of their obvious young age, we hesitate in

making specific diagnoses. This is partially done because of a hesitancy to so label the child, and perhaps because we are always optimistically looking towards and hoping for some degree of spontaneous recovery. When we hold our staffing, which of course involves the receiving teacher within Special Education, we may allude to the fact that this child appears to have symbolic difficulties which appear to impede his or her ability to master reading as a subject matter, and as a result of this staffing make concrete recommendations to the teacher as to how the child may be reached. Quite naturally, the follow up is on an ongoing continuum, many of our suggestions are of a trial and error nature. We require maximum flexibility from the teacher and within the classroom at all times. Our ultimate goal, of course, is to return these children back to mainstream education. Out of two classes comprising twenty-three of these children, on both a primary and intermediate level, we have so far this year placed four of these children back into conventional classrooms. At the present writing their progress seems to be entirely satisfactory."

- ... "The . . . County School District does not have an organized program for dyslexia. We do have some children in our pre-school language program that have been identified as suffering from this disorder. These children are helped on a one-to-one basis by the Special Education teacher using materials of Leon M. Whitsell, M.D., Consultant for the Child Study Institute at the University of California Medical Center."
- ... "The . . . County School District has five classes for children who have been identified as neurologically impaired, many, of course, who have serious reading problems. One or two of our teachers have had considerable training in the area, but for the most part the training has been minimal and we have not tried to do any original work or research. We have had some good results with some of the children."
- ... ". . . we are attempting to assist youngsters in diagnosing their reading difficulties and helping them in both remedial and developmental approaches. However, to this point, we have not done anything specifically in the area of dyslexia or related disorders."
- ... "We are beginning to identify these children with developmental gaps in perception and resultant weak integrative functions. Clinical study involves a detailed developmental history obtained by our social worker. Our psychiatrists follow up this history and extend it where necessary as a basis for neurological screening during their examination of the child. Detailed study of our children areas of functioning efficiency in those areas and 'style' of functioning are made by our psychologists. Among the tests used are the Bender Gestalt Test, various drawings (HTP, Animal, etc), the Wechsler Intelligence Scale for Children, the Illinois Test of Psycholinguistic Ability, the Raven's Progressive Matrices, and the Wepman Auditory Discrimination Test.

"Personal-social problems and emotional disturbance in our children, either primary or secondary to learning difficulties are dealt with also through diagnostic evaluation, and by providing various levels of treatment services to parents and children, both individually and in groups.

"We have yet to come to conclusions as to how our pupils with severe perceptual-motor difficulties are to be instructed in reading - that is, whether we should continue to have our reading teachers deal with them in special groups in a more intensive and more structured program. These plans are now in a formative stage with us."

... "We have recently established a Learning Evaluation Center in our district. Possibly there has been some misunderstanding of its role that has caused you to believe that we are working with dyslexics. Though we may occasionally in our evaluation of children with learning problems identify such a child we are by no means establishing ourselves as experts in diagnosing, screening or treating dyslexics."

... "The . . . Independent School District has a psychological service center whose staff includes a psychologist, psychometrists, visiting teachers, doctor, dentist, and nurses.

"We have classes for children with minimal brain injury. From our work with these children we have found that:

1. Early recognition and inclusion in a special class is necessary for productive participation in a regular class later.
2. All children included in our classes for minimal brain injury are not ready at 13 years old for full participation in junior high school regular curriculum. Most of them can participate on the basic track.
3. The psychological center services have been most beneficial to us. Our psychologist is able to interpret medical reports to classroom and visiting teachers. Visiting teachers have been able to provide much needed help to parents."

... ". . . under this department we have established a Reading Center with reading specialists assigned on a county-wide basis to give help to any school within the system in diagnosis, instruction and consultation. We also maintain a resource room of up-to-date and varied materials for examination and trial use by the reading teachers assigned to schools. We have a large collection of trade books which are checked out to teachers for use in Reading and Study Skills classrooms.

"Our diagnostic testing division of the Reading Center gives a comprehensive reading evaluation and is supplemented by the Psychological Services of the county organization. Pupils are referred by the schools, and after testing the pupil, the Center reports to the school, the Pupil Personnel Department, the Area Supervisor and the parents."

... "In our program, which began in the fall of 1963, dyslexic children are grouped in self-contained classrooms with teachers who have been especially trained in a multi-sensory approach. Children may be recommended for testing by teachers, principals, or pediatricians if there is sufficient evidence of difficulty in the language area to justify such a recommendation. We use Slingerland's Screening Tests for Identifying Children With Specific Language Disability. If the results of the test are indicative further tests are recommended.

There are several places where such testing can be done, though the majority of our students are tested at the Language Center of Scottish Rite Hospital in Dallas.

"Currently we have ninety-eight (98) children assigned to six teachers, with the following grade distribution: two second grade classes; three third grade classes; and one fourth grade class. These classes are housed in five different elementary buildings in our district, but membership is open to children anywhere in the district."

- ... "There are currently approximately 72 local school districts (Oregon) and administrative units providing remedial programs involving reading specialists. In some cases the administrative units provide service to a number of small local districts. There are approximately 200 specially certified teachers working in these programs plus a sizable number of non-specially certificated teachers involved in certain of these programs. The availability of E.S.E.A., Title I money has brought about the development of a large number of general corrective and remedial reading programs, often involving non-specially certificated teachers who in general would not make a highly individualized approach to dyslexic children. The 56 programs receiving state reimbursement under the handicapped child program would definitely include work with the dyslexics."
- ... "In the Diocese of Helena, Montana, the Neurological Program is intended to treat existing reading problems and to prevent reading problems in the future.

"Correlated with the neurological approach to the teaching of reading is the Ungraded Primary in Grade One to Three, and the Ungraded Reading Program in Grades Four to Eight.

"The Neurological Program includes:

1. Testing program.
 - a. Achievement tests.
 - b. Intelligence tests.
2. Test for correct sleep pattern.
3. Tests for neurological organization.
 - a. Supination and pronation.
 - b. Cortical opposition
4. Use of Delacato Test Summary Sheet to determine dominance.
5. Use of Telebinocular machine for eyes.
6. Tests for correct writing position and position of paper.
7. Test for cross-pattern creeping.
8. Test for cross-pattern walking.

"Research projects have not been set up because of time involved and lack of personnel; however, individual schools will compare the rate of improvement in former years in the reading score with that of the present year.

"Remedial procedures include:

1. Exercises to strengthen handedness and footedness.
2. Instructions on correct sleep pattern.

3. Instructions on correct writing position.
4. Referral to competent doctors for exercises to strengthen dominant eye.
5. Cross pattern creeping -- 15 minutes per day. Severe cases creep one hour a day. Children with severe reading problems are encouraged to creep from 15 to 30 minutes extra at home each day.
6. Cross pattern walking -- correlated with physical education program.

"In conjunction with the Neurological Program, schools are using many games and exercises described in Success Through Play by Radler and Kephart for coordination and improvement of motor skills.

"Requirements for Teachers in Helena Diocese:

Treatment and Prevention of Reading Problems. Carl H. Delacato, Chas. C. Thomas Pub. Co., Springfield, Illinois.

The Diagnosis and Treatment of Speech and Reading Problems. Carl H. Delacato, Chas. C. Thomas Pub. Co., Springfield, Illinois.

The Slow Learner in the Classroom. Newell Kephart, Chas. E. Merrill Books, Inc., Columbus, Ohio

Success Through Play. Radler, D.H.: Kephart, Newell C., Harper and Row, Publishers, New York and Evanston.

A Handbook of Information on the Carl H. Delacato Neurological Approach to Reading Instruction. Prepared for parents and teachers by the Archdiocesan Reading Service, 116 North Desplaines Street, Chicago, Illinois 60605.

"While results of the Helena Diocesan program have not yet been evaluated, delineation of hyperactivity, desire to learn to read, more perfect coordination group-wise and individually, better coordination in handwriting attest to the partial success of the neurological approach to the teaching of reading."

The following are typical excerpts from institutions of higher education:

... "At present we have only been able to diagnose children. We use basically the testing approach developed at Temple University. We are able to identify a type of reader we call remedial (dyslexic). The treatment approach that we recommend is the tactile (tracing) approach.

"We hope to increase our Clinic staff next year. This would give us three full-time professional staff members and one full-time doctoral student doing Clinic work.

"Within the next 18 months we hope to move into the new College of Education building. This will provide us with a carefully designed series of diagnostic and treatment rooms."

... "Problems of diagnosis of dyslexia or other types of severe reading disabilities are included in our diagnostic course. We refer to it

along with other types of reading disabilities in our basic reading course. Also in the course we are teaching reading to slow learners and occasionally we have several cases of severe reading disability in our case-study course."

- ... "Our reading clinic has been in operation during the regular school year and also during the summer session for the past ten years. It is operated by me on a one-fourth time basis and we are therefore limited in the number of children we can accept. The clinic enrollment (depending upon the number of college students available to work with me as clinicians) ranges from ten to twenty-four during the regular school year and from twenty-four to forty during the summer session.

"Only three children who have been previously classified as dyslexics have been referred to our clinic during its existence. However, we found that the diagnosis which had been made of these children was incorrect because they did learn to read and made good progress.

"We are prepared to use kinesthetic approaches with dyslexics in an attempt to teach them to read, but thus far we have had no clinic cases with whom we have needed to use this approach."

- ... "Among our clients we do find those who have perceptual or motor deficits or immaturities that seem to be expressions of some underlying neurological disfunction. Other leads to remediation of a physical, psychological, social, or experiential nature also are present in these cases. Recommendations for remedial work are based on the total pattern of strengths and weaknesses which the client presents.

"Within the overruling conditions that remediation be fitted to the present and future interests and needs of the pupil and that in any area it begin at the level of his present achievement, however low, there are a number of activities we, at times, recommend to improve underlying perceptual and motor performance. Among those measures are: variations of VAKT techniques such as large size write-and-say practice; programs for developing visual perception from Frostig and Continental; measures listed with the Monroe Aptitude Test; records of sounds; tachistoscopic exercises, near-point and far; exercises in blending; chalk board exercises for form and direction, walking beam, balance board, angels-in-the-snow exercises, visual pursuit training, filtered reading and writing, cross pattern crawling, creeping, and walking. The last group of activities can be found in the works of Delacato, Getman, and Kephart."

- ... "We operate a summer clinic for dyslexics. This summer clinic is one in which it is possible for remedial teachers from the surrounding areas to obtain experience working directly with dyslexics. In connection with this program we have a very comprehensive diagnostic program in which we give the youngsters enrolled in the program visual examinations, auditory examinations, individual intellectual evaluations, and reading diagnoses. Our diagnostic program in this area is probably about as intensive as that which would be found anywhere in the state of South Dakota. We do work with about eighty youngsters in conjunction with the program and approximately

twenty teachers. In conjunction with the reading diagnostic program, we train about seven psychological examiners each year. The psychological examiners, of course, are trained to administer the individual intelligence tests, some projective tests, and at least one reading diagnostic battery. The training of the psychological examiners, in addition to the type of training they receive with the reading clinic, also stresses the importance of writing reports, that is writing reports in such a way that the reports can then provide the basis for various types of corrective teaching procedures. This is stressed to the maximum degree. This is done because of the fact that a good many of the psychological examiners will be working in situations in which comprehensive reading programs may not be in existence.

"Concerning innovations or research in these areas, our work with dyslexia follows pretty much the standard procedure, that is the typical corrective procedures. However, at the present time, we are conducting research in the area of perceptual problems relating to reading.

"It is possible for college students at our institution to obtain help in reading through the Department of Special Education in this school. All entering freshmen are given a reading test upon entering the institution, although our major effort in the area of reading, primarily involves working with dyslexics of the subcollege level, and it involves the training of remedial teachers and psychological examiners. A great deal of stress is placed in the training of all such personnel in the diagnosis of learning disabilities generally."

At the State level there are also some interesting developments:

... "Last November, the State (Connecticut) sponsored a two-day workshop concerning diagnosis and treatment of the perceptually handicapped student for public school reading specialists. (Keynote speaker for the workshop was Charles Drake, Director of Research and Development Program, Perceptual Education and Research (PERC), Wellesley, Massachusetts.) As a result, reading specialists in many of our schools are attempting--in a limited way--to implement some type of program.

"The State has passed a law pledging state support for local school programs designed to screen, diagnose, and educate perceptually, neurologically, and emotionally impaired students. Funding for these local programs will be available this Fall."

... In Rhode Island the following regulations governing the education of children with neurological impairment are in addition to the General Regulations governing the Special Education of Handicapped Children:

"I. Definition

- A. The Neurologically Impaired - a child without serious physical locomotion problems who tests within the normal range of intelligence but who neurologically demonstrates such unusual perceptual and conceptual disturbances as to make instruction very difficult without the provision of a clinical or a special educational program. (These children are variously referred to as children with brain damage, cerebral dys-

function, Strauss Syndrome, Central Nervous System Impairment, perceptual-motor problems, etc.)

II. Procedure for Determination of Eligibility for Special Education for the Neurologically Impaired

- A. An overall evaluation including general medical, psychiatric, educational, neurological, and clinical psychological examination.
- B. An analysis of the evaluation by the community school psychologist.
- C. A specific recommendation for placement by the community supervisor of special education on the basis of the overall evaluation and analysis by the school psychologist, and consultation with the parent(s) or guardian(s).

III. Special Education Programs for Neurologically Impaired Children

A. Pre-School and School Programs.

1. A community having eight neurologically impaired pre-school children whose needs, as judged by the evaluative procedure, can best be met in community pre-school programs, shall establish pre-school programs; or
2. A community may utilize pre-school programs operated by another community or by private agencies whose pre-school programs are approved by the Commissioner of Education.

B. School Programs

1. A community having eight or more neurologically impaired children within a chronological age range of five years and an academic achievement range of approximately two to three years shall establish appropriate programs for the instruction of these children.
2. A community having fewer than eight neurologically impaired children which does not establish an appropriate program shall provide for the free education of such children in a special public school program in another community or in a program approved by the Commissioner of Education.

IV. Criteria for the Educational Program

A. Pre-School and School Programs

1. The maximum size of a class shall be ten.
2. The facilities shall be comparable to other classes in the community.
3. Each such class shall have available a consulting clinical psychologist and a consulting neurologist or be affiliated with a clinic employing such personnel.
4. No child shall remain in such a class for a period to exceed two years without a clinical re-evaluation.
5. Appropriate records of attendance, evaluation, suspension or withdrawal shall be maintained."

Research

The survey was not successful in uncovering completed research that might not otherwise have come to the attention of the conference participants. Nevertheless, some very thoughtful and helpful replies pointing to the literature in the field should be of interest.

... "Much of the early research prior to 1955 or 1956 includes the work of Orton in the United States; Hallgren, Hinshelwood, and Hall in England. It gives much more emphasis on the relation of cerebral dominance to reading than do more recent studies of children in the general school population rather than in clinics as in the earlier investigation. Among the more recent writers interested in what is now called neurological dysfunction, the point of view of research by Dr. Hirsch at the Presbyterian Hospital, New York City; Dr. Wepman at the University of Chicago; and Dr. Reitan, Indiana University, Medical Center, I think are among the best authorities on the subject. A very comprehensive book was written by Malmquist which reviews much of the research up to 1961."

Specific references included:

- Balow, Irving H., and Bruce Balow, "Lateral Dominance and Reading Achievement in the Second Grade" AMERICAN EDUCATIONAL RESEARCH JOURNAL, Vol. 1, May, 1964, pp. 139-143.
- Cohn, Stella M., The Special Reading Services of the New York City Board of Education. The Reading Teacher. Vol. 12, No. 2, Dec. 1958, pp. 107-114.
- Cohn, Stella M., and Cohn, Jack - Teaching the Retarded Reader - A Guide for Teachers, Reading Specialists and Supervisors. The Odyssey Press, Inc., New York, 1967.
- Cohn, Stella M., and Fite, Margaretta W. - Personal-Social Changes, Reflected in Reading Accuracy Ratings. The Reading Teacher. International Reading Association, Inc., Tyre Avenue at Main Street, Newark, Delaware 19711, Vol. 17, No. 2, Nov., 1963, pp. 97-99.
- Fite, Margaretta W., and Mosher, Margaret M. - The Special Reading Services of the New York City Board of Education - Part II. The Clinical Program. The Reading Teacher, Vol. 12, No. 3, pp. 181-186.
- Robbins, Melvyn T., A STUDY OF THE VALIDITY OF DELACATO'S THEORY OF NEUROLOGICAL ORGANIZATION. Exceptional Children, Vol. 32, April, 1966, pp. 517-523.
- Silverman, Dr. Jerome S., Fite, Margaretta, and Mosher, Margaret - Clinical Findings in Reading Disability Children - Special Cases of Intellectual Inhibition. Paper read at the thirty-fifth annual Conference of the American Orthopsychiatric Association. March 6, 1958: New York City. Published in the Journal of the American Orthopsychiatric Association. Vol. for 1959.
- Vernon, Dr. M. D., BACKWARDNESS IN READING, Cambridge University Press, 1957.

Sister Joseph Cecelia, "The Doman-Delacato Approach to the Teaching of Reading" MONTANA EDUCATION, February, 1966.

Some samples of research activity and references to Ph.D. and M.A. theses dealing with a wide variety of characteristics and experimental treatments of reading disabled children will be turned over to the conference sponsors.

The fact that a research conference is being held raised concerns and hopes. The following are examples:

... "It is my personal hope that this country does not spend the major share of funds allotted to reading as England has done on the i.t.a. and the problem of the dyslexic. This summer I visited with British teachers at the First International Conference on Reading and again in London. They were of the opinion that the medical profession rather than the teachers of reading were most interested in this problem and that a number of those diagnosed as dyslexics were taught to read."

... "I do want to make explicit the attitude of my colleagues at this institution, which is simply that any such problem by whatever name people choose to call it needs the most careful and scholarly study. It is especially important that any treatments thought to be useful for such problems receive careful experimental study before they are recommended to the general public."

"A research conference is an excellent beginning and we wish it every success."

... "It is gratifying for those of us who have seen the need and have worked alone for so long to see something being done on a national level that will call attention to this group of children."

The great majority of the helpful individuals who responded to the request for information expressed a desire to hear more about the conference to be held at Southwest Texas State College. An example of this type of comment is:

... "We would certainly be interested in further information concerning the survey and the results of the May conference."

Teacher Preparation

A report of what is and what is not being done to prepare reading specialists deserves a study of its own. From the responses received in this study a paper could cover each of several aspects of this topic. For example, the courses offered and/or required to gain certification could be a report by itself. It is believed more useful, in the space allotted, to review a single phase of the topic--the state by state certification requirements--to show the diversity that exists.

Marion L. McGuire, Reading Specialist for the Rhode Island Department of Education, thoughtfully enclosed with her reply, the results

of a 1966 survey she had made. She had responses from 39 States and the District of Columbia. Data from Miss McGuire's study and this one are shown side by side below and on the following pages. Taken together information is available for 46 of the 50 States.

CERTIFICATION OF READING SPECIALISTS

<u>State</u>	<u>Per Results of 3/27/67 Inquiry</u>	<u>Per Rhode Island Study dated 7/9/66</u>
Alabama	"University of Alabama offers credit courses basic to certification. . ."	No comment
Alaska	No comment on certification	No comment
Arizona	(Three universities) "offer credit courses and are certifying. . ."	No comment
Arkansas	". . . we have no colleges or universities offering credit courses toward certification . . ."	Report a recommended minimum standard for Elementary level of an Elementary Certificate and 6 hours in reading.
Calif.	Reported a number of colleges and universities that offer courses "to <u>qualify</u> as reading specialists" and "other outstanding graduate level programs are being developed rapidly."	No comment
Colorado	No special certification issued although an endorsement "Special Education-Educationally Handicapped" is offered.	"Very few of these endorsements have been issued."
Conn.	Four colleges and universities presently offer programs for certifying reading specialists. Two more will start in the Fall of 1967.	Offers certification for Teacher/Clinician and for Consultant. Master's degree, 6 years experience and 18 hrs. in reading and related fields required.
Delaware	University of Delaware has program leading to certification.	Offers Certification with following requirements: Tchr/Clin - Bachelor's degree 3 yrs. experience 15 hrs. in reading Consult. - Master's degree 3 yrs. experience 32 hrs. in reading

State	Per Results of 3/27/67 Inquiry	Per Rhode Island Study dated 7/9/66
Florida	Ten colleges and universities have programs of preparation for certification to meet state requirements.	Offers certification with following requirements: Tchr/Clin - Bachelor's degree 3 yrs. experience 21 hrs. in reading Consult. - 6th year 3 yrs. experience 21 hrs. in reading
Georgia	Four colleges and universities certify	Offers certification with following requirements: Tchr/Clin - Master's degree 25 q.hrs. in rdg. Consult. - 6th year
Hawaii	"Univ. of Hawaii offers courses to train reading specialists." (No comment re certification.)	No comment
Idaho	"Sorry, there are no such services available in Idaho."	No comment
Illinois	Six state universities were named as offering credit courses leading to certification.	"A Standard Special Certificate is issued to an applicant who has 32 semester hrs. in a teaching area of specialization. Some applicants get this certificate in the field of reading."
Indiana	No response by 5/8/67	Offers <u>endorsement</u> with following requirements: Tchr/Clin - Master's degree 36 hrs. in rdg. Offers <u>certification</u> with following requirements: Consult. - 6th year 3 yrs. exp. 60 hrs. in rdg.
Kansas	State does not yet offer a certificate for reading teachers "but plans indicate that by 1970 we will." Considers "a reading specialist as one who has a Master's degree with 12 hrs. of reading courses, as the IRA recommends."	No comment

<u>State</u>	<u>Per Results of 3/27/67 Inquiry</u>	<u>Per Rhode Island Study dated 7/9/66</u>
Kentucky	"Kentucky is not training Reading Specialists. I am happy to say we are fast moving in this direction."	No comment
Louisiana	Reported that all institutions of higher education "offer credit courses in reading, although some credits are earned in language arts courses. No certification requirements for reading specialists have been developed as yet."	No comment
Maine	Reported that credit courses are offered in reading but no sequential program and no certification.	"Although no certificate is granted to reading specialists, a supervisor in any area must have a master's degree with 50% of the work in the special area for professional certification."
Maryland	Two institutions offer credit courses and certify.	Offers certification with following requirements: Tchr/Clin - Master's degree 3 yrs. experience 15 hrs. in rdg. Consult - same as above
Mass.	No response by 5/8/67	Offers certification with following requirements: Tchr/Clin - Bachelor's degree 18 hrs. in reading Consult. - Bachelor's degree 21 hrs. in reading
Michigan	No response by 5/8/67	No comment
Minn.	Reported two institutions offering credit courses but no comment re certification	Offers certification with following requirements: Tchr/Clin - Bachelor's degree 2 yrs. experience Consult. - Master's degree 3 yrs. experience
Miss.	No response by 5/8/67	No comment
Missouri	Reported U. of Mo. is only institution offering a complete range of courses for reading specialists. Mentioned 2 St.Colls. that are developing offerings which may lead to certification.	No comment

<u>State</u>	<u>Per Results of 3/27/67 Inquiry</u>	<u>Per Rhode Island Study dated 7/9/66</u>
Montana	Reported that only one institution offered a 30-hour minor. No comment re certification.	No comment
Nebraska	All colleges and universities seem to offer undergraduate courses in reading. Only one - U. of Omaha - has grad.work.	Offers endorsement for teachers, clinicians and consultants with Master's degree & 3 years experience.
Nevada	The U. of Nev. in Reno offers credit courses. No comment re certification.	Reports that certification is now under consideration.
N. Hamp.	Certification offered at the U. of N.H. in Durham.	Certification offered for Teachers and Clinicians with Bachelor's degree, 3 yrs. experience and 30 hrs. in reading.
N. Jer.	No response by 5/8/67	An "Endorsement in Reading is available to the holder of any N.J. teacher's certificate who presents an approved Master's degree program in reading from an accredited institution. The additional field of Reading Improvement may be added to a secondary certificate upon completion of 18 hours in reading. The following areas are recommended but not required: remedial reading, reading improvement, child psychology, & tests and measurements.
New Mexico	No response by 5/8/67	No comment
New York	Does not certify reading specialists.	No comment
N. Car.	Does not have a certificate in this area.	No comment
N. Dak.	A number of institutions offer credit courses and certify.	Certificate offered to Teachers and Clinicians with 3 yrs. experience & 16 hrs. in reading.
Ohio	Does not certify reading specialists.	No comment

<u>State</u>	<u>Per Results of 3/27/67 Inquiry</u>	<u>Per Rhode Island Study dated 7/9/66</u>
Oklahoma	Three institutions offer credit courses to prepare reading specialists. They "do not have programs which have been approved by the IRA, they nevertheless certify people as reading specialists for the public schools.	No comment
Oregon	Three institutions certify in the area of extreme learning problems exclusive of mental retardation.	The certificate in remedial reading is no longer issued. A certificate is now issued to teachers of children with extreme learning problems exclusive of mental retardation which requires 42 quarter hrs. including, among other areas, the following: diagnostic & remedial techniques in reading, advanced course in reading instruction, and clinical practice in reading. A supervisor in this area must have a master's degree and 90 quarter hrs. of graduate level courses in appropriate areas.
Penna.	All institutions offer credit courses. Tentatively, next year most institutions will have graduate programs leading to provisional certificates which when followed by 3 years of demonstrated competence can lead to permanent certificates.	Certification as Educational Program Specialist (Non-Mandatory) is offered in subject areas including reading to those with the following qualifications: Penna. College Certificate, 3 yrs. successful teaching experience, and 45 semester hrs. of grad. work including a Master's degree in the subject area; or, earned Doctorate with concentration in reading, evidence of experience in area, & request of chief school administrator.
R. I.	Two institutions offer Master's degree in reading for the preparation of reading specialists	Reading will be written on a secondary English certificate upon completion of 6 semester hours in developmental and remedial reading. ". . . reading certification is under consideration."

State	Per Results of 3/27/67 Inquiry	Per Rhode Island Study dated 7/9/66
S. Car.	". . .does not have a certification program in reading. A committee is developing certification plans this year and it is hoped that these plans will become operative next year.	". . . reading certification is under consideration."
S. Dak.	Three colleges and universities offer credit courses for teachers wishing to <u>qualify</u> as reading specialists. No comment re certification being a part of "qualify."	No comment
Tenn.	No response by 5/8/67	No comment
Texas	Responded with a detailed account of higher education offerings and "At present, no certificate program or endorsements for Reading Specialists are authorized"	"Teachers of reading improvement and corrective reading are encouraged to have training, competence, and interest in the field of reading, and familiarity with the materials and equipment.
Utah	Three institutions offer courses in remedial reading. No comment re certification.	"An endorsement is added to a valid teacher's certificate for teachers in Special Education - Remedial upon completion of an approved specialized training program (16 q. hrs.) consisting of work in the following areas: Intro. study of exceptional children, educational diagnosis of learning difficulties, principles and procedures in remedial teaching, and supervised teaching of non-exceptional children with academic retardation. This certificate is used for remedial reading teachers.
Vermont	No response by 5/8/66	"Reading certification is under consideration."
Virginia	No response by 5/8/67	No comment
Wash.	Four institutions offer credit courses leading to Specialists in Reading. No comment re certification.	No comment

<u>State</u>	<u>Per Results of 3/27/67 Inquiry</u>	<u>Per Rhode Island Study dated 7/9/66</u>
W. Va.	Two universities have developed training programs for the training of reading specialists. No comment re certification.	No comment
Wisc.	Several institutions offer credit courses but no comment re certification.	Offers Endorsement to teachers and clinicians with Bachelor's degree, 3 yrs. experience and 12 hours in reading.
Wyo.	One university offers credit courses for reading specialists. No comment re certification.	Offers Endorsement to teachers and clinicians with Bachelor's degree and 6 hrs. in reading.
Iowa	Three colleges and universities were mentioned.	No comment

APPENDIX G

REPORT TO THE EXECUTIVE COMMITTEE OF THE
CONFERENCE ON DYSLEXIA AND RELATED LEARNING
DISORDERS IN THE PUBLIC SCHOOLS OF THE
UNITED STATES

Southwest Texas State College
San Marcos, Texas

May 15 - 16, 1967

by: Roger Dale Semerad

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The conference to be held at Southwest Texas State College on May 15 and 16, 1967 supported by a grant from the U.S. Office of Education is designed to assess at the highest level of competence, the state of knowledge, the facilities, the problems, efforts, and needs of educating the dyslexic child in America.

The Executive Committee of the Conference assigned me to the task of collecting data by visiting key people in the allied disciplines in various locations in the United States. As a neutral reporter, objectivity was the only commitment with which the interviews, observations, and visitations were conducted. Due to the multi-disciplinary nature of the problem and the relatively small number of conference participants it was recognized that to better accomplish the broad aims of the conference, a valuable frame of reference and professional opinion was to be gleaned from non-conference participants. I interpreted the assignment as one of determining what was or was not happening in those states I visited and the reasons why. A public relations function was also served by my travel by involving these knowledgeable individuals, relating to them the purposes of the conference at Southwest Texas State College, and the discussion of other activity currently being generated with regard to dyslexia. This type of conversation especially seems significant when we realize that the allied professional interests have been remarkably slow in establishing favorable cooperation and collaboration.

The twenty-five days of information gathering covered about 10,000 miles and 10 states. Fifty personal visitations were accomplished ranging in duration from a few minutes to eight hours. Thirty-six detailed interviews were conducted with people representative of the related professional areas of interest. The public and private sectors received nearly equal time. In many instances, schedule conflicts precluded interviews with outstanding individuals in the field, primarily because of my very limited timetable. (See Appendix A for itinerary and cooperating professionals.) Interviews were conducted on a one to one basis, although on several occasions a group interview permitted a wider participation and interesting interchange of ideas.

When time was short, a rather formal question and answer interview was conducted. All questions asked were predetermined and uniform to provide a constant input, however, the order of presentation varied to best elicit responses from the subject. When time permitted, observation of children, testing devices, facilities, and a more relaxed exchange of information was recorded in the same manner as the more formal interviews. Incidental notes were taped following the conversation and incorporated with written notes.

Technical evaluations of the diagnostic procedures or remediation techniques were not made. Nevertheless, an attempt was made to gain a "feel" for the "atmospheric conditions" prevailing in the relatively small professional world which has recognized the problem of the dyslexic child and is attempting to do something about it. The vitality and cooperation exhibited by these individuals was impressive in all disciplines and in all states visited.

I should like to point out that an initial suspicion of the reasons behind my request for an interview and the Texas conference was encountered in roughly 10% of those people contacted. A few members of this group were unable to overcome their apprehension and preferred to make themselves unavailable at any suggested time. However, this experience was truly an exception to the general cooperation and open-minded attitude manifested by those I visited. Generosity with time from busy schedules and offerings of printed material was the rule.

Lest the point become obscure, let me clearly state that this report represents only a consensus of the opinions expressed to me in conversation by individuals personally and professionally concerned with dyslexic children. I was not burdened by preconceptions nor commitment to any doctrine or theory. My neutrality was favorably received and I suspect the replies to my questions accurately reflect true assessment by these knowledgeable people. By design, no place, practice, or personality is identified in this report because it is immaterial who said what. It is the context of what was said, which is important. It is with great interest that the professional community I visited awaits the results of the Texas conference. This paper attempts to consolidate their majority view and illustrate the problems, the confusion and concern for the dyslexic child in the United States.

SIGNIFICANCE AND MAGNITUDE OF THE PROBLEM OF DYSLEXIA

Response in the form of estimated incidence provided a range from 1/2% to 20% of the school population. As might be expected, the approximation depended largely upon the interviewee's definition of dyslexia. The mean unsubstantiated incidence rate was 8%. Consensus indicated that possibly 1% of the children indicate a brain damaged condition and 7% non-brain damaged who are emotionally stable and possess average or above average intelligence could accurately be identified as dyslexics.

Acknowledgement was given to the fact that reading difficulties to some degree are common in perhaps 1/3 of our school children today. Certainly we cannot discount social and cultural pressures, ineffective teaching, psychological disorders, inadequate motivation, low intelligence, etc., as problem factors. Attention should be given to the current popularity of "dyslexia" and consequential imprecise and improper usage of the term. The medical community almost unanimously agreed that 5% of our children could be categorized specifically as dyslexics. The private sector involved with diagnosis and remediation of children not responding to traditional learning methodology tended to suggest a higher incidence. Public school personnel represented the lower estimation of incidence, but all acknowledged the large number of children not reading and not learning by conventional instructional procedures. The reason for this is the classes of handicapped children, exceptional children, emotionally disturbed, etc.--categories into which most problem children are conveniently designated. The skepticism that perhaps the dyslexic child has a special problem of an organic nature plus the absence of a diagnostic prototype applicable to classroom use creates a serious lag in public school awareness. Certainly the traditional Remedial Reading group has not encouraged greater understanding of the dyslexia syndrome. The overlapping of symptoms between the dyslexic child and other children with learning dis-

abilities compounds the confusion for the public school community. However, it would be erroneous to imply that the public education community is unwilling to accept a clear definition of dyslexia and once suitable diagnostic tools were designed and specific treatments developed, proceed to implement these practices into the work with children. It was apparent that current familiarity of the classroom teacher concerning the symptoms and successful corrective measures for the dyslexic child is minimal.

With few exceptions it was agreed that many of the ills confronting our society today have a specific learning disability as a causative factor. This seemed to reflect a change from the environmental and sociological doctrine which is popular in our current Great Society thinking. The problems of school dropouts, juvenile delinquency, unemployment, undoubtedly has a high correlation with early childhood learning difficulty. If this supposition could be proven, as well as the incidence of dyslexia in this group, public awareness and action would follow rapidly.

DYSLEXIA AS A VIABLE TERM

Developmental Dyslexia, Specific Dyslexia, Genetic Dyslexia, were but a few of the many terms for this specific language disability reported. It was my impression that most of the group interviewed were talking about pretty much the same child but using different diagnostic tools which indicate that the child is suffering from whatever terminology the individual tends to subscribe to. The majority of professionals felt that "dyslexia" was as good a label as any other with the following stipulations:

- Provide a proper definition and criteria which is acceptable to the allied disciplines. Until this is accomplished, the creditability of the term will be low and consequently, current inertia, difficult to overcome.
- Provide a model which can be tested and defended.
- Disseminate conclusive research information.

FOREMOST PROBLEM AREAS

With few exceptions the opinion was expressed that perhaps a foremost problem confronting the attack on dyslexia was a lack of sound criteria defining dyslexia and the absence of basic research on the learning to read process. This attitude is widespread and I believe indicative of the hesitancy which has prohibited dyslexia from the forefront of educational concern. However, it was interesting to note that a majority also felt that we presently have sufficient knowledge at our disposal to proceed in the further development of diagnosis and corrective methods.

It was stressed that considerable work is required in relating the medical etiology and diagnosis to educational treatment. This particular concern punctuated a general problem often expressed--that the communication channels disseminating research results to the classroom teacher and specialist, in the field, are inadequate and not timely. The need for "absolutes" to emerge from the scientific research would lend substance

to the entire problem of dyslexia to those people who question its magnitude and legitimacy. From this could come the design of models and the necessary pilot program.

Not infrequently was it emphasized that the entire remedial reading methodology should be revised. The exponents of this theory were quick to foresee the massive resistance to action of this kind due to the vested interests which have prevailed in the field for the last 20 years.

The problem of qualified, up-to-date reading teachers and specialists is not new. However, as we interject the special implications and needs of the dyslexic child into this already strained phase of the education process, the problem magnifies itself. As will be discussed later, teacher education was considered by most professionals I talked with to be in poor shape currently and historically, to provide the ways and means of combating this learning disorder and are doing little about it. Consequently, schools today are recruiting teachers who know little, if anything, about reading skills, let alone, dyslexia. These teachers are the "front lines" who see the problem daily.

Those individuals who by experience could comprehend the complexities of the mobilization of an education concept expressed a certain pessimism concerning utilizing existing organizations and doctrines to combat dyslexia. It is significant that of those who spoke to the point, most agreed that leadership by the USOE could precipitate the interdisciplinary approach necessary to generate change. The provinciality of some of the related professions in their process of selective knowledge when analyzing this complex syndrome has caused fractional change, but little unity. Consequently, millions of children may be the ultimate losers.

Opinion was mixed on the subject of parental awareness. In several areas of the country where programs, both public and private, are in operation, parent pressure is almost totally responsible. Caution was expressed when considering more public awareness, that a panic situation not be allowed to develop. The professionals were unanimously troubled about the waiting lists or complete unavailability of suitable remediation programs in their locale. If the demands on diagnostic centers are heavy now, greater knowledge of dyslexia in the home may very well create a frustrating and troublesome expectation and demand. However, more parent sophistication about learning problems, as well as the opportunities for very early screening and medical treatment is an important consideration. It was suggested that the emotional problems of the dyslexic child could be drastically reduced if there were more parental understanding of the child and sympathetic compensatory action at home.

Certainly, when we consider universal recognition and program development in the public schools to combat a specific language disability, a standardized diagnostic prototype must be operationally agreed upon. Its applicability to economic and efficient classroom use is considered a prerequisite if we are to mount a preventive program. The public school community seems to have adopted a "wait and see" posture with regard to both diagnosis and treatment. The confusion within the professional ranks and some unfavorable editorializing in the literature is contributing to the controversial element surrounding the issue of dyslexia.

Very few respondents did not make reference to the lack of funds to do an adequate job with the children already detected as dyslexics and requiring special individualized assistance. The private schools and clinics are suffering from lack of financial support and high costs of remediation and the public schools are desperately trying to just stay abreast of the special services required by so many children. I found only 5 states which have enacted legislation or have it pending establishing special categories of funding which will provide financial assistance in various forms and under different labels to public schools to assist the dyslexic child. Although in a majority of cases, dyslexia is not spelled out specifically but is a subcategory of problem identification. Federal leadership would probably stimulate greater legislation activity throughout the States.

COMMUNICATIONS

In a field where much work is done and considerable information available from perhaps a dozen disciplines, the channels of communication appear poorly defined. The complex and controversial nature of the problem has fostered fragmented reporting. With few outstanding exceptions, many traditional organization publications have been on one track concerning this dyslexia problem and at best the track is narrow gauge.

Several individuals suggested that an American Journal of Dyslexia was needed to provide an easily attainable and single reference source of research development and program activity. The point was stressed that only multidisciplinary approach would be acceptable in placing this information into the professional community. Perhaps abstracts of all current writings and a short editorial comment would permit constant availability of reference. Dissatisfaction was widespread about the nature of and method of dissemination of the data in the field.

The idea that information and awareness should filter down through the university and college structure was considered favorable. I would submit that perhaps the afflicted children don't have that much time.

When discussing coordination, collaboration, cooperation, and the requirements for an exchange of information, many of the individuals interviewed felt that leadership and visibility at the National level would tend to draw together under one tent a large number of the allied professions. The suggestion is that Headstart, Handicapped Children, Mentally Retarded, Cerebral Palsy, Disadvantaged Youth, etc, have received the attention of the mass media and become educational bywords. In these cases visibility was an early step in the change process. Certainly, the potentials of the mass media should be given careful review and plans for its effective use be considered.

Professional concern was constantly emphasized over the tremendous demands upon time for conferences, speeches, consultations and the overuse of the highly publicized professionals nationally and internationally who spend a great deal of time talking at one another. If nationwide action is desired, television may very well be the best way to maximize the time of the expert resources available and bring the conversation directly to parents and teachers.

FUTURE FEDERAL LEGISLATION

Even if we accept a very conservative incidence of dyslexia and related disorders in the public schools in the United States, the problem manifests itself in large numbers of children, and suggests that new federal and state legislation is necessary to provide funds to mount a comprehensive campaign.

With this premise in mind the professionals were asked to outline the priority elements of good legislation which they felt would provide the necessary thrust and direction.

Some resistance to the federal government's involvement was met and this group preferred State action. The majority opinion, as mentioned earlier, reflected the feasibility and necessity for leadership from Washington, and specifically the USOE.

If consensus is valid, the following represent those suggestions heard most often from the field:

- . Any legislation should have emphasis based on the individual child's needs.
- . Nationwide incidence study.
- . Greater priority of funds for basic research into the learning to read process.
- . Emphasis on reading curriculum development in the Nation's teacher education institutions. Suggested funding pilot programs in teacher education in every State.
- . Critical evaluation of current teaching methods.
- . Demonstration programs in public schools, perhaps funded out of existing legislation, and publicizing successful programs.
- . Establish separate federal commission on dyslexia to identify competence, collect and disseminate information and administer funds currently available and future committee support.
- . In-service education for teachers, medical people, social workers, etc., should be free credit courses for teachers. Seminars, workshops, lecture series on the complexities of dyslexia would be useful to the related professions and parents.
- . Task forces of interdisciplinary composition to set up model diagnostic centers and a universal battery of tests.
- . Pilot research and training programs concerned with the early screening and preventive methods applicable to the dyslexic child.
- . Any legislation should be child oriented without restrictions on where he attends classes. Eligibility for fundings should

be open to public, and private schools and clinics. Due to the fact that historically a considerable portion of work being done with the dyslexic child is in the private sector, to exclude their experience and facilities from participation would be a severe loss.

- Administration in the public schools preferred State aid assistance programs but with rigid guidelines, established in Washington, defining use of funds for the dyslexic child. (Sub-categorization under Handicapped or some other broader terminology leaves a low priority of spending for Dyslexia.)
- Teacher certification requirements need serious review to stipulate more intensive pre-service education in the Language Arts.
- Longitudinal studies and constant evaluation of any research or training programs.
- USOE should stimulate in-service programs dealing with the dyslexic child in the multitude of reading institutes already funded under the Elementary and Secondary Education Act of 1965, and the NDEA Institutes program.
- Priority integration of Dyslexic Research and development into Regional Educational Laboratory plans and activity.

With only one or two exceptions, those interviewed expressed belief that action at the Federal level would provide the most expeditious method of gearing up education. Flexibility and an open-ended approach based on sound scientific practices was stressed. Funding should be directed at all levels of the education community. Let me suggest that an organized plan could perhaps pick up the most favorable component programs currently operational in the United States and build a prototype to test and revise to meet the mass public school demands. Organized activity could also potentially provide an interdisciplinary consultant pool to assist States in development on a team basis.

I found it difficult to determine a consensus of the most effective plan of action. The indication was that we need a many-pronged attack which is flexible enough to facilitate insertion of new firm knowledge generated in the Research and Evaluation phases without upsetting the stability and confidence in the overall mission. However, it was obvious to this investigator that little nationwide action could be generated until assessment at the highest professional level could be undertaken and efficient lines of communication opened on an unbiased professional level.

RESEARCH

In my effort to assess familiarity with research activity on dyslexia, the complete range of knowledge and opinion was exhibited. Everyone was familiar with the widely published results of perhaps 10 outstanding people in the field, both nationally and internationally. However, they often were not familiar with what work was being undertaken in their own area. The poor dissemination of results and lack of conclusive data due to inadequate research design was echoed most frequently.

When discussing research in the field of dyslexia with the education community, I was impressed by the rather remote attitudes displayed. Some

of the existing hostilities between the schools and the medical community are based on the lack of translation of research and diagnosis into sound remediation practices for the reading specialist or classroom teacher. As mentioned previously, the lag time between the research and making it widely known was estimated, at best, two years. The need for coordinated research activity was stressed universally. Several persons preferred that research be conducted on a more regional basis as opposed to the present semi-isolation in various States.

I found nearly unanimous agreement that considerable basic research was needed in the learning procedure itself, that it must be interdisciplinary in design and tested on a suitably large sample. From that point it was generally agreed that a nationwide dyslexic incidence study was required for a number of reasons. First, agreement on definition would be a prerequisite. Secondly, firm criteria would have to be established so we know what child we're concerned with and differentiate him from other learning disorder groups. Thirdly, this study would intimately involve the public school community and enhance awareness and better understanding of the problem at the level where the children are. Fourthly, a uniform diagnostic tool would be required on such a large scale operation. Finally, we would be in a better position to eliminate the tremendous speculation factor which always surfaces when discussing dyslexia and its incidence. I place this in the highest priority.

Some people were rather adamant about the current overall research data available - suggesting poor design, inconclusive results, and generally a waste of money. Suspicion was encountered concerning the motivation of some professionals to boast themselves rather than help the children. A significant number of professionals told me that they would favor current programs if they had stricter guidelines to insure local communication, cooperation and application to the classroom situation emphasized.

A common diagnostic procedure was rarely encountered, but rather mixed and modified application of the standard tests and tools. Again, it was obvious that a critical evaluation of diagnostic procedures for identifying dyslexics is badly needed. Local experimentation with diagnosis was evident in many institutions. The accuracy of this work was claimed true by the diagnosticians from data available.

Of related concern is early identification and preventive aspects at the pre-school level. It would appear that this is a long-range item that probably is medical and perhaps needs the aforementioned areas thoroughly explored first. However, if it is accurately assumed that formal education will begin at age 4 in the foreseeable future, then this matter gains greater relative priority.

DIAGNOSTIC AND EVALUATIVE SERVICES

During the process of locating diagnostic centers I found that roughly 50% of those interviewed were cognizant of the other places in their respective States screening for dyslexia. The remainder were just vaguely aware of what was going on elsewhere. On several occasions individuals were reluctant to make a judgment on the quality of diagnosis being conducted. This perhaps was the result of unfamiliarity with their colleagues' work, a communications breakdown, or professional rivalry.

It was generally (90%) recognized that available diagnostic services were good but many reservations were aired. For instance, not enough recognition is being given to the neurologically vulnerable family and the genetic aspects of early screening; and that more of the related professions have to be alerted to the neurological implications. Many individuals were distressed that evaluation was "failure oriented" and expressed the need for further study into the known preventive measures.

A number of people felt that the kinds of diagnostic techniques were too limited and by using standardized tests were basing evaluations on surface symptoms. "Biased diagnostic reports, with little evidence, which promotes their own doctrine. . ." was one candid opinion.

Multi-disciplinary evaluation was agreed upon as perhaps the only valid approach to accurate diagnosis. More collaboration of this type between professions is evidenced nationwide.

It was recommended that the development of statewide diagnostic clearing houses be given consideration. It was suggested that this would encourage professional collaboration and maximize the effect of available professional talent. (Probably could be funded under existing legislation.)

Problems were cited that were due to the more frequent involvement in diagnosis by the medical community and their prescription of treatments which are not understood and/or available in the schools. In some areas of the United States the schools and clinics are asking for much greater medical involvement. Most doctors felt that it was a medical problem with educational treatment.

I suspect that there is a large measure of success in all the procedures currently used. Consensus reflected the need for much more work on the rather primitive practices now employed if we are to screen large numbers of children.

TEACHER PREPARATION

During my investigation the teacher education concern received unanimous agreement. Very few colleges and universities (approximately 30%) have any reading curriculum at all and by and large it is of relatively poor quality. The identification of dyslexia as a reading or learning disability is not common and often played down in favor of other remediation approaches. One of the outstanding reasons for the lack of intensive training at the undergraduate level is the unavailability of trained professors. Much of the pre-service and in-service instruction for teachers is conducted by professionals outside the formal faculty, i.e. part-time individuals from the private sector.

There is no universally accepted textbook or curriculum which deals with dyslexia and apparently there is resistance to the dyslexic concept by the remedial reading establishment. Experience has shown the teacher education institutions to be conservative to a fault regarding the essential learning skill, reading, and providing teachers with an understanding of its complexity. Certain institutions designate reading problems to other subject areas, such as behavioral sciences, exceptional education, special

education, psychology, human neuropsychology, and handicapped. This in itself may not be unfavorable but does illustrate the relative minor importance placed on the problem of the dyslexic child. Where understanding of the reading process should be an important part of teacher preparation, little emphasis seemed to be placed upon it and less on dyslexia. Lip service is often paid to its inclusion, however, in closer analysis, the problem of dyslexia is quite an obscure unit.

It was disturbing to discover that, where in practice, State reading specialist certification usually does not include a background in dyslexia and only a handful of States require an even minimal reading background for general certification.

In all fairness, I must point out that some of our colleges and universities are doing outstanding work in the area of reading and providing a fairly comprehensive background in related learning disorders. I was able to identify only one institution preparing researchers in this field. However, there are undoubtedly others whose activity is less known. Alternative methods of closing the ignorance gap were cited frequently. Most of the people interviewed felt that in-service training programs, workshops, seminars, experimental classes, diagnostic teams, and specialized courses would be immensely helpful to teachers in the classroom today. Of course, success would depend on qualified instructors and a soundly developed multi-disciplinary curriculum.

It is my opinion that their apparent lack of concern and curriculum development in the reading skills and related problems is a serious indictment of our teacher education institutions. I consider it an area of grave concern which should be given careful study and designated as a priority target for the change process.

CORRECTIVE EDUCATION FOR PUPILS

I was impressed by the work with the dyslexic child currently being done in the private sector. Without passing judgment on the scientific merit of their work, these people seem to be making headway with a small segment of the afflicted children. They are using dyslexia, with associated terminology, as a label and proceeding to teach accordingly. In locations where private schools and clinics were established, some conflict was discerned because of teacher qualifications, certification requirement, and the fees charged. In the private sector visited, I did not find justification for the over-generalized criticism it is often subjected to.

Information reported to me indicates that little is being done in the public schools to provide the special attention required by the dyslexic child. There are a number of cities and counties in the United States that have embraced the situation and are developing up-to-date and large scale screening and remediation programs. Identification of these operations should be made and intensive evaluation conducted for determining prototype public school programs. In many areas schools are employing special education techniques but corrective reading programs are still regarded as supplemental services.

Tremendous activity in Language Arts and in-service reading teacher training has been generated through the United States due to the avail-

ability of funds under Titles I and III of the Elementary and Secondary Education Act. It would be possible to ascertain how many of these projects deal with dyslexia. I undertook a very cursory review of funded projects in several States (using USOE files) which failed to discover dyslexia mentioned in any program abstract. However, I suspect a more thorough investigation might not bear this out.

I did frequently hear the comment that many reading specialists are outmoded in their techniques. In 5 in-service reading specialists institutes, funded under Title I ESEA, and administered by this reporter within the past two years, dyslexia was not discussed in the course work nor recommended for supplemental literature.

Generous funding is available for the remediation of the poor or non-reader. Study should be given at a national level to encourage specific programs for the dyslexic to be incorporated into all specific language disability or reading projects. This could, with legislative approval and/or greater bureaucratic awareness, be included in the federal guidelines and new proposals evaluated accordingly. Certainly the syndrome must first firmly be understood in professional circles.

Some States I visited are doing practically nothing for the dyslexic child. Because specific dyslexic term has been avoided in most legislative language in favor of related learning disorders as "handicapped" or "minimal brain injured" it was difficult to determine how much State money actually was committed to help the dyslexic child. My guess is, very little.

The cooperating professionals were asked if current remediation techniques are, in their opinion, successful. The following observations were recorded:

- . Individual instruction successful regardless of approach
- . Better progress in groups of dyslexics than anticipated
- . There is much inconsistent treatment which seems to be proportionate to the severity of the child's problem
- . Need to carefully evaluate time and expense factors
- . Methodology just not effective for the "hard core education catastrophe"
- . Current treatment is inadequate, particularly in metropolitan areas where waiting lists are up to 2 years - demands exceed the supply of instructors overwhelmingly
- . Short-term remediation has immediate results but many felt that it was too superficial
- . Need longitudinal studies
- . Sight vs. phonics is problem in public school systems
- . Comprehensive (multi-disciplinary) treatment of long enough duration and intensity was very successful

- . Continuous testing is vital to good treatment
- . Renewed interest in automatic connections, associated with the old Palmer Method writing exercises
- . Present waiting time negates psychiatric benefits of immediate reinforcements and treatment

No clear consensus exists. Educated opinion covers the full spectrum as does the quality of work.

CONCLUSION

Perhaps this report illustrates that agreement was difficult to ascertain except in the classification of the problems before us. It is not enough for a smaller number of knowledgeable professionals to consider sophisticated etiology, diagnosis, and treatment. At the level of the child and teacher, the problem is more primitive and requires more basic research and development. As we all know, some excellent work is being done. Let me suggest that a great deal of good work is being conducted around the country, but it needs orchestration. Only then can we determine what is scientifically sound and adaptations made for large scale public school application. I was encouraged by the attitude of those people I visited. As a result of those discussions, my opinion is that the time is propitious for an intelligently waged attack on the problems of the dyslexic child. However, if the professional community falters at this time in the confusion of diffuse knowledge and misunderstanding, we shall delegate a significant number of our children to unfulfilled and wasted lives.

Professionals Interviewed

(Mrs.) Margaret Rawson, Pres.
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Visitations

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Greeley, Colorado

Dr. Julian Stanley
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Professionals Contacted or attempts made to contact. Conflicting schedules
precluded interviews

Dr. Richard Masland, Dir. (sched.conf.)
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Ann McKillop (unable to contact)
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Dr. Alan Cohen, Dir. (did not
Reading Clinic return
Yeshiva Univ. calls)
New York, N.Y.

Florence Roswell (unable to
Schl. of Educ. contact)
City College
New York, N.Y.

Dr. John Money, Dir. (out of
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Johns Hopkins Hosp.
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Helen K. Smith (vacation)
Reading Clinic
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Dr. Edwin Cole (sched. conf.)
Mass. General Hosp.
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Helen Robinson (vacation)
Reading Research Center
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Katrina de Hirsch (out of
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Dr. Curtis Benton (confl.
Fort Lauderdale, Fla. sched.
allowed
brief tel.)

Mrs. Paula Rome, Dir. (family emerg.
Remedial Reading Center forced
Rochester, Minn. cancel.)

Dr. Archie Silver
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N.Y.U. Schl. of Medicine
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Dr. John D. Carroll (out of town)
Grad. Schl. of Educ.
Harvard Univ.
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(did not want to be interviewed
referred me to Dr. Hagin)
Dr. Rosa Hagin
N.Y.U. Schl. of Medicine
(would not allocate time for
visit or interview)