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ABSTRACT

The paper describes a 5-year longitudinal study of a Texas school district's implementation of an individualized mainstream special education program. "Plan A" program activities and outcomes are reported for five phases (sample subtopics in parentheses): initiation in one high school, one junior high school and eight elementary schools (description of pilot model and analysis of survey responses and site visits which indicated major implementation difficulties); revision of Pilot Plan A (establishment of an advisory council and materials center); expansion of the pilot program (development of a recordkeeping system for individualized education programs - IEPs - , evaluation findings that 60% of the plans were complete, and a list of sample objectives for 30 categories); continuation of the pilot program (a teacher workshop for 200 teachers on IEPs and evaluation of student progress which showed that Plan A students made larger gains than expected); and the final phase of district-wide program expansion (the addition of new staff and four format options for IEPs). The report concludes with guidelines for IEP implementation in large urban settings, with 15 common problems pointed out. (CL)

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# A FIVE-YEAR LONGITUDINAL STUDY OF IEP IMPLEMENTATION

by

Ruth M. Turner, Ed.D.  
Assistant Director Special Education  
Dallas Independent School District  
Dallas, Texas

Daniel J. Macy, Ph.D.  
Department of Research and Evaluation  
Dallas Independent School District  
Dallas, Texas

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## INTRODUCTION

### Rationale

The longitudinal study of IEP implementation is organized into six phases describing management and evaluation phenomena over a five-year period. As such, this is a five-year longitudinal study of the special education department's experiences with implementing an IEP for special students during the pilot operation and ultimate expansion of Plan A in the Dallas Independent School District, Dallas, Texas. Plan A is the individualized, mainstream special education program implemented on a state-wide basis in Texas.

Phase I describes pilot Plan A initiation in one high school cluster from September, 1972 through December, 1972. Phase II describes the revised pilot Plan A in the same high school cluster and extends from January, 1973 through August, 1973. Phase III deals with the continuation and expansion of the pilot Plan A from September, 1973 through June, 1974. Phase IV is a continuation of the pilot Plan A at the expansion level reached during Phase III, which included two high school clusters. The district-wide expansion of Plan A, which took place in the 1975-76 school year, constitutes Phase V, and Phase VI represents the continuation of district-wide expansion in the 1976-77 school year.

The following provides a summary of these phases and accompanying time periods:

Phase I	Pilot Plan A Initiation	Sept., 1972 - December, 1972
Phase II	Revision of Pilot Plan A	January, 1973 - August, 1973
Phase III	Expansion of Plan A Pilot	1973-74 school year
Phase IV	Continuation of Plan A Pilot	1974-75 school year
Phase V	District-Wide Plan A Expansion	1975-76 school year
Phase VI	District-Wide Plan A Continuation	1976-77 school year

### Program Setting

In 1968, the Texas Education Agency conducted a two-year study of the existing special education program. A summary of the study was reviewed by outstanding national consultants who recommended major changes in special education in Texas.

Provisions for a new state plan for special education were spelled out by Senate Bill 230, which was passed by the 61st Texas Legislature in 1969. The new plan was called Plan A, Comprehensive Special Education for Exceptional Children. The new plan had several critical distinguishing characteristics when compared to the former plan (noted Plan B).

Chart I

#### Plan B

Funds were allocated on the basis of minimum numbers of identified handicapped students.

Students were grouped according to handicap label regardless of the degree of severity of the handicap.

Eligible students were 6-18 years of age and learning disabled students were not included

The special education teacher served a single role; the teacher

#### Plan A

Funds were allocated according to the average daily attendance of all children in the school district.

Students were grouped according to educational needs.

Eligible students were 3-21 years of age and learning disabled students were included.

A wide variety of instructional arrangements were provided, and the role of the special education varied

of a special education class and handicapped students spent their day in a special class.

No support personnel for appraisal were funded. Appraisal was rarely the result of a team effort.

The product of the appraisal was a diagnostic label which established eligibility.

The Dallas Independent School District (DISD) encompasses 351 square miles and includes 135 elementary schools, 22 middle schools, 19 senior high schools and 6 magnet high schools. It has an operation budget of \$242 million and employs approximately 14,000 people as teachers, administrators, aides, secretaries and other type of personnel. The ethnic population is approximately 40% black, 50% white and other and 10% Mexican-American.

The DISD special education program is currently staffed by about 600 teachers, 150 aides, 80 appraisal team personnel, and 10 central administrators. Instructional arrangements for 8,000-9,000 students served range from total self-contained placement in a community center to itinerant instruction for students enrolled full-time in the district's regular education program.

#### DISD Research and Evaluation

The major purposes of the Research and Evaluation component (R&E) of the Department of Research, Evaluation, and Information Systems are to provide useful information to Dallas Independent School District (DISD)

widely according to the needs of a particular school and its students.

Educational diagnosticians, psychologists, counselors and visiting teachers were funded.

The product of the appraisal was an educational plan of action which indicated classroom goals, objectives and was periodically reviewed and updated.

decision-makers and to serve as an accountability agent. The process requires cooperative action by decision-makers (i.e., curriculum developers, teachers, and administrators) and evaluators. The decision-maker's role is to weigh the evidence provided by the evaluator and to render judgment about what course of action to take when confronting any particular situation. Because the decision-maker generally has neither the time nor technical skill necessary to gather and to analyze the objective data necessary to make informed decisions, the evaluator provides such information concerning the reason action must be taken and alternative strategies that are open. Thus, it is essential that the evaluator know enough about the decision-making process and the information used in reaching a given decision, to identify the scientifically sound and useful information needed to reach an objective decision.

In implementing data collection and analysis activities, evaluators share an obligation with educators. They must provide information which is valid and objective. Objectivity requires that they be free to identify and investigate the viewpoints of a given decision-maker's clients, constituents, and other interested parties. Evaluators have four broad obligations in the evaluation process: (a) to focus on evaluative information to be provided; (b) to collect, organize, and analyze that information; (c) to administer evaluative activities; and (d) to provide relevant evaluative feedback to decision-makers at all levels.

To provide these evaluation processes, R&E is organized into five branches. The first, System-Wide Testing, is responsible for the design and implementation of DISD system-wide norm-referenced and criterion-referenced testing programs. The second, System-Wide Evaluation, performs the longitudinal and cross-sectional research and evaluation necessary to supply major DISD decision-makers with information about the overall functioning of DISD programs. The third, Developmental Project

Evaluation, evaluates specific developmental projects to ascertain the effects of those projects on developing specific student abilities in areas that generally need more mediation than that which is provided by the DISD general academic program. The fourth, Administrative Research, is responsible for satisfying the ad hoc information needs of the R&E Department and DISD. It also conducts several system-wide evaluations, prepares basic and applied research designs, and provides technical assistance to DISD administrators. The fifth, Long Range Planning, provides staff, enrollment, facilities, supply, and financial projections.

The Dallas evaluation model is primarily a modification of the CIPP model advocated by Stufflebeam (1968). The CIPP model delineates four kinds of evaluation information: context describes the state of the world before intervention, input describes the intervention strategies, process describes the implementation of strategies, and product describes the impact of intervention. The Dallas application of the CIPP model emphasized context, process, and product data.

Special education research and evaluation is contained within the Developmental Project Evaluation branch of the Department of Research, Evaluation, and Information Systems. The Department of Special Education provides financial support for research and evaluation personnel assigned to Special Education R&E. Special Education R&E is staffed by one principal evaluator, one senior evaluator, three assistant evaluators and two computer programmers. Two of these positions are supported by soft money, and the number of R&E personnel assigned to special education varies slightly from year to year.

The coming of Plan A was a major impetus for special education's initial involvement in research and evaluation and planning, and it was permissible to expend Plan A monies for evaluation and planning. Thus, the Department of Special Education invested in one full-time principal evaluator during the first year of Plan A implementation (1971-72).

PHASE I  
PILOT PLAN A INITIATION

Pilot Model

The Dallas Independent School District chose to implement the Plan A project on a pilot basis in ten schools in the 1971-72 school year. These schools included one high school, the adjacent junior high school and the eight elementary schools in their attendance area. This cluster was representative of the total district in terms of socio-economic factors. The combined average daily attendance of the ten schools was 7,215 students. Special education teachers were assigned to the schools on the basis of their average daily attendance (A.D.A.). One special teacher per 200 A.D.A. was provided in schools with less than 1,000 A.D.A. and one teacher per 250 A.D.A. in schools with more than 1,000 A.D.A. A total of 43 teachers were added to the ten schools. The numbers per campus ranged from 2 teachers in the smallest schools to 7 additional special education teachers in the high school. Additional resources to this high school cluster included six itinerant speech therapists and three multidisciplinary appraisal teams consisting of visiting teachers (social workers), educational diagnosticians, counselors and associate psychologists. One team spent two days per week in the high school and two days per week in the junior high school. The other two teams each spent one day per week in each of four elementary schools.

An effort was made to provide a full array of instructional options within the cluster. Most of the options were contained at the campus level. For example, the smallest schools had a resource room and a self-contained room. The high school had a self-contained room, two

resource rooms, a helping teacher, a diagnostic teacher and a vocational adjustment class. A special center for severely retarded was provided in one site and a comparable site was provided in another school for students with severe behavior disorders.

The school personnel and parents received an overview of the Plan A pilot program during the spring semester prior to the beginning of the project. During the summer, the central administrative structure of special education was completely reorganized. When the project was initiated in the fall of 1972, no formal written guidelines were available, and no consistent form was used for the educational plan. Each teacher was allowed to design their own format for their plans but they were given the specifications for the educational plan outlined in the Administrative Guide and Handbook for Special Education published by the Texas Education Agency (TEA) in 1971. The specified requirements included the following:

Specific delineation of the essential components of instruction in terms of short-and long term objectives.

Objectives developed around instructional units in each subject area at every classroom level delineating the scope of the program, the specific component of the content to be covered during a given period; fractionated; and appropriately sequenced; and the criteria specifying what it is the student is expected to do, the circumstances under which he should be able to do it, and the degree of accuracy expected.

This TEA publication also specified consistent and periodic checks of progress to provide a basis for revising or supplementing the program.

## Evaluation Questions

Information needs expressed by project management were relatively general in nature. A major purpose of the evaluation was to identify possible problem areas in project implementation. The evaluation concentrated on process evaluation and gave low priority to product evaluation information.

The evaluation questions initially formulated for investigation were relatively general and did not explicitly address IEP implementation.

1. What characteristics described the implementation and operation of the Admission, Review, and Dismissal committees?
2. What was the reaction of Admission, Review, and Dismissal personnel to Plan A?

Within the next few months, more IEP specific questions were developed.

3. What problems, if any, did teachers encounter in writing educational plans?
4. Were educational plans appropriately individualized to suit the student?
5. How much time was the Plan A teacher able to devote to each child while he or she is in the resource room? Was this adequate?
6. Was there adequate interaction among the regular class teachers, Plan A teachers, and appraisal team members?

## Procedures

Process evaluation information was primarily collected via informal classroom visits and observations and survey questionnaires of Plan A staff. The survey was mailed to team members and resource teachers during December, 1972. The survey items solicited anonymous open-ended re-

sponses, and instructions stated that the information gained would be used in program planning and evaluations. Questionnaire return was almost 80% of the number sent. The return included 18 appraisal team members and 27 Plan A teachers. Relevant items contained in the team-member survey were educational plans, regular classroom teachers, instructional materials and the materials center concept. The teacher survey contained questions three through six listed previously.

The survey yielded a great deal of information. In order to provide the maximum communication, individual responses to each item were typed and assembled in a 64-page memo which was submitted to the Director of Special Education. Classroom observations and visits with Plan A teachers were conducted on an informal basis without the use of systematic observation schedule or recording instruments. These visits also included informal discussions with appraisal team members. Teacher reactions and comments were written down and reported to the Director.

### Outcomes

At the conclusion of Phase I, it was evident that Plan A had encountered major implementation difficulties. The predominant implementation problems were the absence of clearly defined operational policies and procedures, a tremendous backlog in the development of educational plans, and delays in the procurement of instructional materials.

Discussions with both appraisal team members and with Plan A teachers indicated that few written educational plans actually existed and that there were excessive time-lags between ARD staffings and generation of plans. Feedback received from Plan A teachers showed that many teachers had not received any educational plans for their children.

These two simultaneous findings revealed existing confusion about whose professional responsibility was the writing of actual plans. Some team members apparently assumed that writing plans was the responsibility of teachers and vice versa.

Plan A teachers reported that the few educational plans they had received called for instructional materials that were unavailable. In fact almost all teachers reported a lack of instructional materials, and team members also reported delays in receiving classroom materials. Several team members thought that a Plan A materials center was a good idea, but many reported no comment.

While teachers could not respond to whether or not plans were appropriately individualized, they did report a significant degree of one-to-one instruction taking place in resource rooms. Most teachers said that there was about 15 minutes of individual instructional time available for each student, but the amount of time available was dependent on number and kinds of children in the resource room. In several cases 15 minutes was seen as inadequate. Another significant finding was that about one-half the Plan A teachers reported inadequate interaction with the child's regular classroom teacher. Team members also reported inadequate interaction with regular teachers.

### Recommendations

The major recommendation made at the end of Phase I called for the development of clear operating procedures and for the development of written educational plans for all Plan A students. The immediate delivery of suitable instructional materials was also recommended.

PHASE II  
REVISION OF PILOT PLAN A

Revised Plan A Model

In response to mid-year evaluation feedback the position of Plan A Facilitator was created and a Plan A Advisory Council was established. The Plan A Facilitator was assigned the task of serving as the special educator on the Plan A Advisory Council and providing consultation regarding Plan A and strategies for its implementation. The Plan A Advisory Council was chaired by the Deputy Assistant Superintendent-Operations whose department was responsible for the day-to-day operation of the schools. The Council membership also included the Directors of elementary, middle and secondary programs who were charged with the direct supervision of principals as well as the Deputy Assistant Superintendent - Pupil Personnel Services who directed the activities of the appraisal personnel.

The Plan A Advisory Council provided leadership in coordinating the components of the Plan A program. Its areas of responsibilities included designing operations procedures, recommending policies, developing staff development activities, planning community relations projects and communicating needs to the General Superintendent. This council had no direct responsibilities for the implementation of Plan A at the building level. This responsibility rested with the building principal who supervised the program and the personnel.

Input was brought to the Plan A Advisory Council from appraisal personnel, principals, and teachers through their usual administrative lines of reporting. At the same time new policies, recommended strategies,

and problem solutions were communicated to these personnel through this same reporting mechanism. This arrangement provided a decision-making loop which facilitated coordination and problem solving.

The first major activity of the Plan A Advisory Council was to develop a handbook for principals which was in a loose-leaf format so that it could be continually updated. Critical items in the handbook relating to educational plans included the following items:

(1) The role of the educational diagnostician was clearly defined. The diagnostician duties included the administration of the educational component of the appraisal, the interpretation of the comprehensive appraisal information to the teachers, the review of educational plans and their effectiveness and the development of staff skills in educational plan development.

(2) The competencies needed by special education teachers were specified and they included the ability to write educational plans which included the skills the students must master, the level of difficulty at which instruction should begin, the best channel through which to instruct, the best method of response for the student, the most appropriate instructional material and the most appropriate instructional grouping.

Related skills needed by the teacher included the ability to state goals behaviorally, sequence the goals on an organized continuum of skills and select appropriate methods and materials.

(3) In a description of the appraisal process, a notation was included which indicated an Educational Plan had to be completed within two weeks following the initiation of services.

During June, 1973 a training institute was conducted for special education and regular teachers on cooperative planning for exceptional students. The primary focus was on the mildly handicapped student and the teachers (both regular and special) who served them in the Plan A program. Skills such as objective writing and informal assessment were included in the training content. Approximately 30 teachers attended the 3-week institute.

A materials center was also created which provided instructional materials which could not be provided on each campus or in each classroom but would be needed by individual students. This center provided a reserve back up source of instructional materials. Diagnosticians were responsible for providing lists of new materials as they were added and for letting teachers know the critical facts about each item in the materials center.

#### Evaluation Questions

The first task following the formation of the Plan A Advisory Council in January, 1973 was to brief the Council on the evaluation outcomes from Phase I. The Council received the 58-page memo containing all staff responses collected in Phase I as well as a memo summarizing these responses. A third memo summarized the results of the Phase I classroom visits and observations. Evaluation personnel met with the Council to discuss and explain the Phase I findings and recommendations.

The information needs identified in Phase II were primarily a continuation of those in Phase I, with the addition of information needed about student progress and about parent reaction to Plan A's individualized instruction. At this time, explicit study of the educational plan had not

yet emerged as a major information need. The following lists the evaluations questions for Phase II:

1. What student progress took place?
2. Were educational plans appropriately individualized to suit the student?
3. To what extent have staff helped parents understand the child's learning problem?

### Procedures

Evaluation activity in Phase II included the continuation of informal classroom visits and discussion with team members. Student progress was assessed via professional reports contained in the records of ARD student reviews conducted in May, 1973. These reports were unfortunately not substantiated by objective test data, but were based for the most part on professional observations.

Parent reaction to individualized instruction in Plan A was measured via a written short-answer survey. Plan A visiting teachers interviewed a sample of 44 parents of children who had attended the resource room for at least two months. The parents included were mostly mothers, and the contact was either personal or by telephone. The sampling criteria specified that four parents should be selected "at random" in each school. The extent to which the sample was random is unknown, since visiting teachers were responsible for selecting each school's sample. Care was taken to exclude any parent who may have been sensitive to the interview process. Also, the sample did not include parents who were unusually difficult to contact.

## Outcomes

Classroom visits and discussions with team members revealed improvement in the development of educational plans and in the accessibility of instructional materials. This was especially true toward the end of the 1973 spring semester.

Professional reports recorded in the ARD end of year student reviews showed that about 60 percent of the 551 Plan A students reviewed had made some progress. Only about 23 percent showed little or no improvement (reports were missing for 17 percent). In most cases, Plan A teachers were the primary reporting sources, and the reported areas of improvement included academic areas, social behavior, perceptual skills, and others.

Parent responses were extremely encouraging. Of the 44 sampled parents, 73 percent said that their child received a great deal of individual attention, and no parent said that their child received little individual attention. Academic progress of children was reported to be even greater than expected by 70 percent of the parents. According to 64 percent, Plan A staff had provided explanations which helped parents to understand their child's learning problem to a great degree.

## Recommendations

At the conclusion of Phase II, evaluation recommended that the Plan A Advisory Council develop more specific project objectives and that one or more objectives explicitly address educational plans. The suggested format for plans was that each plan should specify instructional objectives, methodology, materials, and a means for observing mastery of instructional objectives.

The development and implementation of a record-keeping system was also recommended in order to provide accurate accounting of student ap-

praisal and placement processes, among which was the educational plan. Recommendations included staff training programs to improve understanding of staff functions and responsibilities.

### PHASE III

#### EXPANSION OF PLAN A PILOT

##### Management Considerations

The Plan A Advisory Council developed 13 specific objectives for the Plan A Program. One of the objectives was to provide each student with an individualized educational plan. A second objective specified that the plan include overall instructional objectives, subordinate instructional objectives related to temporal units (e.g. weekly) or skill attainment (e.g. mastery of a specific math skill), activities to achieve subordinate objectives, observation methods for determining the attainment of the objectives and an observation schedule.

A record-keeping system was developed to provide a consistent format for documentation of the appraisal information, the placement decisions and the educational plans. The format for the educational plan included the items mentioned in the second objective relating to plans (see Chart II in the Appendix).

(Insert Chart II here)

The recording keeping system (including the plan) was on 3-part NCR paper which allowed for one copy to be retained by the teacher, one copy to be sent to the central office and one copy to be retained by the appraisal team.

Teachers complaints about their lack of planning time as well as the feelings of the principals that special education teachers should have a school day with children that was equal to that of the regular teachers frequently reached the Plan A Advisory Council level. A paper was developed for the principals which recommended that special education teachers be allowed to have an additional non-teaching period a day to be utilized in consulting with regular teachers and the development of written individualized educational plans.

A special day of training for teachers was provided during the first regular full-day staff development date. A consultant from a major university conducted a mini-workshop on "Developing An Individualized Educational Plan of Action."

#### Evaluation Questions

The Phase III evaluation was primarily a management-type evaluation and emphasized process evaluation. Problems in program implementation during the previous year pointed out the need for continued emphasis on process evaluation. In addition, the Phase III Plan A model reflected several refinements and revisions based on previous experience. The Phase III evaluation included a number of questions focused explicitly on the educational plan. Evaluation questions were formulated in cooperation with the Plan A Facilitator and the Plan A Advisory Council. In response to the need for increased evaluation, a full-time assistant evaluator was hired to work in the Plan A evaluation.

The following lists the evaluation questions pertinent to the educational plan:

1. How many students received educational plans?

2. Did the structure of educational plans meet program specifications?
3. Were the instructional objectives of the educational plans appropriate in relation to the student profiles?
4. What was the technical quality of instructional objectives?
5. What curricular areas were represented by instructional objectives?
6. Were educational plans appropriately individualized to suit the student?
7. How much time was the Plan A teacher able to devote to each child while he or she was in the resource room? Was this adequate?
8. What was the extent of use of instructional materials?
9. How much time did students spend outside the regular classroom in order to receive special services?
10. Was there adequate interaction among the regular classroom teachers, Plan A teachers, and appraisal team members?
11. What student progress took place?
12. To what extent have staff helped parents understand their child's learning problems?

#### Procedures

Evaluation activity conducted in Phase III was substantially more intensive than that conducted in Phase I and II. The informal classroom visits, mid-year staff survey, and the end of year parent survey were continued in Phase III. New evaluation activity which addressed IEP implementation included the Plan A record keeping system, review of educational plans for completeness, and initial investigation of student progress on instructional objectives.

The classroom visits and observations took place in October and

December, 1973. Evaluation personnel talked with Plan A teachers and appraisal team members and school principals. Interviews were conducted informally, but the conversation was guided to include at least those problem areas identified in the previous year.

In order to solicit mid-year reactions to the program, a survey questionnaire was sent during December, 1973 to all Plan A personnel. The questionnaires, designed separately for appraisal team members and resource teachers, used open-ended questions which required written responses. Responses were anonymous, and instructions stated that the information gained would be used in program planning and evaluation. The number of questionnaires returned by team members was about 41% (13 of 32). The number returned by Plan A teachers was about 81% (70 to 86). The survey yielded a great deal of information. In order to provide immediate communication, a memo summarizing survey results was submitted to the Plan A Advisory Council in January, 1974. Items included in the team questionnaire and relevant to IEP implementation were: regular classroom teachers, educational plans, instructional materials, and the materials center. Relevant IEP items included in the Plan A teacher survey were questions six, seven, and ten listed in the foregoing section on evaluation questions.

The parent survey was conducted during the latter part of May, 1973. Visiting teachers contacted a sample of forty-eight parents whose children had received Plan A services. The sample was randomly selected and proportionally stratified on school Plan A enrollment. The population of Plan A students was all students who had entered Plan A by the end of February, 1974. Visiting teachers contacted parents (either father, mother,

or guardian) by telephone or personal interview. Evaluation personnel provided visiting teachers with the names of sampled parents for each school. Relevant IEP items included in the survey were questions six, eleven, and twelve.

The record keeping system designed cooperatively by evaluation and management personnel contained demographic information, comments from classroom teachers, results of appraisal, records of appraisal and service, educational plans, a medical examination report, sociological and psychological reports, eligibility verification, and a report from the year-end review. Evaluation personnel routinely transferred information from these documents to coding forms as the documents fed into the central administration building. A set of ALGOL computer routines provided analyses of each document as well as overall summaries of the contents of the reporting system. The computer routines generated numerous tables needed to respond to the process questions. The final evaluation report, which was available to the Board of Education in July, contained this information. (Plan A management received process evaluation results on an interim basis.)

Evaluation personnel also maintained a tabulation of the number and kinds of documents received from each school, and this procedure was most valuable in the generation of interim reports (October and January) to management. Such reporting enabled management to assist better personnel in the field in implementing Plan A, since the documents paralleled the operational structure of Plan A. One of the ways the tabulation of documents helped was by providing information about the number of educational plans filed for individual Plan A students. For example, if there were 107

Plan A students in school X and only 67 plans on file from school X, school X was not in compliance with state Plan A policy.

### Outcomes

In order to simplify the presentation of outcomes, they will be discussed separately for each evaluation question.

1. *How many students received educational plans?*

Of the 2,344 students referred to Plan A, 86 percent had received an educational plan by the end of the 1973-74 school year. However, about one semester was required to reach this level of plan implementation. In October, 1973, only 39 percent of the 848 Plan A students had received an educational plan, but in January, 1974 88 percent of the 1,502 Plan A students had written educational plans.

Initial start up with completing educational plans was much slower in the newly added high school cluster, where Plan A had just recently begun in September, 1973. In those eleven schools, only 25 percent of the 479 students served in Plan A in October, 1973 had written educational plans. In the high school cluster where Plan A was starting its second year, 58 percent of 369 students had written educational plans.

An interesting note is that 292 non-Plan A students had also received written educational plans by the end of the school year. All of these plans were written by appraisal team members.

Classroom visits during the fall semester detected no major overt resistance to the use of educational plans among Plan A teachers or team members. Some teachers said that writing plans had been helpful; others said that writing plans did not alter instruction since they already planned mentally. Teachers who had had previous training in writing

behavioral objectives appeared to have had much less difficulty in writing plans. The formal plan document in the Plan A reporting system was not seen in any of the classrooms, but a specific request to see the document was not made. However, there was some evidence of informally written plans and of objectives-based instructional activities. However, the educational plan document, may have been post facto in a number of instances.

2. *Did the structure of educational plans meet program specifications?*

A sample of sixty Plan A students was randomly selected during March, 1974. The sample was proportionally stratified on schools. The sample contained only plans from Plan A teachers, and only one educational plan was selected from folders which contained more than one plan.

A panel of four educational diagnosticians and the Plan A Facilitator reviewed the sampled plans to determine how well the plans met program specifications. The review panel found that thirty-six of the sixty plans (60 percent) were complete in that the plans specified objectives, activities, and materials. Thirty-two of the plans (52 percent) indicated that the Plan A teacher understood the distinction between objectives and activities. In forty-one of the plans (68 percent), materials were specifically identified. Thirteen of the plans were not signed by the teacher (22 percent), and an inappropriate matching of objectives and materials was observed in only four of the plans (7 percent).

In general, the review panel judged that the sample of educational plans was a good beginning and that the educational plans reflected good instructional expertise on the part of Plan A teachers.

3. *Were the instructional objectives of the educational plans appropriate in relation to the student profiles?*

Original evaluation plans called for a panel of experts to review a student sample to determine if the instructional objectives specified for individual students were appropriate relative to the students' strengths and weaknesses. District managerial workloads prevented the formation of a panel, and there was no response to this question.

4. *What was the technical quality of instructional objectives?*

The above question revealed that the ability of Plan A staff to write instructional objectives was lacking. The review panel discussed above in question two, found that only 18 of the 60 sampled plans (30 percent) from Plan A teachers contained objectives that were adequately written. An adequately written objective was arbitrarily defined as one possessing all of the following four components.

1. Observable task - what the student is to do to demonstrate attainment of the objective.
2. Performance level - the level of accuracy or proficiency with which the student is to perform the observable task.
3. Observational method - means of determining whether or not the student has attained the specified performance level.
4. Attainment date - date or time within which it is thought that the student will attain the objective.

The above four components were certainly not the only means of studying the technical characteristics of instructional objectives. Numerous experts in the field have written extensive and valuable expositions on the formulation of objectives. It was thought that the above four

components represented a reasonable approach to objectives specification for the purposes of Plan A.

A second data source for responding to question four came from a sample of 42 instructional objectives selected from the population of 5,000 objectives received in the central office as of January 11, 1974. Aside from the attempt to select objectives so that the representation of personnel positions would be somewhat proportional to that in the population, there was no attempt to make the sample representative of the total 5,000 objectives. The sample included one objective from each of 29 Plan A teachers and one from each of 13 appraisal team members. Only 12 of the 42 sampled objectives (29 percent) contained all four components, and the technical quality of objectives ranged from very poor to very good. Plan A staff especially had difficulty in writing the observable task component of the objective, even though this (or some facsimile) was the single-most predominant component evident in the sampled objectives.

The following gives one of the very good sampled objectives and lists its four components:

Child will show increased skills in auditory closure  
by supplying the missing sounds to 10 words given by  
the teacher with 90% accuracy by November 1, 1973.

Observable task: supply the missing sounds to 10 words

Performance level: 90% accuracy

Method of observing: 10 words given by teacher

Attainment date: November 1, 1973

Examples of other typical sampled objectives include the following:

- 1) Jimmy will become part of the class within four weeks.
- 2) Mark will become less hyperactive in the resource room showing a marked improvement by November 30, 1973.
- 3) Terry will understand the solar system in relationship to the earth.
- 4) Mark will learn the function of zero in multiplication by November 30, 1973 with 98% accuracy.

Chart III lists all 42 sampled objectives as they appeared on the educational plans (see Appendix).

5. *What curricular areas were represented by instructional objectives?*

One routine function completed in the Plan A reporting system was the classification and coding of all instructional objectives from educational plans. A classification scheme containing 30 categories was devised, and each instructional objective was classified into one of these categories, which were defined after reviewing objectives from the previous year and as needed throughout Phase III.

The following lists each of the 30 objective categories and a brief description of the kinds of objectives included in each category.

1. Math - includes basic elementary and secondary studies, i.e. addition, subtraction, multiplication, division, fractions, decimals, sets, bases, etc. and such activities as making change, counting and telling time.
2. Language Arts - includes all areas basic to reading and English, i.e. phonics, word composition (vowels, consonants), vocabulary, paragraph dissection and library skills. All skills related to measuring reading success are included in this objective. (Speed, comprehension, pronunciation).
3. Science - includes elementary and secondary studies, i.e. biology, chemistry, physics, general science, weather and drugs.
4. Social Studies - includes history, government, geography, current events.
5. Handwriting - includes the area of fine motor coordination, cursive writing, (manual expression) ability to write one's name, ability to write numbers in sequence, and neatness of handwriting.
6. Spelling - includes memorizing words to write correctly at a specific time. Syllabication, accents, pronunciation and other skills which teach spelling are included.
7. Perception - includes visual and auditory closure, visual and auditory association visual and auditory discrimination, reversal problems, grouping words with pictures and finding words beginning with certain letters.
8. Memory Training - includes auditory and visual memory, completing recall statements, word recall, and retention and a few cases of basic recall as in directions and orientation.
9. Motor Training - includes skills related to gross motor coordination.
10. Speech - includes all areas of speech problems, i.e. fluency, articulation, pronouncing correctly words with specific letter combinations, lisp, and so forth.
11. Music/Art - includes instruction in these areas.
12. Typing - includes instruction in this area.
13. Sports - includes instruction in this area.
14. Undefined EPA - includes placement in resource room for an undefined subject area.
15. Other Academic - includes the areas of judgment, reasoning, making comparisons, drawing conclusions, predicting outcomes, and finding best answers.
16. Interpersonal Relations - includes the pupil relationships with teachers and peers and includes problems related to withdrawal, cooperation, and so forth.
17. Verbalization - includes verbal behavior as related to answering questions, social discourse, and so forth.

18. Attending Behavior - includes basic behaviors essential to successful classroom participation, i.e., sitting, listening, concentrating on work, avoiding distraction, working through assignment without disruption. Also for the mentally retarded pupil, includes behaviors such as self-feeding, cutting around objects, coloring within lines, using accepted manners, and producing neat work.
19. Following Instructions - includes the reading of the instructions, comprehension of instructions, and ability to work on an assignment without constant teacher explanation.
20. Completing Assignments - includes objectives pertaining to the completion of assignments without daydreaming, prompting, or excessive talking.
21. School Attendance - includes tardiness and attendance.
22. Other Behavior - includes other areas related to school success such as hyperactivity, attention span, self-confidence, and selected emotional needs.
23. Providing Adult Model - includes objectives dealing with the situations of one-parent families or need for positive authority figure. The usual objectives specify adult tutors or counseling sessions.
24. Providing Successful Experience - includes objectives specified for the pupil whose negative self-concept hinders his achievement. Personnel strive to produce situations in which the student can experience success.
25. Providing Peer Interaction - includes objectives specified for the pupil who is withdrawn or who has unsuccessful peer interaction. Those objectives have typically specified group work and group counseling.
26. Providing Parent Counseling - includes parent-pupil conferences and individual parent conferences. These objectives attempt to enlist the parent's help in working with the child's problem at home (i.e., attendance, tardiness, acting out behavior, etc.).
27. Other Environmental Manipulation - includes objectives pertinent to observation of classroom behavior, change of classroom organization, and so forth.
28. Undefined counseling - includes objectives that are undefined that apparently involve counseling (i.e., supportive counseling).
29. Motivation - includes attempts to improve cooperation and attitude toward learning.
30. Vocational - includes placement with the vocational program at the high schools or the Texas Rehabilitation Center.

Objectives were tabulated and reported to the Plan A council in January, 1974 and then again in June, 1974. In January, there was a total of 4,804 objectives tabulated for 1,502 Plan A students. This was an overall average of about 3 objectives per student (more precisely 3.20). The end of year tabulation in June showed a total of 7,772 objectives for 2,052 students, which was an overall average of almost 4 objectives per student (more precisely 3.78). Chart IV gives the percent of total objectives tabulated for each category in January and in June, 1974.

(Put Chart IV here)

Tabulation of objectives by category shows that while there was a wide range of content within instructional objectives, most objectives (60 percent) dealt with math and language arts. This was also supported by on-site observations. One might argue that instructional content should have been more diversified, depending on one's educational philosophy. Note that the frequency of objectives in the categories of motor training and sports is totally inconsistent with today's 94-142 mandate for physical education in the IEP. Tabulations of objectives by category were also computed by individual schools, and a wide range in content among schools was also revealed.

A word of caution regarding interpretation of numbers of objectives may be helpful. The observed numbers of objectives is, to a large extent, a function of dates of attainment for individual objectives and activities or learning tasks specified by individual objectives. One objective may be attained within one week and another may require six weeks for completion. Consequently, objectives should not necessarily be weighted equally when

making comparisons or interpreting tabulations.

6. *Were educational plans appropriately individualized to suit the student?*

Eighty percent of Plan A teachers reported in the mid-year survey that plans were appropriately individualized. Appraisal team members voted in March, 1974 on whether or not most Plan A students received individualized instruction appropriate for their learning problems. Team members voted yes to the question for seventeen of the twenty-one Plan A schools, which was eighty-one percent of the schools. Responses from the parent survey showed that 100 percent of the parents thought that their child received a great deal of or adequate individual attention.

7. *How much time was the Plan A teacher able to devote to each child while he or she was in the resource room? Was this adequate?*

Plan A teachers reported that ten minutes was the average time spent with students individually at the elementary school level. At the secondary level, there were only 4-5 minutes available for each student. The amount of time varied in relation to the number of students and types of needs presented. Responses indicated that less individual time was needed for secondary students than needed for elementary students. Selected teachers were concerned that the extent of individualization they could provide was insufficient. On-site visits also found that most instruction was on a one-to-one basis, with small group instruction being used as well.

8. *What was the extent of use of special instructional materials?*

Classroom visits revealed that almost all resource rooms had adequate instructional materials. Reports from team members indicated that materials were available and good. The materials centers were reported

by team members to be generally working well, but room for improvement was cited. Several team members noted considerable improvement over the previous year.

Educational plan documents were reviewed to determine the frequency with which various instructional materials were cited. While a wide range was cited, 18 specific materials were selected for study because of special interest by management. Ten of these were cited in 5 to 17 percent of the educational plans. The remaining eight were cited in less than five percent of the plans. One interesting finding was that one of the most expensive materials was cited the least frequently (in only one plan).

9. *How much time did students spend outside the regular classroom in order to receive special services?*

Information from the Plan A reporting system showed that 85 percent of all Plan A students spent less than two hours per day outside the regular classroom. Former self-contained Plan B students were identified through discussion with Plan A teachers in the seven elementary and four secondary schools in which Plan A implementation was judged acceptable. Plan A teachers were able to identify 25 former Plan B students in the elementary schools and 28 in the secondary schools. These 53 students did not constitute the entire population of former Plan B students but about 80 percent of the population of former Plan B students in these eleven schools.

Results showed that about seventy percent of the former Plan B elementary students sampled attended regular academic classes but that almost all former Plan B secondary students attended regular classes on a

restricted basis and attended the resource room most of the day. These secondary students typically attended regular classes for physical education, art, and home economics. Feedback from Plan A teachers indicated that main-streaming at the secondary level was much more difficult due to the increased skills differential between special students and students in the regular classroom.

10. *Was there adequate interaction among the regular classroom teachers, Plan A teachers, and appraisal team members?*

Discussions with selected principals indicated that the individualized instruction in Plan A had had a "spill over" effect into the regular classroom and that regular teachers were consulting with Plan A teachers for suggested procedures and techniques. Reports from appraisal team members in the mid-year survey showed improved interaction with regular classroom teachers, and about two-thirds of the Plan A teachers reported adequate interaction with regular teachers. Lack of understanding of Plan A was cited often as the cause of inadequate interaction. Another factor was that conflicts between teacher schedules made it impossible to talk to other staff.

11. *What was the student progress toward mastering instructional objectives?*

The attainment of instructional objectives as recorded by Plan A teachers on educational plans was taken as a measure of student progress. During the weeks beginning April 29 and May 6, 1974, evaluation personnel sampled educational plans in order to determine the success of Plan A students in attaining the specified instructional objectives. The sample contained 238 resource room students from seven of the sixteen Plan A

elementary schools and from four of the five Plan A secondary schools. Students were quasi-randomly selected in two of the elementary schools and in the four secondary schools. In these schools teacher bias may have affected the selection process. Students were randomly selected in the remaining five elementary schools. The sample was proportionally stratified on schools.

Plan A teacher reports indicated that resource room students had attained or were progressing toward 1,358 of total 1,461 objectives specified in all the educational plans. This was an overall attainment/progress rate of 93 percent. Most teachers used observation, teacher-made tests, workbook tests, and standardized tests to assess progress.

Inspection of student progress by schools showed that there were no major differences between individual schools or between elementary and secondary schools. One noteworthy difference was that secondary Plan A teachers generally specified more objectives per student than did elementary teachers.

One should exercise caution in interpreting these data since, as was revealed in the mid-year analysis of instructional objectives, teachers possessed a wide range of objective-writing skills. The interim report (January 29, 1974) to the Plan A Council showed that many of the instructional objectives did not specify a condition whereby one could easily determine attainment of objectives. Consequently, teacher reports of student progress on instructional objectives did not provide a very definitive or useful measure. In the parent survey 47 percent of sampled parents reported that their child's academic progress was greater than expected.

12. *To what extent have staff helped parents understand their child's learning problems?*

According to 35 percent of parents sampled in the parent survey, Plan A staff had provided explanations and information which helped parents to understand their child's learning problem to a great degree.

The above percent was markedly lower than that observed for the same question in May of the previous year (64 percent reported staff gave helpful explanations). It was not clear why parent responses for the current year were lower. Perhaps some of the differences was due to a positive bias in the sampling procedure used during Phase II. The sampling procedure in Phase III was more nearly random and may have been more representative.

Investigation of responses for each high school cluster showed that responses were lower in the cluster in which Plan A was recently implemented than in the second-year Plan A cluster. Computation of a z-test for independent proportions showed that the difference between the two clusters was significant (13 percent in the first-year cluster, 50 percent in the second-year cluster,  $p < .05$ ). Thus, some of the decrease since the previous year could have been due to a lower degree of project implementation in the newly-added cluster.

#### Recommendations

The major recommendation of the Phase III evaluation was that staff development give priority to improving the objectives writing skills of Plan A staff, as well as to the overall development and use of educational plan documents. It was also recommended that the content of Plan A instruction be considered to see if it was consistent with department goals.

It was suggested that more uniform time intervals for attaining objectives be recommended to teachers, since attainment dates varied from year-long objectives to weekly objectives.

#### PHASE IV

#### CONTINUATION OF PLAN A PILOT

##### Management Considerations

A major training effort was conducted during June, 1974 following the close of school. Two hundred teachers attended the workshop which provided six hours of graduate credit from two area universities. Model classrooms with students were provided at the workshop site. Each participant was required to review the formal assessment information about a specific student, observe that student in the model classroom, conduct an educational assessment of the students' ability in math and reading and develop an individualized educational plan for the student. They were required to utilize a minimum of 3 sources of information for their assessment. Their written plan had to contain at least three major objectives and activities and materials selected to facilitate the attainment of these objectives. Activities designed to help the participants complete these plans successfully included demonstrations of formal and informal assessments, conferences with appraisal personnel, reviews of reading materials on assessment and test manuals, materials demonstrations, and lectures on writing objectives. These plans were critiqued in an individual conference with a consulting diagnostician.

This particular assignment appeared to be very threatening to our teachers. Several of them dropped out of the workshop. Many of the

others were frequently in tears during the initial days of the training and one teacher's blood pressure became so elevated that her physician recommended that she withdraw from the training program. All of the participants were experienced teachers and the intensity of their anxiety was a surprise. It seemed to be directly related to the required demonstration of the ability to complete an assessment and an educational plan which met certain quality standards.

Evaluation feedback continued to reveal a widespread unhappiness regarding the format of the educational plans. This was supported by observations (fall, 1974) that, in many special education classrooms, planning was in evidence. The individualized plans which were written to meet the state requirements, however, were in a desk drawer, a file folder in the principal's office or some other inaccessible place. Many teachers had devised creative management systems for individualized instruction such as loose leaf notebooks with weekly plans for each student, file folders for each student with his current plan clipped to the inside of the folder in the form of a student-teacher contract, and card files organizing individualized plans which were grouped according to specified criteria such as a particular reading approach.

We were anxious for the individualized plans which were completed to meet state policy and the actual plans utilized by the teachers to be one and the same.

During the spring semester of 1975, we scheduled a series of small group meetings to solicit suggestions from the teachers in regard to the optimal format for the plans. We communicated our observations that planning was being done and that we were interested in merging the planning

done for their daily teaching and the planning done to meet the state requirements. Each teacher was asked to share her classroom system for individualized planning and to assist in devising forms to be field-tested. Doctoral interns in special education assisted in collecting written and verbal reactions to the preliminary teacher designed formats.

The following reactions were major themes in the teacher feedback:

(1) Writing objectives for all students was a time-consuming, negative experience. The teachers asked for collections of prewritten behavioral objectives in sequence in each subject area. Some of them suggested that they be numbered and that the number code be entered on the educational plan so that you would save the time it took to copy the objective. Others suggested that objectives be preprinted in the form of a checklist and the chosen one for an individual student be checked by the teacher. Much of the verbal input at the meetings revealed that the teachers felt insecure about their ability to write behavioral objectives and preferred to have a list from which to choose or from which to model their own objectives.

(2) No particular plan format was more positively accepted by the majority of teachers. There was diversity of opinion about each of the field tested items. Quite frequently a format would look good to all teachers at the small group meeting, however, when a field testing trial period had been completed the written comments would vary widely.

#### Evaluation Questions

Phase IV began the third year of the Plan A pilot in one high school cluster and the second year in the other cluster. While Plan A evaluation

in the previous phases placed primary emphasis on process evaluation, the Phase IV evaluation shifted resources more toward product evaluation in order to gain a better estimate of Plan A effectiveness in terms of student gains.

The IEP relevant evaluation questions addressed during Phase IV were:

1. Were educational plans appropriately individualized to suit the student?
2. What problems, if any, did Plan A teachers encounter in writing educational plans?
3. What was the extent of use of instructional materials?
4. How much time did students spend outside the regular classroom in order to receive special services?
5. Was there adequate interaction among the regular classroom teachers, Plan A teachers, and appraisal team members?
6. What student progress took place?

Comparison of the above questions with those addressed during Phase III clearly shows the shift of emphasis away from IEP implementation during Phase IV.

#### Procedures

The Phase IV evaluation reflected a reduction in the extent of process information collected, and there was greater emphasis on evaluation of student progress. The classroom visits were continued, but appraisal team members and principals were not interviewed. Only Plan A teachers were interviewed. The written mid-year survey of Plan A teachers and team members was expanded to include principals, but the end of year parent survey was discontinued.

Routine coding of documents from the Plan A record keeping system and computer analysis and tabulation of objectives was also discontinued. The reporting system continued to function, but there was no commitment to support the extensive collection of process evaluation data supported in Phase III.

During October all Plan A schools were visited in order to talk with Plan A teachers and to observe Plan A resource rooms. Discussions with Plan A teachers were informal, but a list of standard questions provided comparable information across all teachers. The visits provided feedback from 96 of the Plan A teachers.

The sample for the mid-year Plan A staff survey included all available Plan A teachers, team members, and principals in the 21 Plan A schools. The return rate for both Plan A teachers and principals was 86 percent, and the rate of return for team members was 69 percent. Rates of return were 10 to 20 percent higher from the high school cluster in which Plan A was in its second year of operation.

Since teacher reports of student progress in instructional objectives proved to be a poor measure of student progress, the Peabody Individual Achievement Test (PIAT) was selected as a measure of progress. Unfortunately, there was no attempt to relate observed progress on the PIAT to content or quality of the educational plans. Pretesting took place during the last part of September and first part of October, 1974, and posttesting took place in the last part of April and first part of May, 1975. Consequently, the pre-post measurement schedule was said to encompass a seven-month instructional period, from October 1, 1974 through April 30, 1975. Testing was on a pre-post observation schedule, and the sample (N=313)

included approximately 40 percent of the elementary school students in Plan A.

### Outcomes

For ease of presentation, the evaluation outcomes are listed by individual questions.

1. *Were educational plans appropriately individualized to suit the student?*

Eighty-two percent of Plan A teachers reported an affirmative response to this question. Responses from team members and principals did not contradict teacher reports, but these responses tended to focus on areas other than individualization.

Discussions with Plan A teachers during classroom visits revealed some concern that increased student enrollments in Plan A would limit the extent of individualization. Only two elementary and eight secondary Plan A teachers reported they were unable to individualize instruction in October, 1974, and on-site observations supported the belief that individualized instruction was taking place.

Plan A instruction was observed to center around each student's individualized educational plan. Most Plan A teachers organized daily instruction by using individual student work folders, which contained the daily lesson plan and work assignment. When students arrived at the resource room, their first task was to obtain their work folder. Students could then determine their learning task for that day and proceed to the appropriate area to begin working. In lieu of individual work folders, some Plan A teachers organized instruction by means of individual instructional contracts.

2. *What problems, if any, did Plan A teachers encounter in writing educational plans?*

The major problem identified was dissatisfaction with the educational plan document. About two-thirds of the teachers indicated some problem with the educational plan document. In most cases, teachers judged that the document was an additional, time-consuming exercise, and many thought that the plans were of little real value. However, many of the remaining one-third reported that the plans documents were helpful. Principals and team members also reported dissatisfaction.

3. *What was the extent of use of instructional materials?*

About one-half the appraisal team members reported that materials centers were working, but there was evidence of isolated operational problems. Some team members expressed concern about availability of materials and appropriate use of materials in the educational plan. On-site visitations revealed that dissemination of materials was greatly improved. However, Plan A teachers in selected schools still cited the lack of materials as a problem. While the problem was not comprehensive across all schools, teachers voiced complaints in about one-third of the schools. The lack of materials was generally more acute at the secondary level, where teachers needed materials of high interest but low reading level. There appeared to be a definite need for special materials to be developed for use in Plan A secondary schools. An adequate supply of consumable materials was seen as a problem in a few elementary schools.

4. *How much time did students spend outside the regular classroom in order to receive special services?*

During Phase IV (1974-75), Plan A served a total of 2,076 students,

and of the 2,019 students who attended a regular DISD campus, 85 percent spent more than two hours a day in the regular classroom. In short, the vast majority of Plan A students spent less than two hours a day in a special Plan A resource setting.

Only two percent of the Plan A population was in a totally self-contained setting, that is, received no regular classroom experience. It was interesting to note that more Plan A students in elementary schools experienced more regular classroom contact than those in secondary schools. This was probably due to the departmentalized nature of secondary schools where individualization was more difficult to achieve.

The following shows the percent of Plan A students who spent selected amounts of time in a regular classroom:

	<u>Amount of time spent in a regular classroom</u>			
	None	Up to 50 per- cent of the day for non-academic subjects	Up to two hours of the day for non- academic and academic subjects	More than two hours of the day
elementary	3	4	3	90
secondary	<1	11	10	78

5. *Was there adequate interaction among the regular classroom teachers, Plan A teachers, and appraisal team members?*

In the mid-year survey, 82 percent of Plan A teachers reported adequate interaction with regular classroom teachers, but only 66 percent of Plan A teachers reported feeling like a contributing member of the ARD

team effort. However, 80 percent of Plan A teachers reported feeling like a contributing ARD team member in the high school cluster with the third-year Plan A operation. While some appraisal team members indicated good interaction with regular teachers, many indicated that regular teachers needed a better understanding and orientation toward Plan A.

6. *What student progress took place?*

Analysis of Peabody Individual Achievement Test (PIAT) scores consisted of repeated-measure ANOVA to test for the statistical significance of observed changes from the pretest to posttest and then the conversion of raw score averages to grade equivalent norms. Results from repeated-measures ANOVAs showed that Plan A students in all groupings (gender and ethnicity) made significant pre-post gains in all PIAT subtests. In most cases, the improvement was significant at less than the .001 significance level, and almost all cases were significant at less than the .01 level. Most student scores showed about one month grade equivalent gain for one month instructional time.

The subtests in which the strongest gains took place were math, reading recognition, and general information. The smallest gains took place in reading comprehension and spelling. One could easily have expected Plan A students to achieve less well in reading comprehension since it was the most advanced skill in the area of language arts. The small gains observed in spelling were surprising, since spelling was a relatively basic language arts skill. The gains observed in spelling may have reflected a need for more instructional emphasis on spelling, but, of course, such questions must consider many factors.

While the month-per-month achievement norm provided one means of

interpreting observed achievement gains, the comparison of observed gains to previous achievement (i.e., before the 1974-75 year) provided another useful interpretation. The rate of achievement before Plan A, that is, measured at time of pretesting, was computed by dividing the pretest achievement grade level by the pretest assigned grade level. A brief example will help explain the above procedure. A child whose achieved pretest grade level in math was 2.2 and whose assigned pretest grade level was 4.4 would have an achievement gain rate of .50, or 50 percent. One could reason that such a child had been achieving only one-half as fast as those students who were at grade level. During the seven-month observation period, one would expect the above student to gain 3.5 months in achievement, or one-half the seven-month period.

The data showed that in almost all cases, Plan A students made larger gains than expected. In a few cases, the observed gains were impressive. For example, male Plan A Black students in one cluster showed a gain in reading recognition almost five months greater than expected. The reading recognition gain of female Plan A Black students in this cluster was even more impressive, but the number of students tested (N=11) was small enough to cast doubt on the stability of the observed increment.

A question of interest was whether or not the observed achievement gains were sufficiently great in view of the expenditure of educational resources. At this point in time, there is no precedent for answering this question, but it is important to note that the pre-post PIAT scores constituted a lower-bound estimate of achievement gains. In reality, Plan A students probably made greater achievement gains than reflected in the PIAT scores.

The first reason for the assumed underestimation of achievement gains was that PIAT testing sampled the total elementary Plan A student population, regardless of previous Plan A experience. Student rosters showed that the majority of students tested (about 76 percent) were returning Plan A students and not first-year students. This would diminish the anticipated magnitude of gains observed during the current year, since the largest program effects would probably take place during the first-year of Plan A experience. In short, the PIAT testing primarily measured the impact of continuing individualized instruction, rather than new IEP implementation.

A second factor contributing to the probable underestimation of gains was that students took all five subtests of the PIAT. In other words, students took the math subtest regardless of whether or not they had received individualized math instruction. Even though reading and math were the two most popular areas of Plan A instruction, Plan A is an individualized program, and students received assistance in a wide variety of skills and areas. The PIAT provided a global measure of achievement, but Plan A did not generally provide global instruction. One would have expected a more individualized assessment of achievement to show greater achievement gains. This again emphasized the need for a more suitable system of assessing product outcomes in IEP implementation.

A logical next step would have been to compare PIAT achievement gains with ratings of educational plan quality and appropriateness. There were unfortunately no resources available to collect such ratings and to make the necessary comparisons. The evaluation demonstrated support for the notion that Plan A students progressed academically, but the evaluation

did not directly link the observed progress with instructional objectives.

### Recommendations

There were two major recommendations after evaluation in Phase IV. The first was that alternative educational plan documents be developed in order to suit better the wide range of preference among Plan A teachers. The second was a suitable procedure be developed to assess student progress. A primary concern was that the assessment procedure allow for the probable individualized nature of student progress. It was thought that criterion referenced testing offered the most promising procedure at that time.

## PHASE V

### DISTRICT-WIDE PLAN A EXPANSION

#### Management Considerations

The Plan A model was extended district-wide in Phase V (1975-76). This required the addition of seventy-five new special education teachers and thirty-five new special education teacher aides. Twenty-five new appraisal personnel were employed to provide a multidisciplinary appraisal team for each high school cluster.

Management discussed the recommendation of our evaluator to seek more effective methods for measuring student progress, however, no strategies were developed to improve our product evaluation. The recommendation to provide alternative plan format options was initiated.

Teachers were offered four alternative forms for individualized plans. Teachers were allowed to choose the format that most uniquely matched their needs and planning style. The first three options utilized the same first page, which was designated from 5.0 (see Chart V).

This page included the student name, the date, the school, the identification number, the number of hours per day spent outside the regular classroom and strengths and weaknesses of the student (the state bulletin of regulations specified that the educational plan recommendations must be based upon identified strengths and weaknesses). This page also included space for goals.

Option #1 combined 5.0 Page 1 with a backsheet (see Chart VI, 5.0 Page 2A) in the form of a weekly Student Log. This form included the student name, the date, the school and the subject. It also had a place for the teacher and the student to sign it as a contractual agreement. Daily assignments and materials were noted and space was provided for comments, scores, observations, etc. If a student was in special education for several subjects, a Student Log was completed weekly in each subject area. The first page was revised each three months unless an update of the goals was needed sooner.

Option #2 combined the same first page (5.0 Page 1) with a second page (see Chart VII, 5.0 Page 2B). This form also included the student's name, the subject and the week's date. It contained columns for each day of the week which were referred to as a log of activities. A small area was also provided for comments.

Option #3 combined the same first page (5.0 Page 1) with a second page (Chart VIII, 5.0 Page 2C). This page contained the student's name, the school, the date and the teacher's name. Columns were provided for a listing of objectives to attain goals, the date these objectives were begun, materials and activities selected to assist in the attainment of the objectives and comments. A place was also provided to note the date

the objective was attained.

Option #4 was a two-page plan format designed to be utilized by regular and special educators who worked with the same students. The first page of this option (see Chart IX, 5.01 Page 1) contained space for the student's name, the school, the date and the student's case number. Columns were provided to note the strengths and weaknesses of the student as identified by the regular teacher, the special education teacher and the support personnel. The second page of Option #4 (see Chart X, 5.01 Page 2) contained the student's name, the school and the date. Long term objectives for both the regular teacher and the special resource teacher were provided. Interim activities, dates attained, regular classroom activities and materials and special resource classroom activities and materials were noted. A space was also provided for the signature of both the regular and special education teacher.

#### Evaluation Questions

Phase V (1975-76) consisted of the District-wide implementation of the modified pilot Plan A model. As such, the evaluation emphasized process information in deference to product information. Identified information needs about IEP implementation centered about the use of educational plan documents and the quality of instructional objectives. In many respects, Phase V evaluation resembled the Phase III evaluation conducted two years earlier during the 1973-74 school year.

The Phase V evaluation questions relevant to IEP implementation were as follows:

1. How many students received educational plans?
2. What was the frequency of use of the alternative educational plan documents?

3. What assistance did Plan A teachers receive in developing educational plans?
4. Did the structure of educational plans meet program specifications?
5. What was the technical quality of instructional objectives?
6. What curricular areas were represented by instructional objectives?
7. How much time did students spend outside the regular classroom in order to receive special services?
8. What was the extent of use of instructional materials?
9. Was there adequate interaction among the regular classroom teachers, Plan A teachers, and appraisal team members?

#### Procedures

The Phase V evaluation made use of two major activities. They were mid-year surveys of Plan A staff and regular classroom teachers and a fall and end of year survey of educational plan documents. Classroom visits and observations were discontinued, since the mid-year staff survey was almost totally conducted via personal interview. There was no attempt to assess student progress during Phase V.

The survey of educational plan documents was conducted in November and again in May, 1976. The first survey was conducted during a three-week period from November 24 through December 12. The study involved 50 randomly selected Plan A classroom units in 48 schools. The sample represented about 20 percent of the total Plan A classroom units, with approximately 40 percent of the Plan A schools represented in the sample. These percentages were computed after the exclusion of the pilot Plan A

units, since the schools from the two pilot high school clusters were not included in the sample.

The sample included five different instructional arrangements, but the majority of the units was designated as resource room. The arrangements and the number of each sampled were: resource room, 28; self-contained, 19; emotionally disturbed (ED), one; trainable mentally retarded (TMR), one; and early childhood, one. There were 35 elementary schools, eight junior high or middle schools, and five high schools included in the sample. The sample included 100 students, with two students randomly selected from each of the 50 classroom units. In terms of primary handicap, 43 percent of the student sample was EMR, 30 percent MBI, 13 percent LLD, 10 percent ED, and 4 percent other.

A checklist was constructed to record completeness of sampled plan documents and the technical quality of instructional objectives. A copy of the checklist appears in the Appendix (see Chart XI). The same checklist was used in both the November and May surveys.

In the May survey of educational plans, two student files were examined at each of 25 sampled schools. Pilot Plan A schools were omitted from the sampling procedure (as in the November survey). As a continuation of the records survey conducted in November, ten schools were randomly selected from the 48 schools which were included in the fall sample. Of these 10 schools, the educational plans, which were reviewed in November, were examined again in May. However, four of these 20 students had transferred and were randomly replaced in the sample by students in the same schools. Fifteen schools, which were not included in the original records survey, were also randomly selected. There was a total of 50 student plans

In the May survey sample. In terms of primary handicap, 54 percent were EMR, 23 percent LLD, 13 percent MBI, and 10 percent other.

The mid-year survey of Plan A staff, regular teachers, and principals took place from November 24 to December 12, as did the November survey of educational plans. Staff interviews were conducted in the same schools as sampled in the survey of educational plans. A team of four evaluators conducted the interviews using a specially designed structured interview questionnaire. Personal interviews were conducted with 50 Plan A teachers, 25 school principals, and 25 regular classroom teachers.

A total of 72 questionnaires was sent to randomly selected appraisal team members. This included about 60 percent of the population of psychologists, visiting teachers, educational diagnosticians, and counselors. About 37 percent of speech clinicians were randomly designated to receive questionnaires. This sampling procedure tended to offset the greater number of speech clinicians relative to other team members. A total of 48 questionnaires was returned, which was a return rate of 67 percent. Individual responses were anonymous.

#### Outcomes

Results are reported for each evaluation question.

##### *1. How many students received educational plans?*

The November survey showed that educational plans had been completed for 70 percent of sampled Plan A students, and the May survey found completed plans for 98 percent of sampled students.

##### *2. What was the frequency of use of the alternative educational plan documents?*

Since Plan A teachers had a choice of four types of educational

plan documents, a tabulation was made of the frequency of each type received in the November survey of plans. The most popular form was 5.0 with page 2C, which is designed for long term and short term objectives and which was found in 54 percent of the cases. Form 5.0 with page 2A, a daily contractual agreement, and 5.0 with page 2B, a daily log of activities, were equally represented in the sample. Form 5.01 plus page 2, including objectives and activities of both the resource room and regular classroom was the least popular. Even though there were only four official forms, ten different types and combinations of forms were used.

Plan A teachers interviewed were also asked what plan documents they used, 63 percent reported using form 5.0 and page 2C. The remaining teachers reported using various combinations of documents or devising their own.

3. *What assistance did teachers receive in developing educational plans?*

Results relative to the above question were somewhat confusing, since team members and Plan A teachers gave conflicting reports. Almost 90 percent of appraised team members reported they assisted Plan A teachers at least sometimes in designing educational plans and 20 percent reported that they usually assisted Plan A teachers. On the other hand, a large majority (82 percent) of the Plan A teachers interviewed reported not receiving assistance in preparing educational plans. If the teachers were receiving help, it was most often from the educational diagnostician. Teachers also received assistance from the special education supervisor, other team members, other resource room teachers, and staff development. Five teachers said they were not receiving assistance, but they knew it

was available. Reports from regular classroom teachers showed that 60 percent of sampled teachers did not work with Plan A teachers in preparing educational plans. When regular and Plan A teachers did work together, most of the planning was accomplished through informal discussions on curriculum, assignments, activities, and progress of the student.

4. *Did the structure of educational plans meet program specifications?*

The November survey located educational plans for 70 of the 100 sampled students, and these plan documents were reviewed for completeness. Plan A specifications directed that all plans must contain one or more instructional objectives, date, professional signature, listing of strengths and weaknesses, and number of hours outside the regular classroom. All required information was completed on 91 percent of the sampled plans.

5. *What was the technical quality of instructional objectives?*

In all of the 70 educational plans reviewed in November, a total of 288 objectives was listed, an average of 4.11 objectives per plan. The number of objectives per plan ranged from one to 12. Of the 288 objectives, 262 (91 percent) specified observable tasks, while the remaining 26 either did not involve a task or was non-observable. When compared to the recommended characteristics of educational plans, the objectives included a criterion for performance in 61.81 percent of the cases, a predicted date of mastery in 45.49 percent, and activities and materials in 77.08 percent. All four components (observable task, criterion, attainment date, and activities/materials) of the objectives were present in 38 percent of the sampled plans.

6. *What curricular areas were represented by instructional objectives?*

The largest group of the objectives was concerned with the subject area of language arts, involving tasks such as reading, spelling, and writing. Of the 288 objectives, subject areas were represented as follows: language arts, 57 percent; math, 30 percent; behavior, 4 percent; history, 2 percent; social, 2 percent; perception, 1 percent; self-image, 1 percent; concepts, 1 percent; other, 2 percent. A few simple computations revealed that 87 percent of all sampled objectives pertained to the language arts area and mathematics. There were few objectives observed in the areas of perception, motor, social, and self-image. No doubt language arts was an area of great concern in the curriculum of special education students, but there were certainly other areas which merited attention.

The educational plans studied in Phase III (1973-74) of Plan A showed that only 60 percent of the instructional objectives pertained to language arts and math. These data clearly suggested that the content of instruction in Phase III Plan A was more comprehensive than that in the Phase V District-wide Plan A program. About one-third of the objectives in the Phase III Plan A were in areas other than language arts and math, and these areas included such things as attending skills, memory training, and interpersonal relations. Such areas were certainly relevant to the District-wide Plan A population, and the data suggested a need for review of the curriculum in the District-wide program.

7. *How much time did students spend outside the regular classroom in order to receive special services?*

Evaluation results revealed some differences between Phase V and the previous years in the extent of regular classroom experience received by Plan A students. One major explanation for this could easily have the differences in Phase V student population as compared to previous phases. The following gives the percent of Plan A students that spent selected amounts of time in a regular classroom during Phase V:

<u>Amount of time spent in a regular classroom</u>					
	None	Up to 50 percent of the day for non-academic sub- jects	Up to two hours of the day for non-academic and academic subjects	More than two hours of the day	
Percent	20	10	5	65	

One should note that the percent of students with no regular classroom experience would have been somewhat higher if the students in special non-district campuses had been included.

8. *What was the extent of use of instructional materials?*

In the mid-year staff survey, 55 percent of the Plan A teachers reported that they did not have adequate instructional materials, and 64 percent of the school principals reported that teachers had suitable materials. Appraisal team members provided little input regarding instructional materials.

9. *Was there adequate interaction among the regular classroom teachers, Plan A teachers, and appraisal team members?*

About 76 percent of the Plan A teachers interviewed in the mid-year staff survey said that there was adequate interaction with regular

classroom teachers. Several regular teachers and principals also mentioned the interaction among staff arising from the individualized Plan A instruction.

### Recommendations

Phase V recommendations included the areas of curriculum content, extent of mainstreaming, staff development needs, and product evaluation needs. It was recommended that management review Plan A curriculum to determine if district goals were being addressed, since the range of content specified in sampled instructional objectives was even less than that observed in the Plan A pilot. Concern was also expressed about the extent of regular classroom experience in the district-wide Plan A program. The objective-writing skill of teachers was again cited as priority staff development need, and the need for more suitable means of assessing student progress was again brought to the attention of management.

## PHASE VI

### DISTRICT-WIDE PLAN A CONTINUATION

#### Management Considerations

Major events at the state and the national level overshadowed many outcomes provided by the special education evaluation component. State guideline changes, child-find efforts, and the specifications of P.L. 94-142 introduced new factors which required major emphasis shifts and diverted the attention of management.

At the state level, funding was no longer allocated on the basis of average daily attendance only. Special education teachers were asked to keep contact hour registers which indicated numbers of students by the

hour attending their special class. New requests for special education units would be granted in light of how fully existing teacher units were being utilized. This discouraged mainstreaming because of the incentive to keep contact hour units high. These state changes coupled with the thrust of P.L. 94-142 toward "least restrictive environment placement" left some of us feeling slightly schizophrenic.

Child find efforts brought increasing numbers of preschool handicapped children and severely and profoundly handicapped children into the public schools. Planning for children who functioned 0-5 years of age developmentally was an area in which our teachers had little or no experience. Project KIDS, an early childhood program funded by the Bureau of Education for the Handicapped, developed some specific products to assist teachers in planning for these children. The project completed a KIDS Inventory of Development Scale which is a criterion-referenced checklist of skills. A Curriculum Organization System was completed which cross-referenced all available curriculum materials with items on the Inventory. Teachers could utilize the inventory to assess informally the child's functioning and to select appropriate educational goals for the child. The Curriculum Organization System assisted the teacher in locating appropriate strategies and materials for instruction.

Staff development efforts focused on assisting teachers in assessment and education plan development for these children. Training efforts also designed to increase professional-parent communication skills.

A task force was formed to study the I.E.P. forms in relation to  
in P. L. 94-142. Among the changes recommended by this  
inclusion of the specific items outlined in the law as

well as space for the team members and the parent to sign the form. We have not adopted their recommendations at this time because we have had some indication that the state agency may be going to recommend a form to be used consistently throughout the state.

### Evaluation Questions

Information needs identified in Phase VI resulted in a significant decrease in the amount of evaluation resources committed to IEP implementation. As such, only five IEP relevant questions were specified. Only one of these evaluation questions pertained to the Plan A program. The remaining four questions addressed IEP implementation in the infant and early childhood program (Project KIDS) and thus yielded information from a restricted sample.

The evaluation questions in Phase VI were as follows:

1. How much time did students spend outside the regular classroom in order to receive special services?
2. Were educational plans appropriately individualized to suit the student?
3. To what extent have staff helped parents understand the child's learning problems?
4. What student progress was made?
5. What staff development needs were identified?

## Procedures

All the major Plan A evaluation activity conducted previously was discontinued. However, a survey of Project KIDS parents was conducted and educational plans were monitored to determine student progress. Other new evaluation activity included a staff development needs assessment questionnaire.

Teacher reports of instructional objective mastery in Project KIDS provided a much more definitive measure of progress than did teacher reports studied in the Plan A program. Project KIDS operating guidelines for development of educational plans required delineation of mastery criterion and observational method for each instructional objective, and project staff adhered to these guidelines. Student performance was systematically monitored to determine mastery.

The parent survey sample included 25 parents of children in Project KIDS. Parents responded anonymously to a short written questionnaire, and all sampled parents were able to read and comprehend the questionnaire.

Assessment of staff development needs of Project KIDS staff involved a written assessment questionnaire. Both instruments were administered on a pre-post schedule over a seven-month interval.

## Outcomes

Results are reported by individual question.

1. *How much time did students spend outside the regular classroom in order to receive special services?*

This was the only question that yielded data on the district-wide Plan A program. The following gives the percent of Plan A students that spent selected amounts of time in a regular classroom during Phase VI:

Amount of time spent in a regular classroom

	None	Up to 50 percent of the day for non-academic subjects	Up to two hours of the day for non-academic and academic sub- jects	More than two hours of the day
Percent	17	11	8	64

2. *Were educational plans appropriately individualized to suit the student?*

3. *To what extent have staff helped parents understand the child's learning problem?*

Of the 25 parents sampled, 76 percent believed that educational plans met the individual needs of their child, and 84 percent reported that project participation had been helpful in their understanding of their child's learning problem. All but one parent reported that they had learned more about working with their child.

4. *What student progress was made?*

The average completion rate for individual children in Project KIDS was about one objective per month. There was considerable variability among children in terms of completion rates (objectives completed per month), and the range in rates was 0.0 to 6.00 objectives per month. There was no statistically significant relationship between completion rate and estimated parent instructional time or length of time in the project. In the survey, 84 percent reported that their child had made progress.

5. *What staff development needs were identified?*

Responses from Project KIDS staff indicated that teachers felt confident in the areas of direct instruction, organizing a learning environment, and selecting instructional materials. Parent interaction and evaluating and revising instructional programs were areas of less perceived strength. Results of short-answer written test paralleled those of the teacher self-assessment questionnaire.

### Recommendations

The major new recommendation from Phase VI was to conduct a staff development IEP needs assessment for the total special education staff. Such assessment should include measurement of current levels of staff IEP expertise as well as priority areas as perceived by staff. Other recommendations reiterated the need for improved objectives writing skills of staff, and this need additionally included the specification of annual goals in concert with short-term objectives. It was further recommended that the preliminary work conducted in project KIDS with IEP guidelines and parent involvement be expanded into the district-wide IEP implementation in Plan A.

## SUGGESTED GUIDELINES FOR IEP IMPLEMENTATION

The implementation of an IEP for each special education student in a large urban setting is an enormous challenge. Consider the mere logistics of the development and annual review of a written IEP document for up to 30,000 special education students (depending on the size of the school district). Past experience with IEP implementation in the Dallas Independent School District, Dallas, Texas points out several problem areas that are likely to be encountered in IEP implementation.

The following briefly describes each of these potential problem areas. It is thought that any school district experiencing IEP implementation for the first time will have all of these problems to some degree.

1. Staff members will probably intellectually accept the IEP concept but will attempt to continue planning and service delivery in the same manner as before IEP implementation.
2. Staff members will generally not possess sufficient expertise to specify usable goals and related short term objectives, but expertise will vary from very good to very poor.
3. The provision of adequate instructional materials will be a chronic problem, and there will probably always be teachers who will report having inadequate materials.
4. Almost everyone will complain about the paperwork, and the paperwork will keep increasing. Efforts to reduce paperwork will at best slow the rate of the increasing paperwork.

5. Staff members would generally prefer not to formulate student goals and objectives from scratch but would prefer "shortcut" methods such as checklists or computer generated goals.
6. The curricular content reflected in IEP goals and objectives will be fairly narrow in scope and will likely focus on math and language arts. Physical education and motor skills maybe conspicuously absent.
7. There will be insufficient time and money committed to IEP staff development activity.
8. The organizational structure of the public school will hinder efforts to individualize instruction.
9. The development and writing of IEPs will place a burden on special education staff not shared by regular education staff, and special staff members will resent the burden.
10. Regular education teachers and administrators will not understand the IEP burden placed on special staff, and regular educators will be reluctant to grant variances in the usual professional work assignments. Regular teachers will resent the low pupil-teacher ratio in special education and any additional planning time given to special staff.
11. The technical level of IEP implementation desired in terms of specification of goals and objectives, completeness of IEP documents, extent of individualization and so forth will not be suitably defined.
12. Management will have difficulty in determining the extent of IEP implementation in terms of IEP meetings, review, written

document generation, and service delivery.

13. It will be difficult to determine when IEP implementation results in the delivery of individualized instruction and even more difficult to measure student progress relative to IEP implementation.
14. Special education management will likely be able to demonstrate only a very minimal level of accountability in IEP implementation, especially as this relates to IEP quality.
15. At any given moment on any given day, one or more special staff members will be depressed about IEP related problems.

While the above problems may sound like doom and gloom, things need not be all that bad. The following guidelines are suggested. Appropriate action along these lines can do a great deal to enhance IEP implementation and to help avoid the above problem areas.

1. Define precise goal statements for IEP implementation. These program goal statements are not to be confused with the goals or objectives specified in IEPs. Rather, the program statements delineate the level of IEP implementation that is desired. Example program goal statements could be as follows:

By October, 197\_, all special education students will have a completed IEP document which contains at least one annual goal and at least two short term objectives for each goal.

All IEP short term objectives will specify at least an observable task, a criterion for mastery, and assessment procedure.

Conduct two 4-hour staff development sessions on writing the IEP document for speech clinicians between September 7 and November 30, 1977.

2. All goal statements for IEP implementation must be translated into clearly defined operating procedures for staff members. These procedures should be worked out in coordination with other district operating procedures, so that IEP implementation is married, or at least, engaged to the policies and procedures of the regular education program. The operating procedures for IEP implementation must be communicated to all levels of regular and special education administration. In many cases, repetitive communication will be necessary for all involved to "hear" the procedures. In some cases, procedures may not be heard until they are communicated by the General Superintendent. Regular education administrators tend to hear better when "the boss" speaks the message clearly.

3. It is important that precise specifications be developed for the content and quality of the IEP written document. Otherwise, there likely will be insufficient information to monitor and evaluate IEP implementation. These specifications should also include the physical format of the document for recording the written IEP. Input from staff (especially teachers) should be solicited and used in developing these document specifications, and followup input should be solicited for periodic monitoring of staff reactions and use of IEP format.

4. Staff development sessions to improve all or selected staff IEP skills must be planned relative to needs assessment information. Content of sessions should reflect both the perceived and actual areas of need in IEP skills. Time is very limited, and real behavior changes in teachers

and appraisal team members are not quickly and easily accomplished. Intensive summer workshops can provide a good way of meeting staff development needs; any periodic staff development conducted during the school year should be repetitive to ensure adequate levels of learning. The content and scope of sessions should be individualized for single staff members or subgroups of varying IEP skill levels. For example, one group of teachers may need to have a series of short weekly sessions, and others may only need a one-time session on current IEP format and procedures. Do not forget that staff members who already have outstanding IEP expertise can serve as staff development sessions leaders.

5. The development of some type of inter-departmental management council can greatly facilitate IEP implementation. If special education management cannot share administrative responsibility for IEP implementation, a schedule of routine briefing should be developed to ensure adequate communication and interface with the regular education program. It is best if IEP implementation can be assimilated into existing district management policies and procedures, whenever possible.

6. In order to achieve some degree of accountability, it is essential to establish a systematic procedure for monitoring IEP implementation. If the district has a computing center, this monitoring procedure should be computerized. In the absence of computer resources, a manual system should be devised. Both the manual and computerized systems would theoretically contain the same information; the computer system would only have the benefit of easy retrieval and tabulation.

7. The evaluation of the quality or appropriateness of the IEP can be an extremely difficult task and is best done thru review by an expert

panel of a random sample of IEPs. Appraisal team members given this responsibility at the campus level perform this task at varying degrees of thoroughness, and management cannot realistically review a large number of IEPs without undue loss of time.

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The Project KIDS appraisal and curriculum packages are useful resources for individualized infant and early childhood programming. These may be obtained at cost from the project office, S. J. Hay School, 3801 Herschel, Dallas, Texas, 75219. (Ruth M. Turner, project director)

Appendix

v



EDUCATIONAL PLAN OF ACTION

Mo. Day Yr.

Complete additional copies of this form (page 2) as needed.

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Today's Date

Student \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
Last First Middle

School \_\_\_\_\_

How many hours per day does the student spend outside the regular classroom \_\_\_\_\_

Objectives

Activities  
(enroute objectivities)

Materials

Attainment of Objectives

Objective  
Number

Date  
Attained  
Mo. Day Yr.


Observation-Measurement

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

78

Signature

Position

### Chart III

#### List of Sampled Objectives

The following are actual objectives as recorded from educational plans for students in January, 1974. (Student names are fictitious.)

Personnel	Objective
Plan A teacher:	Teach basic math skills.
Plan A teacher:	Mark will learn the function of zero in multiplication by Nov. 30, 1973 with 98% accuracy.
Plan A teacher:	Student will write the answer to 100 addition problems on the 1st grade level that are presented visually and will complete this within five minutes with 90% accuracy by Dec. 1, 1973.
Plan A teacher:	When the student has worked through the prescriptive exercises she should be able to write a mixed number as an improper fraction and change an improper fraction to a mixed number by completing 20 or more problems with 80% accuracy.
Plan A teacher:	To pronounce words, and to identify letter sounds of beginning, medial, and final consonants by words listed in Word List of Adventures Series Reader 4.
Plan A teacher:	Complete the following with 80% accuracy on a post-test.
Plan A teacher:	Given a list of two words student can successfully provide A. synonyms, B. antonyms, C. homonyms
Plan A teacher:	Student will demonstrate his ability to identify the central idea of given paragraphs by reading the paragraph and choosing the correct answer sentence from the four given answers. 3 out of 5 must be correct.
Plan A teacher:	Michael will increase his reading recognition and comprehension skills by a grade level (1.6 and 2.2 respectively) by April 1974 as measured by Gates Mac-Ginitie Reading Test.

Chart III (Cont.)

- Plan A teacher: Terry will understand the solar system in relationship to earth.
- Plan A teacher: Demonstrating knowledge of basic weather terminology and symbols.
- Plan A teacher: Through simple experiments and questions Jonathan will learn the following scientific concepts.
- Plan A teacher: Having completed a unit on human cell structure, student will be able to correctly identify 15 terms from the unit with 80% accuracy.
- Plan A teacher: Deborah will be able to name the three branches of government and the function of each branch.
- Plan A teacher: Given a list of geographical terms, students will be able to identify 7 continents, 4 oceans, the equator and 4 cardinal directions with 80% accuracy.
- Plan A teacher: Gain fluency in cursive handwriting by daily practice until all letters are formed with confidence as demonstrated by (Oct. 5) writing the alphabet without a visual cue in 1½ minutes or less with no hesitation.
- Plan A teacher: Jamie will be able to write the following letters in cursive writing by Nov. 1, 1973. i,t,u,e,l,m,n,h,p,k,a,d,c.
- Plan A teacher: To raise spelling level from below 2.0 to 3.0 by May, 1974.
- Plan A teacher: Attention and retention in spelling will be attained through letter recognition and sounds.
- Plan A teacher: The child will be able to recognize and spell correctly words from Sullivan Book #7 with 90% accuracy by Nov. 30, 1973.
- Plan A teacher: Increase auditory discrimination of similar sounding words to her grade level by January 5, 1974.
- Plan A teacher: Child will show increased skills in auditory closure by supplying the missing sounds to 10 words given by the teacher with 90% accuracy by November 1, 1973.

Chart III (Cont.)

- Plan A teacher: To develop the ability to recognize a complete object from an incomplete visual presentation and differentiate meaningful objects in her environment (visual closure) with 80% accuracy on 1st grade level materials as measured by teacher evaluation at end of a six week period. (expected date 10-24-73).
- Speech clinician: Kathy to be able to identify objects and pictures as "same" or "different" in the presence of the clinician with 90% accuracy on 4 trials of 10 responses each by November 30, 1973.
- Plan A teacher: Phillip will be able to remember and correctly repeat a sequence of symbols just heard at his expectancy level with 90% accuracy by May 30, 1974.
- Plan A teacher: Jamie will be able to place 6 geometric shapes in the same order as seen (from memory) with 95% accuracy by October 1, 1973.
- Speech Clinician: To obtain 95% proficiency in using breathy onsets in initiating phonation in single words.
- Speech Clinician: Production of 90% fluent speech in conversation. 2 ten minute conversational periods 90% correct as charted by the clinician to be accomplished within 77 therapy sessions.
- Speech Clinician: By October 25, 1973 Bobby will be able to use the [s] sound correctly in all positions 95% of the time in five minutes of conversation with the therapist.
- Speech Clinician: Curt will be able to produce the [ts] sound 90% of the time in 25 (ch) word sentences in one attempt in presence of clinician (by October 25, 1973).
- Plan A teacher: Pat will be able to follow auditory directions and respond with 90% accuracy in her workbook by May 14, 1974.
- Plan A teacher: The student will be able to follow directions in sequential order correctly to 5 commands given by the teacher both orally and written with 90% accuracy by November 1, 1973.
- Plan A teacher: Jimmy will become part of the class within four weeks.

Chart III (Cont.)

- Plan A teacher: Mark will become less hyperactive in the resource room showing a marked improvement by November 30, 1976.
- Diagnostician: Deborah will be able to define the functions of the skeletal system in written form with 90% accuracy.
- Diagnostician: Auditory Memory:
- a. will be able to sequence auditorially at grade level with 80% accuracy.
  - b. will be able to repeat auditory stimuli in context at age level with 80% accuracy.
- Psych. Associate: 80-100% acceptable social behavior in the regular and resource classroom:  
def. on time for class, being ready for work in seat with folder, pencil and paper, paying attention, (eyes on teacher, book or board), during class no verbal or physical hostility toward others.
- Counselor: For the student to identify with and conform (within normative tolerance) to the organized structure of the school community.
- Counselor: For the student to become aware of the nature and social acceptability of the attitudes and values of social groups with which she affiliates or which may be open to her.

Chart IV

PERCENT OF TOTAL INSTRUCTIONAL OBJECTIVES  
BY CATEGORY\*

	JANUARY	JUNE		JANUARY	JUN
1. MATH . . . . .	32	28	16. INTERPERSONAL RELATIONS	<1	1
2. LANGUAGE ARTS . .	30	32	17. VERBALIZATION . . . . .	<1	<1
3. SCIENCE . . . . .	5	5	18. ATTENDING BEHAVIOR . . . .	1	1
4. SOCIAL STUDIES . . . .	2	2	19. FOLLOWING INSTRUCTION . . .	2	1
5. HANDWRITING . . . . .	2	2	20. COMPLETING ASSIGNMENT . . .	<1	<1
6. SPELLING . . . . .	4	4	21. SCHOOL ATTENDANCE . . . . .	<1	<1
7. PERCEPTION . . . . .	3	3	22. OTHER BEHAVIOR . . . . .	1	1
8. MEMORY TRAINING . . .	5	4	23. PROVIDING ADULT MODEL . . .	<1	<1
9. MOTOR TRAINING . . .	<1	1	24. PROVIDING SUCCESSFUL EXPERIENCE . . . . .	<1	1
10. SPEECH . . . . .	7	8	25. PROVIDING PEER INTER- ACTION . . . . .	<1	<1
11. MUSIC/ART . . . . .	<1	1	26. PROVIDING PARENT COUNSELING . . . . .	1	1
12. TYPING . . . . .	<1	1	27. MISC. ENVIRONMENTAL MANIPULATION . . . . .	<1	<1
13. SPORTS . . . . .	<1	1	28. UNDEFINED COUNSELING . . .	1	1
14. UNDEFINED . . . . .	<1	1	29. MOTIVATION . . . . .	<1	<1
15. OTHER ACADEMIC . . .	3	2	30. VOCATIONAL . . . . .	<1	<1

\*Total objectives in January was 4,804; total in June was 7,772 (data were collected in Phase III, 1973-74).



dallas independent school district

Mo.	Day	Yr.
Date		

# EDUCATIONAL PLAN

Student \_\_\_\_\_  
*Last* / *First* / *Middle*

School \_\_\_\_\_ Psychological # \_\_\_\_\_

Number of hours per day spent outside regular classroom: \_\_\_\_\_

Strengths (as identified by formal and informal assessment)

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Weaknesses (as identified by formal and informal assessment)

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GOALS (OBJECTIVES)

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dallas independent school district

# STUDENT LOG

Name \_\_\_\_\_

CONTRACTUAL AGREEMENT

Date \_\_\_\_\_

School \_\_\_\_\_

\_\_\_\_\_  
*(Teacher's Signature)*

Subject \_\_\_\_\_

\_\_\_\_\_  
*(Student's Signature)*

DAY	ASSIGNMENT	MATERIALS	COMMENTS (NOTES, SCORES, OBSERVATIONS, ETC.)
MONDAY			
TUESDAY			
WEDNESDAY			
THURSDAY			
FRIDAY			

Chart VI

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dallas independent school district

Student \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
Last First Middle

Subject \_\_\_\_\_

Week of \_\_\_\_\_

LOG OF ACTIVITIES

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	COMMENTS





Dallas Independent School District  
EDUCATIONAL PLAN

Student \_\_\_\_\_ School \_\_\_\_\_ Date \_\_\_\_\_

Number of hours per day spent outside regular classroom \_\_\_\_\_ Psychological # \_\_\_\_\_

STRENGTHS AS IDENTIFIED BY:

REGULAR TEACHER	RESOURCE ROOM TEACHER	OTHER

WEAKNESSES AS IDENTIFIED BY:

REGULAR TEACHER	RESOURCE ROOM TEACHER	OTHER

Chart IX

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Clark County Independent School District

Student \_\_\_\_\_ School \_\_\_\_\_ Date \_\_\_\_\_

LONG TERM OBJECTIVES

REGULAR TEACHER

RESOURCE ROOM TEACHER

INTERIM OBJECTIVES

DATE  
ATTAINED

REGULAR CLASSROOM  
ACTIVITIES AND MATERIALS

RESOURCE CLASSROOM  
ACTIVITIES AND MATERIALS

(Regular Teacher Signature)

(Resource Teacher Signature)

Chart X

82

30

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Chart XI

Educational Plan Checklist

Student \_\_\_\_\_ Evaluator \_\_\_\_\_

School \_\_\_\_\_ Date \_\_\_\_\_

Yes No 1. Is there an educational plan on file for the student?

2. Identify the Plan.

\_\_\_\_\_ 5.0 (only one page)

\_\_\_\_\_ 5.0 with 2A

\_\_\_\_\_ 5.0 with 2B

\_\_\_\_\_ 5.0 with 2C

\_\_\_\_\_ 5.01 (only one page)

\_\_\_\_\_ 5.01 (both pages)

\_\_\_\_\_ Other, specify \_\_\_\_\_

Yes No 3. Number of hours per day outside regular classroom.

\_\_\_\_\_ 4. Date of Plan.

0 1 2 3 4 5 5. Number of signatures.

Yes No 6. Strengths listed.

Yes No 7. Weaknesses listed.

Objectives	No Task	TASK		Criterion for performance	predicted date of mastery	activities & materials	subject areas
		Non-obs.	observable				
1							
2							
3							
4							
5							
6							
7							
8							
9							

## Chart XII

### Comprehensive List of Evaluation Questions

The following lists the evaluation questions addressed during one or more phases of the IEP implementation.

1. How many students receive educational plans?
2. Did the structure of educational plans meet program specifications?
3. Were the instructional objectives of the educational plans appropriate in relation to the student profiles?
4. What was the technical quality of instructional objectives?
5. What curricular areas were represented by instructional objectives?
6. Were educational plans appropriately individualized to suit the student?
7. How much time was the Plan A teacher able to devote to each child while he or she was in the resource room? Was this adequate?
8. What was the extent of use of instructional materials?
9. How much time did students spend outside the regular classroom in order to receive special services?
10. Was there adequate interaction among the regular classroom teachers, Plan A teachers, and appraisal team members?
11. What student progress took place?
12. To what extent have Plan A staff helped parents understand their child's learning problems?
13. What problems, if any, did teachers encounter in writing educational plans?
14. What was the frequency of use of the alternative educational plan documents?
15. What assistance did Plan A teachers receive in developing educational plans?