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## ABSTRACT

The comprehensive Des Moines Plan (DMP) for Des Moines, Iowa elementary through high school students throughout the district who require academic support was evaluated, as implemented during 1987-88. The plan represents an expansion and reorganization of all district remedial programs, and receives federal, state, and local funding. The DMP programs focus on providing reinforcing/remedial assistance according to students' learning strengths, based on the premise that early identification and intervention are more effective than later remedial efforts. The Kindergarten Enrichment Program, K-1 Transitional Program, Reading/Writing Lab Program, and Mathematics Lab Program were evaluated. As of May 24, 1988, the programs served 206, 108, 2,877, and 2,365 students, respectively. The total full-time equivalent staff included 142.1 teachers, coordinators, consultants, supervisors, and associates. The extent to which each program was implemented according to its respective process and performance objectives, procedures used, nature of students served, and follow-up on recommendations from previous evaluations of district remedial programs are discussed. The four program evaluations are provided, within this document, as separate studies, each presenting evaluation forms, checklists, and sample tests. Fifty-four data tables are included. A supplement to the DMP program evaluations, the longitudinal evaluation study, and conclusions/recommendations from the DMP's comprehensive evaluation are also presented. (TJH)

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Report of Evaluation:

THE DES MOINES PLAN: A PLAN FOR STUDENT SUCCESS

1987-88

Department of Evaluation, Research, and Testing

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DEPARTMENT OF EVALUATION, RESEARCH AND TESTING  
DES MOINES PUBLIC SCHOOLS  
EVALUATION ABSTRACT

October 31, 1988

TITLE OF PROGRAM: The Des Moines Plan (including Kindergarten Enrichment Program; K-1 Transitional Program; Reading/Writing Lab Program; Mathematics Lab Program)

NUMBER OF STUDENTS SERVED:

Kindergarten Enrichment Program:	206
K-1 Transitional Program:	108
Reading/Writing Lab Program:	2877
Mathematics Lab Program:	2365

The above numbers were based upon the number of students on the database as of May 24, 1988.

FULL TIME EQUIVALENT STAFF:

Supervisor:	1.0
Coordinators:	1.0
Consultants:	3.5
Teachers:	123.6
Kindergarten Enrichment:	6.5
K-1 Transitional:	8.0
Reading/Writing Lab:	58.3
Mathematics Lab:	50.8
Associates:	10.0
Secretarial:	3.0
TOTAL:	142.1

TOTAL ALLOCATION BY FUNDING SOURCE:

Educational Improvement Grant:	\$522,936.00
Dropout Prevention:	363,531.00
Budget Review:	592,375.00
Chapter II:	365,033.00
Chapter I:	2,268,045.00
District General Fund:	901,752.00
TOTAL:	\$5,013,672.00

EXPENDITURES BY PROGRAM:

Kindergarten Enrichment:	\$221,477.00
K-1 Transitional:	\$255,720.00
Reading/Writing Lab:	\$2,065,665.00
Mathematics Lab:	\$1,978,793.00
TOTAL:	\$4,512,655.00

## PREFACE

The Des Moines Plan is a comprehensive plan for students throughout the district in need of academic support. It represents an expansion and reorganization of all district remedial programs. Federal, state and local funds are allocated to meet the needs of students at the elementary, middle and high school levels.

The philosophy underlying The Des Moines Plan suggests that early identification and intervention will have a greater impact on academic achievement than remedial efforts implemented later in a student's academic experience. Evaluating this philosophy will require monitoring the need for academic support among students served in the program throughout their academic experience in the district, as well as monitoring the implementation and maintenance of the programs included in The Des Moines Plan.

This report represents the first comprehensive evaluation of The Des Moines Plan. Separate chapters are devoted to examining the extent to which each program in The Des Moines Plan was implemented according to its respective process and performance objectives. This information was supplemented with a closer examination of the identification procedures, the nature of the students served, and a follow up of recommendations from previous evaluations of district remedial programs. Although results will not be available until after the close of the 1988-89 school year, a description of the design of the longitudinal study is also included in the full report.

To maximize the utility of the report, each chapter is written as an independent document. While this approach may result in redundancy between chapters, it is hoped that it will meet the specific needs of the various individuals involved in the implementation of The Des Moines Plan more efficiently.

## KINDERGARTEN ENRICHMENT PROGRAM

### Conclusions

The results of the evaluation of the process and performance objectives of the Kindergarten Enrichment Program indicate that the program was implemented as outlined in the program description. Results of the Kindergarten Enrichment Student Evaluation suggest that students do develop in the areas specifically emphasized in the program. Placement recommendations at the end of the program support this perception and provide evidence to suggest that efforts to improve the placement procedures resulted in the identification of students that more accurately reflected the target population for whom the program was created. Although class sizes were generally lower than originally expected, they were maintained at a level that more closely approximated the ratio recognized as ideal for early elementary programs. Finally, parents/guardians of students in the program indicated that the Kindergarten Enrichment Program made a significant contribution to the development of a positive attitude toward school and the learning process.

In many instances, performance exceeded expectations. For example, the performance objectives specified that 75% of the students served would be recommended for first grade at the end of the kindergarten year. Actual figures indicated that over 85% of these students were considered adequately prepared for first grade. Although instructors were only required to make one contact with the parents/guardians of students served in their classes, results indicated that Enrichment teachers devoted a considerable amount of time and energy keeping parents/guardians informed of program activities and student development in the program.

Combined, the results of this evaluation suggest that the Kindergarten Enrichment Program provides a unique experience to help prepare students with moderate developmental deficiencies for success in first grade and beyond. Implementation of the program accurately reflects its own philosophy as well as the philosophy of early elementary education in the district.

### Recommendations

A preliminary examination of the impact of early elementary programs suggests that students with more severe developmental deficiencies might benefit from an additional half day experience in the kindergarten year. Accommodation of these students will require modification of the philosophy, identification procedures, and the process and performance objectives of the Kindergarten Enrichment Program in 1988-89. The following recommendations are submitted for consideration in the modification process.

1. The program coordinator should work with representatives from the Department of Elementary Education and the Department of Educational Services to examine the philosophy statement underlying the early elementary programs in the district to ensure that it includes a rationale for the special programs at the kindergarten level. This rationale should also be reflected in the philosophy statement of the Kindergarten Enrichment Program.
2. The program coordinator should work with the Coordinator of Testing and Research to develop identification procedures that accurately identify students most in need of academic support services at the kindergarten level.
3. The inclusion of students with more severe developmental deficiencies will affect expectations for the program's "success" as measured by placement expectations at the end of the kindergarten year. In the absence of information upon which to base sound expectations, the program coordinator should establish no more than 50% as the criterion level for this objective. This criterion should be increased gradually as the program adjusts to the changes associated with the new target population.
4. The program coordinator should increase the criterion for parent/teacher contacts to more accurately reflect Enrichment teacher efforts and the emphasis characteristic of all Des Moines Plan programs.
5. Although information from parents/guardians provides an important contribution to a program evaluation, the return rate of efforts to solicit such feedback is not necessarily in the hands of the program coordinator or teachers. The program coordinator should consider removing the 30% return rate criterion or eliminating the performance objective from the program entirely.

### K-1 TRANSITIONAL PROGRAM

#### Conclusions

In general, the results of an examination of the process objectives suggest that the K-1 Transition Program was implemented as outlined in the program description. Teachers followed objectives to provide a complete curriculum. They also made considerable efforts to keep parents and guardians informed of their children's activities and progress and encouraged their active involvement in the development of their children.

Although a review of the performance objectives of the program failed to satisfy expectations, the qualifications that must be imposed on the interpretation of the results render them preliminary at best. Checkpoint results do indicate that the program is approaching the criterion level for "success" particularly in the area of reading. Finally, while the return rate was insufficient to consider the responses as truly representative, there is reason to believe that parents and guardians of students in the program are

pleased with the impact of the program on their children.

### Recommendations

A preliminary examination of the impact of early elementary programs on student achievement suggests that students with more severe developmental deficiencies might benefit from an additional half day experience in the kindergarten year. Participation in this supplemental program could change the nature of the students served in the K-1 Transition Program and may therefore require modification in the program to better meet the needs of these students. The following recommendations are based on the results of this evaluation with consideration of pending alterations in the organizational structure of the early elementary academic support programs in this district.

1. The program coordinator should work with representatives from the Department of Elementary Education and the Department of Educational Services to examine the philosophy statement underlying all early elementary programs in the district. Particular attention should be directed to ensuring that the rationales for the early elementary support programs are consistent with the philosophy of the regular kindergarten program.
2. The program coordinator should work with the Coordinator of Testing and Research to examine the impact of the structural change on the identification procedures for the K-1 Program. Necessary modifications should be made to ensure that the most appropriate students are identified and served.
3. The additional half day experience during the kindergarten year is likely to increase the "success" of the K-1 Program as measured by first grade checkpoint results. However, as students served in the K-1 Program are identified in the spring of the kindergarten year, the effects of this structural change will not be experienced until 1989-90. Given the results of this evaluation, the program coordinator should reduce the criterion level for passing the first grade math and reading checkpoints to no more than 50% for 1988-89.
4. First grade checkpoint results suggest that considerably more emphasis is given to the development of reading skills than math skills. Given that the K-1 Program is designed to provide a comprehensive curriculum, and that the performance objective to determine the "success" of the program includes the results of the math checkpoint, the program coordinator should work with K-1 teachers to increase the emphasis on math skills.
5. Current outcome measures to evaluate the effects of the program are limited to the first grade checkpoint results. As these are not available until the year following the current year of service, they are of limited value in the evaluation of the immediate year of service. The program coordinator should work with the program evaluator to identify a means of providing more formative feedback of the effects of the program.
6. The program coordinator should increase the criterion for parent/teacher contacts to more accurately reflect the efforts of the instructors and the emphasis characteristic of all Des Moines Plan programs.
7. Although information from parents and guardians provides an important contribution to the program evaluation, the return rate from efforts to solicit such feedback is not necessarily in the hands of the program coordinator or teachers. The program coordinator should consider removing the 30% return criterion or eliminating this performance objective from the program entirely.

## READING/WRITING, MATHEMATICS LAB PROGRAMS

### Conclusions

Results of the evaluation of performance and process objectives suggest that student attendance and communication with parents are two areas that received strong emphasis in these programs. In the reading/writing program, parents of approximately 83 percent of the elementary students and 75 percent of both middle and senior high students were contacted by telephone or in person during the year. In the mathematics program, parents of 84 percent of the elementary students and 67 percent of the middle school students were similarly contacted.

The rate of attendance for reading/writing program students was 88.9 percent of the days possible for middle school attendees and 90.5 percent for senior high. The attendance rate for mathematics program students was very similar. While criterion levels established by the proposal were not reached, these rates of attendance closely approximate those for nonprogram students at the middle and senior high levels - 92.8 and 92.5 percent respectively.

Student performance objectives involved administration of the Iowa Tests of Basic Skills and Iowa Tests of Educational Development on a pre/post basis as a measure of growth. Criteria for achievement included the amount of gain in the normal curve equivalent score. On the reading comprehension subtest, established criteria were exceeded when weighted averages were computed for grades 2-5 and 1-3. Criteria were not reached for grades 4-5, 6-8 and 9-12. In mathematics, criterion levels for gain were reached only in grade 1.

Two conditions that may have adversely affected achievement gain during 1987-88 were:

(a) The Des Moines Plan lab programs were modeled after the district's Chapter I and II Programs; however, one third of the buildings involved in the lab programs had not participated in the Chapter programs. Although inservice training was part of the implementation process, unfamiliarity with the model and delivery system could have had an adverse effect on achievement; and

(b) The Des Moines Plan did not officially begin until January of 1988 following initial administration of checkpoints. This resulted in a considerable shift in the student population at mid year as some students were exited from the program and others were entered. The end result was that pre/post scores were available and included in evaluation results for students that may have received instructional benefits for a shorter block of time than what would be expected. This would be particularly true for students at grade levels in which all pupils complete the Iowa Tests of Basic Skills or Iowa Tests of Educational Development in the fall. This condition bears mentioning though an assumption is that the effect of it on the overall results for the program is probably slight.

Condition (a) should be alleviated with the passage of time. Steps will be taken during the 1988-89 school year to eliminate test scores on the outcome measure for students that have not been served for an established length of time.

While there were at least two instances in which proper documentation to evaluate process and performance objectives was not submitted (noted in recommendations section), it appears from the evaluation that The Des Moines Plan Reading/Writing and Mathematics Programs were implemented as called for in proposals.

### Recommendations

1. The Supervisor of the Des Moines Plan should reassess the usefulness of the Principal's Report of

Des Moines Plan Supervision in the operation of this program. If this type of report is deemed useful, steps should be taken to ensure the more timely and accurate completion of this form.

2. Process and performance objectives related to the Writing to Read program should be separated from those that apply to the elementary reading/writing lab program. The Writing to Read Program is a distinct program that serves non-Des Moines Plan students as well as those that participate in the lab classes. In order to highlight this program, it would be best to treat it as a separate entity.
3. It is recommended that the Des Moines Plan Supervisor take action to ensure that valid results may be obtained from administration of an attitude instrument to all individuals for whom it is intended. The value of a pre/post measure is severely compromised when difficulty occurs in matching results from the pre and post administrations.
4. It is recommended that continued emphasis be applied to encourage the improvement of student attendance. It would also be feasible to revise the objective for the senior high program so that it is consistent with the middle school objective in comparing attendance of program with non-program students.
5. It is recommended that alternative methods for obtaining the perceptions of parents about the program be considered. It might be feasible to have an opinionnaire or other appropriate instrument completed at conference time or at another school activity that tends to be well attended by parents. Costs of designing, printing and mailing an instrument to measure perceptions are not warranted unless an adequate rate of return is encountered.
6. The development of the process for measuring student performance using a locally developed objective based instrument rather than a norm referenced test should be continued. Several conditions must be met in order to do this, but it is probable that benefits would be gained from measuring growth using an instrument that is closely matched with the district curriculum.
7. Consideration should be given to limiting the involvement of the Department of Evaluation and Research, and Testing in its monitoring of certain ongoing activities that are well incorporated into this program. Examples would include existence of Individual Educational Plans and lab schedules which are monitored on a regular basis by The Des Moines Plan consultants.

## SUPPLEMENTAL INFORMATION

### Conclusions

#### Identification Procedures

In general, procedures to identify students for all programs included in the Des Moines Plan were implemented according to specifications outlined in the respective program descriptions. Preliminary results of an evaluation of the device currently used to identify students for the Kindergarten Enrichment Program suggest that a standardized individually administered assessment battery (the Battelle Developmental Inventory) was a better predictor of Metropolitan Readiness Test results and less sensitive to the ethnic background of students than the Waupun Curriculum Screening Device. This investigation is ongoing.

#### Student Characteristics

State guidelines suggest that the percentage of minority students represented in any special program should not deviate more than 10 percentage points from the district wide minority percentage to ensure equitable delivery of service. While the distribution of minority students represented in the Kindergarten

Enrichment Program satisfied this criteria, the minority representation exceeded this standard in the K-1 Transition and lab programs.

#### Follow Up of 1986-87 Recommendations

Evidence was available to suggest that a majority of the recommendations specified in 1986-87 evaluations of the programs later subsumed in The Des Moines Plan were addressed by program coordinators. The results of a review of the procedures used in determining gain criteria on the outcome measure in the lab programs is expected.

#### **Recommendations**

##### Identification Procedures

1. The Supervisor of the Des Moines Plan should continue to work with the Coordinator of Testing and Research to develop procedures that accurately identify students for the early elementary support programs.
2. The Supervisor of The Des Moines Plan should consider including an item relating to the identification procedures in the process and performance objectives for all Des Moines Plan programs to ensure that such procedures are evaluated on a regular basis.

##### Student Characteristics

1. The Supervisor of The Des Moines Plan should continue to monitor the distribution of minority/nonminority and male/female students in the program. Particular efforts should be directed to ensuring that minority student representation does not exceed state criterion levels.

#### Follow Up of 1986-87 Recommendations

1. The Supervisor of the Des Moines Plan should continue to examine procedures currently employed to determine the criteria for "success," particularly in the lab programs.

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **Conclusions**

##### Philosophy and Goals

The evaluation of the process and performance objectives of the early elementary support programs indicated that both programs provided distinct experiences that consistently and accurately reflected their respective goals and philosophies. However, in 1988-89 the Kindergarten Enrichment Program will be modified to serve students who demonstrate the greatest need for academic support. Accommodating these students will require significant adjustments to both the identification procedures and the outcome expectations of the program. The additional preparation should have a direct affect on the nature of the K-1 Transition Program, and may be felt in the elementary lab programs as well.

##### Identification Procedures

Identification procedures for all programs in the Des Moines Plan were determined after careful consideration of district resources. Consistent with the philosophy of the Des Moines Plan, greater emphasis was given to serving students at the elementary levels. For example, provisions for the Reading/Writing and Math Labs included serving 20% of the students in grades 1 and 2, 15% of the

students in grade 3, 10% of the students in grades 4-6, 8% of the students in grade 7, and 5% of the students in grades 8-11. Once defined, checkpoint criteria were established to identify students according to these proportions. For example, students who scored in the lowest 20% of the scores on the first grade reading checkpoint were served in the Reading/Writing Lab, etc.

While procedures based on percentages ensure that those students most in need receive support services, they also introduce the possibility of serving students who do not really demonstrate need. In other words, current identification procedures do not consider the level of mastery demonstrated on the checkpoints, but are based on the distribution of the checkpoint results and the number of spaces available for service at each grade level. For example, a first grade student who scored 80% on a checkpoint could be identified for service if that score fell among the lower 20% of all first grade checkpoint scores.

Test development procedures provide one safeguard against misidentifications of this nature. District checkpoints are designed to measure mid year mastery of curriculum objectives and are revised to reflect any modifications in those objectives. Increasing the difficulty of the curriculum objectives should increase the difficulty of the checkpoints and therefore, improve their power to differentiate among students' level of functioning. To follow up the example, a score of 80% would not likely fall within the range of identification on a more difficult checkpoint because the range of all first grade checkpoint scores would be much broader. However, curriculum objectives are reviewed on a five year schedule and developing new tests to reflect changes may take up to two additional years. This time line may not be sufficiently sensitive to avoid misidentifications.

#### Organizational Structure of the Management System

The Des Moines Plan was based on the district's Chapter programs. In 1986-87, the Chapter programs involved 31 schools across the district. In 1987-88, the Des Moines Plan included all elementary and secondary schools offering regular academic programming in the district; some 58 buildings. The Des Moines Plan also acquired two early elementary programs with their accompanying personnel. In addition, the Chapter programs relied on two sources of funding; however, approximately 82% of the funds for the Des Moines Plan were contributions from five state or federal sources.

While the system utilized to manage the Chapter programs successfully accounted for the implementation of those programs, the same system failed to withstand the demands imposed by the expansions associated with the Des Moines Plan. Accountability files were established to monitor the objectives of each program in the Des Moines Plan, and within each grade level of the lab programs (i.e., elementary, middle, and high school). Similarities in the nature of the program objectives often resulted in maintaining multiple sets of files with the same documentation. Furthermore, regulations associated with the allocation of funds from external sources complicated the maintenance of account ledgers for each program.

#### **Recommendations**

The following recommendations are based on the conclusions listed above.

1. The Supervisor of The Des Moines Plan should meet with representatives from the Department of Elementary Education, the Department of Educational Services, and the Department of Evaluation, Research, and Testing to review the implications of the modification to the Kindergarten Enrichment Program on other Des Moines Plan programs. Particular attention should be given to examining the impact of this change on the identification procedures and outcome expectations of the K-1 Transition and first grade lab programs.

2. Each year the Supervisor of The Des Moines Plan should meet with representatives from the Department of Elementary Education, the Department of Secondary Education, the Department of Evaluation, Research, and Testing, and the Coordinator of Testing and Research specifically, to review the allocation of academic support resources. The number of students served at each grade level should be determined on the basis of available resources, checkpoint results, and other relevant information.

3. The Supervisor of The Des Moines Plan should meet with representatives from the Department of Evaluation, Research, and Testing, and the Controller's Office to devise a system to monitor the implementation and accounting of the Des Moines Plan more efficiently.

Copies of the full Report of Evaluation for The Des Moines Plan, 1987-88 are available upon request from the Department of Evaluation, Research and Testing, Des Moines Public Schools, 1800 Grand Avenue, Des Moines IA 50307-3382.

## PREFACE

### The Plan For Excellence

In 1982 an administrative committee of the Des Moines Independent Community School District began developing a model program to improve student achievement in the district. Literature on excellence in education identifies areas that offer the greatest promise for impact on student achievement. The district's Plan for Excellence (1985) outlines steps to improve education in each of these areas. One of these recommendations describes steps to strengthen programs and achievement specifically for low achieving students including reorganizing all district remedial programs under a single umbrella. The Des Moines Plan: A Plan for Student Success was implemented in 1987-88 to coordinate remedial efforts.

### The Des Moines Plan: A Plan for Student Success

#### Component Programs

The Des Moines Plan is a comprehensive plan for students throughout the district in need of academic support. The basic philosophy of the plan assumes that all children can learn and recognizes that students learn in a variety of ways. Programs included in the Des Moines Plan are designed to provide reinforcing and remedial assistance according to students' learning strengths.

#### Early Elementary Programs

Programs at the early elementary level (i.e., Kindergarten through grade 2) are characterized by a philosophy based on accepted principles of early childhood growth and development. Children from birth to approximately age 7 develop at variable rates. As a result, students who satisfy the age criterion for entrance into kindergarten may demonstrate developmental deficiencies in other areas that compromise their chances for a successful kindergarten experience. Failing to receive an adequate foundation in kindergarten could jeopardize students' chances for successful learning experiences in first grade and beyond. Des Moines Plan programs at the early elementary level are designed to provide children with additional time and support to strengthen their weaknesses and better prepare them for first grade.

Des Moines Plan programs at the early elementary level include the Kindergarten Enrichment and K-1 Transition Programs. Students who demonstrate moderate developmental deficiencies during the kindergarten screening process are given the opportunity to receive an additional half day instruction to supplement the regular kindergarten curriculum in the Kindergarten Enrichment Program. The Kindergarten Enrichment Program was piloted in 1985-86 and became a component of the Des Moines Plan in 1987-88.

Students who demonstrate more severe deficiencies benefit from the interaction with same age peers in various stages of development in the regular kindergarten program their first year and may be given an additional year of reinforcement in the K-1 Transition Program the following year. The K-1 Program was introduced in 1986-87 and offers a complete, comprehensive curriculum to reinforce and extend the social, academic, emotional and physical growth that occurred during the kindergarten year.

#### Reading/Writing and Math Labs

Students who fail to satisfy district standards in the basic skills areas receive assistance through Reading/Writing and Math Lab Programs. Modelled after the District's Chapter I and II programs, the basic skills labs include individualized remediation plans to allow students the opportunity to strengthen specific skill deficiencies according to their academic strengths and preferred learning styles. Students at the elementary level are served on a pull-out basis, while students at the secondary level receive assistance through regularly scheduled courses.

#### Transition Rooms

Students who have participated in the lab program for three consecutive semesters and have had the opportunity to attend two summer school sessions, but continue to demonstrate critical skill deficits are enrolled in special curriculum rooms. These "transition" rooms are introduced between grades 2 and 3, 4 and 5, and 6 and 7. Primary emphasis is devoted to strengthening basic skills in reading, writing, and math. As the Des Moines Plan officially began in January of 1988, transition rooms will not be implemented until 1990-91 to allow students sufficient opportunities to strengthen academic weaknesses in the lab programs.

### Funding

The Des Moines Plan receives economic support from a variety of federal, state, and local sources.

#### Federal Support

District allowances under Chapter I and II of the Education Consolidation Improvement Act and other provisions to promote desegregation programs make a substantial contribution to programs at the primary and elementary level.

#### State Support

In addition to the state base rate allocation, the district receives support for special programs through the "allowable growth" mechanism included in the state funding formula. The allowable growth mechanism permits local districts to assess additional local taxes for the purpose of promoting school improvement. Allowable Growth funds were awarded by the state in response to a special request to the State Budget Review Committee by the district for funds to support the Des Moines Plan. Additional funds provide support for the Educational Improvement Grant (i.e., the Plan for Excellence) and the Drop Out Prevention Programs in the district. Because the Des Moines Plan is an integral part of both programs, a portion of the monies from these grants is allocated to Des Moines Plan programs.

#### Local Support

Teacher salaries and associated benefits not covered by other sources are credited to the district's general fund.

### Plan Of Evaluation

#### Rationale

The philosophy underlying the Des Moines Plan suggests that early identification and intervention will have a greater impact on academic achievement than remedial efforts implemented later in students' academic experience. To the extent that the Des Moines Plan is effective, it follows that students who were served in programs, particularly at the primary and elementary school level, should not require continued assistance throughout their academic experience in the district. It also follows that participation in the academic support components of the plan should reduce the need to retain

students.

### Summative Evaluation

The nature of these expectations suggests that a complete evaluation of the Des Moines Plan will require monitoring the need for academic support among students served in the program throughout their academic experience in the district. Such a study was initiated in the spring of 1988. The design of this study calls for following students who were identified and served in Des Moines Plan programs that spring to determine the extent to which students require additional assistance and to identify the nature of that assistance.

### Formative Evaluation

As with any education program, the Des Moines Plan was created to meet the needs of students in the district and must change as these needs change. The longitudinal design described above and the dynamic nature of these programs increases the need to monitor the implementation and maintenance of the Des Moines Plan programs. Results of these studies may identify areas that have a significant impact on the effects of the programs. Information will be drawn from two sources to provide adequate documentation of the implementation of the programs.

### Process and Performance Objectives

Each program within the Des Moines Plan is guided by a series of process and performance objectives. These objectives specify activities and performance criteria to ensure continuity in the implementation of the programs in all schools across the district and to provide preliminary evidence of the effects of the programs.

### Supplemental Information

An examination of the process and performance objectives will document the extent to which the program was implemented as planned, but will not allow an examination of critical issues that go beyond the objectives. A thorough formative evaluation will require supplementing the compliance information with data to address specific issues, such as the adequacy of the objectives and the validity of the identification procedures, as they arise.

### Overview of the Comprehensive Evaluation of The Des Moines Plan

The following report represents the first comprehensive evaluation of the Des Moines Plan. Separate chapters are devoted to each of the components outlined in the description of the evaluation plan. Chapters 1 through 4 examine the process and performance objectives for each program included in the Des Moines Plan. Chapter 5 reviews each program with regard to three specific areas not directly assessed by the process and performance objectives, namely: the validity and reliability of the identification procedures, the nature of the students served in the programs, and a follow up of recommendations from previous evaluations. The results of the evaluation of the process and performance objectives, considered with the supplemental information reported in chapter 5 are designed to provide the background and descriptive information to support the longitudinal study.

The Des Moines Plan was officially implemented in January 1988. As such, the results of the first year of the longitudinal study will not be available until the spring of 1989. However, chapter 6 describes the evaluation design of the longitudinal study in greater detail.

Although conclusions and recommendations are specified at the end of the process and performance evaluations for each program, chapter 7 provides the opportunity to formulate conclusions regarding the Des Moines Plan in general based upon a synthesis of all available information.

Recommendations to improve the delivery of services and/or programming based on the conclusions are also submitted.

Finally, a note about the format of this report. Implementation and oversight of the Des Moines Plan involves a variety of individuals who serve in different capacities. To maximize the utility of the report, each chapter is written as an independent document. While this approach may result in redundancy between chapters, it is hoped that it will serve to meet the specific interests of all those involved more efficiently.

**Reference**

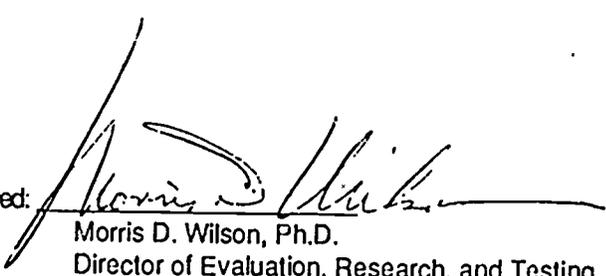
Des Moines Independent Community School District. (February 21, 1984). Plan For Excellence.

Des Moines, IA: Author.

Report of Evaluation:  
THE KINDERGARTEN ENRICHMENT PROGRAM  
1987-88

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## INTRODUCTION

### Background Information

The Kindergarten Enrichment Program is a supplemental program to reinforce and extend the foundation concepts and skills of the basic kindergarten program. It was developed and introduced into the district in 1985-86 and was incorporated into the Des Moines Plan in 1987-88. The incorporation procedures required a slight modification in the structure of the program namely the inclusion of process and performance objectives. The primary purpose of this evaluation is to document the extent to which the Kindergarten Enrichment Program was implemented according to the objectives outlined in the program proposal. The results of the evaluation are presented following a description of the program.

### Program Description

#### Administration

In 1987-88, the Kindergarten Enrichment Program was coordinated by an elementary school principal. In addition to administrative responsibilities, the coordinator chaired the Kindergarten Enrichment Planning Committee, which also included Kindergarten Enrichment instructors and the Elementary Consultant. This committee met at least monthly to develop program and curriculum modifications necessary to conform to the Des Moines Plan, to discuss difficulties and to exchange curriculum ideas and activities. It was also primarily responsible for implementing the program.

#### Attendance Centers

Thirteen half day sessions were offered at eight elementary schools throughout the district including: Brooks, Cowles, Findley, Howe, King, Mann, Moulton, and Woodlawn. These centers were chosen on the basis of enrollment figures and the availability of space. With two exceptions, the remaining elementary schools were divided into attendance areas that clustered around these target sites. A sufficient number of eligible students were identified at Moulton and King Elementary Schools to offer one half day session at each of these sites. As a result, one session was eliminated at Woodlawn Elementary School. Two sessions (i.e., one morning and one afternoon) were held at the

remaining five centers.

### Class Size

Original class sizes were limited to 18 students per session. Previous attendance patterns of the Kindergarten Enrichment Program were characterized by frequent transfers. Program policy provides that once a student has been identified, accepted, and served, they are not denied services in the event of a transfer, due to class size. When a student transferred to a home school within a different Kindergarten Enrichment attendance center, he/she was admitted to the new Enrichment center upon notification of the home school. Slight deviations in class sizes were allowed to accommodate transfer students; however, if a specific class enrollment exceeded 20 students, busing to another center was considered. Alternate placement decisions were made by the program coordinator, in consultation with the teachers involved.

### Budget and Expenditures

As a pilot the Kindergarten Enrichment Program was funded through allowable growth funds awarded to the district for the Education Improvement Program Grant (i.e., the Plan for Excellence). The following year the program was incorporated into the district at large and expenses were absorbed into the general district operating funds. As part of the Des Moines Plan, the Kindergarten Enrichment Program was funded through federal, state and local sources. Federal funds were provided through the Chapter I Program. The State of Iowa contributed through the Educational Improvement Program Grant. Local monies for transportation and the Voluntary Transfer Program were also allocated to the Kindergarten Enrichment Program.

Table KE-1 lists the budget and expenditures for the program. Budgeted figures were estimated on the basis of district averages. The average teacher salary for 1987-88 was \$26,389. Estimated salaries and benefits for five full time and three half time instructors based on this average was \$171,528. Each building received \$24.10 per student for supplies and equipment. Multiplying this figure by the average number of students served in the program during the year (207.5) provides an estimate of the budget requirements for the program. Transportation demands were estimated by

multiplying the average cost per student in 1987-88 (\$155.74) by the average number of students served in the program.

State and federal regulations prohibit intermingling of funds, therefore, expenditures are reported according to funding source. Expenditures for supplies and materials were recorded for elementary programs combined. The figures listed were estimated on the basis of the relative number of students in the Kindergarten Enrichment Program. Transportation expenditures were credited to the district general fund. Actual expenditures were therefore, not available specifically for the Kindergarten Enrichment Program.

Estimated total expenditures for the program represent an over expenditure of approximately two percent; however, the number of estimated figures in the table challenges the accuracy of this review. Current record keeping procedures, complicated by the number of funding sources and associated accountability stipulations, failed to provide clear evidence of the actual budget and allocations.

Table KE-1. Estimated Program Budget and Expenditures for Kindergarten Enrichment 1987-88.

Source	Items			Total
	Salaries/ Benefits	Supplies/ Materials	Transportation	
Budget	\$171,528	\$5,001	\$32,316	\$208,845
Chapter 1	\$135,069	\$957		\$136,026
Education Improvement	\$33,071	\$957		\$34,028
District	\$10,107		\$32,316	\$42,423
Total Expenditures	\$178,247	\$1,914	\$32,316	\$212,477

#### Philosophy and Goals

The philosophy of the Kindergarten Enrichment Program is based on the philosophy of the Des Moines Public Schools kindergarten program and emphasizes a developmental orientation. It

states that Early childhood programs have a responsibility to help all children 'be what they are and become what they are capable of becoming.' This requires recognizing each child's individual developmental maturity and providing experiences to encourage further development. Educational experiences focus on readiness experiences which develop personal social/emotional skills, intellectual functioning, verbal fluency, psychomotor abilities, and basic life skills to prepare students to live with self, parents and friends; to approach the world with curiosity and creativity; and to develop effective life skills with a disposition for life long learning.

The following goals were developed to guide the implementation of this philosophy:

1. Apply the principles of growth and development as a foundation for teaching and learning.
2. Provide a planned, comprehensive program of experiences designed to develop the cognitive, affective, social, verbal and psychomotor abilities of each child.
3. Ensure that the school's learning environment facilitates productive thinking, learning and living.

#### Curriculum

The curriculum of the Kindergarten Enrichment supplements, without duplicating, the curriculum presented in the regular kindergarten program in an attempt to reinforce and enhance student preparation for future academic success. The curriculum of the regular kindergarten program utilizes Strategies in Early Childhood Education (Waupun); a developmental approach to visual, auditory, verbal, and motor skill development. The behavioral objectives in each area are arranged in five performance levels. After locating students within the hierarchy through screening, teachers present a complete sequence of instruction, reinforce skill development, and confirm students' abilities to perform a particular objective independently before proceeding to the next skill level.

The Kindergarten Enrichment Program enhances the Waupun curriculum with the following objectives based on its specific goals to provide a planned, comprehensive program:

1. Develop personal social/emotional skills to enhance self-concept, confidence and a disposition for life long learning.
2. Promote verbal fluency through language experiences as a means to develop communication and self-expression.
3. Explore literature to build a positive self-concept, enlarge vocabulary, stimulate imagination, develop listening skills and broaden the students' view of the world.
4. Expand intellectual functioning through thinking skills, such as problem solving and decision making.
5. Integrate psychomotor skills into the learning activities.
6. Emphasize good health and safety habits.

A complete list of performance objectives for the emphases specific to the Enrichment Program is found in Appendix KE-A. While progress on the Waupun curriculum objectives is monitored by the teachers of the regular kindergarten program, Enrichment teachers measure progress on the special emphases by the results of a checklist of specific behaviors related to each performance objective.

#### Teaching Techniques

Consistent with principles of early childhood learning styles, teaching techniques emphasize numerous "hands-on", manipulative and tactile experiences to provide opportunities to examine, investigate, explore, experience and discover.

#### Identification Procedures

Prior to the introduction the Kindergarten Enrichment Program all kindergarten students were screened during the third week of the school year to determine their standing within the Waupun curriculum. The results of this screening provided teachers with a rough estimate of where to begin instruction. Implementation of the Kindergarten Enrichment and other early elementary academic support programs, necessitated more rigorous selection procedures to accurately and consistently identify appropriate candidates for the program.

To date, the Kindergarten Enrichment Program has relied on the results of the Kindergarten

Enrichment Teacher Evaluation Form (see Appendix KE-B). This was administered to those students who performed below the minimum Waupun level considered prerequisite for success in kindergarten, and who teachers believed to be appropriate candidates for the Kindergarten Enrichment Program.

In 1987-88 a pilot study was conducted to examine the technical properties of current screening procedures and to explore the possible use of an alternative instrument. The screening test of the Battelle Developmental Inventory (BDI) was administered in lieu of the Waupun screening and the Kindergarten Enrichment Teacher Evaluation to all kindergarten students in six schools across the district. Students from all other elementary schools were referred according to the original placement procedures described above.

Candidates from all schools were confirmed by the home school principal and the Kindergarten Enrichment instructor for the attendance area, and were referred to the Enrichment Planning Committee for review. The results of all referrals were rank ordered within the respective tests. Students referred on the basis of the Kindergarten Enrichment Teacher Evaluation Form were selected according to criteria established from the results of previous years. Students referred on the basis of the BDI screening test were placed according to criteria derived from normative data provided with the screening test. Additional information such as the results of draw-a-person and scissor cutting tasks and teacher observations, was used to identify students with the greatest need and/or to verify a placement decision. Selections were confirmed with the home school teachers and principals.

Final placement was contingent upon approval from the parent/guardian. Parent contacts were initiated by the home school principal and followed up by the Kindergarten Enrichment teacher.

## PROCESS AND PERFORMANCE OBJECTIVES

### Introduction

Process and performance objectives were generated in four major areas to guide the implementation of the program. These areas included: Administration, Students, Instructional Staff and Family. The methods for documenting and evaluating each objective in these areas, as well as the

results of the evaluation are described below.

### Administration

#### Objective B-1

*During the instructional year the program coordinator will organize and maintain an accountability file and provide copies of data to support the evaluation of all objectives as documented by an accountability file maintained by the program consultant.*

#### Evaluation Method

Evaluation of this objective called for simply confirming the existence and maintenance of an accountability file. Maintenance was confirmed by requesting information as specified in the program objectives.

#### Results

The program evaluator confirmed the creation of the files and received all data in a timely fashion as specified in the program objectives.

### Students

#### Objective A-1

*At the end of the instructional year, students served by the program for at least two thirds of a given year will improve an average of one ranking on each of the components on the Kindergarten Enrichment Student Evaluation as documented by a summary of the results submitted to the program coordinator by May 15, 1988.*

#### Evaluation Method

#### Subjects

Kindergarten Enrichment classes met for a total of 155 days. Only those students who attended 103 or more classes during the academic year were included in the evaluation of this objective.

#### Measure

The Kindergarten Enrichment Student Evaluation was generated to more accurately reflect the specific objectives of the program (see Appendix KE-C). Four to 8 items were empirically derived to

represent 5 of the six curriculum objectives outlined in the program description. The objective "exploration of literature", was considered descriptive of the teaching strategy rather than a student behavior and was therefore omitted from the Student Evaluation. Teachers were asked to indicate on a scale of 1-5 the extent to which each student demonstrated at least age appropriate levels of each characteristic (1=infrequently, 5=frequently). Subscores were obtained by adding the scores for each item within each objective. A composite score was obtained by adding the scores across objectives. Although pre and post test scores were obtained on the Kindergarten Enrichment Student Evaluation during 1987-88, delays in its development resulted in subsequent delays in the initial administration. The results below represent student growth over a 4 month period.

### Results

The results of a comparison between pre and post test scores of the Kindergarten Enrichment Student Evaluation are presented in table KE-2. The results indicate that the subscale and composite scores obtained on the post-test were significantly higher than pretest scores. Although the results represent a statistical difference, it is difficult to determine whether the difference represents a meaningful change in behavior. This interpretation is compounded by the absence of a comparison group and the limited duration between test administrations.

Table KE-2. Kindergarten Enrichment Student Evaluation Pre and Post Test Comparisons

Objective	Average Pretest	Average Post test	T-Statistic	Effect Size	Percent Increase
Personal Social/Emotional Skills	19.42	23.70	13.12*	0.90	17.24
Verbal Fluency/Competency	26.85	32.50	15.80*	1.01	17.21
Intellectual Functioning/ Disposition for Life Long Learning	12.89	15.31	12.24*	0.77	14.24
Psychomotor Skills	20.28	24.18	15.27*	1.01	15.56
Health and Safety Habits	21.61	25.69	19.16*	1.16	16.56
Composite	100.92	121.31	12.76*	1.09	16.85

\*  $p < .001$

One approach to facilitate the interpretation of these results is to calculate the effect size based on the difference between pre and post test scores. The effect size is an index of the degree to which a characteristic is present. An effect size of .25 represents a small effect, .50 represents a moderate effect and 1.00 represents a large effect. The effect size for each subscale and the composite are included in the table. With the exception of the Personal Social/Emotional Skills and the Intellectual Functioning/Disposition for Life Long Learning scales, the effect sizes satisfy Cohen's criteria for a large effect. The effect sizes for the two exceptions approached this criteria.

The interpretation may also be enhanced by calculating the percent increase in the scores, represented by the average difference between pre and post test scores, relative to the range of possible scores on the subscales. Percent increases ranged from 14.24% to 17.24%. The greatest increases occurred in the areas of personal social/emotional skills and verbal fluency/competency, two of the primary concerns of the program. The lowest percent increase occurred in the area of intellectual functioning/disposition for life long learning.

Although inconclusive, these results provide evidence to suggest that the program does make a positive impact on development in those areas it was designed to improve.

#### Objective A-2

*At the end of the instructional year, at least 75 percent of those students served in the program for at least two thirds of a given year will be recommended for placement in first grade as documented by placement recommendations for each student served in the program, submitted to the program consultant by May 15, 1988.*

#### Evaluation Method

##### Subjects

Again, only those students who participated in the Kindergarten Enrichment Program for 103 days or more were included in the evaluation of this objective.

##### Measure

The purpose of the Enrichment Program is to prepare high risk students for the first grade,

therefore, placement recommendations made in the spring of the kindergarten year serve as a measure of the effects of the program. There were at least four alternative placements for students following their kindergarten year. Students could be retained in kindergarten, in which case they were eligible for another year in the Kindergarten Enrichment Program, invited to participate in the K-1 Transition Program, promoted to the first grade, or referred for evaluation and service by Educational Services.

Retention in kindergarten and participation in the K-1 Transition Program was also contingent upon approval of the parents or guardians, therefore teacher recommendations for academic placement is considered a more accurate index of a student's level of functioning at the end of the kindergarten year. These recommendations are made by the students' regular kindergarten instructor in consultation with the Enrichment teacher.

### Results

The placement recommendations for students who participated in the Kindergarten Enrichment Program for at least 103 days are displayed in Table KE-3. These results indicate that over 85 percent of these students were considered adequately prepared for first grade. Only 14.56 percent (n=23) were referred for consideration for retention, and none of these students demonstrated a need for Educational Services.

Table KE-3. Placement Recommendations of Students Served in Kindergarten Enrichment for 103 Days or More.

Placement Recommendation	Number of Students	Percent of Students
Promote to first grade	135	85.44
Refer to K-1 Transition	19	12.03
Retain in kindergarten	4	2.53
Refer to Educational Services	0	0.00
Total	158	100.00

## Instructional Staff

### Objective B-1

*Kindergarten Enrichment students will be identified by the fourth week of the instructional year as documented by class lists of identified students and eligibility data, on file with the program consultant.*

### Evaluation Method

Evaluation of this objective required reviewing program records to note the time line of the screening and placement procedures.

### Results

Classes for the 1987-88 academic year began on September 1, 1987. Kindergarten screening took place during the week of September 14-18, three weeks into the school year. Results of the screening tests were reviewed and the parents of eligible students were contacted during the following week (September 21-25). Although eligible students were identified by the fourth week, obtaining parent permission and securing class rosters from the list of candidates, and making final transportation arrangements required postponing the start of the Kindergarten Enrichment classes one week.

Kindergarten Enrichment classes began on October 6, 1988.

### Objective B-2

*During the instructional year Kindergarten Enrichment teachers will instruct 18-20 students in each half-day session as documented by class lists compiled from student data forms, submitted to the program consultant by October 9, 1987.*

### Evaluation Method.

The average class size at the beginning of the program was compared to the average class size at the end of the school year to determine the extent to which the targeted student/teacher ratio was maintained throughout the year.

### Results

Class sizes at the beginning of the school year ranged from 14-20 and averaged approximately 17. Class sizes at the end of the year ranged from 13-20 and averaged approximately 15. These results

indicate that student/teacher ratios were maintained below the target level, and more closely approximated the ideal ratio for similar programs (i.e., 12-15 students.).

#### Objective B-3

*By the end of the second semester, Kindergarten Enrichment teachers will have had at least one contact with the parent(s)/guardian(s) of each student enrolled during the instructional year. These activities may consist of one or more of the following: a) Parent/teacher conferences; b) Kindergarten Enrichment newsletters; c) Kindergarten Enrichment open houses; and d) Parent volunteer activities as documented by attendance reports, copies of newsletters, and other appropriate documentation, submitted to the program consultant by May 15, 1988.*

#### Evaluation Methods

In addition to reviewing program records, Kindergarten Enrichment teachers were asked to complete a Parent Contact Summary Sheet during the spring semester of 1987-88 academic year. The parent contact summary sheet was designed to indicate the extent to which each teacher made individual as well as group contacts.

#### Results

The very structure of the program ensures at least some contact with parents during the year. The parents of all eligible students are contacted by teachers during the selection process to confirm placement. Before the program begins, all parents are invited to an open house at each center to give parents an opportunity to visit the rooms and to learn more about the program. District wide parent/teacher conferences are held in the fall and spring. Kindergarten Enrichment teachers were available at the students' home schools during conference times to supplement the feedback from the regular kindergarten teacher. They also prepared an insert for each student's report card to inform parents about the progress of their child specifically in the Kindergarten Enrichment Program. Finally, teachers were encouraged to circulate a Kindergarten Enrichment Newsletter to keep parents informed of Enrichment activities on a periodic basis.

The results of the Parent Contact Summary Sheet indicate that an average of 7 letters were sent

home each session between February and May of 1988. Approximately four of these letters were program newsletters. The remaining letters were notes and announcements related changes in building schedules, etc. In addition to Newsletters and other written announcements an average of 60 individual notes were sent home per session during the recording period to provide parents with feedback about their child's behavior. At least 69 percent of these notes reinforced students for positive or appropriate behavior which reflects the positive emphasis expressed in the philosophy of the program. Teachers also made phone contacts and held conferences with parents beyond the scheduled district conferences. An average of 7.46 phone contacts and 25.46 individual conferences were made per session during the recording period. Finally, some teachers also noted participation of parent volunteers for field trips and special sessions as well as classroom visits by parents/guardians.

These results were based on recordings over a 4 month period and included some inconsistencies that required interpretation by the evaluator, therefore they probably represent an underestimate of the actual contacts made by teachers. Nevertheless, this limited sample suggests that teachers devote a considerable amount of time and effort communicating with parents/guardians about student progress as well as Enrichment activities.

#### Objective B-4

*During the instructional year the following objectives will be emphasized: a) Development of personal social/emotional skills to enhance self-concept and self-confidence; b) Development of verbal fluency/competency through language experiences; c) Exploration of literature; d) Expansion of intellectual functioning and development of a disposition for life long learning; e) Integration of psychomotor skills into learning activities; and f) the demonstration of good health and safety habits as documented by the results of the Kindergarten Enrichment Observation Checklist, on file with the program evaluator.*

#### Evaluation Method

#### Subjects

Each Enrichment session (i.e., a.m. and p.m. sessions at all of the centers), was treated as the unit

of analysis to evaluate this objective.

### Measure

The Kindergarten Enrichment Observation Checklist was generated in consultation with the Enrichment instructors, to reflect most of the goals and objectives or emphases of the program (see Appendix KE-D). "Expansion of intellectual functioning and the development of a disposition for life long learning" was omitted from the observation checklist because it focuses on individual student characteristics and does not have physical or behavioral components that could be readily observed in the classroom.

### Procedure

Once constructed, the observation checklist was used by the program evaluator to ensure consistent observations during onsite visits to all of the Kindergarten Enrichment sessions. These visits took place between April 11 and April 27. Each visit lasted approximately 30 minutes and an attempt was made to schedule the visits around a teacher's planning period to allow time for a brief interview.

### Results

The results for one session were eliminated because it was conducted by a student teacher rather than the regular Kindergarten Enrichment instructor. All objectives, as operationalized by the items on the behavioral checklist, were either observed directly or noted in the instructor's lesson plans in 3 of 12 sessions (66.67%). Teachers in three of the four remaining sessions described activities they incorporated into their classes to address the areas not directly observed. There was only one session that offered insufficient evidence that all objectives were emphasized during instruction. The area for which no evidence was obtained was psychomotor skill development.

### Family

#### Objective A-1

*Near the end of the instructional year at least 30 percent of the parents of Kindergarten Enrichment students will provide formative feedback on program activities as documented by a summary of*

*responses obtained from a parent survey conducted by the program evaluator.*

### Evaluation Method

#### Subjects

Because of the limited size, all parents/guardians of students in the program were asked to provide feedback regarding the Enrichment Program. Approximately 208-234 surveys were distributed (based on 16-18 students per session). Of these, 81 (38.94-34.62%) were returned which satisfies the minimum number of surveys required to assume that the results are representative of all the parents of the students involved with the program.

#### Measure

There were four primary purposes for surveying parents/guardians. The first was to solicit perceptions regarding major changes they observed in their child during the year and the primary impetus for those changes. The second is to evaluate communication between parents and the Enrichment instructors. The third purpose for administering the survey was to solicit perceptions of the strengths and weaknesses of the program and to obtain parent recommendations for improvement. A fourth set of questions assessed the nature and extent of students' preschool experiences. These items were piloted for future use in a longitudinal study of all academic support programs in the district and were not included as part of this evaluation.

#### Procedure

The initial distribution of the Des Moines Public Schools Parent Follow-Up Questionnaire for the Kindergarten Enrichment Program (see Appendix KE-E) took place during the spring parent/teacher conferences. It was assumed that such a procedure would increase the likelihood of responses; however, a follow-up mailing was necessary to obtain an interpretable sample.

#### Results

A number of the questions included on the questionnaire were open ended. To facilitate reporting these responses were categorized according to the general topic they addressed. In addition, the open ended format allowed respondents to list more than one response; therefore, the results were

reported in percentages based on the total number of responses rather than on the number of parents or guardians who responded. Responses that appeared only one time and that could not be included in another cluster were combined in an "other" category.

### Observed Changes

Parents were asked to describe changes they observed in their children since they began participating in the Kindergarten Enrichment Program. Seventy-four of the 81 parents who responded (91.36%) provided 153 responses. Table KE-4 summarizes the nature of these responses.

Table KE-4. Parent/Guardian Observations of Developmental Changes in Students Served in Kindergarten Enrichment 1987-88.

Category	Number of Responses	Percent of Responses
Individual Growth and Development	82	53.59
Academic Skills	53	34.64
Social Skills	11	7.19
Other	2	1.31
Negative Habits	5	3.27

Over 50 percent of the responses noted significant changes in individual growth and development. Twenty-one (25.61%) of these responses referred specifically to the development of a positive attitude toward school and learning in general. These types of responses out-numbered the responses in all other categories. As "enthusiasm", "excitement for learning" and "curiosity" are characteristics of a "disposition for life long learning", these results provide some indication of the effects of this curriculum emphasis. Other frequent responses within this category included the development of self confidence (14.63%), independence (12.20%), and maturity (10.98%). Another 34.64 percent of the responses to this question included statements regarding development of academic skills. The most frequent

response referred to academic skills in general (20.75%); however, writing skills (13.21%), reading skills (13.21%), and counting skills (11.32%) were mentioned specifically. The third largest cluster of responses referred to social skill development including characteristics such as cooperation, the ability to interact well with other children, thoughtfulness and sharing. Five responses referred to the development of negative behavior patterns or characteristics. These included "bad habits" in general, "less self confidence", and "fatigue".

When asked to indicate factors that would explain these changes, a majority of the parents who responded (64.56%) endorsed "participation in the Kindergarten Enrichment Program" specifically (see Table KE-5). Another 18.52 percent attributed these changes to a combination of factors including Kindergarten Enrichment, the regular kindergarten program, normal developmental changes and caring teachers.

Table KE-5. Reasons for Changes Observed in Kindergarten Enrichment Students  
1987-88.

Category	Number of Responses	Percent of Response
Participation in the Kindergarten Enrichment Program	51	64.56
Participation in Kindergarten Enrichment and the regular kindergarten programs	8	10.13
Normal developmental changes	5	6.33
Participation in the regular kindergarten program	5	6.33
Participation in pre-kindergarten experiences	2	2.53
Participation in kindergarten programs and normal developmental changes	2	2.53
All of the factors listed	2	2.53
Other	4	5.06

### Parent/Teacher Communication

The next section surveyed parent assessments of communications between program teachers and parents/guardians. A majority of parents (60.%) felt they received frequent notification of Kindergarten Enrichment activities. Another 32.50 percent felt they received feedback on a periodic basis.

Combined these data indicate that 92.50 percent of the parents who responded to the survey felt they received information about the Kindergarten Enrichment Program on at least a periodic basis.

Parents were also asked to indicate their perceptions regarding the extent to which they received information about their child's progress in the Kindergarten Enrichment Program. Again, 92.50 percent of those who responded felt that they received feedback on at least a periodic basis. Half of these parents felt that they received frequent feedback about their child's progress.

### Strengths, Weaknesses and Recommendations

Responses regarding the strengths of the program fell into 2 major clusters: those that referred to the development of skills and attitudes necessary for success in the first grade and beyond (53.27%), and those that mentioned specific characteristics of the program (42.07%). The most frequent strength cited within the "readiness" category included statements about emotional/attitudinal development (22.81%), general readiness for first grade (19.30%), providing additional time and practice for students to learn (19.64%), generic statements about the support it provides to the regular kindergarten program (15.79%), and social skill development (12.28%).

Teachers were the most frequently cited program characteristic considered a strength of the program (37.78%). Smaller class sizes and their advantages also appeared frequently in this cluster (31.11%); as did specific aspects of the teaching methodology such as hands on experiences, focussing on the student's current level of functioning and providing a variety of concrete experiences (22.22%).

Only 38.27 percent of the respondents listed specific weaknesses they perceived in the program. The category with the greatest frequency of responses included specific areas or topics that were mentioned only one time. Disappointment in the inability to serve more children and concern about

transportation logistics accounted for 19.36 percent of the responses.

There was greater consensus among recommendations to improve the program. Approximately 30 percent of the parents who responded to this question felt the program was fine as it was and could make no recommendations for improvement. Twenty percent of the responses to this question expressed a desire to see the program expanded to serve more kids in need. Another 15 percent of the responses expressed a desire to see greater teacher/parent communication and in particular communication pertaining to parent education and involvement in the educational process of their children.

The fact that respondents identified considerably more strengths than weaknesses or recommendations, and that no weakness was mentioned consistently among the responses suggests that parents were pleased with the program.

### CONCLUSIONS

The results of the evaluation of the process and performance objectives of the Kindergarten Enrichment Program indicate that the program was implemented as outlined in the program description. Results of the Kindergarten Enrichment Student Evaluation suggest that students do develop in the areas specifically emphasized in the program. Placement recommendations at the end of the program support this perception and provide evidence to suggest that efforts to improve the placement procedures resulted in the identification of students that more accurately reflected the target population for whom the program was created. Although class sizes were generally lower than originally expected, they were maintained at a level that more closely approximated the ratio recognized as ideal for early elementary programs. Finally, parents/guardians of students in the program indicated that the Kindergarten Enrichment Program made a significant contribution to the development of a positive attitude toward school and the learning process.

In many instances, performance exceeded expectations. For example, the performance objectives specified that 75 percent of the students served would be recommended for first grade at the end of

the kindergarten year. Actual figures indicated that over 85% of these students were considered adequately prepared for first grade. Although instructors were only required to make one contact with the parents/guardians of students served in their classes, results indicate that Enrichment teachers devoted a considerable amount of time and energy keeping parents/guardians informed of program activities and student development in the program.

Combined results of this evaluation suggest that the Kindergarten Enrichment Program provides a unique experience to help prepare students with moderate developmental deficiencies for success in first grade and beyond. Implementation of the program accurately reflects its own philosophy as well as the philosophy of early elementary education in the district.

### RECOMMENDATIONS

A preliminary examination of the impact of early elementary programs suggests that students with more severe developmental deficiencies might benefit from an additional half day experience in the kindergarten year. Accommodation of these students will require modification of the philosophy, identification procedures, and the process and performance objectives of the Kindergarten Enrichment Program in 1988-89. The following recommendations are submitted for consideration in the modification process.

1. The program coordinator should work with representatives from the Department of Elementary Education to examine the philosophy statement underlying the early elementary programs in the district to ensure that it includes a rationale for the special programs at the kindergarten level. This rationale should also be reflected in the philosophy statement of the Kindergarten Enrichment Program.
2. The program coordinator should work with the Coordinator of Testing and Research to develop identification procedures that accurately identify students most in need of academic support services at the kindergarten level.
3. The inclusion of students with more severe developmental deficiencies will effect expectations for the program's "success" as measured by placement expectations at the end of the kindergarten year. In the absence of information on which to base sound expectations, the program coordinator should

establish no more than 50 percent as the criterion level for this objective. This criterion should be increased gradually as the program adjusts to the changes associated with the new target population.

4. The program coordinator should increase the criterion for parent/teacher contacts to more accurately reflect Enrichment teacher efforts and the emphasis characteristic of all Des Moines Plan programs.
5. Although information from parents/guardians provides an important contribution to a program evaluation, the return rate of efforts to solicit such feedback is not necessarily in the hands of the program coordinator or teachers. The program coordinator should consider removing the 30 percent return rate criterion or eliminate the performance objective from the program entirely.

Appendix KE-A

Kindergarten Enrichment Curriculum Objectives

## OBJECTIVES

I. **Develop personal social/emotional skills to enhance self concept and self confidence.**

A. **Develop a sense of confidence and independence**

Student Demonstrates:

1. Positive self worth.
2. Feeling of accomplishment.
3. Accepting/giving compliments and criticisms.

B. **Internalize sense of order.**

Student Demonstrates:

1. Understanding and following classroom routines
2. Respect for environment and materials.

C. **Demonstrate social relationships and appropriate social behavior.**

Student Demonstrates:

1. Interacting appropriately
2. Participation and involvement
3. Appropriate group behavior
4. Exiting and entering conversations
5. Accepting consequences
6. Accepting/giving compliments

## SUGGESTED ACTIVITIES

Super Star  
Self portraits  
Positive reinforcement  
Interviews  
Display student work  
Me In A Box  
Use of developmental literature

Daily planning  
Class rules/routine  
Classroom organization

Role playing  
Stories  
Films  
Cooperative activities  
Collaborative experiences  
Large/small group participation

## OBSERVABLE ELEMENTS

Working independently  
Working cooperatively  
Interacting appropriately

Orderly, purposeful  
classroom conduct  
Posted daily schedule  
Posted classroom rules

Interacting appropriately  
Responding appropriately  
to teacher direction.

## OBJECTIVES

### II. Develop verbal fluency/competency through language experiences.

#### A. Use/interpretation of oral language.

Student Demonstrates:

1. Complete sentences.
2. Appropriate sentence structure.
3. Descriptive language.

#### B. Use/interpretation of written language.

Student Demonstrates:

1. Descriptive language.
2. Representations of oral language.

#### C. Demonstrate use of meaningful conversation.

Student Demonstrates:

1. In small groups
2. In large groups
3. Through active listening

#### D. Build vocabulary

Student Demonstrates:

1. Naming
2. Categorizing
3. Instructional language

## SUGGESTED ACTIVITIES

Sharing  
Poetry  
Action songs  
Puppetry  
Dramatic Play  
Forms of literature  
Modeling  
Brainstorming  
Rhyming  
Opposites  
Sequencing  
Stories  
Films  
Music

## OBSERVABLE ELEMENTS

Complete sentences  
Remains on topic  
Use of related multiple sentences

Use of related multiple sentences as displayed in student work  
Naming

Responds on topic appropriately  
Interacts on topic appropriately

Listens attentively

Follows directions

Categorizing

## OBJECTIVES

- III. Explore literature.
- A. Enlarge vocabulary.
  - B. Stimulate imagination.
  - C. Develop listening skills.
  - D. Broaden their view of the world.



- IV. Expand intellectual functioning and develop a disposition for life long learning.

- A. Thinking skills - Des Mcines taxonomy.

Student Demonstrates:

1. Problem solving-decision making
  - Evaluate
  - Synthesize
  - Analyze
  - Apply
  - Comprehend
  - Know
  - Observe

## SUGGESTED ACTIVITIES

Identify with literature characters  
Dramatizing  
Introducing recommended quality literature  
Oral reading-teacher/std.  
Composition-teacher/std.  
Listening-group/station  
Use of various forms of print  
Altering story ending  
Sentence starters  
Records  
Films  
Role playing

## OBSERVABLE ELEMENTS

Individual reading centers  
Small group reading activities  
Large group reading activities  
Use of various forms of literature  
(See activities)

Independent choices  
On task behavior  
Evaluating own work  
Group problem solving  
Appropriate response to problematic questions

## OBJECTIVES

## SUGGESTED ACTIVITIES

## OBSERVABLE ELEMENTS

- V. Integrate psychomotor skills into learning activities.
- A. Develop gross motor skills.
  - B. Develop fine motor skills.
  - C. Develop body orientation - movement/spatial orientation.
- VI. Demonstrate good health and safety habits.

Hopping, skipping  
Running, galloping  
Dancing, rope jumping  
Carrying, sweeping  
Cutting, drawing, writing  
Pasting, coloring  
Balance, walking downstairs  
Creative movement  
Catching, bouncing  
Patterning

(See activities)

### A. Health

Student Demonstrates:

1. Hygiene
2. Nutrition
3. Exercise
4. Rest

Cooking, tasting, introduction to foods  
Appropriate clothing  
Hand/face washing  
Appropriate eating habits

Self help  
Posters  
Rules posted  
Cooking activities  
Tasting activities  
Lunch time

### B. Safety habits

Student Demonstrates:

1. Bus safety
2. Classroom rules
3. Fire/tornado
4. Playground safety
5. Home safety
6. Pedestrian safety

Safe route map  
Bus safety evacuation  
Fire/tornado drills

Rules posted  
Posters

Appendix KE-B

Kindergarten Enrichment Teacher Evaluation Form

DES-MOINES PUBLIC SCHOOLS  
 SCREENING FOR ENRICHMENT KINDERGARTEN  
 TEACHER EVALUATION FORM

Student Name \_\_\_\_\_ School \_\_\_\_\_  
 Teacher \_\_\_\_\_ Date \_\_\_\_\_

Auditory

- |  | Yes   | No    |
|--|-------|-------|
| *1. Child can, when presented with ten pairs of words, indicate whether the words are the same or different in 8 of 10 situations. | _____ | _____ |
| *2. Child can reproduce 4 of 6 clapping patterns.  | _____ | _____ |
| *3. Child can, when given a simple word, produce two simple words that rhyme.  | _____ | _____ |
| 4. Child actively listens and follows through in a large group.  | _____ | _____ |
| 5. Child follows three step directions, individual and/or group.   | _____ | _____ |
| *6. Child pays attention to a short story in a large group and can answer simple questions about it.                               | _____ | _____ |

Comment \_\_\_\_\_

Auditory totals

Visual

- |   |       |       |
|---|-------|-------|
| *1. Child can, from a diffused background, outline six of ten items regardless of their size or position. | _____ | _____ |
| *2. Child can form five figures by connecting dots which are given as contextual clues.                   | _____ | _____ |
| *3. Child can visually discriminate similar objects (designs) in nine of ten exercises.                   | _____ | _____ |
| 4. Child can successfully assemble a simple puzzle of five or more pieces.                                | _____ | _____ |

Comment \_\_\_\_\_

Visual totals

SCREENING FOR ENRICHMENT KINDERGARTEN, TEACHER EVALUATION FORM, p. 2

Verbal

Yes

No

- \*1. Child can, when shown a simple experience picture, state simply at least three variations of the activity portrayed in the picture.
- \*2. Child can, when presented a simple nursery rhyme, recite it accurately from memory.
- \*3. Child can, name 8 of 10 pictures. (objects, people, animals, places)
- 4. Child's verbal participation in a group is relevant to the task or topic.
- 5. Child interacts verbally with peers and adults.
- 6. Child verbally states needs. (i.e. restroom, etc.)
- 7. Child is easily understood by others

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Comment \_\_\_\_\_

Verbal totals

Motor  
GROSS

- \*1. Child can maintain flexible balance of body when walking across a 10 foot 2 X 4 inch balance beam-forward, backward and sideways in an integrated manner.
- \*2. Child can hop in a forward direction a distance of 10 feet on the left foot and 10 feet on the right foot..
- \*3. Child can toss an eight-inch ball in the air with both hands and catch it on the first bounce 2 of 3 times.
- \*4. Child can skip forward on alternating feet approx. 20 ft.
- 5. Child can walk down at least 5 steps using alternating feet with the help of holding onto a railing or holding one hand.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Fine

- 6. Child can use scissors, paste and supplies functionally.
- 7. Child can draw and color past the scribbling stage. (Depicts a person, incorporates body parts.)

_____	_____
_____	_____

Comment \_\_\_\_\_

Motor totals

SCREENING FOR ENRICHMENT KINDERGARTEN, TEACHER EVALUATION FORM, p. 3

Social/Self-Help

Yes                      No

- |  |       |       |
|--|-------|-------|
| 1. Child attends to basic needs. (Clothing, toileting, caring for personal possessions.) | _____ | _____ |
| 2. Child works independently at a task without individual attention.                     | _____ | _____ |
| 3. Child follows general rules and routines established in the classroom.                | _____ | _____ |
| 4. Child reacts appropriately to changes in the routine.                                 | _____ | _____ |
| 5. Child works/plays without disrupting or bothering peers.                              | _____ | _____ |
| 6. Child takes turns and shares with others.   | _____ | _____ |
| 7. Child has positive attitude toward self and school.                                   | _____ | _____ |

Comment \_\_\_\_\_  
 \_\_\_\_\_

Social/Self-Help totals \_\_\_\_\_

( ) indicates items are included in the Waupun screening.

24-30

Appendix KE-C

Kindergarten Enrichment Student Evaluation

## Kindergarten Enrichment Student Evaluation

Indicate on a scale of 1 to 5 (1= infrequently, 5= frequently) the extent to which this student demonstrates at least age appropriate levels of the following characteristics:

	Infrequently			Frequently	
1. Appropriate social interaction with peers in small groups	1	2	3	4	5
2. Recalls details from information presented orally	1	2	3	4	5
3. Identifies items (stimuli) with accurate and appropriate labels	1	2	3	4	5
4. Spatial relations (external objects) such as: accurately estimates the space requirements for objects	1	2	3	4	5
5. Recognizes the sequence and arrangement of an oral message	1	2	3	4	5
6. Discriminates salient features of objects	1	2	3	4	5
7. Actively pursues own intellectual interests	1	2	3	4	5
8. Hygienic habits during food preparation activities	1	2	3	4	5
9. Self assurance	1	2	3	4	5
10. Appropriate social interaction in a 1-1 situation with peers	1	2	3	4	5
11. Eye-hand coordination without manipulatives	1	2	3	4	5
12. Compliance with fire/tornado drill emergency procedures	1	2	3	4	5
13. Ability to analyze information from the environment	1	2	3	4	5
14. Enthusiasm for the learning process	1	2	3	4	5
15. Appropriate games	1	2	3	4	5
16. Observes safe playground behavior	1	2	3	4	5
17. A sense of autonomy	1	2	3	4	5
18. Remains on topic for the duration of a conversation	1	2	3	4	5
19. Incorporates new vocabulary words into simple sentences	1	2	3	4	5
20. Ability to synthesize information from the environment	1	2	3	4	5
21. Rhythmic activities	1	2	3	4	5
22. Viewpoint or perspective	1	2	3	4	5
23. Physical fitness	1	2	3	4	5
24. Terminates a conversation with peers appropriately	1	2	3	4	5
25. Moves at least two parts of the body simultaneously while standing in place	1	2	3	4	5
26. Recognizes the relationship between behaviors and their consequences	1	2	3	4	5
27. Recognizes the consequences of his/her own behavior	1	2	3	4	5
28. Accurately writes his/her own name	1	2	3	4	5
29. Adequate rest	1	2	3	4	5
30. Observes pedestrian safety conventions	1	2	3	4	5

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Appendix KE-D  
Kindergarten Enrichment Observation Checklist

**KINDERGARTEN ENRICHMENT**  
**Observation Checklist 1987-88**

GOAL	OBSERVED	NOT OBSERVED	DISCUSSED W/TEACHER	REVIEW RECORDS	COMMENTS
<p><b>Curriculum Emphases</b></p> <p>1. Develop personal social/emotional skills to enhance self concept and self confidence as evidenced by</p> <p>1.1 Opportunities for independent and cooperative activities.</p> <p>1.2 Orderly purposeful classroom conduct that conforms to classroom schedules and standards.</p> <p>1.3 Appropriate interaction among peers and teachers during role playing activities, story time, cooperative activities and other classroom activities.</p> <p>2. Develop verbal fluency/competency through a variety of language experiences such as sharing, poetry, action songs, puppetry, dramatic play, opportunities to interact with various forms of literature, modeling, brainstorming, rhyming, films, music, etc. stressing concrete, student-centered vocabulary.</p> <p>3. Expand intellectual functioning and develop a disposition for life long learning through activities such as individual and group problem solving and opportunities for free choice time.</p> <p>4. Develop psychomotor skills by integrating fine motor, gross motor, and spatial orientation activities into the learning process.</p> <p>5. Develop good health and safety habits through lessons in hygiene, cooking and tasting activities, and safety drills.</p>					

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KINDERGARTEN ENRICHMENT  
Observation Checklist 1987-88

GOAL	OBSERVED	NOT OBSERVED	DISCUSSED W/TEACHER	REVIEW RECORDS	COMMENTS
<p><b>Materials and Equipment</b></p> <ol style="list-style-type: none"> <li>1. A variety of learning activity centers including but not limited to reading centers, listening centers, play house, and areas to participate in hands-on, manipulative activities.</li> <li>2. Areas for small and large group activities.</li> <li>3. Sufficient materials for a variety of hands-on manipulative activities.</li> <li>4. Materials to provide a language enriched environment such as various forms of literature and language (i.e., posters, labels, books, papers, and magazines), records, record players, cassette players, and composition boards.</li> </ol> <p><b>Program Management</b></p> <ol style="list-style-type: none"> <li>1. Daily planning as evidenced by accessible daily lesson plans.</li> <li>2. Monitoring student daily work as evidenced by public display of student work and maintaining individual files of student progress.</li> <li>3. Maintaining program records such as the End of the Year Feedback Form and the Parent Contact Summary Form.</li> </ol>					

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Appendix KE-E

Kindergarten Enrichment Parent Follow Up Questionnaire

**DES MOINES PUBLIC SCHOOLS  
PARENT FOLLOW UP QUESTIONNAIRE FOR THE  
KINDERGARTEN ENRICHMENT PROGRAM**

Please answer the following questions as completely as possible and return the questionnaire to the Department of Evaluation, Research and Testing in the envelope provided. Feel free to comment on any of the questions.

1. School at which your child participated in the regular kindergarten program \_\_\_\_\_

2. School at which your child participated in the Kindergarten Enrichment Program \_\_\_\_\_

3: Describe any major changes that you have observed in your child since he/she started school?

4. To what would you attribute most of these changes (please check only one of the following alternatives):

- a.  Participation in pre-kindergarten experiences.
- b.  Participation in the regular kindergarten program.
- c.  Participation in the Kindergarten Enrichment Program
- d.  Normal developmental changes
- e.  Other (please specify) \_\_\_\_\_

5. How often were you informed of Kindergarten Enrichment activities?

- a.  Frequently
- b.  Periodically
- c.  Rarely
- d.  I was not informed

6. How often were you informed of your child's progress in the Kindergarten Enrichment Program? (For example, received Kindergarten Enrichment progress report inserts in the regular report cards, or received feedback from the regular or Kindergarten Enrichment teacher)

- a.  Frequently
- b.  Periodically
- c.  Rarely
- d.  I was not informed

7. Did your child attend preschool?  Yes  No

If you answered YES above, please answer the following questions. If you answered NO above go to Questions 8 on the back page.

- What type of preschool did your child attend?
- Privately-sponsored
  - Publicly-funded
  - Tuition-based
  - Other (Specify) \_\_\_\_\_
  - Headstart
  - Don't know

- Where did your child attend preschool?
- In the Greater Des Moines area. If so, where? \_\_\_\_\_
  - In Iowa, but not in the Greater Des Moines area. If so, where? \_\_\_\_\_
  - Outside Iowa. If so, where? \_\_\_\_\_

What kind of preschool experience did your child have?

- Full-day
- Half-day
- Before and after regular working hours or daycare

How many days per week did your child attend preschool?

- 1
- 2
- 3
- 4
- 5

How many years did your child attend preschool?

- Less than 6 months
- 6-12 months
- 13-18 months (1 to 1-1/2 years)
- 19-24 months (1-1/2 to 2 years)
- More than 2 years

8. What do you believe to be the strengths of the Kindergarten Enrichment Program?

9. What do you believe to be the weaknesses of the Kindergarten Enrichment Program?

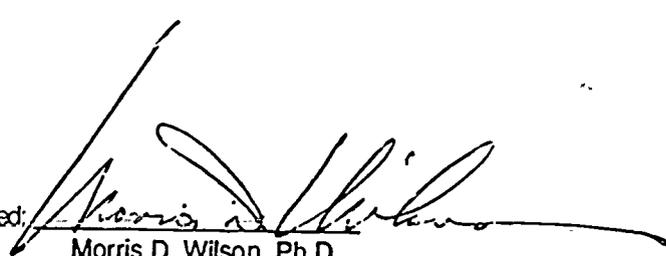
10. What recommendations do you have to improve the Kindergarten Enrichment Program?

Thank you for your participation. Your responses will be used to examine the effectiveness of the Kindergarten Enrichment Program.

Report of Evaluation:  
THE K-1 TRANSITION PROGRAM  
1987-88

Department of Evaluation, Research, and Testing  
Des Moines Independent Community School District  
1800 Grand Avenue  
Des Moines, Iowa 50307

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Evaluation Specialist

Approved: 

Morris D. Wilson, Ph.D.  
Director of Evaluation, Research, and Testing

October 20, 1988

## INTRODUCTION

### Background Information

In 1985 the Des Moines Independent Community School District began implementing a comprehensive Plan For Excellence to improve the academic achievement of all students. One component of the Plan For Excellence emphasizes improving achievement specifically for low achieving students. A key assumption underlying this area maintains that early identification of potential learning deficiencies and intervention maximizes the likelihood of academic achievement and reduces the need for future remediation. Therefore, special efforts were made to develop and strengthen identification and support services at the primary (K-2) level.

Early identification begins during kindergarten screening which occurs three weeks into each academic year. At this time students who demonstrate moderate developmental deficiencies are placed in the Kindergarten Enrichment Program, a half day supplemental program designed to reinforce, without duplicating, the regular kindergarten curriculum. Students who demonstrate more severe developmental deficiencies benefit from the interaction with peers of a variety of developmental levels in the regular kindergarten program and may be given an additional year of reinforcement in the K-1 Transition Program the following year.

The K-1 Transition Program was piloted during the 1986-87 academic year. Another provision of the Des Moines Plan For Excellence calls for coordinating all academic support programs in the district under one umbrella organization. This coordination was phased in during the 1987-88 academic year under the Des Moines Plan: A Plan for Student Success. Capitalizing on the successful objectives based structure of the district's Chapter 1 Program, the Des Moines Plan required each academic support program to prepare performance objectives for administration, students, instructional staff, and the parents/guardians of students in the program. Objectives for the K-1 Program were prepared and implemented in 1987-88. The primary purpose of this evaluation is to document the extent to which the K-1 Transition Program was implemented according to these objectives.

## Program Description

### General Description

The K-1 Transitional Program was developed by a committee of elementary school administrators, teachers and the district's Supervisor of Reading in response to a perceived need among a significant number of students for additional instruction in academic, social, physical, and emotional development before entering the first grade. The K-1 Program provides full day, comprehensive instruction in all subject areas represented in the regular first grade, as an extension of the kindergarten curriculum.

### Administration

The program was coordinated by the district's Supervisor of Reading and an elementary school principal. The K-1 teachers met with the coordinators monthly to discuss curriculum and program issues. An evaluation committee was also created to critically examine various aspects of the program. This committee included the coordinators and teacher representatives from first grade, kindergarten and the K-1 Program.

### Attendance Centers

Eight K-1 centers were established at elementary schools throughout the district. Brooks, Findley, Greenwood, Jefferson, King, Moulton, Willard, and Woodlawn Elementary Schools were selected on the basis of available space and transportation logistics. Approximately 120 students were served across all centers. The average class size across centers was 12-15 students.

### Budget and Expenditures

As a pilot, the K-1 Transition Program was funded through allowable growth funds awarded to the district for the Education Improvement Program Grant (i.e., the Plan for Excellence). As part of the Des Moines Plan, the K-1 Program was funded through federal, state, and local sources. Federal funds were provided through the Chapter I Program. A state contribution was provided through the Education Improvement Program Grant. Local monies for transportation and the Voluntary Transition Program were also allocated to the K-1 Program.

Table K1-1 lists the budget and expenditures for the program. Budget figures were estimated on

the basis of district averages. The average teacher salary for 1987-88 was \$26,389. Estimated salaries and benefits for eight full time instructors was \$211,112. Each building received \$24.10 per student for supplies and materials. Multiplying this figure by the average number of students served during the academic year (110) provides an estimate of the budget requirements for the program. Transportation demands were estimated by multiplying the average cost per student in 1987-88 (i.e., \$155.54) by the average number of students served during the year.

State and federal regulations prohibit intermingling of funds, therefore, expenditures are reported according to the funding source. Expenditures for supplies and materials were recorded for early elementary programs combined. The figures listed were estimated on the basis of the relative number of students in the K-1 Program. Transportation expenditures were credited to the district general fund. Actual expenditures were, therefore, not available specifically for the K-1 Program.

The estimated total expenditures for the program represents an over expenditure of approximately 10 percent; however, the number of estimated figures in the table challenges the validity of this budget review. Current record keeping procedures, complicated by the number of funding sources and associated accountability stipulations, failed to provide clear evidence of the actual budget and expenditures.

Table K1-1. Estimated Budget and Expenditures for the K-1 Transition Program

Source	1987-88			Total
	Salary/ Benefits	Supplies/ Materials	Transportation	
Budget	\$211,112	\$2,651	\$17,109	\$230,872
Chapter I	\$77,313	\$478		\$77,791
Education Improvement	\$101,881	\$478		\$102,359
District	\$53,439		\$17,131	\$75,570
Total Expenditures	\$237,633	\$956	\$17,131	\$255,720

### Philosophy

The philosophy of the K-1 Program is based on accepted principles of growth and development. While it is assumed that all children can learn, the philosophy of the program recognizes that children through approximately age 7 develop at variable rates and may not be developmentally prepared to meet the challenges of first grade by the end of the kindergarten year. The goal of the K-1 Transition Program is to reinforce and expand the social, physical, academic, and emotional growth achieved during kindergarten through the application of these principles of growth and development.

### Curriculum

The K-1-Transition Program has a comprehensive curriculum that includes specific performance objectives for physical education, art and music activities, and social emotional development in addition to the traditional academic areas found in the regular kindergarten and first grade curricula (see Appendix K1-A). Strategies in Early Childhood Education (Waupun), Mathematics Their Way, and Workjobs I and II are locally developed and commercial curriculum packages that were adapted and employed to enhance the K-1 curriculum.

### Instructional Techniques

The instructional strategies employed in the K-1 Program reflect early childhood principles of learning. Techniques emphasize concrete subject matter and provide opportunities for hands-on experiences. For example, math patterns and concepts are demonstrated with concrete materials and problem solving techniques that require children to manipulate materials. Oral language and literature is emphasized by providing students an opportunity to participate in language experience stories and to explore children's literature. A variety of methods and techniques are incorporated to encourage problem solving and to practice expressive language.

### Identification Procedures

Students served in the K-1 Transition Program in 1987-88 were identified during the second semester of their kindergarten year. Students who completed less than 80 percent of the entry level objectives of the kindergarten curriculum (i.e, Level III of Waupun) by January 1987, were evaluated with

the Kindergarten Checkpoint in January and again in May (see Appendix K1-B). Students who failed to earn a minimum of 17 points on both administrations of the checkpoint were referred for placement into the program. Students new to the district in 1987-88 were evaluated with the Kindergarten Checkpoint upon request by the regular classroom instructor. Selections were validated with the results of the Metropolitan Readiness Test when questions were raised about the appropriate placement of students. Final placement was contingent upon consent of the parent or guardian.

#### Exiting Procedures

Students could be exited from the program in three ways. Teachers, the principal, parents or the K-1 coordinator could request a re-evaluation during the first nine weeks of the K-1 year. If the results of the re-evaluation indicate that the child satisfied the prerequisite skills considered important for success in first grade, the student was placed in a first grade classroom in his/her neighborhood center. Students could be referred for staffing into a self-contained special education classroom at any time during the year. Finally, all students who completed the K-1 Transition Program were enrolled in the first grade in their home school for the next academic year.

### PROCESS AND PERFORMANCE OBJECTIVES

#### Introduction

Process and performance objectives were generated in four major areas to guide the implementation of the program. These areas include: administration, students, instructional staff, and family. The methods for documenting and evaluating each objective in these areas, as well as the results of the evaluation, are described below.

#### Administration

##### Objective B-1

*During the instructional year the consultant will organize and maintain an accountability file and provide copies of data to support the evaluation of all objectives as documented by accountability files maintained by the program consultant.*

### Evaluation Method

Evaluation of this objective called for simply confirming the existence of accountability files. Maintenance was monitored by requesting information as specified in the program objectives.

### Results

The program evaluator confirmed the creation of the files and received all data in a timely fashion as specified in the program objectives.

### Students

#### Objective A-1

*In January of 1989, at least 60 percent of those students who were served in the K-1 Program for at least two thirds of the previous year will receive a passing score on the first grade checkpoints as documented by first grade checkpoint scores on file in the Department of Evaluation, Research, and Testing.*

### Evaluation Method

#### Subjects

Although checkpoint results for students served in the K-1 Transition Program in 1987-88 will not be available until 1989, the results for students served in 1986-87, who completed the checkpoint in January of 1988, are presented below. Those students who attended less than two-thirds of the scheduled academic year were omitted from the analysis; however, records indicated that no student was omitted on the basis of this criteria.

#### Measures

A major component of the identification procedures for the elementary and secondary programs in the Des Moines Plan involves the district's checkpoint program. Mid year mastery of curriculum objectives in reading, writing and math are assessed in grades 1, 3, 5, 8, and 11. These grades represent key transition points in the educational experience in this district. Students who fail to satisfy minimum standards of performance in these areas are considered for assistance in the Des Moines Plan Lab programs.

Student scores are reported in three bands: the range of "definite need" includes those students who scored well below district standards and who were first to receive assistance in the lab programs. Students who fell within the "range of reconsideration" were served according to need as space was available in the lab programs. All other students satisfied district standards.

The bands were determined on the basis of the distribution of checkpoint scores and on district resources. Consistent with the philosophy of the Des Moines Plan, greater emphasis was given to serving students at the elementary levels in the distribution of resources. For example, provisions include serving 20 percent of the students in grades 1 and 2, 15 percent in grade 3, 10 percent in grades 4-6, 8 percent in grade 7 and 5 percent in grades 8-11.

In 1987-88 the first grade students who scored below 62 percent on the math checkpoint or below 48 percent on the reading checkpoint demonstrated "definite need" for academic support. Students who scored between 62 percent and 77 percent on the math checkpoint and between 48 percent and 68 percent on the reading checkpoint fell within the range of reconsideration. Students who scored at or above 77 percent on the math checkpoint and at or above 68 percent on the reading checkpoint satisfied district minimum performance standards.

The philosophy underlying all early elementary programs is to provide a strong foundation in the academic skills necessary for success in school and therefore minimize the need for future remediation. The extent to which students qualify for additional academic support services then, has implications for the success of the program.

### Results

Scores on one or more of the checkpoints were available for at least 81 percent of the students served in the K-1 Program in 1986-87. The distribution of scores for both reading and math are presented in Table K1-2. These results indicate that approximately 52 percent of the students who were served in K-1 passed the reading checkpoint; however, only 25 percent of these students passed the math checkpoint. The remaining students scored within the lowest 20 percent of the distribution of all first grade students.

Table K1-2. Distribution of Math and Reading Checkpoint Results

1986-87 K-1 Students.

Test	Passed		Reconsideration		Definite Need		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Reading	65	52.42	42	33.87	17	13.71	124	100.00
Math	30	25.00	55	45.83	35	29.17	120	100.00

Although the results fail to satisfy the program objective, they should be interpreted with the following considerations. First, these data are the results of students who were served in the initial year of implementation and may therefore not reflect the true impact of the program. Second, the criterion was established without the advantage of baseline information on which to base reasonable expectations for success and may therefore be unreasonably high given the population being served. Third, although the results were lower than expected, the number of K-1 students who failed to satisfy district standards represents less than 4 percent of the population of their same age peers (specifically: 2.27% and 3.46% on the reading and math checkpoints, respectively). Finally, the discrepancy between scores on the reading and math checkpoint suggests that greater emphasis was placed on reading and language experiences in the program than on math skills which is consistent with the primary thrust of the program.

### Instructional Staff

#### Objective B-1

*During the instructional year K-1 teachers will develop and maintain a student checklist for each student as documented by the presence of such lists on file with the K-1 teachers.*

#### Evaluation Method

#### Measure

The curriculum objectives for the K-1 program were arranged on a form to facilitate monitoring student progress (see Appendix K1-C). The form lists the objectives along the horizontal axis and the student names along the vertical axis. Student progress on each objective is recorded in the grid that

results when these axes intersect. Teachers use a code system to denote progress on each objective. A diagonal slash indicates that the objective had been introduced and a second slash in the opposite direction indicates that the objective has been successfully mastered.

### Procedure

Maintenance of these records was confirmed by the program evaluator during onsite visits that took place in the spring of 1988.

### Results

Curriculum objective documentation forms were readily evidenced at all centers during the onsite visits and appeared to be updated on a regular basis, to reflect the student's current level of functioning.

### Objective B-2

*During the instructional year K-1 teachers will instruct an average of 12-15 students daily as documented by class lists compiled from student data forms, submitted to the program consultant by September 18, 1987.*

### Evaluation Method

Class lists appeared in the records for each of the attendance centers by the September deadline. To get a more accurate representation of the stability of the student/teacher ratio across the year, class sizes from the beginning of the year were compared to class sizes at the end of the year.

### Results

The results indicate that the number of students per K-1 Transition center ranged from 10 to 17 with an average class size of 13.5 at the beginning of the school year (see Table K1-3). Class sizes ranged from 11 to 17 and averaged 14 students by the end of the school year. This suggests that class sizes remained fairly constant and within the criteria specified in the objective.

Table K1-3. Class Size Statistics for the K-1 Transition Program 1987-88

<u>Time of Recording</u>	<u>Range</u>	<u>Average</u>
Fall 1987	10-17	13.5
Spring 1988	11-17	14.0

### Objective B-1

*By the end of the second semester, K-1 teachers will have had at least one contact with the parent(s) or guardian(s) of each student enrolled during the instructional year. These contacts may consist of one or more of the following: a) Parent/teacher conferences; b) K-1 newsletters; c) K-1 open houses; or d) Parent volunteer activities, as documented by attendance reports, copies of newsletters or other appropriate forms of documentation submitted to the program consultant by May 15, 1988.*

### Evaluation Method

#### Subjects

To facilitate documentation, teachers were asked to maintain records of their contacts with parents throughout the year.

#### Measures

Initially, teachers recorded their contacts on the Des Moines Plan Educational Plan Summary Report Form that was developed for the Chapter I Reading and Math Labs (see Appendix K1-D). Differences between the lab programs and the K-1 Transition Program rendered a number of the items on the form irrelevant. In February of 1988 a revised form was introduced as a more appropriate form of documentation (see Appendix K1-E).

#### Procedures

Teachers were given the option to use either form for the remainder of the school year. Each teacher maintained a file of these forms and submitted them to the program evaluator in May of 1988.

### Results

The very structure of the program provides ample opportunities to satisfy this objective. All K-1 Transition centers invite parents to attend an open house to answer questions and to familiarize them with the program. In addition, parent/teacher conferences are held once in the fall and once in the spring to discuss student progress during the year. Finally, K-1 Transition instructors are encouraged to prepare and distribute periodic newsletters to keep parents/guardians abreast of K-1 Transition activities. The number of contacts structured into the program increases the likelihood that all parents

were contacted at least once during the school year.

Teacher records provided a more accurate description of the efforts made to contact parents/guardians. The results of the parent contact record forms indicate that all teachers prepared newsletters at least once a month. Many distributed brief updates weekly.

Parents were also kept informed of their children's progress in the program. Estimates of the number of individual notes, phone contacts, and personal contacts initiated by K-1 Transition teachers are reported in the Table K1-4. A number of teachers incorporated notes to parents into their classroom management strategies. Feedback reinforcing positive behavior and/or identifying areas for improvement were sent home on a daily basis for select students. Although there is no information available to compare these results to efforts made by regular kindergarten and first grade teachers, the results do suggest that K-1 teachers considered communication with parents or guardian, an important component of the program.

Table K1-4. K-1 Parent/Guardian Contacts 1987-88

Type of Contact	Total Contacts Fall	Average Contacts Fall	Total Contacts Spring	Average Contacts Spring
Phone Contacts	190	27.14	190	27.14
Individual Notes	68	8.50	1671	208.88
Personal Contacts	184	23.00	166	20.75

#### Family

##### Objective A-1.

*Near the end of the instructional year at least 30 percent of the parents of K-1 students will provide formative feedback on program activities as documented by a summary of responses obtained from a parent survey conducted by the program evaluator.*

## Evaluation Method

### Subjects

Because of the limited number of students served in the program (i.e., approximately 112), all parents were surveyed to increase the chances of obtaining a representative return (30%).

### Measures

Feedback from parents was solicited on a brief Parent Follow Up Questionnaire (see Appendix K1-F). The questionnaire contained 4 open ended questions regarding the changes parents observed in their children during the K-1 Transition year, and the strengths, weaknesses, and recommendations for the program.

### Procedures

The initial distribution of the survey took place during the spring parent/teacher conferences. It was assumed that a procedure would increase the likelihood that parents would return the completed form; however, a follow up mailing was necessary to improve the return rate. Combined, the return rate from both methods of distribution (26.79%) failed to yield a sufficient number of surveys to interpret the results as representative of all parents/guardians involved with the program. Therefore the following results must be interpreted with caution.

### Results

Open ended questions invited respondents to list multiple responses to each of these questions. To facilitate reporting, all responses were counted independently and were categorized according to the general topic they addressed. Responses that appeared only one time and that could not be included in another category were combined to form an "other" category.

Responses to the question regarding the nature of the changes parents observed were classified into two major categories (see Table K1-5). About one half of the responses referred to developments in specific academic skills such as writing (18.75% within this category); reading (18.75% within this category); fine motor (15.625% within this category); and learning skills in general (12.50% within this category).

Table K-1 5. Differences Observed in K-1 Students by Their Parent/Guardián

Category	Number of Responses	Percent of Responses
Academic Skills	32	53.33
Social/Emotional	27	45.00
Negative Habits	1	1.67
Total	60	100.00

Another 45 percent of the responses referred to social/emotional developments. The most frequent response within this category noted the development of a positive attitude toward learning (15.56%). The remaining responses referred to positive emotional growth such as self confidence, independence, increased self esteem, maturity, getting along with other students, increased patience, etc. One parent mentioned the development of negative behavior patterns. This parent felt that his/her child became "mouthier" during the course of the year.

Table K1-6 lists the responses to the question regarding parent perceptions of the strengths of the K-1 Program. These responses clustered into three general categories. The greatest percentage of them (54.17%) referred to specific aspects of the program. Over one third of the responses within this category (38.46%) credited the teacher as the strength of the program. Approximately 19 percent of the responses within this category listed class size and aspects of the curriculum among the strengths of the program. The remaining responses included: the full day experience (7.69%), the teaching method (7.69%), a less stressful climate (3.85%), and the emphasis on parent involvement (3.85%).

Table K1-6. Parent Perceptions of the Strengths of the K-1 Transition Program

Category	Number of Responses	Percent of Responses
Program Characteristics	26	54.17
Program Purposes	11	22.92
Curriculum/Program Goals	10	20.83
None	1	2.08
Total	48	100.00

Another 22.92 percent of the responses clustered around the basic purpose of the K-1 Transition Program. Among these included: "gets kids ready for first grade" (63.64%), "help(s) kids who are slow and would not get the help they needed (had) they gone on to first grade" (27.27%), and "providing additional time for students to grow up before entering the first grade" (9.09%).

The third category included responses that referred to specific aspects of the curriculum or areas emphasized in the program (20.83%). Half of these referred to the focus on specific academic skills. The other half referred to the attention to social/emotional development.

Only 28 replies were recorded in response to the question regarding weaknesses of the program. The most frequent response among these was "None" (39.29%). Weaknesses that were listed varied widely and were mentioned by three or fewer respondents. The limited number of responses to these questions, as well as the inconsistency among specific weaknesses identified, renders these results uninterpretable.

Similarly, only 31 replies were recorded in response to the question soliciting recommendations to improve the program. Approximately one-third of the responses (i.e., 32.26%) could make no recommendation to improve the program. Another one-third of the responses appeared only one time. Four responses offered suggestions to alter the kindergarten program so as to avoid or reduce the need for a K-1 Program. These included providing an all day kindergarten program, particularly to those

students who did not have a preschool experience, and reducing the class size in the regular kindergarten classrooms.

### CONCLUSIONS

In general, the results of an examination of the process objectives suggest that the K-1 Transition Program was implemented as outlined in the program description. Teachers followed objectives to provide a complete curriculum. They also made considerable efforts to keep parents and guardians informed of their children's activities and progress and encouraged their active involvement in the development of their children.

Although a review of the performance objectives of the program failed to satisfy expectations, the qualifications that must be imposed on the interpretation of the results renders them preliminary at best. Checkpoint results do indicate that the program is approaching the criterion level for "success" particularly in the area of reading. Finally, while the return rate was insufficient to consider the responses as truly representative, there is reason to believe that parents and guardians of students in the program are pleased with the impact of the program on their children.

### RECOMMENDATIONS

A preliminary examination of the impact of early elementary programs on student achievement suggests that students with more severe developmental deficiencies might benefit from an additional half day experience in the kindergarten year. Participation in this supplemental program could change the nature of the students served in the K-1 Transition Program and may therefore, require modification in the program to better meet the needs of these students. The following recommendations are based on the results of this evaluation with consideration of pending alterations in the organizational structure of the early elementary academic support programs in this district.

1. The program coordinator should work with representatives from the Department of Elementary Education to examine the philosophy statement underlying all early elementary programs in the district. Particular attention should be directed to ensuring that the rationale for the early elementary support programs are consistent with the philosophy of the regular kindergarten program.

2. The program coordinator should work with the Coordinator of Testing and Research to examine the impact of the structural change on the identification procedures for the K-1 Program. Necessary modifications should be made to ensure that the most appropriate students are identified and served.
3. The additional half day experience during the kindergarten year is likely to increase the "success" of the K-1 Program as measured by first grade checkpoint results. However, as students served in the K-1 Program are identified in the spring of the kindergarten year, the effects of this structural change will not be experienced until 1989-90. Given the results of this evaluation, the program coordinator should reduce the criterion level for passing the first grade math and reading checkpoints to no more than 50 percent for 1988-89.
4. The first grade checkpoint results suggested that considerably more emphasis is devoted to the development of reading skills than math skills. Given that the K-1 Program is designed to provide a comprehensive curriculum, and that the performance objective to determine the "success" of the program includes the results of the math checkpoint, the program coordinator should work with K-1 teachers to increase the emphasis on math skill development.
5. Current outcome measures to evaluate the effects of the program are limited to the first grade checkpoint results. As these are not available until the year following the current year of service, they are of limited value in the evaluation of the immediate year of service. The program coordinator should work with the program evaluator to identify means of providing more formative feedback of the effects of the program.
6. The program coordinator should increase the criterion for parent/teacher contacts to more accurately reflect the efforts of the instructors and the emphasis characteristic of all Des Moines Plan programs.
7. Although information from parents and guardians provides an important contribution to the program evaluation, the return rate from efforts to solicit such feedback is not necessarily in the hands of the program coordinator or teachers. The program coordinator should consider removing the 30 percent return criterion or eliminating this performance objective from the program entirely.

Appendix K1-A

K-1 Transition Curriculum Objectives

K-1 TRANSITIONAL CLASSROOM  
Objectives

LEVEL III REPRESENTATIONAL

LEVEL III CRITICAL THINKING SKILLS

- T1. Child can identify absurd elements in a picture.
- T2. Child can draw a picture showing their own ending of an orally presented story.
- T3. Child can draw a picture showing the main idea of an orally presented story.

LEVEL III VISUAL

When given a key picture, child can find pictures that are associated with it.  
(Example: boots, umbrella, raincoat, etc.)

- C \*2. (1) Child can, from a diffused background, outline with finger or pencil six of ten items regardless of their size or position.
- \*3. (2) Child can form five figures by connecting dots which are given as contextual clues.
- \*4. (3) Child can visually discriminate similar objects in nine of ten exercises.
- 5. Child can piece together a 12-14 piece puzzle.
- 6. Child can match an isolated alphabet letter to the correct letter from an array of 3 letters.
- 7. Child can match an isolated numeral to the correct numeral from an array of 3 numerals.
- 8. Child can recognize first name in lower case letters (Jane).
- T. 9. Child can recognize a letter from a group of symbols. (2, b, triangle)

LEVEL III AUDITORY

- C1. Child can, upon hearing an instrumental sound on tape, find the corresponding instrument. (drum, triangle, blocks, cymbals, tamborine, bells)
- C2. Child can identify two sounds as the same.
- C3. Child can identify two sounds as different.
- \*4. (1) Child can, when presented with ten pairs of words, indicate whether the words are the same or different in 8 of 10 situations.

- \*5. (2) Child can reproduce 4 of 6 clapping patterns.
- C 6. Child can identify an object in response to the sound it makes 4 of 6 times. Use whistle, ball, walking, music, telephone and engine noise.
- 7. Child can carry out 3 related directions in sequence after hearing once without further clues.
- 8. Child can carry out 3 unrelated directions in sequence after hearing once without further clues.
- 9. Child can remember one word after a time of one minute. (Remembering a "mystery" word or "magic" word)
- \*10. (3) Child can, when given a simple word, produce 2 simple words that rhyme.
- T11. Child can repeat 4 one-syllable words.
- T12. Child can repeat 4 digits in sequence.

LEVEL III      MOTOR

- 1. Child can maintain static balance on right foot for 5 seconds and left foot for 5 seconds. (Activity buildups; tiptoes, standing, kneeling, sitting with feet off ground, arms out.)
- 2. (1) Child can maintain flexible balance of body when walking across a 10 foot 2 x 4 inch balance beam forward, backward, and sideways in an integrated manner.
- 3. Child can gallop forward along a 30 foot 12 inch wide path without stepping off.
- 4. Child can throw a ball and hit a two-foot wide stationary target 3 of 4 times by using a two handed underhand throw from a stationary position 6 feet away.
- 5. Child can throw a bean bag into a wastebasket six feet away 4 of 5 times.
- 6. Child can catch an eight-inch ball on the fly thrown from six feet away 3 of 4 times.
- \*7. (3) Child can toss an eight-inch ball in the air with both hands and catch it on the first bounce 2 of 3 times.
- 8. Child can kick a moving ball at least 6 inches, rolled from 10 feet away.
- 9. Child can fold 9 x 12 inches paper in halves and quarters.
- \*10. (4) Child can draw a line between two boundary lines approximately 3/8" apart.
- 11. Child can copy a square, triangle, and X.
- 12. (5) Child can skip forward on alternating feet approximately 20 feet.
- 13. Child can write first name in manuscript using lower case. - (Don)

### LEVEL III      VERBAL

1. Child can verbalize sentences that have a descriptor (adjective), noun and verb pattern by responding appropriately to a stimulus picture when asked, "What is happening in the picture?"
2. Child can use the pronouns she, he, they, appropriately.
3. Child can name eight colors; (red, blue, yellow, green, orange, purple, black, brown)
4. Child can name all body parts, including fingers, toes, neck, shoulders, elbows, heel, wrist, and waist.
- C. 5. Given two sequence activities, the child will verbally predict the third sequence. ("Mother cooks the food, then sets the table, what will happen next?")
6. Child will supply a logical third step to a three step sequence activity 2 out of 3 times.
- C\* 7. (1) Child can, when shown a simple experience picture, state simply at least three statements that describe the activities portrayed in the picture.
8. Child can imitate the action of the teacher and verbalize on his/her own the following spatial concepts. (far, beside, below, low, bottom, behind, middle, backward, sideways)
9. Child can, using a picture game of three frames, arrange them in sequential order, and tell what is happening in each picture.
- \*10. (2) Child can, when presented a simple nursery rhyme, recite it accurately from memory.
- \*11. (3) Child can name 8 of 10 pictures, (objects, people, animals, places)
12. Child can verbalize first and last name.
13. Child can verbalize address.

### LEVEL IV      CRITICAL THINKING SKILLS

- T1. Child can give a conclusion to an orally presented story.
- T2. Child can retell important details about orally presented sentences.
- T3. Child can tell the main idea of a story presented orally.
- T4. Child can tell at least 3 similarities about given objects.
- T5. Child can tell at least 3 differences between given objects.
- T6. Child can sort objects into categories with given properties. (For example: color, size, shape)
- T7. Child can identify the one object that is different from the other objects in the set. (ball, bat, baseball mitt, pencil)

- T8. Child can tell why an object does not belong to a given set.
- T9. Child can recall at least a three-step sequence from an oral selection.
- T10. Child can verbalize a possible outcome of a described situation.
- T11. Child can orally identify cause and effect relationship from a picture.
- T12. Child can orally identify cause and effect relationship from a story.
- T13. Child can orally identify cause and effect relationship from an event.

LEVEL IV    VISUAL MOTOR

- C1. Child can draw a solid line from left to right when given visual direction.
- C2. Child can reproduce 4 of 6 geometric forms.
- 3. Child can outline four different shapes even when other parts are added, four of five times.
- 4.
  - a. Child can cut on a straight line for 12 inches.
  - b. Child can cut on a wavy line for 12 inches.
- T5. The child will be able to frame a word within a printed sentence.

LEVEL IV    VISUAL VERBAL

- C1. Child can, when presented with an object, name the object and give at least four characteristics of the object. Size, color, shape, use.
- C2. Child can describe in complete sentences the feelings of the person represented in the picture.
- C3. Child can use descriptive terms to describe size, shape, sound, color, smell, taste, touch of a given object.
- 4. Child can identify and use opposite terms.
- C5. Child can use the word NOT in 3 complete sentences describing unlike objects or activities.
- 6. Child can use singular and plural forms of verbs in the present and past tense in complete sentences.
- C7. Child can, when shown several objects, describe the spatial relationship between the items or behind or in back of, beside or next to; between or in the middle of. (pencil is in front of the cup)
- T8. The child will be able to select the specific letter named by the teacher.

LEVEL IV     AUDITORY VERBAL

1. Child can, upon hearing sounds made by an object, name and describe the object.
2. Child can, after listening to a story, retell the story using complete sentences.
3. Child can from memory, give first names of at least seven members of his/her class.
4. Child can, after hearing a story depicting a worker, identify four workers of the community.  
Example: principal, electrician.
5. Child can, when given a word, respond with a synonym and/or a definition.
6. Child can, after hearing a rhythmic phrase or sentence, supply a corresponding pattern.
7. Child can, after hearing a story or poem, describe in complete sentences an individual's feelings.
- T8. The child can dictate a make-believe story in a minimum of three sentences.
- T9. The child can dictate a story that describes a real event in a minimum of three sentences.
- T10. Child can identify the word or phrase omitted from a repeated sentence.

LEVEL V     IMAGERY - MEMORY AND SEQUENCING

1. Child can, after being presented two-thirds of a story, supply the ending.
2. Child can recall four details about clothing worn by another child.
- C3. Child can, when shown a picture for eight seconds, recall at least four details in the picture.
- T4. Child can, when shown a picture, identify 5 illogical elements.
- C5. Child can repeat by verbalizing a series of four figures, letters, numbers, and/or words in proper sequence. (4,6,8,9 h,d,f,m dog, cat, horse, pig)
- C6. Child can repeat by writing, a series of four figures, letters, numbers, and/or words in sequence. (4,6,8,9 h,d,f,m cat, horse, pig)
- C7. Child can repeat by verbalizing a series of four figures, letters, numbers, and/or words in proper sequence. (4,6,8,9 h,d,f,m dog, cat, horse, pig)
- C8. Child can pantomime, verbalize, and illustrate a story he/she has heard.
- T9. The child will be able to determine if a picture is real or make believe.
- T10. The child will be able to determine if the orally read story is real or make believe.
11. Child can, after viewing a room which has been rearranged, recall positions of objects in the room.

12. Child can carry out proper sequence directions involving five different actions.
13. Child can recall in correct sequence a four step activity described to him/her.
14. Child can supply a word that makes sense to finish a sentence.
15. The child will identify a printed word for a given spoken word.

LEVEL VI    SYMBOLIC READING

- T1. Child can identify and name at random the manuscript letter of the alphabet.
- T2. Child can hear and name the letter for the beginning consonant sound of a word.
- T3. Child can hear and write the letter of the beginning consonant sound of a word.
- T4. Child can hear, and name the letter for the final consonant sound of a word.
- T5. Child can hear, and write the letter for the final consonant sound of a word.
- T6. The child will differentiate a line of printed words from a sentence.

## K-1 TRANSITIONAL CLASSROOM

### Mathematics - Their Way

#### MATH OBJECTIVES

1. Child can, given various materials, explore and describe them.
2. Child can extend, complete, and describe patterns.
3. Child can, given materials, sort, classify, and use words to label the sorted groups.
4. Child can explore and describe the possible arrangements of a given number of objects.
5. Child can demonstrate an understanding of conservation of number.
6. Child can compare properties and describe likenesses and differences.
7. Child can count through 10, recognize numerals, and match the appropriate quantity with each numeral and vice versa.
8. Child can compare length, masses, quantities, durations, and volumes using non-standard units.
9. Child can organize data in a systematic way in order to discover patterns. (Graphing)
10. Child can extend the concept of number by adding and subtracting, and using symbols to record events.
11. Child can apply the concept of number to patterns.
12. Child can develop an understanding of the structure of the base ten number system.

#### ADDITIONAL OBJECTIVES

1. Child can count by ordinals 1st through 10th.
2. Child can recognize five basic shapes.
3. Child can recognize numerals when out of sequence 1 through 10.
4. Child can identify penny, nickel, dime, quarter, and their value.
5. Child can demonstrate understanding of time and temperature relations.

Appendix K1-B  
Kindergarten Checkpoint

Check Point for Kindergarten  
May, 1987

Birthdate: \_\_\_\_\_

Code #: \_\_\_\_\_

Sex: M \_\_\_ F \_\_\_

Name: \_\_\_\_\_

Home Phone Number: \_\_\_\_\_

School Attending Now: \_\_\_\_\_

Home School: (If different than above)  
\_\_\_\_\_

(Check One):

Extended Day \_\_\_\_\_ Kdgn Enrichment \_\_\_\_\_ 1/2 Day Kdgn \_\_\_\_\_

(Check One):

Race:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Am. Indian or  
White not of Hispanic

Asian or  
Pacific-Islander

Black, not of  
Hispanic Origin

Hispanic  
(Latino) Origin

Alaskan Native

Special Ed Services received Yes/No  
If yes, please specify

Special Ed Referrals Yes/No  
If yes, please specify

.....  
.....  
.....  
.....

.....  
.....  
.....  
.....

Pre-School? Yes/No If yes, where? \_\_\_\_\_

Head Start? Yes/No \_\_\_\_\_

Code # \_\_\_\_\_

### CRITERIA K-1 TRANSITION ROOM

#### MATH

Yes                      No

- 1. Child can select a given numeral 1 through 10 when spoken by the teacher. (100%)
- 2. Child can count from 1 to 10. (100%)
- 3. Child can identify the number of value of 1 to 10 objects. (100%)
- 4. Child can count by ordinals 1st through 5th. (100%)
- 5. Child can name a given basic shape, including: (4 out of 5)
  - circle
  - rectangle
  - triangle
  - square
  - ellipse
- 6. Child can name numerals 1 through 10 when out of sequence. (100%)
- 7. Child can solve a simple story problem given manipulatives. (3 out of 3)

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Karen had 2 large balls. Bob gave Karen 6 more balls. How many balls does Karen have now? \_\_\_\_\_

Mary was playing with 5 blocks. She gave Jane 2. How many blocks does Mary have left? \_\_\_\_\_

Larry has two pencils and Sharon gave him three more. How many pencils does Larry have now? \_\_\_\_\_

#### LANGUAGE

- 8. Child can name two words that rhyme. (4 out of 5 pairs with the word stated by the teacher).

cat,	_____	_____
man,	_____	_____
book,	_____	_____
Sid,	_____	_____
box,	_____	_____



Yes                      No

9. Child can state first and last name  
 address.  
 phone number  
 age  
 (3 out of 4)
10. Child can express ideas that are relevant to the topic being discussed. (100%)
11. Child can tell a story in sequence. (100%)
12. Child can listen attentively for at least 15 minutes. (100%)
13. Child can remain on task for 10 minutes. (100%)
14. Child can follow a 3-step set of oral directions. (100%)  
 Go to the bookshelf.  
 Get a book.  
 Bring it to me.

WAUPUN

LEVEL III VISUAL

- C 4 a Child can identify likenesses in pictures, letters, words and numerals. (80%)
- b. Child can identify differences in pictures, letters, words and numerals. (80%)

LEVEL III AUDITORY

3. Child can indicate whether a given pair of words are the same or different. (8 out of 10)
- |              |                  |
|--------------|------------------|
| 1. tub-tug   | 6. gum dumb      |
| 2. lack-lack | 7. bale-gale     |
| 3. web-web   | 8. sought-fought |
| 4. leg-led   | 9. vow-thou      |
| 5. chap-chap | 10. shake-shake  |

LEVEL III FINE MOTOR

- C 12. Child can draw a line between the two parallel lines. (100%)
15. Child can write first name in manuscript using lower case. (100%)



**LEVEL IV VISUAL MOTOR**

Yes

No

- |   |     |   |       |       |
|---|-----|---|-------|-------|
|   | 3.  | Child can identify each given color. (black, brown, red, yellow, blue, purple, green and orange) (100%) | _____ | _____ |
|   | 7.  | Child can describe the activity in simple action picture with a simple sentence. (100%)                 | _____ | _____ |
| C | 10. | a. Child can arrange a set of pictures in sequential order. (100%)                                      | _____ | _____ |
|   |     | b. Child can tell what is happening in each picture. (100%)   | _____ | _____ |
| C | 11. | (2) Child can recite a sentence accurately.<br>"John and Mary went to school on a big yellow bus."      | _____ | _____ |
| C | 12. | Child can recite a simple nursery rhyme accurately from memory. (100%)                                  | _____ | _____ |

**LEVEL IV VISUAL MOTOR**

- |   |    |   |       |       |
|---|----|---|-------|-------|
|   | 1. | Child can draw a solid line from left to right when given <u>visual</u> direction. (100%)<br><br>"Draw a straight line from left to right connecting the two dots:" | _____ | _____ |
| C | 2. | Child can reproduce a given geometric form. (4 out of 6)  | _____ | _____ |
|   | 4. | a. Child can cut on a straight line. (12 inches) (100%)   | _____ | _____ |
|   |    | b. Child can cut on a wavy line (12 inches) (100%)  | _____ | _____ |

Yes

No

LEVEL IV VISUAL VERBAL

- 1. Child can give at least four characteristics of a given object. (100%)
- 2. Child can describe feelings of the person portrayed in a given picture. (100%)
- 7. Child can describe the spatial relationship among several items behind or in back of; beside or next to; between or in the middle of criteria. (100%)

_____	_____
_____	_____
_____	_____
_____	_____

LEVEL IV AUDITORY MOTOR

- 2. Child can follow oral directions which include the items forward/backward, on top, above, below, inside, outside, left, right, between or the middle. (100%)
- 3. Child can, when given oral directions move from left to right by drawing solid, broken, and/or dotted lines. (100%)

_____	_____
_____	_____

LEVEL IV AUDITORY VERBAL

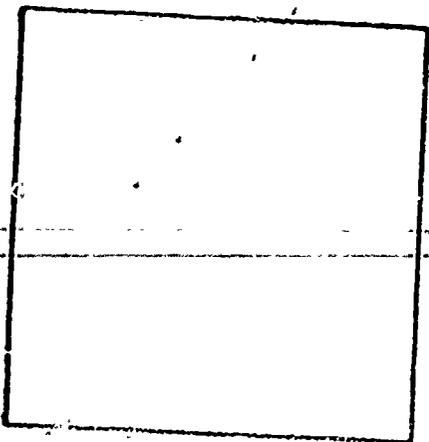
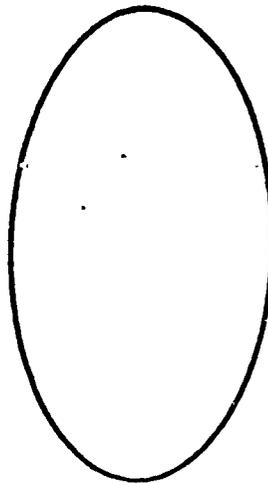
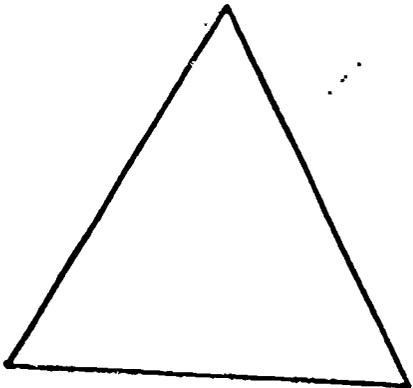
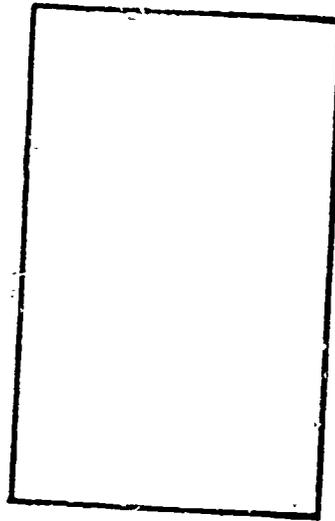
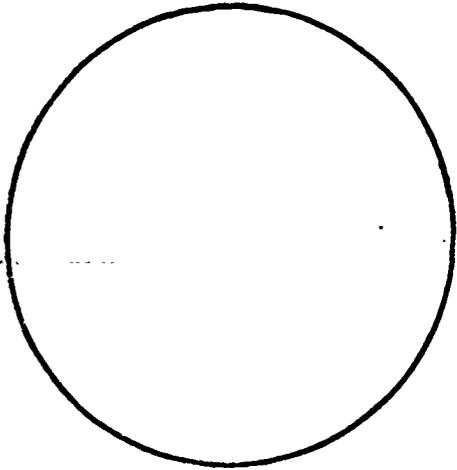
- 2. Child can retell an orally presented story using complete sentences. (100%)

_____	_____
-------	-------

DRAW A PERSON

Ask each child to draw themselves from head to toe. (Page 16)

Math: Item 5  
Child can name a given basic shape.

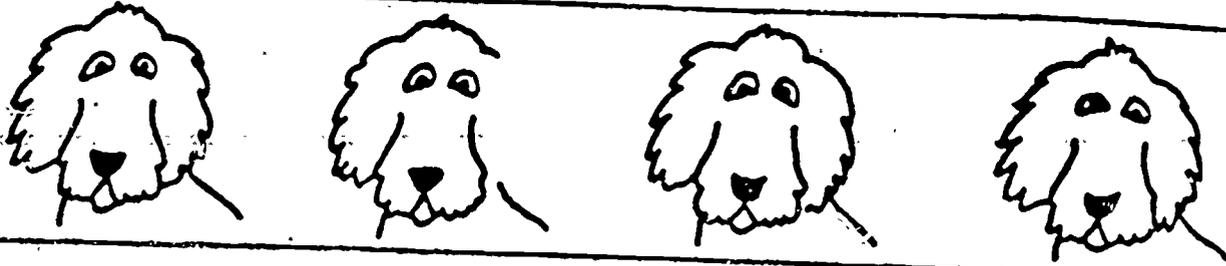


**Math: Item 6**  
Child can name numerals 1 through 10 when out of sequence.

4	2	1
5	8	3
6	9	7

Level III Visual - 4a.

Child can identify likeness in pictures, letters, words and numerals.  
Child will mark X on items alike.



H H F H

m m m n

Hot Hat Hot Hot

bed bed bud bed

5 5 4 5

Level III Visual - 4b.

Child can identify differences in pictures, letters, words and numerals. Child will mark X on item that is different.



D

D

D

B

f

l

f

f

cold

old

cold

cold

Man

Man

Men

Man

6

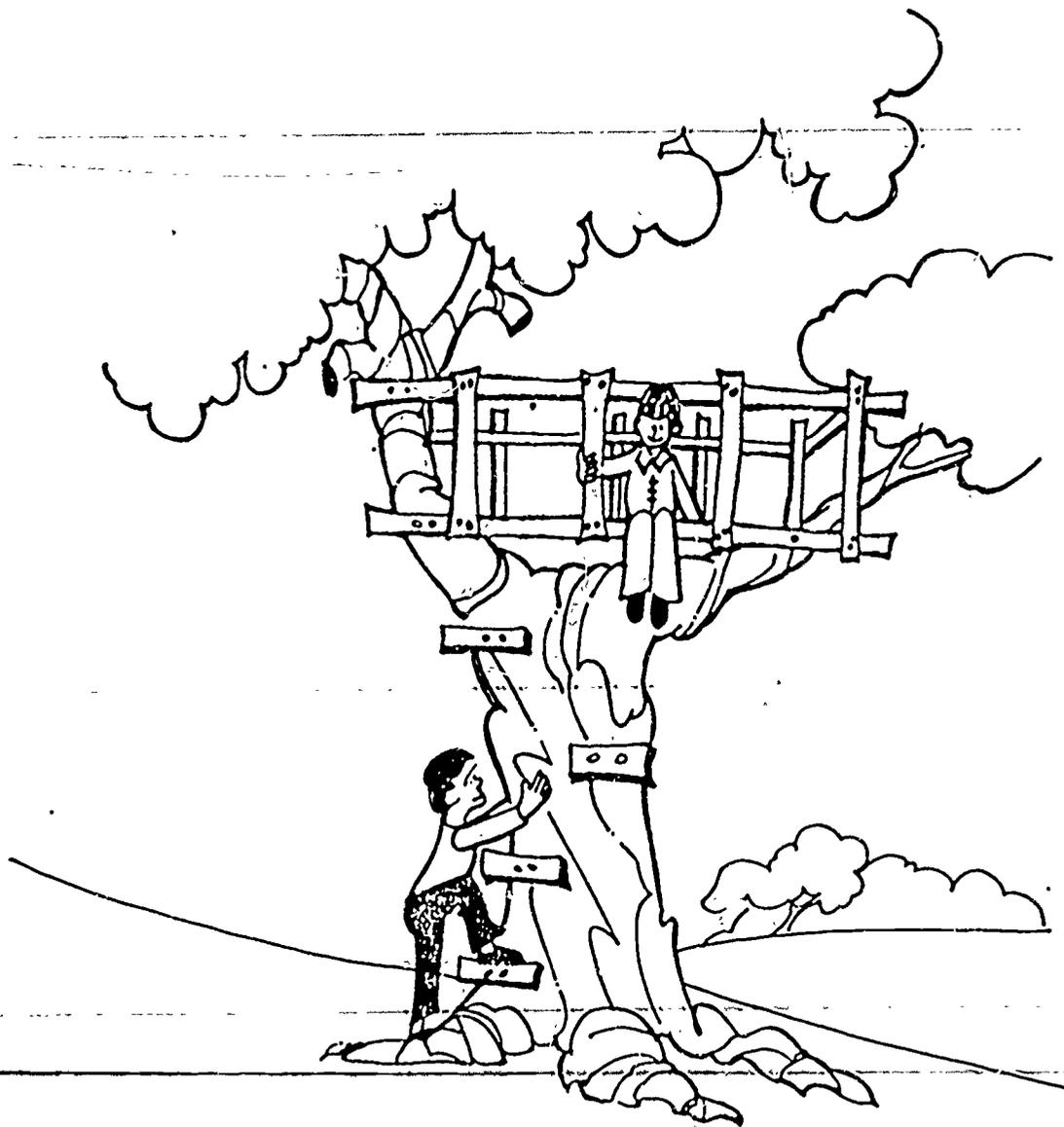
8

6

6

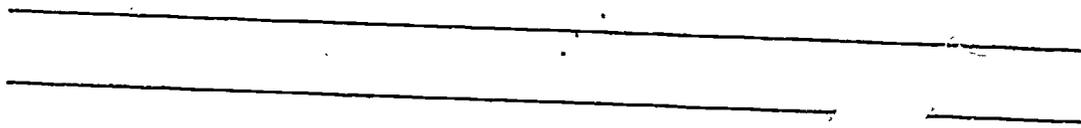
Level III Verbal 7.

Child can describe the activity in a simple action picture with a simple sentence.



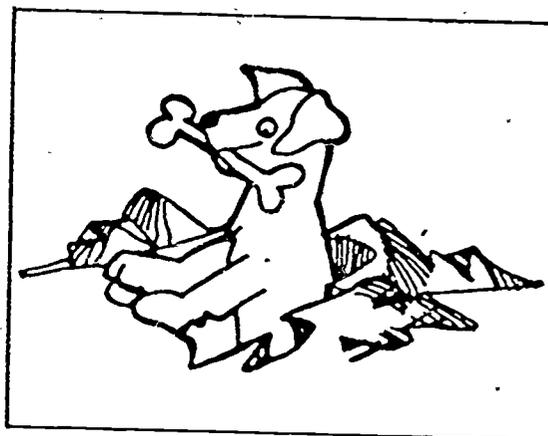
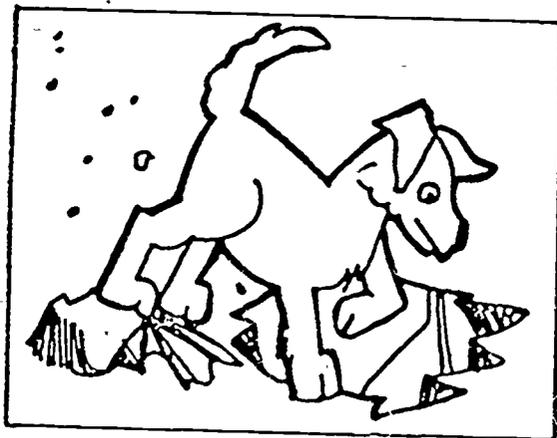
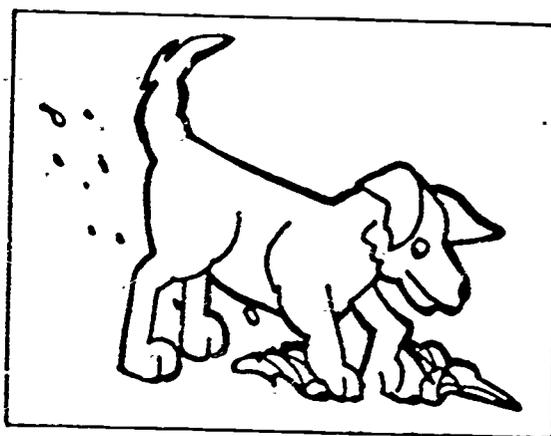
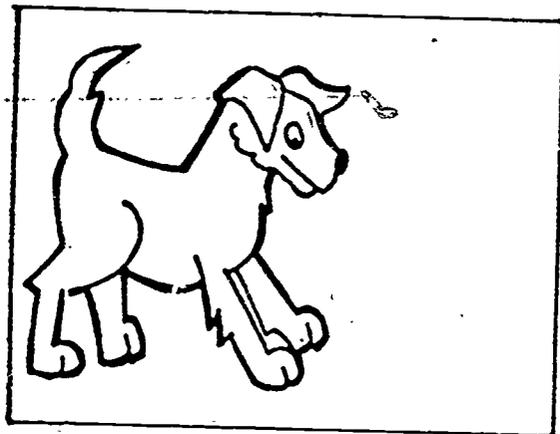
Level III Fine Motor 12.

Child can draw a line between the two parallel lines.



Level III Verbal 10 a. & b.

- a. Child can arrange a set of pictures in sequential order.
- b. Child can tell what is happening in each picture.



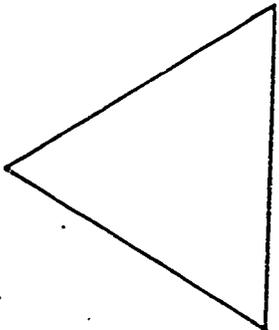
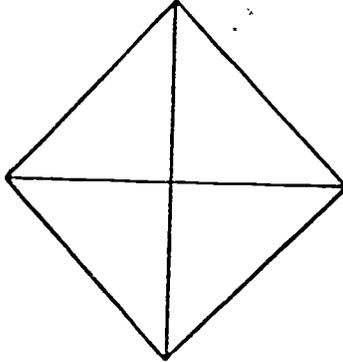
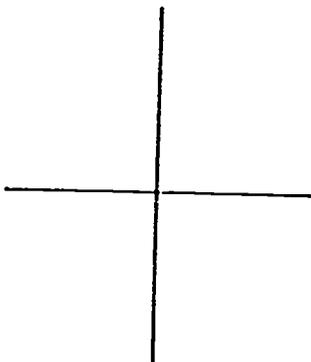
Level IV Visual Motor

- i. Draw a straight line from left to right connecting the two dots.



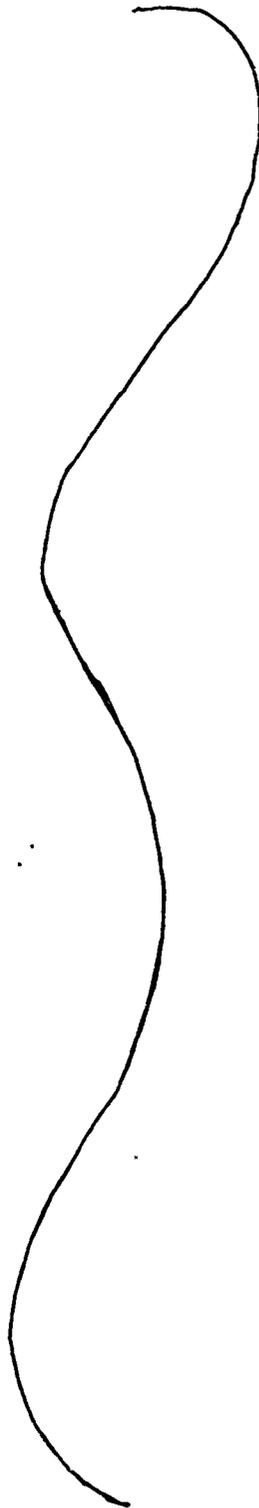
Level IV Visual Motor

2. Child can reproduce a given geometric form.

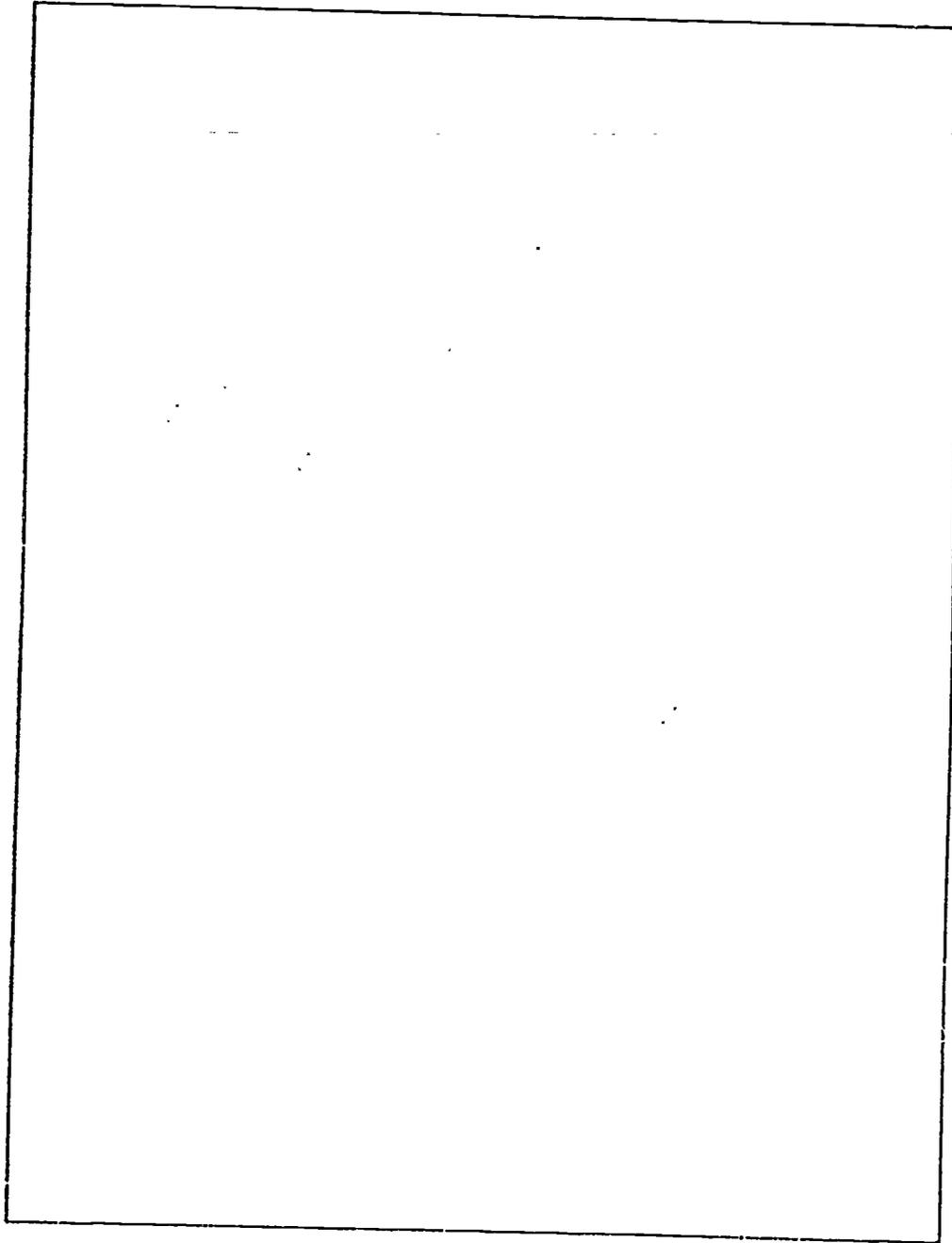
Level IV Visual Motor

4. a.h. Ask the child to cut the wavy line and the straight line.



Draw A Person

Ask the children to draw a picture of themselves with the frame. All children being tested could be asked to do at the same time.



19-51

Appendix K1-C

K-1 Transition Curriculum Objectives Documentation Form

- |  |   |
|--|---|
|  | 1. Explore and describe materials.  |
|  | 2. Extend, complete, and describe patterns.                               |
|  | 3. Sort, classify, use words to label.                                    |
|  | 4. Explore, describe arrangements of objects.                             |
|  | 5. Child demonstrate conservation of number.                              |
|  | 6. Compare properties, describe likenesses and differences.               |
|  | 7. Count through 10, recognize numerals match appropriate quantity.       |
|  | 8. Compare length, volumes, non-standard units.                           |
|  | 9. Organize data in a systematic way to discover patterns. (Graphing)     |
|  | 10. Extend concept of number by adding & subtracting.                     |
|  | 11. Apply the concept of number to patterns.                              |
|  | 12. Develop understanding of the structure of the base ten number system. |

1. Maintain balance left/right foot (5 sec.)
2. Balance beam (forwards-backwards-sideways)
3. Gallop - 30" - 12" path
4. Hop forward 10' each foot
5. Throw ball -- hit target (3 of 4)
6. Throw bean bag in wastebasket
7. Catch 8" ball 6' away (3 of 4)
8. Toss 8" ball - catch first - bounce (2 of 3)
9. Kick moving ball 6"
10. Fold 9 x 12 paper 1/2 and 1/4
11. Draw line between 2 lines 3/8" apart
12. Copy square, triangle, X
13. Skip forward - 20'
14. Child can write first name in manuscript using lower case.

- |  |  |
|--|--|
|  | T1. Child can identify absurd elements in a picture.                       |
|  | T2. Child can draw picture showing their ending of orally presented story. |
|  | T3. Child can draw picture showing main idea of orally presented story.    |
|  |  |
|  | 1. Match pictures to key pictures.   |
|  | 2. Outline items regardless of size (6 of 10)                              |
|  | 3. Form figures from dot clues.  |
|  | 4. Visually discriminate objects   |
|  | 5. Piece together 12-14 piece puzzle.                                      |
|  | 6. Match letter to correct letter from 3                                   |
|  | 7. Match numeral to correct numeral from 3                                 |
|  | 8. Child can recognize first name in lower case letters.                   |
|  | T9. Child can recognize letter from a group of symbols.                    |



- |     |  |
|-----|--|
| 1c. | Name object - give 4 characteristics                               |
| 2c. | Look at picture - describe feelings - end (sentence).              |
| 3c. | Use descriptive terms size, shape, sound, etc.                     |
| 4.  | Identify and use opposite terms.                                   |
| 5c. | Use word <u>NOT</u> in sentences                                   |
| 6.  | Use singular and plural forms of verbs.                            |
| 7c. | Describe spatial relationship between items.                       |
| 18. | Child will be able to select specific letter named by the teacher. |

- |     |   |
|-----|---|
| 1.  | Draw solid, dotted lines from visual direction.                                     |
| 2c  | Reproduce geometric forms 4 of 6  |
| 3.  | Child can outline 4 different shapes even when other parts are added, 4 of 5 times. |
| 4.  | Child can cut straight and wavy lines and distinguish where to cut (approx. 12 x 2) |
| 15. | Child will be able to frame a word within a printed sentence.                       |

Critical Thinking Skills

- T1. Child give conclusion to orally presented story
- T2. Child retell details about orally presented sentences.
- T3. Child tell main idea of story presented orally.
- T4. Child tell 3 similarities about objects.
- T5. Child tell 3 differences between given objects.
- T6. Child sort objects into categories with given properties.
- T7. Child identify one article different from the set.
- T8. Child tell why article not belong in set.
- T9. Child recall 3 step sequence from oral selection.
- T10. Child verbalize outcome of described situation.
- T11. Child can orally identify cause /effect relationship from a picture.
- T12. Child can orally identify cause/effec relationship from story.
- T13. Child can orally identify cause/effect relationship from an event.

- |      |   |
|------|---|
| 1.   | Supply ending to a story.   |
| 2.   | Recall four (4) details clothing worn                                       |
| 3.   | Recall four (4) details in a picture.                                       |
| T4.  | Child can identify illogical element in a picture.                          |
| 5c.  | Repeat four (4) letters, numbers, words in sequence.                        |
| 6c.  | Child can repeat by writing series of 4 letters, numbers words in sequence. |
| 7.   | (No objective)  |
| 8c.  | Pantomime, verbalize, or illustrate story heard.                            |
| T9.  | Child determine if picture is real or make believe.                         |
| T10. | Child determine if story read orally is real or make believe.               |
| T11. | Recall position of objects.   |
| T12. | Follow five (5) directions in sequence.                                     |
| T13. | Recall in correct sequence a 4-step activity.                               |
| T14. | Child can supply words - make sense - sentence                              |
| T15. | Child will identify a printed word for given spoken word.                   |



Appendix K1-D

Chapter 1 Elementary Educational Plan Summary Report



21-53

Appendix K1-E

K-1 Transition Parent Contact Summary Sheet



22-54

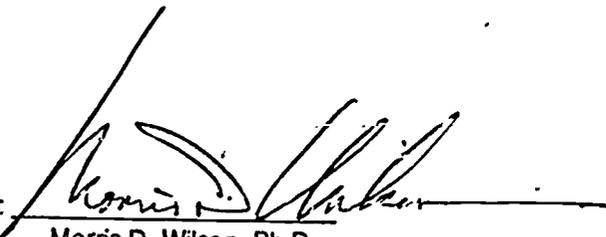
Appendix K1-F  
K-1 Transition Parent Follow Up Questionnaire



Report of Evaluation:  
READING/WRITING LAB PROGRAM  
1987-88

Department of Evaluation, Research, and Testing  
Des Moines Independent Community School District  
1800 Grand Avenue  
Des Moines, Iowa 50307

John Tompkins  
Program Evaluator

Approved: 

Morris D. Wilson, Ph.D.  
Director of Evaluation, Research, and Testing

October 20, 1988

## INTRODUCTION

### Program Description

#### Philosophy and Goals

The underlying philosophy behind development of the reading/writing lab program is that reading and writing are integrated processes based on language development. Students are therefore given opportunities to participate in an integrated language process involving reading, listening, writing and speaking. These language processes are active and are to be whole, functional and meaningful. Higher order thinking skills are to be developed within these processes and students are encouraged to learn to write in two ways: (1) by writing; and (2) by reading good writing.

Six goals were identified for the reading/writing program during the 1987-88 school year. They were:

- (1) Lab students will show improvement in reading/writing achievement;
- (2) Administrative staff for the Des Moines Plan will participate in the development of criterion referenced tests to be implemented as a measure of growth for students in the program;
- (3) Comprehension, word analysis and vocabulary strategies will be evaluated and revised as needed by staff;
- (4) Inservice sessions will be designed to enhance the program and provide for professional and personal growth. Classroom teachers will be given the opportunity to participate in inservice sessions;
- (5) Reading and writing will be taught using an integrated approach, and
- (6) Computer-assisted instruction will be implemented to support the lab program.

#### Instructional Model

The Chapter I program is the instructional model used in the reading/writing labs. This model

includes small group instruction, diagnosis, mastery learning approaches, individual educational plans, highly motivational supplemental curriculum (including manipulatives), coordination with classroom teachers and district curriculum supervisors, parental involvement, inservice and support, computerized recordkeeping and effective teaching strategies.

#### Identification Procedures

Identification of students in need of additional instruction is assured through checkpoints. The tests are a check to see at what point students are mastering certain subjects for their appropriate grade level. The tests will be given in grades 1, 3, 5, 8 and 11. There were 41.3 full time equivalent teaching positions in grades 1-5, 12.5 positions in grades 6-8; and 4.5 positions in grades 9-12. At the end of the school year, 2,106 students were served in the reading/writing labs at the elementary level, 619 students were served at the middle school level (grades 6-8) and 152 students were served at the senior high level (grades 9-12).

#### Budget and Expenditures

The budgetary information for the Reading/Writing Lab Program for the 1987-88 school year was provided by The Des Moines Plan Supervisor in October, 1988. Figure R/W- 1 below indicates the funds allocated and expended in the Reading/Writing Lab Program for various line items included in the budget. The total appropriation for the Reading/Writing Lab Program was \$2,355,884.00. This was provided through the following sources: Educational Improvement Grant, Dropout Prevention, Budget Review, Chapter II, Chapter I and the district's general fund. The program abstract indicates the allocations from each funding source to the overall Des Moines Plan. Due to the method in which budgetary records are maintained it would have been an extremely time consuming task to determine the allocation to this program only from each separate funding source. Therefore, only the total amount allocated is reported for each line item.

Figure RW-1. Budget and Expenditures Reading/Writing Lab Program \*  
1987-88

Category	Amount Allocated	Expenditure
Salaries	\$1,696,893	\$1,405,473
Fixed Charges	222,756	222,756
Administration	25,968	11,980
Indirect Costs	35,562	35,562
Parent Component	1,875	1,786
Evaluation	16,365	16,365
Software/Materials/Supplies	110,950	78,948
Inservice	54,920	26,786
Telephone	1200	1388
Mileage	2250	1763
Lay Readers	10,000	0
Computers	165605	251873
Classroom Reconfiguration	11500	11,485
<b>TOTAL</b>	<b>\$2,355,844</b>	<b>\$2,065,665</b>

\*As reported by Des Moines Plan Supervisor, October, 1988.

During the 1987-88 school year, \$2,065,665.00 was expended to operate the Reading/Writing Lab Program. This represents 87.7 percent of the amount allocated. The majority of the unspent funds are eligible for carryover to be used during 1988-89. It should be noted that due to the complexity of the funding mechanism and the system used to maintain budget documents, laborious procedures were necessary in order to generate the budget information in the above format.

## PROCESS AND PERFORMANCE OBJECTIVES

### Elementary Reading/Writing Lab Program

#### Objective II A1

*During the instructional year the coordinator will organize and maintain an accountability file and provide copies of the data to support the evaluation of all objectives as documented by accountability files maintained in the project office and the Department of Evaluation, Research, and Testing:*

#### Results

Duplicate accountability files were maintained in the Des Moines Plan Office and the Department of Evaluation, Research and Testing during the 1987-88 school year. Periodic checks were conducted during the school year to assure that data to evaluate program objectives were being collected. The data were forwarded to the Department of Evaluation, Research and Testing at the end of the 1987-88 school year.

#### Objective II B2

*By November 27, 1987, the elementary principals will have monitored, by classroom visits, the activities of all lab teachers and classroom teachers to assure that lab students are receiving direct reading instruction from the classroom teachers as well as from lab staff as documented by reports of supervision of the lab program, submitted to the Executive Director of Elementary Education, Des Moines Public School, or to the Superintendent of Schools, Des Moines Catholic Diocese, by December 4, 1987.*

#### Evaluation Method

The Principal's Report of Des Moines Plan Supervision submitted by each building principal was examined to determine evidence that lab students were receiving classroom as well as lab instruction.

#### Results

The Principal's Report of Des Moines Plan Supervision is an annual report submitted by elementary principals in December to document that Des Moines Plan lab students are receiving instruction from

classroom teachers and that joint planning is occurring between classroom and Des Moines Plan teachers. A copy of this form appears in Appendix RW, M-A. Documentation is gathered by principals observing a regular classroom that includes Des Moines Plan students and by observing planning sessions between Des Moines Plan and classroom teachers. The report serves the same purpose as and was an outgrowth of the Principal's Report of Chapter I Supervision that had been completed by elementary principals of Chapter I buildings for a number of years.

Several discrepancies were noted concerning this report during the 1987-88 school year. They were as follows:

(1) No report was submitted by the principals of five buildings. This occurred despite the fact that the Des Moines Plan Supervisor sent a letter to all elementary principals dated March 3, 1988 to remind those that had not completed the report at that time to do so;

(2) At four buildings, the purpose of the observation was apparently unclear as the principals at those sites observed lab classes rather than regular classrooms; and

(3) Observations were made after the specified date in eleven cases-in two cases, not until March and April of 1988.

Given that some principals had not been required to submit this form previously, i.e. principals of buildings not served by Chapter I, it is not surprising that the record of submission and accuracy for this document was not as good as in previous years. Steps that might be taken to improve this situation would include more detailed instructions concerning completion of the form and increased efforts to follow-up in situations where the form is submitted inaccurately or not at all. In addition, a decision needs to be made as to the requirement for nonpublic school principals to be involved in this activity. It would seem difficult for these individuals to observe particularly the joint planning efforts between Des Moines Plan and classroom teachers when the Des Moines Plan teachers no longer serve students from the nonpublic buildings at the non-public school site.

Objective III A1

*At the end of the instructional year, lab students, grades 1-5 who have been enrolled in the program*

for at least 80 days will demonstrate an increase in the mean percentile rank from pre to post test on the vocabulary and comprehension subtests of the Iowa Tests of Basic Skills (ITBS) as documented by scores from fall and spring testing, submitted to the program evaluator at the end of the instructional year.

Objective III A2

At the end of the instructional year, lab students, grades 2-5, who have been enrolled in the program for at least 80 days will demonstrate a proficiency on the vocabulary and reading comprehension subtests of the ITBS, such that the average gain in normal curve equivalents (NCEs) will be at least 5.0 as documented by scores from fall and spring testing submitted to the program evaluator at the end of the instructional year.

Objective III A3

At the end of the instructional year, lab students in grades 1-3, who have been enrolled in the program for at least 80 days will demonstrate a proficiency on the vocabulary and reading comprehension subtests of the ITBS, such that the average gain in NCEs will be at least 7.0 as documented by scores from fall and spring testing, submitted to the program evaluator at the end of the instructional year.

Objective III A4

At the end of the instructional year, lab students, grades 4-5, who have been enrolled in the program for at least 80 days will demonstrate a proficiency on the vocabulary and reading comprehension subtests of the ITBS such that the average gain will be at least 3.0 as documented by scores from fall and spring testing, submitted to the program evaluator at the end of the instructional year.

Evaluation method

Students in the Des Moines Plan Reading/Writing Lab Program at the elementary level complete the vocabulary and reading comprehension subtests of the Iowa Tests of Basic Skills in October and April of each year. Raw scores for those students who completed both a pre and post test are

converted ultimately to percentile ranks and normal curve equivalents. The objectives in the proposal specify various criteria for the NCE gain between pre and post testing by grade level.

### Results

Tables R/W 1 and R/W 2 present data that are necessary to evaluate objectives III A1 to III A4.

Narrative pertaining to these objectives follows the tables.

Table R/W-1. Vocabulary and Reading Comprehension Iowa Test of Basic Skills Grades 1-5

(Percentile Rank)

<u>Grade</u>	<u>N</u>	<u>Vocabulary</u>			<u>Reading Comprehension</u>			
		<u>Pre</u>	<u>Post</u>	<u>Gain</u>	<u>N</u>	<u>Pre</u>	<u>Post</u>	<u>Gain</u>
1	384	34	32	-2	384	12	31	+21
2	388	20	28	+8	388	17	28	+11
3	209	21	27	+6	209	17	28	+11
4	183	24	30	+6	183	25	28	+3
5	64	22	24	+2	64	20	26	+6

Table RW-2. Vocabulary and Reading Comprehension Iowa Test of Basic Skills Grades 1-5  
(Normal Curve Equivalent)

Grade	N	Vocabulary			N	Reading Comprehension		
		Pre	Post	Gain		Pre	Post	Gain
1	384	41.2	40.5	-0.7	384	22.6	39.4	+16.8
2	388	32.3	37.6	+5.3	388	29.5	37.7	+8.2
3	209	33.1	37.3	+4.2	209	29.9	37.9	+8.0
4	183	35.1	38.7	+3.6	183	35.6	37.8	+2.2
5	64	33.2	35.2	+1.8	64	32.6	36.5	+3.9
<hr/>								
2-5	844	33.2	37.6	+4.4	844	31.2	37.7	+6.5
1-3	981	36.0	38.7	+2.7	981	26.9	38.4	+11.5
4-5	247	34.7	37.8	+3.1	247	34.8	37.5	+2.7

### Results

Students demonstrated an increase in the percentile rank at all grade levels except grade 1 where the percentile rank declined 2 units from the pretest to the post test. It is interesting to note that the largest increase in percentile rank occurred in grade 1, the same grade at which the largest decline occurred in vocabulary.

The criterion in Objective III A2 states that students in grades 2-5 will achieve an average gain of 5.0 NCE units on the vocabulary and reading comprehension subtests of the Iowa Tests of Basic Skills. The Normal Curve Equivalent (NCE) scale is similar to the percentile scale except that it is an equal interval scale meaning that the distances between units are the same. This allows for the process of averaging of scores which is not feasible with percentile rank scale as the distance between units is not equal throughout the scale. A weighted average gain was computed due to the difference in the number of

students at the various grade levels. In vocabulary, the weighted average NCE gain for grades 2-5 was 4.4 compared to a criterion of 5.0. In reading comprehension, a gain of 6.5 NCE units surpassed the established criterion.

The criterion in Objective III A3 for the weighted average gain for grades 1-3 was 7.0 NCE units for vocabulary and reading comprehension. Students who completed pre and post tests at these levels showed a weighted average NCE gain of 2.7 in vocabulary and 11.5 in reading comprehension. These results indicate a considerable discrepancy in the amount of gain demonstrated by students on the vocabulary and reading comprehension subtests at these primary grade levels. This is a continuation of the same pattern that has occurred at the primary level for a period of several years and may result from a differential emphasis in the two areas or may be a function of different rates of learning in the two areas that are typical of students at this level. It should be noted that gains for the two subtests tend to become more similar as the age of the student increases.

The criterion for the weighted average gain expressed in Objective III A4 for grades 4-5 was 3.0 NCE units for vocabulary and reading comprehension. The weighted average gain was 3.1 in vocabulary and 2.7 in reading comprehension.

#### Objective III A5

*At the end of the instructional year, lab students who have been enrolled in the program for at least 80 days will demonstrate an increase in their holistic writing scores as documented by writing scores from September and May submitted to the program evaluator.*

#### Results

Information pertaining to pre/post holistic writing scores for Writing to Read students may be found in a separate document pertaining to the Writing to Read Program.

#### Objective III A6

*At the end of the instructional year, lab students who have been enrolled in the program for at least 80 days will have a working knowledge of the writing process as documented by a minimum of ten writing assignments for each student on file with the lab teachers.*

### Evaluation method

During the 1987-88 school year, lab program students were given instruction in the process of writing. To demonstrate proficiency, students were to complete a minimum of ten writing assignments which were evaluated by the lab teacher and then placed on file for future reference.

### Results

Documentation indicating the number of writing assignments was received from 30 of the 41 elementary buildings. The lack of an appropriate reporting form for this objective was the probable cause for eleven buildings not submitting the proper documentation concerning writing assignments. Of the 1,375 students reported to be enrolled for 80 days or more, 777 (56.5 percent) completed at least ten writing assignments. Objective III A6 stated that a minimum of ten writing assignments were to be completed by each student. With no other criterion suggested, this objective was not achieved.

### Objective III A7

*At the end of January 1988, lab students who participated in the Writing to Read Program during the second semester of their kindergarten year (1986-87) and during the first semester of their first grade year (1987-88) will have writing assessment scores that are, on the average, greater than scores for a control group as documented by pretest scores (January 1987) and post test scores (January 1988) on file in the Writing to Read office.*

### Objective III A8

*At the end of January 1988, lab students who participated in the Writing to Read Program during the second semester of their first grade year (1986-87) and during the first semester of their second grade year (1987-88) will have writing assessment scores that are, on the average greater than scores for a control group as documented by pretest scores (January 1987) and post test scores (January 1988) on file in the Writing to Read Office.*

### Results

Information pertaining to writing assessment scores for Writing to Read students may be found in a

separate document.

### Objective III A9

*At the end of the instruction year, 65 percent of the kindergarten lab students in the Writing to Read Program will be at or above Waupun (Strategies in Early Childhood ) Level 4 as documented by Waupun information on file in the Writing to Read Office.*

### Evaluation method

Kindergarten students in the district follow an early childhood sequence of objectives known as Strategies in Early Childhood Education that were developed in Waupun, Wisconsin. A student is said to have completed a particular "level" if mastery of the learning objectives associated with that level has occurred. Writing to Read teachers kept records on students indicating the level completed by the end of the year in the Strategies in Early Childhood program.

### Results

Table R/W 3 indicates the percent of kindergarten Writing to Read students who are also served by the Des Moines Plan that achieved level 4 or above as determined by the Strategies in Early Childhood (Waupun) objectives.

Table R/W-3. Strategies in Early Childhood (Waupun) Kindergarten Students in Writing to Read and D.M. Plan 1987-88

School	Number of Students	Number of Students >Level 4	Percent
Edmunds	17	07	41.1
Longfellow	20	16	80.0
McKinley	18	13	72.2
Moulton	No kindergarten students in Writing to Read Program.		
<b>TOTAL</b>	<b>55</b>	<b>36</b>	<b>65.5</b>

As indicated by Table R/W-3, 65.5 percent of the kindergarten students who participated in both the Writing to Read Program and The Des Moines Plan achieved level 4 or above on the Waupun Strategies in Early Childhood Education sequence of objectives. It should be noted that two of the three Writing to Read centers enrolling kindergarten students surpassed the indicated criterion of 65 percent. At the other center, 41.1 percent of the students had mastered level 4 at the end of the year.

Objective III A10

*At the end of the instructional year, 80 percent of the nonlab kindergarten students in the Writing to Read Program will be at or above Waupun Level 5 as documented by Waupun information on file in the Writing to Read Office.*

Evaluation method

Same as for Objective III A9.

Results

Table R/W 4 indicated the percent of kindergarten Writing to Read students who are not served by the Des Moines Plan that achieved level 5 or above as determined by the Strategies in Early Childhood objectives.

Table R/W-4. Strategies in Early Childhood (Waupun) Kindergarten Students in

Writing to Read Only 1987-88

School	Number of Students	Number of Students $\geq$ Level 5	Percent
Edmunds	54	30	55.6
Longfellow	17	17	100.0
Mckinley	22	10	45.5
Moulton	No kindergarten students in Writing to Read Program.		
<b>TOTAL</b>	<b>93</b>	<b>57</b>	<b>61.3</b>

Table RW-4 indicates that 61.3 percent of the kindergarten students who received instruction in the Writing to Read lab, but who were not served in the Des Moines Plan attained level 5 in the Strategies in Early Childhood sequence. At one center, Longfellow, it was reported that all students in the Writing to Read Program achieved level 6. Lesser numbers of students achieving the specified criteria at the other two centers caused the total number of students reaching this level to fall below the 80 percent criterion.

Objective III A11

*During the instructional year, 80 percent of the first grade students in the Writing to Read Program will complete ten instructional cycles on the computer and in the work journals as documented by class profile sheets, submitted to the Writing to Read Office at the end of each semester.*

Evaluation Method

Students in the Writing to Read Program may complete up to ten instructional cycles in the Writing to Read Program. Lab teachers recorded the date of completion of each cycle on a class profile sheet.

Results

Table RW-5 indicates the number of students at each WTR center that completed ten instructional cycles.

Table RW-5. Computer Instructional Cycles Writing to Read Program

First Grade Students 1987-88

School	Number of Students	Number Completing Ten Cycles	Percent
Edmunds	25	6	24.0
Longfellow	14	1	7.1
McKinley	12	0	0.0
Moulton	29	0	0.0
TOTAL	80	7	8.8

This objective was not achieved. Of the eighty first grade students enrolled in the Writing to Read Program, only 7 or 8.8 percent completed ten instructional cycles. At two centers, McKinley and Moulton, no students completed all ten cycles.

#### Objective IV B1

By September 18, 1987, lab teachers will have selected students, grades 1-5 as documented by a list of students (by grade level) who were selected for instruction and the rank order checklist, submitted to the program coordinator with September accountability data.

#### Evaluation Method

The Des Moines Plan was not officially implemented until January of 1988 following the initial administration of checkpoints. However, as staff was hired at the beginning of 1987-88; students were selected for instruction based on criteria established for identification by the Chapter I Programs. These criteria were established with the idea of being able to rank order students starting with those "in greatest need" of assistance. Students were then selected in rank order until classes were filled. Teachers completed a Des Moines Plan Pupil Enrollment Form for each student as he/she was selected for the program. The information on this form was entered on-line to what had been referred to as the "Chapter I database," now expanded to accept student records from all buildings.

#### Results

An initial set of class lists were produced from the database on November 17, 1987. Table RW-6 shows the number of students that were originally identified at each center by grade level for the reading/writing labs.

Table RW-6. Number of Students Served Des Moines Plan Reading/Writing Labs

(Elementary)

Building	1	2	3	4	5	Total
Adams	5	13	10	11	5	44
All Saints	7	2	3	1	2	15
Brooks	15	20	10	0	0	45
Cattell	15	15	4	7	3	44
Douglas	6	7	0	0	0	13
Edmunds	25	24	11	16	5	81
Findley	10	10	4	4	11	39
Garton	20	16	7	2	3	48
Granger	22	23	17	6	0	68
Greenwood	7	18	8	4	3	40
Hanawalt	7	8	8	4	3	30
Hillis	15	10	13	6	6	50
St. John	5	3	3	0	0	11
Howe	10	28	6	5	1	50
Hubbell	4	11	0	0	0	15
Jackson	30	20	10	13	0	73
Jefferson	6	6	1	1	0	14
King	49	31	0	0	0	80
Longfellow	9	24	15	10	7	65
Lovejoy	4	4	3	0	0	11
Lucas	24	18	25	10	7	84
Madison	17	16	10	1	3	47
Mann	13	3	2	9	0	27
McKee	11	6	2	5	2	26
McKinley	15	11	8	10	5	49
Mitchell	5	4	9	6	0	24
Monroe	0	0	15	7	3	25
Moore	6	11	9	12	6	44
Moulton	33	33	15	20	12	113
Oak Park	13	14	17	3	1	48
Park Ave.	7	13	7	9	0	36
Perkins	0	0	24	20	1	45
Phillips	12	12	6	10	4	44
Pt. Hill	0	2	6	14	0	22
Rice	22	23	0	0	0	45
Stowe	13	31	7	13	5	69
Studebaker	1	6	6	0	0	13
Wallace	13	11	10	8	0	42
Watrous	3	7	1	3	0	14
Willard	22	10	5	0	0	37
Windsor	7	17	4	8	4	40
Woodlawn	10	15	2	7	2	36
Wright	15	8	4	8	1	36
TOTAL	533	564	327	273	105	1802

As can be seen from Table R/W-6, 1,802 students were initially identified for participation in Des Moines Plan Reading/Writing Lab classes at the elementary level. A full time teacher according to the program proposal could serve between 45 and 55 students.

Efforts are currently being made to develop a revised Des Moines Plan enrollment document that will reduce the amount of data entry that currently is performed by Des Moines Plan clerical staff. This step should allow for generation of initial class lists in a much more timely fashion. This objective was achieved as the actual process of student selection was completed by the specified date.

#### Objective IV B2

*During the instructional year, lab teachers will develop and maintain an IEP for each student receiving lab instruction as documented by IEPs on file with the lab teachers.*

#### Evaluation Method

Des Moines Plan consultants examined Individual Educational Plans during visits to program sites. At the end of the first semester, the consultant initialed a form entitled "Des Moines Plan Educational Plan Summary Sheet" which indicated that each IEP had been examined and was properly written.

#### Results

Individual Educational Plans were developed and maintained for each Des Moines Plan student. The educational plan included a listing of objectives to be introduced to each student and various teaching strategies that will be employed. As indicated above, Des Moines Plan consultants monitored the existence and completeness of these documents.

#### Objective IV B3

*During the instructional year, lab teachers will instruct 45-55 students for 25-30 minutes daily as documented by lab schedules, submitted to the program coordinator by September 18, 1987, and resubmitted each time a schedule change is made.*

#### Evaluation Method

Lab teaching schedules were submitted by all Des Moines Plan teachers as classes began in mid September. Revisions were submitted as necessary during the school year.

### Results

Lab teaching schedules indicated the lab teaching times and number of students served in each group. Other information appearing on the schedule included the time that direct instruction is provided by the classroom teacher in the same subject area and the time that the lab teacher and classroom teacher engage in planning sessions. The schedules indicated that lab classes met from 25-30 minutes per session and that a full time teacher served from 45-55 students as specified in the objective. Group sizes ranged from 1 to 8. Much of the information on the schedules is verified at least once during the year when the building principal conducts the observations necessary to complete the Principal's Report of Des Moines Plan Supervision. (See Objective II B1 for a discussion of this document).

#### Objective IV B4

*By the end of the first semester, lab teachers will have personal conferences with the parents/guardians of at least 80% of the total number of lab students, grades 1-5, who have been enrolled in the program for at least 20 days. These conferences will be conducted at the homes of, or at places selected by, the parents/guardians as documented by attendance/parent contact reports, submitted with January accountability data to the program coordinator, program evaluator and building principals.*

#### Objective IV B5

*By the end of the second semester, lab teachers will have had personal conferences with the parents/guardians of at least 80 percent of the total number of lab students, grades 1-5, who have been enrolled in the program for at least 20 days during the second semester. These conferences will be conducted at the homes of the parents/guardians, at school or by telephone as documented by attendance/parent contact reports submitted with May accountability data to the program coordinator, program evaluator and building principals.*

#### Evaluation Method

Des Moines Plan teachers completed a preslugged "Attendance and Parent Contact Form" at the end of each semester. The form indicates the days possible for attendance during the semester, the

days attended and the number of home visits and personal contacts made by the teacher to the parents of each student. The forms are scanned by Mid Iowa Computer Center, the information becomes a part of the database and summary reports are produced which allow for evaluation of these objectives.

### Results

Table R/W-7 provides the data necessary to evaluate objectives IV B4 and IV B5, both of which concern contacts with parents of students in Des Moines Plan labs.

Table R/W-7. Contacts with Parents Des Moines Plan Reading/Writing Lab Students  
Grades 1-5 1987-88

Grades	N Contacted	Percent Contacted	First Semester		Second Semester	
			Total Contacts	N Contacted	Percent Contacted	Total Contacts
1-5	1908	82.8	2423	2164	83.4	2475

During the first semester, objective IV B4 specifies that lab teachers will have personal contact with the parents of 80 percent of the students enrolled for a period of 20 days or more. Personal contact implies a face to face contact between the parent and teacher through a home visit by the teacher or a visit to school by the parent. Telephone calls made or letters sent to the home do not count as personal contacts during the fall semester. During the first semester, parents of 82.8 percent of the Reading/Writing Lab students were contacted, thereby surpassing the established criterion. Objective IV B5 also specifies that parents of 80 percent of the students enrolled 20 days or more during the second semester will be contacted personally, but allows telephone calls made to the home to be counted as parent contacts. During the second semester, according to Table R/W 7, parents of 83.4 percent of the Reading/Writing Lab students were contacted also surpassing the criterion of 80 percent. The table shows a total of 4,898 contacts (2,423+2,475) made during the year to parents of lab students. This would seem to represent a continuation of the long existing trend in the district's Chapter I programs of maintaining a high level of contact with parents of lab students. Objectives IV B4 and IV B5 were

achieved.

#### Objective IV B6

*By October 2, 1987, lab teachers at each building will have submitted the name of a parent to be a representative on the District Parent Advisory Council as documented by parent names, submitted to the Des Moines Plan Supervisor.*

#### Results

A list of representatives to the Chapter I/Des Moines Plan District Parent Advisory Council was received by the Department of Evaluation, Research and Testing on March 10, 1988. The list itself was not dated, making it impossible to determine when it was developed. The list contained names, addresses and telephone numbers of 59 building representatives and 3 community representatives. It should be noted that while some buildings had a number of representatives listed, a total of ten elementary buildings were not represented. In as much as the intent of this process objective was to have representation on the council from each attendance center involved with The Des Moines Plan, this objective was not achieved.

#### Objective IV B7

*During the instructional year, Writing to Read teachers will schedule and instruct students in the Writing to Read Center for one hour daily as documented by classroom and lab teachers' daily schedules, submitted to the Writing to Read Coordinator.*

#### Evaluation Method

Schedule forms were submitted by each Writing to Read lab teacher.

#### Results

Schedules submitted by teachers providing instruction to students in the Writing to Read labs indicated that such instruction was provided for a period of one hour on a daily basis. This compares to the one half hour of daily instruction that is the norm for the regular Des Moines Plan lab class session.

#### Objective IV B8

*At the beginning of the instructional year, Writing to Read teachers will provide orientation for*

*students one week prior to full-time attendance in the Writing to Read Centers as documented by teacher lesson plans submitted to the Writing to Read Coordinator at the end of the first month of the instructional year.*

#### Evaluation Method

Writing to Read teachers submitted copies of lesson plans for the period during which an orientation to the program for students was held.

#### Results

Lesson plans submitted by Writing to Read teachers indicated the occurrence of orientation sessions at all Writing to Read Centers. According to the lesson plans, the sessions involved an explanation of the rules for the lab, sharing materials, care of equipment and hands on practice with the computer equipment. ~~This objective was achieved.~~

#### Objective IV B9

*During the instructional year, Writing to Read teachers will maintain a file of samples of students' writing as documented by dated weekly samples of each students' writing on file with the Writing to Read teachers.*

#### Results

Weekly samples of students' writing were maintained in each Writing to Read Center. The Des Moines Plan consultant working with the Writing to Read Program monitored the existence of the writing samples regularly during visits to each center.

#### Objective IV B10

*During the instructional year, the Writing to Read assistant will monitor children at the computer, work journal, and listening stations as documented by teacher lesson plans on file with the Writing to Read teachers.*

#### Results

The Des Moines Plan consultant for Reading/Writing that worked specifically with the Writing to Read Program reported that individuals were not specifically hired to fill the position of Writing to Read

assistant. Instead, a building associate or other individual such as a volunteer was often used to assist teachers in the Writing to Read lab. While it appears these individuals were useful in assisting the WTR teachers with a variety of lab activities, this objective should be modified if persons will not be specifically designated to occupy the position of Writing To Read assistant.

#### Objective VI B1

*Near the end of the instructional year a parent survey will be conducted by the program evaluator as documented by a summary of responses obtained from a parent survey conducted by the program evaluator.*

#### Evaluation method

During the 1987-88 school year, the parent survey that had been used for a number of years in the Chapter I Program was completely revised. This was done in response to a recommendation made in the 1986-87 Report of Evaluation for Chapter I Reading and Mathematics Programs. This recommendation suggested that a more comprehensive questionnaire be designed that would hopefully not only be a better instrument for gathering information from parents about their perceptions of the new Des Moines Plan, but would also yield a better rate of return than had been experienced in the past.

The seven item revised instrument, a copy of which appears in Appendix R/W,M- B was sent to a 10 percent random sample of parents of all Des Moines Plan lab students on April 15, 1988. Three hundred eighty five questionnaires were sent out via U.S. mail, 61 or 15.8 percent of which were returned. While this represents a slightly better rate of return than had been experienced in previous years, it is nonetheless insufficient for making generalizations to the population of Des Moines Plan parents. Results of the survey are summarized in the statements below with the qualification that generalizations cannot be made from the responses of this sample to the population at large.

#### Results

Forty five of the 61 respondents (73.8%) agreed or strongly agreed that they were satisfied with information they had received about the Des Moines Plan.

- The process for selecting students for participation in this program satisfied 36 (61.1%) of the 59 parents responding to this question. Thirteen (22.0%) were not satisfied to some degree.

- Of the various ways in which parents are contacted by Des Moines Plan lab teachers, 64.0 percent of the respondents preferred scheduled conferences at school with The Des Moines Plan teacher. Only 2 (4.0%) indicated preference for home visits by the teacher while 9 (18.0%) preferred telephone calls.

- Thirty-one respondents (67.4%) felt that letters provided the best avenue for obtaining information about the District Parent Advisory Council and its activities.

- Over one half (56.3%) of the respondents felt that brochures and information about learning activities for use at home would be the most useful items that could be provided through the Parent Advisory Council.

Although the return rate improved slightly from that in previous years (using Chapter I surveys), the number of returns via U.S. mail was still far from that necessary to allow for generalizations to be made from the sample to the population. This is unfortunate as costs are involved in designing, printing and mailing such an instrument. Given this situation, it would seem feasible to consider giving parents an opportunity to complete this survey during conference time as many participate in this activity. This would increase the response rate and could be set up in a way that would still ensure anonymity of the respondents.

## PROCESS AND PERFORMANCE OBJECTIVES

### Middle School Reading/ Writing Lab Program

#### Objective II B1

*During the instructional year, the coordinator will organize and maintain an accountability file and provide copies of data to support the evaluation of all objectives as documented by accountability files maintained by the program coordinator and the Department of Evaluation, Research and Testing.*

#### Results

Duplicate accountability files were maintained in the Des Moines Plan Office and the Department of

Evaluation, Research and Testing during the 1987-88 school year. Periodic checks were conducted during the school year to assure that data to evaluate program objectives were being collected. The data were submitted to the Department of Evaluation, Research and Testing at the end of the program year.

#### Objective III A1

*At the end of the instructional year, lab students, grades 6-8, who have been enrolled in the program for at least 80 days will demonstrate an increase in the percentile rank from pre to post test on the vocabulary and comprehension subtests of the Iowa Tests of Basic Skills (ITBS) as documented by accountability files maintained by the program coordinator and the Department of Evaluation, Research and Testing.*

#### Objective III A2

*At the end of the instructional year, lab students, grades 6-8 who have been enrolled in the program for at least 80 days will demonstrate a proficiency on the vocabulary and reading comprehension subtests of the ITBS, such that the average gain in normal curve equivalents (NCEs) will be at least 3.0 as documented by scores from fall and spring testing, submitted to the program evaluator at the end of the instructional year.*

#### Evaluation Method

Students complete the vocabulary and reading comprehension subtests of the Iowa Tests of Basic Skills in October and April of each year. Raw scores obtained by these students are ultimately converted to percentile ranks and normal curve equivalent (NCE) scores. Objectives III A1 and III A2 specify criteria for the gain in the NCE score between pre and post testing.

#### Results

Tables R/W-8 and R/W-9 present data that are necessary to evaluate objectives III A1 and III A2. Narrative pertaining to these objectives follows the tables.

Table RW 8. Vocabulary and Reading Comprehension Iowa Test of Basic Skills

Grades 6-8 (Percentile Rank)

Grade	Vocabulary				Reading Comprehension			
	N	Pre	Post	Gain	N	Pre	Post	Gain
6	142	29	30	+1	142	22	26	+4
7	135	29	25	-4	135	22	23	+1
8	134	22	27	+5	134	19	21	+2

Table RW-9. Vocabulary and Reading Comprehension Iowa Test of Basic Skills

Grades 6-8 (Normal Curve Equivalents)

Grade	Vocabulary				Reading Comprehension			
	N	Pre	Post	Gain	N	Pre	Post	Gain
6	142	38.2	39.2	+1.0	142	33.9	36.5	+2.6
7	135	38.0	36.0	-2.0	135	33.5	34.4	+0.9
8	134	33.9	37.4	+3.5	134	31.0	33.2	+2.2
6-8	411	36.7	37.6	+0.9	411	32.8	34.7	+1.9

Students demonstrated an increase in the percentile rank at grades 6 and 8 in vocabulary and in grades 6, 7 and 8 in reading comprehension. The percentile rank for students in grade 7 on the vocabulary subtest decreased by 4 points. (Objective III A1)

Objective III A2 states that students in grades 6, 7 and 8 will demonstrate an increase of 3.0 NCE units in both vocabulary and reading comprehension subtests of the Iowa Tests of Basic Skills.

According to Table RW 9, the weighted average NCE gain for students in grades 6-8 was 0.9 in vocabulary and 1.9 in reading comprehension. This compares to gains made during the previous year

for students at these grade levels of 0.4 NCE units in vocabulary and 2.2 units in reading comprehension. The gains demonstrated by students at the middle school level on the vocabulary and reading comprehension subtests have consistently failed to meet specified criterion levels. This would indicate a need for continued emphasis at the middle school level in order to improve achievement.

#### Objective III A3

*By the end of the instructional year, lab students, grades 6-8 who have been enrolled in the program will display a more positive attitude toward learning than they displayed at the time of their entrance into the program as documented by a pre/post Attitude Toward Learning summary submitted to the program evaluator at the end of the instructional year.*

#### Evaluation method

Des Moines Plan Reading/Writing lab students at the middle school level completed a pre/post self evaluation instrument designed to measure attitude toward various academic activities. The instrument used replaced the Self Anchoring Attitude Scale, an instrument used in the Chapter I Program to measure student attitudes for a period of several years. The instrument, a copy of which appears in Appendix RW, M- C, consists of two rating scales. The first asks students to rate their daily behavior according to seven descriptors, i.e. "completing work on time," "participating in class," etc. on a 5 point scale (1=never =; 5=always). The second section asks students to rate their attitude in class using the same five point scale as it applies to eight adjectives. Four of the adjectives are positive ("helpful," "interested," "respectful" and "improving") while four are negative ("disruptive," "disinterested," "disrespectful" and "a problem") and meant to represent opposites of the positive adjectives. The most favorable attitude would be indicated by a response of "5" to the positive adjectives and a response of "1" to the negative adjectives.

#### Results

Several problems arose in the administration of this instrument to middle school reading/writing lab students in 1987-88. The most significant problem was the fact that at several buildings students did not complete the attitude scale in both the fall and spring to create a pre/post measurement as indicated

by the objective. Another problem was the fact that there was no way to determine whether students completing the instrument were doing so as part of a reading or a mathematics lab class. Tables R/W-10A and -10B report the results for the portion of the scale dealing with attitudes toward class for those buildings where Des Moines Plan students completed the instrument on a pre/post basis. Table R/W-10A indicates results for the positive attitudes while Table-10B indicates results for negative attitudes.

Table R/W-10A. Attitude Scale Results for "Positive" Attitudes

Des Moines Plan Middle School Students 1987-88

School*	N	Helpful		Interested		Respectful		Improving	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post
Callanan	17	3.7	4.1	4.0	3.8	4.5	3.9	4.2	4.4
Goodrell	33	4.2	3.7	3.9	3.7	4.3	4.0	4.0	4.2
McCombs	39	4.0	3.7	3.7	3.6	4.1	4.1	3.9	3.8
Meredith	41	3.6	3.6	3.6	3.4	4.0	3.8	4.0	4.0
Metro	2	3.0	3.5	3.5	3.5	3.5	3.5	3.5	5.0
All Schools	132	3.9	3.7	3.8	3.6	4.2	4.0	4.0	4.1

\* Not administered on a pre/post basis at Brody, Harding, Hiatt, Hoyt, Merrill and Weeks.

Table R/W-10B. Attitude Scale Results for "Negative" Attitudes

Des Moines Plan Lab Students 1987-88

School	N	Disruptive		Disinterested		Disrespectful		A Problem	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post
Callanan	17	1.9	2.0	2.0	1.6	1.5	1.5	1.7	1.5
Goodrell	33	2.0	2.5	2.1	2.3	1.8	1.9	2.1	1.6
McCombs	39	2.0	2.4	2.2	2.6	1.7	1.6	2.1	1.9
Meredith	41	1.9	2.3	2.4	2.5	1.9	2.4	1.6	2.1
Metro	2	2.5	2.0	2.5	3.5	2.5	2.0	2.0	1.5
All Schools	132	2.0	2.3	2.2	2.4	1.8	1.9	1.9	1.8

From the time of pre measurement to the time of post measurement, improvement in attitude would be indicated on the five point scale by an increase in the scale value for the positive descriptors and a decrease in the scale value for the negative descriptors. Examination of the scale value for all schools indicates that for the positive adjectives ("helpful," "interested," "respectful," "improving"), the scale value actually decreased from pre to post measurement for all descriptors except "improving" which showed a slight increase. For the negative descriptors, a decrease in scale value would indicate an improvement in attitude from the pre to the post measure. Table RW-10B, however, shows that the value increased for all areas except one which showed a slight decrease.

In summary, the results presented in Tables RW-10A and 10B indicate an improvement in attitude from pre to post measurement for only two of the eight descriptors. The results must be qualified with the fact that no data for matching students on a pre/post basis were received from six middle schools. In addition, the response sheets submitted did not indicate whether the student completed the instrument in the reading/writing lab or mathematics lab which made the sorting process even more difficult.

#### Objective III A4

*By the end of the instructional year, lab students, grades 6-8, who have been enrolled in the program for at least 80 days will respond positively to the program, as indicated by their rate of attendance being equal to or greater than that of all non-lab students in the same schools as documented by attendance/parent contact reports, submitted with the May accountability data to the program coordinator and program evaluator.*

#### Evaluation Method

Teachers report the number of days each student attended during each semester and the number of days of possible attendance. Reporting is accomplished by the teacher completing a preslugged document entitled "Attendance and Parent Contact Form." The information on this form is entered on the database and subsequent summary reports are produced which allow for evaluation of this objective.

Results

Objective III.A4 states that the attendance of Des Moines Plan lab students enrolled in the program for 80 days will display a rate of attendance that is equal to or better than that of nonprogram students in the same schools. Emphasis on the importance of school attendance has been a priority in the Chapter I Program since its inception and continues to be considered such in The Des Moines Plan. Table R/W-11 displays the attendance rate (indicated by days attended as a percentage of days possible) for Des Moines Plan and non-Des Moines Plan students at all middle schools:

Table R/W 11. Attendance Rate D.M. Plan/Non-D.M. Plan Middle School Students

1987-88

<u>Building</u>	<u>Des Moines Plan</u>		<u>Non-Des Moines Plan</u>	
	<u>N</u>	<u>Percent</u>	<u>N</u>	<u>Percent</u>
Brody	59	96.4	580	91.6
Calianan	52	87.3	574	94.0
Goodrell	63	89.3	712	92.5
Harding	138	93.7	658	84.0
Hiatt	60	88.4	486	91.6
Hoyt	51	93.9	496	92.9
McCarrbs	41	91.0	560	93.1
Meredith	62	92.8	595	94.6
Merrill	41	92.0	494	94.5
Metro	14	46.2	109	68.9
Weeks	72	92.8	604	93.0
All Buildings	653	88.9	5868	92.8

As indicated by Table R/W-11, the attendance rate for Des Moines Plan Reading/Writing students at the middle school level was 88.9 percent compared to 92.8 percent for nonlab students at the same

buildings. At two buildings, Brody and Hiatt, Des Moines Plan students actually displayed an attendance rate higher than that of non-lab students. As the overall attendance rate for Des Moines Plan students was lower, this objective was not achieved.

#### Objective IV B1

*By September 18, 1987, lab teachers will have selected students, grades 6-8 as documented by lists of students (by grade level) who were selected for instruction and the rank order check list, submitted to the program coordinator with September accountability data.*

#### Evaluation Method

The Des Moines Plan was not officially implemented until January of 1988 following the first administration of checkpoints. However, as staff was hired at the beginning of 1987-88, students were tentatively identified and served beginning in September. On November 17, 1987, initial class lists were produced from information contained in the database at that time. The inclusion of a student in the database and subsequent appearance of his/her name on class lists indicated selection for the program.

#### Results

Table R-12 shows the number of students that were originally identified at each attendance center by grade level for the reading/writing labs.

Table R/W-12. Number of Students Served Des Moines Plan Reading/Writing Labs  
(Middle School) as of November 17, 1987

Building	Number of Students Served by Grade Level			Total
	6	7	8	
Brody	24	22	12	58
Callanan	14	10	09	33
Goodrell	15	17	20	52
Harding	48	51	31	130
Hiatt	13	13	27	53
Hoyt	09	13	26	48
McCombs	19	15	12	46
Meredith	34	09	11	54
Merrill	18	10	12	40
Metro	04	03	04	11
Weeks	19	36	16	71
All Buildings	217	199	180	596

As can be seen from Table R/W-12, 596 students were initially identified for participation in Des Moines Plan Reading/Writing Lab classes at the middle school level.

Efforts are currently being made to develop a revised Des Moines Plan enrollment document that will reduce the amount of data entry performed by The Des Moines Plan clerical staff. This step should allow for generation of initial class lists in a much more timely fashion. This objective was achieved, as the actual process of student selection was completed by the specified date.

Objective IV B2

*During the instructional year, lab teachers will develop and maintain an IEP for each student receiving lab instruction as documented by IEPs on file with the lab teachers.*

### Evaluation Method

Des Moines Plan consultants examined Individual Educational Plans during visits to buildings. At the end of the first semester, the consultant initialed the Educational Plan Summary Sheet to indicate that the plan for each student had been reviewed.

### Results

Individual Educational Plans were developed and maintained for each Des Moines Plan student. The educational plan includes a listing of objectives to be introduced to each student and various teaching strategies that will be employed to achieve the objectives. One of the functions of the Des Moines Plan consultants is to monitor the recording of information for each student on the educational plan. As mentioned above, the consultant initials the educational plan during visits to a building to indicate that the necessary information has been recorded and that the plan itself is being carried out.

### Objective IV B3

During the instructional year, lab teachers will instruct 55-75 students for an average of 45 minutes daily as documented by lab schedules, submitted to the program coordinator by September 18, 1987, and resubmitted each time a schedule change is made.

### Evaluation Method

Lab teaching schedules were submitted by all Des Moines Plan teachers as classes began in mid September. Revisions were submitted as necessary.

### Results

Schedules indicated the lab teaching schedule and number of students served in each group. Other information appearing on the schedule includes the time that the lab teachers and appropriate classroom teachers plan jointly. Lab classes at the middle school level met for one class period or approximately 45 minutes daily. Full time teachers served a range of from 55 to 75 students during the day.

Objective IV B4

*By the end of the instructional year, lab teachers will have had personal contact with the parents/guardians of at least 50% of the total number of students, grades 6-8, who have been enrolled in the program for at least 20 days as documented by attendance/parent contact reports, submitted with the May accountability data to the program coordinator, the program evaluator, and the building principals.*

Evaluation Method

Des Moines Plan teachers completed a preslugged "Attendance and Parent Contact Form" at the end of each semester. The form indicates the days possible for attendance during the semester, the days attended and the number of home visits and personal contacts made by the teacher to the parents of each student. The forms are scanned by Mid Iowa Computer Center, the information becomes a part of the database and summary reports are produced which allow for evaluation of these objectives.

Results

Objective IV B4 states that the parents of at least 50 percent of the students in the Reading/Writing Lab Program enrolled for 20 or more days would be contacted personally at some time during the school year. The criteria established for parent contact at this level were less stringent than at the elementary level which specified contact with parents during each semester rather than for the entire year.

"Personal contact" implies a visit by the teacher to the home of a student, a visit by the parent to school or a telephone call made by the teacher to the parent. Documentation submitted revealed that personal contacts were made to the parents of 74.7 percent of the students enrolled 20 days or more, thereby exceeding the specified criterion. At only one middle school attendance center did the rate fall below 50 percent. At another building, Harding Middle School, parents of 86.6 percent of the students were contacted. This objective was achieved.

Objective IV B5

*By the end of the instructional year, lab teachers will have completed a minimum of one parent*

*involvement activity as documented by Parent Activity Planning Sheets, submitted to the program coordinator by the end of the instructional year.*

#### Evaluation Method

Lab teachers submitted a document entitled Parent Activity Planning Sheet that contained information about activities provided for parents of students in the lab program to document this objective.

#### Results

Parent Activity Planning Sheets most frequently reflected activities that included inviting parents to visit the labs at a specified time at which they could see and participate in various lab functions. In several cases, use of computer workstations were demonstrated and parents were then encouraged to participate in a computer activity. In many cases, the activities were provided at either conference or open house time. Activity sheets were received from all middle schools with the exception of Hiatt.

#### Objective VI A1

*Near the end of the instructional year, a parent survey will be conducted by the program evaluator as documented by a summary of responses obtained from the parent survey on file with the program evaluator.*

#### Evaluation method

During the 1987-88 school year, the parent survey that had been used for a number of years in the Chapter I Program was completely revised. This was done in response to a recommendation made in the 1986-87 Report of Evaluation for Chapter I Reading and Mathematics Programs. This recommendation suggested that a more comprehensive questionnaire be designed that would hopefully not only be a better instrument for gathering information from parents about their perceptions of the new Des Moines Plan, but would also yield a better rate of return than had been experienced in the past.

The seven item revised instrument, a copy of which appears in Appendix RW, M-B was sent to a 10 percent random sample of parents of all Des Moines Plan lab students on April 15, 1988. Three hundred eighty five questionnaires were sent out via U.S. mail, 61 or 15.8 percent of which were returned. While this represents a slightly better rate of return than had been experienced in previous years, it is nonetheless insufficient for making generalizations to the population of Des Moines Plan parents. Results of the survey are summarized in the statements below with the qualification that generalizations cannot be made from the responses of this sample to the population at large.

### Results

- Forty five of the 61 respondents (73.8%) agreed or strongly agreed that they were satisfied with information they had received about the Des Moines Plan.
- The process for selecting students for participation in this program satisfied 36 (61.1%) of the 59 parents responding to this question. Thirteen (22.0%) were not satisfied to some degree.
- Of the various ways in which parents are contacted by Des Moines Plan lab teachers, 64.0 percent of the respondents preferred scheduled conferences at school with The Des Moines Plan teacher. Only 2 (4.0%) indicated preference for home visits by the teacher while 9 (18.0%) preferred telephone calls.
- Thirty-one respondents (67.4%) felt that letters provided the best avenue for obtaining information about the District Parent Advisory Council and its activities.
- Over one half (56.3%) of the respondents felt that brochures and information about learning activities for use at home would be the most useful items that could be provided through the Parent Advisory Council.

Although the return rate improved slightly from that in previous years (using Chapter I surveys), the number of returns via U.S. mail was still far from that necessary to allow for generalizations to be made from the sample to the population. This is unfortunate as costs are involved in designing, printing and mailing such an instrument. Given this situation, it would seem feasible to consider giving parents an opportunity to complete this survey during conference time as many participate in this

activity. This would increase the response rate and could be set up in a way that would still ensure anonymity of the respondents

## PROCESS AND PERFORMANCE OBJECTIVES

### Senior High Reading/Writing Lab Program

#### Objective II B1

*During the instructional year, the coordinator will organize and maintain an accountability file and provide copies of data to support the evaluation of all objectives as documented by accountability files maintained by the program coordinator and the Department of Evaluation, Research and Testing.*

#### Results

Duplicate accountability files were maintained in the Des Moines Plain Office and the Department of Evaluation, Research and Testing during the 1987-88 school year. Periodic checks were conducted during the school year to ensure that data to evaluate program objectives were being collected. The data were submitted to the Department of Evaluation, Research and Testing at the end of the program year.

#### Objective III A1

*At the end of the instructional year, lab students, grades 9-12, who have been enrolled in the program for at least 80 days will demonstrate an increase in the mean percentile rank from pre to post test on the reading subtest of the Iowa Tests of Educational Development (ITED) as documented by scores from fall and spring testing, submitted to the program evaluator at the end of the instructional year.*

#### Objective III A2

*At the end of the instructional year, lab students, grades 9-12 who have been enrolled in the program for at least 80 days will demonstrate a proficiency on the reading subtest of the ITED, such that the average gain in normal curve equivalents (NCEs) will be at least 3.0 as documented by scores from fall and spring testing submitted to the program evaluator at the end of the instructional year.*

### Evaluation Method

Students complete the reading subtests of the Iowa Tests of Educational Development in October and April of each year. Raw scores obtained by these students are ultimately converted to percentile ranks and normal curve equivalent (NCE) scores. Objectives III A1 and III A2 specify criteria for the gain in the NCE score between pre and post testing.

### Results

Tables R/W-13 and R/W-14 present data that are necessary to evaluate objectives III A1 and III A2. Narrative pertaining to these objectives follow the table.

Table R/W-13. Reading Comprehension Iowa Test of Educational Development  
Grades 9-12 (Percentile Rank)

<u>Grade</u>	<u>N</u>	<u>Pre</u>	<u>Post</u>	<u>Gain</u>
9	118	24	27	+3
10	No students served in 1987-88			
11	No students served in 1987-88			
12	No students served in 1987-88			

Table R/W-14. Reading Comprehension Iowa Test of Educational Development  
Grades 9-12 (Normal Curve Equivalent)

<u>Grade</u>	<u>N</u>	<u>Pre</u>	<u>Post</u>	<u>Gain</u>
9	118	34.9	37.0	+2.1
10	No students served in 1987-88			
11	No students served in 1987-88			
12	No students served in 1987-88			

Students in grade 9 demonstrated an increase in the percentile rank on the reading subtest of 3 units. The increase between pre and post testing using the Normal Curve Equivalent scale as specified

in objective III A2 was 2.1 NCE units. The criterion for achievement gain at this level was 3.0.

Comparative results are not available from previous years as the Chapter I/II Programs had not served students at these grade levels in recent history.

### Objective III A3

*By the end of the instructional year, lab students, grades 9-12, who have been enrolled in the program for at least 80 days will display a more positive attitude toward learning than they displayed at the time of their entrance into the program as documented by the pre/post Attitude Toward Learning summary, submitted to the program evaluator at the end of the instructional year.*

### Evaluation method

Des Moines Plan Reading/Writing lab students at the middle school level completed a pre/post self evaluation instrument designed to measure attitude toward various academic activities. The instrument used replaced the Self Anchoring Attitude Scale, an instrument used in the Chapter I Program to measure student attitudes for a period of several years. The instrument, a copy of which appears in Appendix R/W, M-C consists of two rating scales. The first asks students to rate their daily behavior according to seven descriptors, i.e. completing work on time, participating in class, etc. on a 5 point scale (1=never; 5=always). The second section asks students to rate their attitude in class using the same five point scale as it applies to eight adjectives. Four of the adjectives are positive ("helpful," "interested," "respectful" and "improving") while four are negative ("disruptive," "disinterested," "disrespectful" and "a problem") and meant to represent opposites of the positive adjectives. The most favorable attitude would be indicated by a response of "5" to the positive adjectives and a response of "1" to the negative adjectives.

### Results

Several problems arose in the administration of this instrument to senior high school Reading/Writing Lab students in 1987-88. The most significant problem was the fact that at two buildings, students did not complete the attitude scale in both the fall and spring to create a pre/post

measurement as indicated by the objective. Another problem was the fact that there was no way to determine whether students completing the instrument were doing so as part of a reading or a mathematics lab class. Tables R/W-15A and -15B report the results for the portion of the scale dealing with attitudes toward class for those buildings where Des Moines Plan students completed the instrument on a pre/post basis. Table R/W-15A indicates results for the positive attitudes while Table R/W-15B indicates results for negative attitudes.

Table R/W-15A. Attitude Scale Results for "Positive" Attitudes Des Moines Plan  
Senior High School Students 1987-88

School	N	Helpful		Interested		Respectful		Improving	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post
Hoover	11	3.8	4.0	3.7	4.3	4.2	4.5	3.8	4.0
Lincoln	07	3.9	3.0	4.1	3.4	4.4	3.3	4.1	4.4
Roosevelt	05	3.6	3.2	3.4	3.4	4.2	3.6	4.0	4.2
All Schools	23	3.8	3.5	3.8	3.8	4.2	3.9	4.0	4.2

Table R/W-15B. Attitude Scale Results for "Negative" Attitudes

Des Moines Plan Senior High Lab Students 1987-88

School	N	Disruptive		Disinterested		Disrespectful		A Problem	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post
Hoover	11	2.1	2.1	2.7	1.6	1.5	1.5	2.1	1.4
Lincoln	7	1.7	1.7	2.0	2.3	1.4	1.7	1.3	1.3
Roosevelt	5	1.8	1.8	2.6	2.2	2.0	2.0	1.6	1.6
All Schools	23	1.9	1.9	2.5	2.0	1.6	1.7	1.8	1.4

From the time of pre measurement to the time of post measurement, improvement in attitude would be indicated on the five point scale by an increase in the scale value for positive descriptors and a decrease in the scale value for negative descriptors. Examination of the scale value for all schools indicates that for positive adjectives ("helpful," "interested," "respectful," "improving"), the scale value decreased in two areas ("helpful," "respectful"), remained the same for "interested" and increased for "improving." For negative descriptors, a decrease in the scale value would indicate an improvement in attitude from the pre to the post measure. Table R/W-15B shows that the value decreased for two descriptors, "disinterested" and "a problem," remained the same for "disruptive" and increased for "disrespectful."

In summary, the results presented in Tables R/W-15A and R/W-15B indicate an improvement in attitude from pre to post measurement for only three of the eight descriptors. The results must be qualified, however, due to the occurrence of the following:

- a. Data were received from only 3 of the 5 senior high schools; and
- b. From the 3 high schools that submitted attitude instruments, only 23 matched pre/post instruments were found.

#### Objective III A4

*By the end of the instructional year, lab students, grades 9-12, who have been enrolled in the program for at least 80 days will respond positively to the program as indicated by a rate of attendance higher than the district average as documented by attendance/parent contact reports, submitted with May accountability data to the program coordinator and program evaluator.*

#### Evaluation Method

Teachers report the number of days each student attended during each semester and the number of days of possible attendance. Reporting is accomplished by the teacher completing a presugged document entitled "Attendance and Parent Contact Form." The information on this form is entered on the database and subsequent summary reports are produced which allow for evaluation of this objective.

Results

Table R/W-16 shows the attendance rate (days present as a percentage of days possible) for Des Moines Plan students at each senior high building and for the total senior high Reading/Writing Lab Program. Also indicated is the attendance rate for all students at each senior high building and for all buildings combined (to yield a district attendance rate).

Table 16. Attendance Rate Des Moines Plan Senior High Students

<u>Building</u>	<u>Des Moines Plan</u>		<u>All Students</u>	
	<u>N</u>	<u>Percent</u>	<u>N</u>	<u>Percent</u>
East	35	90.4	2291	91.8
Hoover	26	92.6	1219	94.4
Lincoln	31	90.8	2524	92.5
North	42	87.9	1052	91.6
Roosevelt	20	93.0	1558	92.9
All Schools	154	90.5	8644	92.5

As shown by Table R/W-16, the average attendance rate for all senior high students in the district was 92.5. This compared to an attendance rate of 90.5 for students in the Des Moines Plan. The Des Moines Plan attendance rate was lower than that for all students at all buildings with the exception of Roosevelt. At that attendance center, Des Moines Plan students had an attendance rate of 93.0 compared to 92.9 percent for all students. As the specification that Des Moines Plan students would display a rate of attendance higher than the district average was not met, this objective was not achieved.

A process objective in the middle school Reading/Writing Lab Program states that the attendance rate of Des Moines Plan students will be compared to that of nonlab students at the same buildings.

The senior high objective on the other hand does not specify the comparison group as being made up of only non-lab students. Therefore, when reporting the attendance rate, records of the lab students were not deleted from the total group. For purposes of consistency and in order to better define the two groups, this objective should be revised to call for a comparison of attendance rates between Des Moines Plan and non Des Moines Plan students.

#### Objective IV B1

*By September 18, 1987, lab teachers will have selected students, grades 9-12 as documented by lists of students (by grade level) who were selected for instruction and the rank order checklist, submitted to the program coordinator with September accountability data.*

#### Evaluation Method

The Des Moines Plan was not officially implemented until January of 1988 following the first administration of checkpoints. However, as staff was hired at the beginning of 1987-88, students were tentatively identified and served beginning in September. On November 17, 1987, initial class lists were produced from information contained in the database at that time. The inclusion of a student in the database and subsequent appearance of his/her name on class lists indicated selection in the program.

#### Results

Table RW-17 shows the number of students that were originally identified at each attendance center by grade level for the Reading/Writing Labs.

Table R/W-17. Number of Students Served Des Moines Plan Reading/Writing Lab  
(Senior High) as of November 17, 1987

Building	Number of Students Served By Grade Level				Total
	9	10	11	12	
East	37	0	0	0	37
Hoover	26	0	0	0	26
Lincoln	34	0	0	0	34
North	45	1	0	0	45
Roosevelt	16	0	0	0	16
All Schools	158	1	0	0	159

As can be seen from Table R/W-17, 159 students were initially identified for participation in Des Moines Plan Reading/Writing Lab classes at the senior high level. Nearly all high school students initially identified were in the 9th grade and were selected based on previous participation in Chapter I at the middle school level and other sources prior to the actual implementation of the Des Moines Plan.

Efforts are currently being made to develop a revised Des Moines Plan enrollment document that will reduce the amount of data entry performed by the Des Moines Plan clerical staff. This step should allow for generation of initial class lists in a much more timely fashion. This objective was achieved as the actual process of student selection was completed by the specified date.

#### Objective IV B2

*During the instructional year, lab teachers will develop and maintain group charts for students receiving lab instruction as documented by group charts on file with the lab teachers.*

#### Results

Group charts were maintained by each teacher serving senior high students in the Reading/Writing Lab Program. The group charts served much the same purpose as the Individual Educational Plan (IEP)

which is developed for students at the elementary and middle school level. Des Moines Plan consultants monitored the existence of the group charts at the time of regular visits to the buildings. This objective was achieved.

#### Objective IV B3

*During the instructional year, lab teachers will instruct 45-75 students daily as documented by lab schedules, submitted to the program coordinator by September 18, 1987, and resubmitted each time a change in schedule is made.*

#### Evaluation Method

Lab teaching schedules were submitted by all Des Moines Plan teachers as classes began in mid September. Revisions were submitted as necessary.

#### Results

Lab schedules were submitted by each senior high teacher during the month of September. Revisions were made throughout the year as needed. The schedules indicated the lab teaching schedule and the number of students served in each group. This objective was achieved.

#### Objective IV B4

*Every . . . weeks, lab teachers will make personal contact with the parents/guardians of all students, grades 9-12, who have been enrolled in the program for at least 20 days.*

#### Evaluation Method

Des Moines Plan teachers completed a preslugged "Attendance and Parent Contact Form" at the end of each semester. The form indicates the days possible for attendance during the semester, the days attended, and the number of home visits and personal contacts made by the teacher to the parents of each student. The forms are scanned by Mid Iowa Computer Center, the information becomes a part of the database and summary reports are produced which allow for evaluation of this objective.

#### Results

Objective IV B4 states that teachers will make personal contact with parents/guardians of all students enrolled in the program 20 days or more every nine weeks. The attendance/parent contact

report that lab teachers complete are submitted for each semester rather than each nine week period, however. Therefore, it is only possible to determine if such contact occurred during that time frame.

During the first semester, contacts were made with parents of 75.8 percent of the students served for a period of 20 or more days. During the second semester, parents of 77.6 percent were contacted. It should be noted that at Hoover and North, 100 percent of the parents were contacted each semester. It could not be determined whether or not this objective was achieved as written as parent contact information was submitted by semester rather than by each nine week period.

#### Objective VI B1

*Near the end of the instructional year, a parent survey will be conducted by the program evaluator as documented by a summary of responses obtained from the parent survey on file with the program evaluator.*

#### Evaluation Method

During the 1987-88 school year, the parent survey that had been used for a number of years in the Chapter I Program was completely revised. This was done in response to a recommendation made in the 1986-87 Repo. of Evaluation for Chapter I Reading and Mathematics Programs. This recommendation suggested that a more comprehensive questionnaire be designed that would hopefully not only be a better instrument for gathering information from parents about their perceptions of the new Des Moines Plan, but would also yield a better rate of return than had been experienced in the past.

The seven item revised instrument, a copy of which appears in Appendix R/W, M-B was sent to a 10 percent random sample of parents of all Des Moines Plan lab students on April 15, 1988. Three hundred eighty five questionnaires were sent out via U.S. mail, 61 or 15.8 percent of which were returned. While this represents a slightly better rate of return than had been experienced in previous years, it is nonetheless insufficient for making generalizations to the population of Des Moines Plan parents. Results of the survey are summarized in the statements below with the qualification that generalizations cannot be made from the responses of this sample to the population at large.

### Results

- Forty five of the 61 respondents (73.8%) agreed or strongly agreed that they were satisfied with information they had received about the Des Moines Plan.
- The process for selecting students for participation in this program satisfied 36 (61.1%) of the 59 parents responding to this question. Thirteen (22.0%) were not satisfied to some degree.
- Of the various ways in which parents are contacted by Des Moines Plan lab teachers, 64.0 percent of the respondents preferred scheduled conferences at school with The Des Moines Plan teacher. Only 2 (4.0%) indicated preference for home visits by the teacher while 9 (18.0%) preferred telephone calls.
- Thirty-one respondents (67.4%) felt that letters provided the best avenue for obtaining information about the District Parent Advisory Council and its activities.
- Over one half (56.3%) of the respondents felt that brochures and information about learning activities for use at home would be the most useful items that could be provided through the Parent Advisory Council.

Although the return rate improved slightly from that in previous years (using Chapter I surveys), the number of returns via U.S. mail was still far from that necessary to allow for generalizations to be made from the sample to the population. This is unfortunate as costs are involved in designing, printing and mailing such an instrument. Given this situation, it would seem feasible to consider giving parents an opportunity to complete this survey during conference time as many participate in this activity. This would increase the response rate and could be set up in a way that would still ensure anonymity of the respondents.

### CONCLUSIONS

Results of the evaluation of performance and process objectives suggest that student attendance and communication with parents are two areas that received strong emphasis in this program. In the Reading/Writing Program, parents of approximately 83 percent of the elementary students and 75 percent of both middle and senior high students were contacted by telephone or in person during the

year.

The rate of attendance for Reading/Writing Program students was 88.9 percent of the days possible for middle school attendees and 90.5 percent for senior high. While criterion levels established by the proposal were not reached, these rates of attendance closely approximate those for nonprogram students at the middle and senior high levels - 92.8 and 92.5 percent respectively.

Student performance objectives involved administration of the Iowa Tests of Basic Skills and Iowa Tests of Educational Development on a pre/post basis as a measure of growth. Criteria for achievement included the amount of gain in the normal curve equivalent score. On the reading comprehension subtest, established criteria were exceeded when weighted averages were computed for grades 2-5 and 1-3. Criteria were not reached for grades 4-5, 6-8 and 9-12.

Two conditions that may have adversely affected achievement gain during 1987-88 were:

(a) The Des Moines Plan lab programs were modeled after the district's Chapter I and Chapter II Programs; however, one third of the buildings involved in the lab programs had not participated in the Chapter programs. Although inservice training was part of the implementation process, unfamiliarity with the model and delivery system could have had an adverse effect on achievement; and

(b) The Des Moines Plan did not officially begin until January of 1988 following initial administration of checkpoints. This resulted in a considerable shift in the student population at mid year as some students were exited from the program and others were entered. The end result was that pre/post scores were available and included in evaluation results for students that may have received instructional benefits for a shorter block of time than what would be expected. This would be particularly true for students at grade levels in which all pupils complete the Iowa Tests of Basic Skills or Iowa Tests of Educational Development in the fall. This condition bears mentioning though an assumption is that the effect of it on the overall results for the program is probably slight.

Condition (a) should be alleviated with the passage of time. Steps will be taken during the 1988-89 school year to eliminate test scores on the outcome measure for students that have not been served for an established length of time.

While there were at least two instances in which proper documentation to evaluate process and performance objectives was not submitted (noted in recommendations section), it appears from the evaluation that The Des Moines Plan Reading/Writing Program was implemented as called for in the proposal.

### RECOMMENDATIONS

1. The Supervisor of the Des Moines Plan should reassess the usefulness of the Principal's Report of Des Moines Plan Supervision in the operation of this program. If this type of report is deemed useful, steps should be taken to ensure the more timely and accurate completion of this form.
2. Program and performance objectives related to the Writing to Read Program should be separated from those that apply to the elementary Reading/Writing Lab Program. The Writing to Read Program is a distinct program that serves non-Des Moines Plan students as well as those that participate in the lab classes. In order to highlight this program, it would be best to treat it as a separate entity.
3. It is recommended that the Des Moines Plan Supervisor take action to ensure that valid results may be obtained from administration of an attitude instrument to all individuals for whom it is intended. The value of a pre/post measure is severely compromised when difficulty occurs in matching results from the pre and post administrations.
4. It is recommended that continued emphasis be applied to encourage the improvement of student attendance. It would also be feasible to revise the objective for the senior high program so that it is consistent with the middle school objective in comparing attendance of program with nonprogram students.
5. It is recommended that alternative methods for obtaining the perceptions of parents about the program be considered. It might be feasible to have an opinionnaire or other appropriate instrument completed at conference time or at another school activity that tends to be well attended by parents. Costs of designing, printing and mailing an instrument to measure perceptions are not warranted unless an adequate rate of return is encountered.

6. The development of the process for measuring student performance using a locally developed objectives based instrument rather than a norm referenced test should be continued. Several conditions must be met in order to do this, but it is probable that benefits would be gained from measuring growth using an instrument that is closely matched with the district curriculum.
7. Consideration should be given to limiting the involvement of the Department of Evaluation, Research and Testing in its monitoring of certain ongoing activities that are well incorporated into this program. Examples would include existence of Individual Educational Plans and lab schedules which are monitored on a regular basis by The Des Moines Plan consultants.

Appendix RW, M - A

Principal's Report of Des Moines Plan Supervision





50-104

Appendix RW, M - B

Reading/Writing, Mathematics Lab Program Parent Survey

Department of Evaluation and Research  
Des Moines Public Schools  
1800 Grand Avenue  
Des Moines, Iowa 50307-3882

April 15, 1988

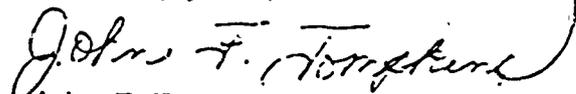
Dear Parent:

The school district conducts an evaluation of The Des Moines Plan each year. As part of this process, we are interested in obtaining input and suggestions from family members of students who have participated in The Des Moines Plan during the 1987-88 school year. We use this information when planning the program in future years.

We would greatly appreciate it if you would take a few minutes to complete the attached survey and return it in the postage paid envelope by May 2, 1988.

Thank you for your cooperation.

Sincerely yours,



John F. Tompkins  
Program Evaluator

Atch  
Parent Survey, Des Moines Plan, 1987-1988

PARENT SURVEY  
DES MOINES PLAN  
1987-1988

Please indicate the extent to which you agree with the following statements by circling the appropriate response:

1. I am satisfied with the information that I have received about the Des Moines Plan.

Strongly Disagree      Disagree      No opinion      Agree      Strongly Agree

2. I am satisfied with the process for selecting students for participation in The Des Moines Plan.

Strongly Disagree      Disagree      No opinion      Agree      Strongly Agree

3. Personal contacts between the school and home are an important component of this program. Which of the following types of communication have you had with your child's Des Moines Plan teacher during the past school year? (check all that apply).

- Home visit from The Des Moines Plan teacher
- Scheduled school conference with The Des Moines Plan teacher
- Des Moines Plan sponsored activities/meetings at the school
- Telephone calls from The Des Moines Plan teacher

4. Which method of personal contact between you and The Des Moines Plan teacher do you prefer? (Please choose one method that you feel is best)

- Home visit from The Des Moines Plan teacher
- Scheduled school conference with The Des Moines Plan teacher
- Des Moines Plan sponsored activities/meetings at the school
- Telephone calls from The Des Moines Plan teacher
- I have no particular preference for a certain method.

PLEASE COMPLETE THE QUESTIONS ON THE REVERSE SIDE OF THIS SHEET.

The District Parent Advisory Council provides an opportunity for members and parents to receive important information about The Des Moines Plan. It also provides an opportunity for parents to voice concerns or make suggestions about the program.

5. What is the best method for informing you about the council and its activities? (Please check one method)

Telephone calls

Letters

Brochures

Public meetings

Other Please describe. \_\_\_\_\_

6. What is the best way for you to communicate with the advisory council? (Please check one method)

By telephone

Through a building representative

By attending a council meeting

By responding to a survey

Other. Please describe. \_\_\_\_\_

7. What kind of information provided through The District Advisory Council would be most useful to you? (Please check one method)

Information on how students are selected for the program

Description of the program and how it operates

Information pertaining to evaluation of the program

Information on learning activities that can be done at home.

Calendars indicating activities related to The Des Moines Plan that occur during the school year.

Brochures/handbook

Please feel free to make any comments about the program below:

PLEASE RETURN THIS QUESTIONNAIRE IN THE POSTAGE PAID ENVELOPE PROVIDED BY MAY 2, 1988. THANK YOU FOR YOUR ASSISTANCE.

51-105

Appendix RW, M - C

Reading/Writing, Mathematics Lab Program Attitude Scale

SELF-EVALUATION  
(Secondary)

Name \_\_\_\_\_ Grade \_\_\_\_\_

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

Directions:

Rate yourself 1, 2, 3, 4, or 5 on each of the items below.

Rating Scale:

- 1 = Never
- 2 = Seldom
- 3 = Sometimes
- 4 = Usually
- 5 = Always

My daily behavior includes: \_\_\_\_\_

- \_\_\_\_\_ completing work on time
- \_\_\_\_\_ handing in neat work
- \_\_\_\_\_ following directions
- \_\_\_\_\_ participating in class
- \_\_\_\_\_ listening to others
- \_\_\_\_\_ using class work time
- \_\_\_\_\_ working without disturbing others

My attitude in class is:

- \_\_\_\_\_ helpful
- \_\_\_\_\_ interested
- \_\_\_\_\_ respectful
- \_\_\_\_\_ improving
- \_\_\_\_\_ disruptive
- \_\_\_\_\_ disinterested
- \_\_\_\_\_ disrespectful
- \_\_\_\_\_ a problem

Report of Evaluation:

MATHEMATICS LAB PROGRAM

1987-88

Department of Evaluation, Research, and Testing

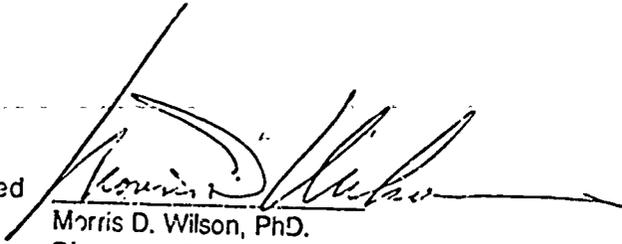
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Director of Evaluation, Research and Testing

October 20, 1988

## INTRODUCTION

### Program Description

#### Philosophy and Goals

The underlying philosophy of the mathematics lab program is that mathematics is of the utmost importance to the education of children, not only for its utilitarian values, but also for its use in teaching logical thinking and problem solving.

According to statements in the chapter of the official Des Moines Plan guidelines entitled

"Philosophy of the Program," achievement in mathematics is improved when:

- (a) models are used by students as well as by instructors;
- (b) teacher expectations are high;
- (c) teaching techniques help students to understand concepts;
- (d) understanding precedes drill;
- (e) instruction is planned to meet student's needs;
- (f) instruction is based on sequential learning objectives;
- (g) parent involvement and interest are high; and
- (h) teaching objectives for mathematical skills go beyond computation to include problem solving applications.

Five goals were identified for the mathematics program during the 1987-88 school year. They were:

- (1) students will show growth in achievement as measured by pre and post tests;
- (2) lab teachers new to the program will be assisted through inservice to learn teaching strategies which use manipulatives;
- (3) all lab teachers will participate in inservice sessions designed to enhance the program and share teaching strategies with classroom mathematics teachers;
- (4) lab teachers will implement computer-assisted instruction as a supplement to the existing curriculum.

(5) teaching objectives and educational plan forms will be reviewed. Recommended changes will be timed to coincide with the new textbook adoption or with adoption of a computer management system.

#### Instructional Model

The Chapter I Program is the instructional model used in the mathematics labs. This model includes small group instruction, diagnosis, mastery learning approaches, individual educational plans, a highly motivational supplemental curriculum (including manipulatives), coordination with classroom teachers and district curriculum, parental involvement, inservice and support, computerized record keeping and effective teaching strategies.

#### Identification Procedures

Identification of students in need of additional instruction is assured through checkpoints. The tests are a check to see at what point students are mastering those subjects for their appropriate grade level. The tests are given in grades 1, 3, 5, 8 and 11. There were 37.75 fulltime equivalent teaching positions in grades 1-5; 8.2 teaching positions in grades 6-8; and 4.8 positions in grades 9-12. At the end of the school year, 1,787 students were served in the mathematics labs at the elementary level, 452 were served in the middle school program and 126 were served in the senior high program.

#### Budget and Expenditures

The budgetary information for the Mathematics Lab Program for the 1987-88 school year was provided by The Des Moines Plan Supervisor in October, 1988. Figure M- 1 below indicates the funds allocated and expended in the Mathematics Lab Program for various line items included in the budget. The total appropriation for the Mathematics Lab Program was \$2,195,093.00. This was provided through the following sources: Educational Improvement Grant, Dropout Prevention, Budget-Review, Chapter II, Chapter I and the district's general fund. The program abstract indicates the allocations from each funding source to the overall Des Moines Plan. Due to the method in which budgetary records are maintained, it would have been an extremely time consuming task to determine the allocation to this program only from each separate funding source. Therefore, only the total amount allocated is reported for each line item.

Figure M-1. Budget and Expenditures Mathematics Lab Program 1987-88

Category	Amount Allocated	Expenditure
Salaries	\$1,589,415	\$1,324,407
Fixed Charges	200,394	200,394
Administration	25,968	11,980
Indirect Costs	35,562	35,562
Parent Component	1,875	1,786
Evaluation	16,365	16,365
Software/Materials/Supplies	90,609	95,095
Inservice	54,350	26,769
Telephone	1,200	1,299
Mileage	2,250	1,776
Computers	165,605	251,873
Classroom Reconfiguration	11,500	11,485
<b>TOTAL</b>	<b>\$2,195,093</b>	<b>\$1,978,793</b>

\* As reported by the Des Moines Plain Supervisor, October, 1988

During the 1987-86 school year, \$1,978,793 was expended to operate the Mathematics Lab Program. This represents 90.1 percent of the amount allocated. The majority of the unspent funds are eligible for carryover to be used during 1988-89. It should be noted that due to the complexity of the funding mechanism and the system used to maintain budget documents, laborious procedures were necessary in order to generate the budget information in the above format.

## PROCESS AND PERFORMANCE OBJECTIVES

### Elementary Mathematics Lab Program

#### Objective II B1

*The program coordinator will organize and maintain an accountability file and provide copies of data to support the evaluation of all objectives as documented by accountability files maintained in the project office and the Department of Evaluation, Research and Testing.*

#### Results

Duplicate accountability files were maintained in the Des Moines Plan office and the Department of Evaluation, Research and Testing during the 1987-88 school year. Periodic checks were conducted during the school year to assure that data to evaluate program objectives were being collected. The data were submitted to the Department of Evaluation, Research at the end of the program year.

#### Objective II B2

*By November 27, 1987, elementary principals will have monitored, by classroom visits, the activities of all lab teachers and classroom teachers to assure that lab students are receiving direct mathematics instruction from the classroom teachers as well as from lab staff as documented by the Report of Des Moines Plan Supervision, submitted to the Executive Director of Elementary Education, Des Moines Public Schools, or the Superintendent of Schools, Des Moines Catholic Diocese, by December 4, 1987.*

#### Evaluation Method

The Principal's Report of Des Moines Plan Supervision submitted by each building principal was examined to determine evidence that lab students were receiving classroom as well as lab instruction.

#### Results

The Principal's Report of Des Moines Plan Supervision is an annual report submitted by elementary principals in December to document that Des Moines Plan lab students are receiving instruction from classroom teachers and that joint planning is occurring between classroom and Des Moines Plan

teachers. A copy of this form appears in Appendix R/W, M- A. Documentation is gathered by principals observing a regular classroom that includes Des Moines Plan students and by observing planning sessions between Des Moines Plan and classroom teachers. The report serves the same purpose as and was an outgrowth of the Principal's Report of Chapter I Supervision that had been completed by elementary principals of Chapter I buildings for a number of years.

Several discrepancies were noted concerning this report during the 1987-88 school year. They were as follows:

- (1) No report was submitted by the principals of five buildings. This occurred despite the fact that the Des Moines Plan Supervisor sent a letter to all elementary principals dated March 3, 1988, to remind those that had not completed the report at that time to do so;
- (2) At four buildings, the purpose of the observation was apparently unclear as the principals at those sites observed lab classes rather than regular classrooms; and
- (3) Observations were made after the specified date in eleven cases; in two cases, not until March and April of 1988.

Given that some principals had not been required to submit this form previously, i.e. principals of buildings not served by Chapter I, it is not surprising that the record of submission and accuracy for this document was not as good as in previous years. Steps that might be taken to improve this situation would include more detailed instructions concerning completion of the form and increased efforts to follow-up in situations where the form is submitted inaccurately or not at all. In addition, a decision needs to be made as to the requirement for nonpublic school principals to be involved in this activity. It would seem difficult for these individuals to observe particularly the joint planning efforts between Des Moines Plan and classroom teachers when the Des Moines Plan teachers no longer serve students from the nonpublic buildings at the non-public school site.

Objective III A1

*At the end of the instructional year, lab students, grades 1-5, who have been enrolled in the program for at least 80 days will demonstrate an increase in the mean percentile rank from pretest to post*

test on the mathematics composite score of the Iowa Tests of Basic Skills (ITBS) as documented by scores from fall and spring testing, submitted to the program evaluator at the end of the instructional year.

Objective III A2

At the end of the instructional year, lab students, grades 2-5, who have been enrolled in the program for at least 80 days will demonstrate a proficiency on the mathematics composite score of the ITBS, such that the average gain in normal curve equivalents (NCEs) will be at least 6.0 as documented by scores from fall and spring testing, submitted to the program evaluator at the end of the instructional year.

Objective III A3

At the end of the instructional year, lab students, grade 1, who have been enrolled in the program for at least 80 days will demonstrate a proficiency on the mathematics composite score of the ITBS, such that the average gain in NCEs will be at least 3.0 as documented by scores from fall and spring testing, submitted to the program evaluator at the end of the instructional year.

Results

Tables M-1 and M-2 present data necessary to evaluate objectives III A1-3. Narrative pertaining to these objectives follow the tables.

Table M-1. Total Mathematics Score Iowa-Tests of Basic Skills

Grades 1-5 (Percentile Rank)

<u>Grade</u>	<u>N</u>	<u>Pre</u>	<u>Post</u>	<u>Gain</u>
1	292	16	24	+8
2	237	19	20	+1
3	267	23	25	+2
4	163	23	27	+4
5	198	29	32	+3

Table M-2. Total Mathematics Score Iowa Tests of Basic Skills

Grade	N	Grades 1-5 (Normal Curve Equivalents)		
		Pre	Post	Gain
1	92	29.1	34.8	+5.7
2	237	31.2	32.4	+1.2
3	267	34.3	35.6	+1.3
4	163	34.2	37.1	+2.9
5	198	38.4	39.9	+1.5
2-5	865	34.4	36.0	+1.6
1	292	29.1	34.8	+5.7

### Results

According to Table M-1, students at all grade levels showed an increase in the percentile rank from pre to post testing on the Iowa Tests of Basic Skills. The largest increase occurred for students in grade 1.

Table M-2 reports the pre and post Normal Curve Equivalent scores for each of grades 2-5 and a weighted average. The Normal Curve Equivalent (NCE) scale is similar to the percentile scale except that it is an equal interval scale, meaning that the distances between units have been equalized. This allows for averaging of scores which is not feasible with percentile ranks. A weighted average gain was computed due to the difference in numbers of students at the various grade levels. The weighted average gain for students in grades 2-5 was 1.6 NCE units which fell below the established criterion of 6.0.

Objective III A3 applies specifically to students in grade 1. Students at this level achieved a gain of 5.7 NCE units compared to a criterion of 3.0.

### Objective IV B1

*By September 18, 1987, lab teachers will have selected students, grades 1-5 as documented by lists of students (by grade level) who were selected for instruction and the rank order checklist, submitted to the program coordinator with September accountability data.*

### Evaluation Method

The Des Moines Plan was not officially implemented until January of 1988 following the initial administration of checkpoints. However, as staff was hired at the beginning of 1987-88, students were selected for instruction based on criteria established for identification by the Chapter I Programs. These criteria were established with the idea of being able to rank order students starting with those "in greatest need" of assistance. Students were then selected in rank order until classes were filled.

Teachers completed a Des Moines Plan Pupil Enrollment Form for each student as he/she was selected for the program. The information on this form was entered on-line to what had been referred to as the "Chapter I database," now expanded to accept student records from all buildings.

### Results

An initial set of class lists were produced from the database on November 17, 1987. Table M-3 shows the number of students that were originally identified at each center by grade level for the Reading/Writing Labs.

Table M-3 . Number of Students Served Des Moines Plan Mathematics Labs (Elementary)

Building	Number of Students Served By Grade Level					Total
	1	2	3	4	5	
Adams	07	11	11	10	06	45
All Saints	06	03	00	01	01	11
Brooks	08	16	17	08	16	65
Cattell	12	06	06	09	08	41
Douglas	10	02	02	00	01	15
Edmunds	19	12	14	10	17	72
Findley	16	09	06	02	10	43
Garton	09	02	03	05	03	25
Granger	15	10	10	03	07	45
Greenwood	08	10	05	05	06	34
Hanawalt	06	03	04	05	05	23
Hillis	04	15	12	04	09	44
Holy Fam 2	00	00	05	00	00	05
Howe	12	07	09	08	04	40
Hubbell	04	02	03	01	01	11
Jackson	13	06	10	08	07	44
Jefferson	06	05	05	05	01	22
King	21	33	00	00	00	54
Longfellow	13	12	19	14	05	63
Lucas	18	13	16	10	11	68
Mann	09	03	05	02	02	21
McKee	10	06	11	06	10	43
McKinley	12	10	06	08	08	44
Mitchell	02	04	08	04	03	21
Monroe	00	00	20	13	14	47
Moore	08	08	06	06	04	32
Moulton	30	20	06	04	06	66
Oak Park	09	13	12	06	04	44
Park Avenue	10	12	20	7	12	61
Perkins	00	00	15	15	14	44
Phillips	09	05	07	05	00	26
Pleasant Hill	04	00	03	01	07	15
Rice	10	13	00	00	00	23
St. Anthony	00	01	00	01	00	02
Stowe	18	20	10	10	09	67
Studebaker	04	04	03	00	00	11
Wallace	10	12	10	06	04	42
Watrous	06	02	09	08	08	33
Willard	23	12	17	09	07	68
Windsor	03	03	02	03	03	14
Woodlawn	09	12	07	05	05	38
Wright	10	02	07	01	04	24
TOTAL	403	339	344	228	242	1556

As can be seen from Table M-3 1,556 students were initially identified for participation in Des Moines Plan Mathematics lab classes at the elementary level. A full time teacher, according to the program proposal, could serve between 45 and 55 students.

Efforts are currently being made to develop a revised Des Moines Plan enrollment document that will reduce the amount of data entry that is currently performed by Des Moines Plan clerical staff. This step should allow for generation of initial class lists in a much more timely fashion. This objective was achieved as the actual process of student selection was completed by the specified date.

#### Objective IV B2

*During the instructional year, lab teachers will develop and maintain an IEP for each student receiving lab instruction as documented by IEPs on file with the lab teachers.*

#### Evaluation Method

Des Moines Plan consultants examined Individual Educational Plans during visits to program sites. At the end of the first semester, the consultant initialed a form entitled "Des Moines Plan Educational Plan Summary Sheet" which indicated that each IEP had been examined and was properly written.

#### Results

Individual Educational Plans were developed and maintained for each Des Moines Plan student. The educational plan includes a listing of objectives to be introduced to each student and various teaching strategies that will be employed. One of the functions of the Des Moines Plan consultants is to monitor the recording of information for each student on the educational plan. The consultant initials the educational plan to indicate that the necessary information has been recorded as of a particular date and that the plan has been implemented.

#### Objective IV B3

*During the instructional year, lab teachers will instruct 45-55 students for 25-30 minutes daily as documented by lab schedules, submitted to the program coordinator by September 18, 1987, and resubmitted each time a schedule change is made.*

### Evaluation Method

Lab teaching schedules were submitted by all Des Moines Plan teachers as classes began in mid September. Revisions were submitted as necessary during the school year.

### Results

Lab teaching schedules were submitted by all Des Moines Plan teachers as classes began in September. Revisions were submitted as necessary. The schedules indicate the lab teaching times and number of students served in each group. Other information appearing on the schedule includes the time that direct instruction is provided by the classroom mathematics teacher and the time that the lab teacher and classroom teacher engage in planning sessions. The schedules indicate that lab classes met from 25-30 minutes and that a fulltime teacher served from 45-55 students as specified in the objective. Instructional group sizes ranged from 1 to 8 for lab classes according to the schedules. Much of the information on the schedules is verified at least once during the year when the building principal conducts the observations necessary to complete the Principals Report of Des Moines Plan Supervision (see objective II B1 for a discussion of this document).

### Objective IV B4

*By the end of the first semester, lab teachers will have had personal conferences with the parents/guardians of at least 80 percent of the total number of lab students, grades 1-5 who have been enrolled in the program for at least 20 days. These conferences will be conducted at the homes of, or at places selected by, the parents/guardians as documented by attendance/parent contact reports submitted with January accountability data to the program coordinator, program evaluator and building principals.*

### Objective IV B5

*By the end of the second semester lab teachers will have had personal conferences with the parents/guardians of at least 80 percent of the total number of lab students, grades 1-5 who have been enrolled in the program for at least 20 days during the second semester. These conferences will be conducted at the homes of the parents/guardians at school or by telephone as documented by*

attendance/parent contact reports, submitted with May accountability data to the program coordinator, program evaluator and building principals.

### Results

Table M-4 provides the data necessary to evaluate objectives IV B4 and IV B5, both of which concern contacts with parents of students in Des Moines Plan labs.

Table M-4. Contacts with Parents Des Moines Plan Mathematics Lab Program

Grades 1-5 1987-88

N	<u>1st Semester</u>		N	<u>2nd Semester</u>	
	Percent Contacted	Total Contacts		Percent Contacted	Total Contacts
1639	84.4	2103	1436	84.4	2182

During the first semester, objective IV B4 specifies that lab teachers will have personal contact with the parents of 80 percent of the students enrolled for a period of 20 days or more. Personal contact implies a face to face contact between the parent and teacher through a home visit by the teacher or a visit to school by the parent. Telephone calls or letters sent to the home do not count as personal contacts during the fall semester. During the first semester, parents of 84.4 percent of the mathematics lab students were contacted thereby surpassing the established criterion. Objective IV B5 also specifies that parents of 80 percent of the students enrolled 20 days or more would be contacted personally during the second semester, but allows telephone calls made to the home to be counted as personal contacts. During the second semester, according to Table M- 4, parents of 84.4 percent of the mathematics lab students were contacted, thereby surpassing the criterion of 80 percent by the same margin as during the first semester.

The table also shows a total of 4,285 contacts (all methods counted) made during the year to parents of lab students. This would seem to represent a continuation of the long existing trend in the district's Chapter I Programs of maintaining a high level of contact with parents of lab students.

Objective IV B6

*By October 2, 1987, lab teachers at each building will have submitted the name of a parent to be a representative on the District Parent Advisory Council as documented by parent names submitted to The Des Moines Plan Supervisor.*

Results

A list of representatives to the Chapter I/Des Moines Plan District Parent Advisory Council was received by the Department of Evaluation, Research and Testing on March 10, 1988. The list itself was not dated, making it impossible to determine when it was developed. The list contained names, addresses and telephone numbers of 59 building representatives and 3 community representatives. It should be noted that while some buildings had a number of representatives listed, a total of ten elementary buildings were not represented. In as much as the intent of this process objective was to have representation on the council from each center involved with The Des Moines Plan, this objective was not achieved.

Objective VI A1

*Near the end of the instructional year, a parent survey will be conducted by the program evaluator as documented by a summary of responses obtained from a parent survey conducted by the program evaluator.*

Evaluation method

During the 1987-88 school year, the parent survey that had been used for a number of years in the Chapter I Program was completely revised. This was done in response to a recommendation made in the 1986-87 Report of Evaluation for Chapter I Reading and Mathematics Programs. This recommendation suggested that a more comprehensive questionnaire be designed that would hopefully not only be a better instrument for gathering information from parents about their perceptions of the new Des Moines Plan, but would also yield a better rate of return than had been experienced in the past.

The seven item revised instrument, a copy of which appears in Appendix R/W, M- B was sent to a 10

percent random sample of parents of all Des Moines Plan lab students on April 15, 1988. Three hundred eighty five questionnaires were sent out via U.S. mail, 61 or 15.8 percent of which were returned. While this represents a slightly better rate of return than had been experienced in previous years, it is nonetheless insufficient for making generalizations to the population of Des Moines Plan parents. Results of the survey are summarized in the statements below with the qualification that generalizations cannot be made from the responses of this sample to the population at large.

### Results

- Forty five of the 61 respondents (73.8%) agreed or strongly agreed that they were satisfied with information they had received about the Des Moines Plan.
- The process for selecting students for participation in this program satisfied 36 (61.1%) of the 59 parents responding to this question. Thirteen (22.0%) were not satisfied to some degree.
- Of the various ways in which parents are contacted by Des Moines Plan lab teachers, 64.0 percent of the respondents preferred scheduled conferences at school with The Des Moines Plan teacher. Only 2 (4.0%) indicated preference for home visits by the teacher while 9 (18.0%) preferred telephone calls.
- Thirty-one respondents (67.4%) felt that letters provided the best avenue for obtaining information about the District Parent Advisory Council and its activities.
- Over one half (56.3%) of the respondents felt that brochures and information about learning activities for use at home would be the most useful items that could be provided through the Parent Advisory Council.

Although the return rate improved slightly from that in previous years (using Chapter I surveys), the number of returns via U.S. mail was still far from that necessary to allow for generalizations to be made from the sample to the population. This is unfortunate as costs are involved in designing, printing and mailing such an instrument. Given this situation, it would seem feasible to consider giving parents an opportunity to complete this survey during conference time as many participate in this activity. This would increase the response rate and could be set up in a way that would still ensure anonymity of

respondents.

## PROCESS AND PERFORMANCE OBJECTIVES

### Middle School Mathematics Lab Program

#### Objective II B1

*The program coordinator will organize and maintain an accountability file and provide copies of data to support the evaluation of all objectives as documented by accountability files maintained by the program coordinator and the Department of Evaluation, Research and Testing.*

#### Results

Duplicate accountability files were maintained in the Des Moines Plan Office and the Department of Evaluation, Research and Testing during the 1987-88 school year. Periodic checks were conducted during the school year to assure that data to evaluate program objectives were being collected. The data were submitted to the Department of Evaluation, Research and Testing at the end of the program year.

#### Objective III A1

*At the end of the instructional year, lab students, grades 6-8 who have been enrolled in the program for at least 80 days will demonstrate an increase in the mean percentile rank from pre to post test on the mathematics composite score of the Iowa Tests of Basic Skills (ITBS) as documented by scores from fall and spring testing submitted to the program coordinator at the end of the instructional year.*

#### Objective III A2

*At the end of the instructional year, lab students, grades 6-8 who have been enrolled in the program for at least 80 days will demonstrate a proficiency on the mathematics composite score of the ITBS, such that the average gain in normal curve equivalents (NCEs) will be at least 3.0 as documented by scores from fall and spring testing, submitted to the program evaluator at the end of the instructional year.*

#### Results

Tables M-5 and M-6 present results for students in grades 6-8 on the mathematics composite subset of the Iowa Tests of Basic Skills.

Table M-5. Total Mathematics Score Iowa Tests of Basic Skills

## Grades 6-8 (Percentile Rank)

<u>Grade</u>	<u>N</u>	<u>Pre</u>	<u>Post</u>	<u>Gain</u>
5	115	25	32	+7
7	97	24	27	+3
8	79	22	25	+3

Table M-6. Total Mathematics Score Iowa Tests of Basic Skills

## Grades 6-8 (Normal Curve Equivalent)

<u>Grade</u>	<u>N</u>	<u>Pre</u>	<u>Post</u>	<u>Gain</u>
6	115	35.8	40.0	+4.2
7	97	34.9	37.0	+2.1
8	79	33.8	35.9	+2.1
6-8	291	35.0	37.9	+2.9

According to Table M-5, students demonstrated an increase in percentile rank at each grade level as specified in Objective III A1. The weighted gain in the average Normal Curve Equivalent (NCE) score as shown in Table M-6 was 2.9 NCE units. This is only 0.1 NCE units below the criterion expressed in objective III A2.

Objective III A3

*By the end of the instructional year, lab students, grades 6-8, who have been enrolled in the program for at least 80 days will display a more positive attitude toward learning than they displayed at the time of their entrance into the program as documented by the Pre and Post Attitude Toward Learning summary, submitted to the program evaluator at the end of the instructional year.*

### Evaluation Method

Des Moines Plan students at the middle school level completed a pre/post self evaluation instrument designed to measure attitude toward various academic activities.

### Results

Several problems arose in the administration of this instrument during the 1987-88 school year. One of those involved the fact that it was not possible to determine whether the rating scales received were administered as part of a reading/writing or mathematics lab class. Some of the students may have participated in both programs while others were in one program or the other.

Because of this situation, tabulated results, narrative and recommendations have been placed under objective III A3 in the middle school reading/writing section of this report. If the Des Moines Plan proposal continues to list separate performance objectives for reading/writing and mathematics students involving attitude measure, it will be necessary to submit the documents in such a fashion that allows for a separate tabulation of the results.

### Objective III A4

*During the instructional year, lab students, grades 6-8, who have been enrolled in the program for at least 80 days will respond positively to the program, as indicated by their rate of attendance being equal to or greater than that of all lab students in the same schools as documented by attendance/parent contact reports submitted with May accountability data to the program evaluator and program coordinator.*

### Results

Objective III A4 states that the attendance of Des Moines Plan lab students enrolled in the program for 80 days will display a rate of attendance that is equal to or better than that of nonprogram students in the same schools. Emphasis on the importance of school attendance has been a priority in the Chapter I Program since its inception and continues to be considered as such in The Des Moines Plan.

Table M-7 displays the attendance rate (indicated by days attended as a percentage of days possible for attendance) for Des Moines Plan and non Des Moines Plan students at all schools.

Table M-7. Attendance Rate Des Moines Plan/Non Des Moines Plan  
Middle School Students 1987-88

<u>Building</u>	<u>Des Moines Plan</u>		<u>Non-Des Moines Plan</u>	
	<u>N</u>	<u>Percent</u>	<u>N</u>	<u>Percent</u>
Brody	30	94.6	609	91.7
Callanan	39	92.2	587	93.7
Goodrell	43	88.4	732	92.5
Harding	122	87.0	674	92.8
Hiatt	63	90.7	483	91.3
Hoyt	54	89.1	493	92.8
McCombs	22	83.9	579	93.2
Meredith	36	89.9	621	94.6
Merrill	34	93.7	501	94.6
Weeks	51	91.5	621	93.1
All Buildings	443	89.8	5900	93.1

As indicated by Table M-7, the attendance rate for Des Moines Plan mathematics students at the middle school level was 89.8 percent compared to 93.1 percent for non-lab students. At Brody Middle School, Des Moines Plan students displayed an attendance rate higher than that for non-lab students. As the overall attendance rate for Des Moines Plan students was lower, this objective was not achieved.

#### Objective IV B1

*The lab teacher(s) in each building served by the program will identify eligible student participants by September 18, 1987, as documented by class lists (by grade level) of identified students and the eligibility checklist, submitted to the program coordinator with September accountability data.*

#### Evaluation Method

The Des Moines Plan was not implemented until January of 1988 following the first administration of

checkpoints. However, as staff was hired at the beginning of 1987-88, students were tentatively identified and served beginning in September by the date specified in this objective. An initial set of class lists was produced from the database on November 17, 1987. Table M-8 shows the number of students that were originally identified at each attendance center by grade level for the mathematics labs.

Table M-8. Numer of Middle School Students Served Des Moines Plan  
Mathematics Labs as of November 17, 1987

Building	Number of Students Served By Grade Level			Total
	6	7	8	
Brody	6	11	8	25
Callanan	9	9	6	24
Goodrell	8	8	10	26
Harding	45	44	29	118
Hiatt	24	20	18	62
Hoyt	14	10	14	38
McCombs	8	10	7	25
Meredith	12	11	8	31
Merrill	10	5	8	23
Weeks	20	21	14	55
<b>TOTAL</b>	<b>156</b>	<b>149</b>	<b>122</b>	<b>427</b>

As can be seen by Table M-8, 427 students were initially identified for participation in Des Moines Plan mathematics lab classes at the middle school level. Efforts are currently being made to develop a revised Des Moines Plan enrollment document that will reduce the amount of data entry performed by the Des Moines Plan clerical staff. This step should allow for generation of initial class lists in a much more timely fashion. This objective was achieved, as the actual process of student selection was completed by the specified date.

Objective IV B2

*Lab teachers will develop and maintain an Individual Educational Plan (IEP) for each participating student as documented by IEPs on file with the lab teachers.*

### Evaluation Method

Des Moines Plan consultants examined Individual Educational Plans during visits to program sites. At the end of the first semester, the consultant initialed a form entitled "Des Moines Plan Educational Plan Summary Sheet" which indicated that each IEP had been examined and was properly written.

### Results

Individual Educational Plans were developed and maintained for each Des Moines Plan student. The educational plan includes a listing of objectives to be introduced to each student and various teaching strategies that will be employed. One of the functions of the Des Moines Plan consultants is to monitor the recording of information for each student on the educational plan. The consultant initials the educational plan to indicate that the necessary information has been recorded as of a particular date and that the plan has been implemented.

### Objective IV B3

*Lab teachers will instruct 55-75 students. Students will receive instruction for an average of 45 minutes daily as documented by mathematics schedules, submitted to the program coordinator by September 18, 1987, and resubmitted each time a schedule change is made.*

### Evaluation Method

Lab teaching schedules were submitted by all Des Moines Plan teachers as classes began in mid September. Revisions were submitted as necessary. These documents were forwarded to the Department of Evaluation, Research and Testing at the end of the school year.

### Results

The schedules indicate the lab teaching schedule and number of students served in each group. Other information appearing on the schedule includes the time that the lab teacher and various classroom teachers plan jointly. Lab classes at the middle school level met for one class period or approximately 45 minutes daily. Instructional groups ranged in size from 5 to 15 students. A fulltime teacher could serve up to 75 students.

Objective IV B4

*By the end of the instructional year, lab teachers will have had personal contact and/or conferences with the parents/guardians of at least 50 percent of the total number of students, grades 6-8, who have been enrolled in the program for at least 20 days as documented by Attendance/Parent Contact Reports, submitted to the program coordinator, program evaluator and building principals by the end of the instructional year.*

Results

Objective IV B4 states that parents of at least 50 percent of the students enrolled in the Mathematics Lab Program for 20 or more days would be contacted personally at some time during the school year. The criteria established for parent contact at this level were less stringent than at the elementary level which specified contact with parents during each semester. "Personal contact" is defined as a visit by the teacher to the home of a student, a visit by the parent to school or a telephone call made by the teacher to the parent. Documentation submitted revealed that personal contacts were made to the parents of 67.0 percent of the students enrolled 20 days or more thereby exceeding the specified criterion. A considerable range was noted among middle school attendance centers in the number of parent contacts made. At four centers, Callanan, Goodrell, Meredith and Metro, parents of less than 50 percent of the number of students served were contacted, while at Merrill Middle School, parents of all students were contacted during the school year.

Objective IV B5

*By the end of the instructional year, lab teachers will have completed one parent involvement activity as documented by Parent Activity Planning Sheets submitted to the program coordinator at the end of the instructional year.*

Results

Lab teachers submitted a document entitled Parent Activity Planning Sheet that contained information about activities provided for parents of students in the lab program. Generally, the activities involved inviting parents to visit the labs at a specified time at which they could see and participate in

various activities. In several cases, the use of computer workstations was demonstrated and parents were then encouraged to participate in a computer activity. In many cases, the activities were provided at either conference or open house time. Activity sheets indicating the occurrence of at least one parent activity were received from all middle schools with the exception of Hiatt. Except for this noted deficiency, Objective IV B5 was achieved

#### Objective VI A1

*Near the end of the instructional year, a parent survey will be conducted by the program evaluator as documented by a summary of responses obtained from a parent survey conducted by the program evaluator.*

#### Evaluation method

During the 1987-88 school year, the parent survey that had been used for a number of years in the Chapter I Program was completely revised. This was done in response to a recommendation made in the 1986-87 Report of Evaluation for Chapter I Reading and Mathematics Programs. This recommendation suggested that a more comprehensive questionnaire be designed that would hopefully not only be a better instrument for gathering information from parents about their perceptions of the new Des Moines Plan, but would also yield a better rate of return than had been experienced in the past.

The seven item revised instrument, a copy of which appears in Appendix RW, M -B was sent to a 10 percent random sample of parents of all Des Moines Plan lab students on April 15, 1988. Three hundred eighty five questionnaires were sent out via U.S. mail, 61 or 15.8 percent of which were returned. While this represents a slightly better rate of return than had been experienced in previous years, it is nonetheless insufficient for making generalizations to the population of Des Moines Plan parents. Results of the survey are summarized in the statements below with the qualification that generalizations cannot be made from the responses of this sample to the population at large.

#### Results

- Forty five of the 61 respondents (73.8%) agreed or strongly agreed that they were

satisfied with information they had received about the Des Moines Plan.

- The process for selecting students for participation in this program satisfied 36 (61.1%) of the 59 parents responding to this question. Thirteen (22.0%) were not satisfied to some degree.
- Of the various ways in which parents are contacted by Des Moines Plan Lab teachers, 64.0 percent of the respondents preferred scheduled conferences at school with The Des Moines Plan teacher. Only 2 (4.0%) indicated preference for home visits by the teacher while 9 (18.0%) preferred telephone calls.
- Thirty-one respondents (67.4%) felt that letters provided the best avenue for obtaining information about the District Parent Advisory Council and its activities.
- Over one half (56.3%) of the respondents felt that brochures and information about learning activities for use at home would be the most useful items that could be provided through the Parent Advisory Council.

Although the return rate improved slightly from that in previous years (using Chapter I surveys), the number of returns via U.S. mail was still far from that necessary to allow for generalizations to be made from the sample to the population. This is unfortunate as costs are involved in designing, printing and mailing such an instrument. Given this situation, it would seem feasible to consider giving parents an opportunity to complete this survey during conference time as many participate in this activity. This would increase the response rate and could be set up in a way that would still ensure anonymity of respondents.

## PROCESS AND PERFORMANCE OBJECTIVES

### Senior High Mathematics Lab Program

#### Objective II B1

*During the instructional year, the coordinator will organize and maintain an accountability file and provide copies of data to support the evaluation of all objectives as documented by accountability files maintained by the program coordinator and the Department of Evaluation, Research and Testing.*

### Results

Duplicate accountability files were maintained in the Des Moines Plan office and the Department of Evaluation, Research and Testing during the 1987-88 school year. Periodic checks were conducted during the school year to assure that data to evaluate program objectives were being collected. The data were submitted to the Department of Evaluation and Research at the end of the program year.

#### Objective IIIA1

*At the end of the instructional year, lab students, grades 9-12, who have been enrolled in the program for at least 80 days will demonstrate an increase in the mean percentile rank from pre to post test on the quantitative thinking subtest of the Iowa Tests of Educational Development as documented by scores from fall and spring testing, submitted to the program evaluator at the end of the instructional year.*

#### Objective III A2

*At the end of the instructional year, lab students, grades 9-12, who have been enrolled in the program for at least 80 days will demonstrate a proficiency on the quantitative thinking subtest of the ITED, such that the average gain in normal curve equivalents (NCEs) will be at least 3.0 as documented by scores from fall and spring testing, submitted to the program evaluator at the end of the instructional year.*

### Results

Tables M-9 and M-10 report data on the quantitative (mathematics) subtest of the Iowa Tests of Educational Development.

Table M-9. Quantitative Thinking Iowa Tests of Educational Development

Grade	N	Grades 9-12 (Percentile Rank)		
		Pre	Post	Gain
9	82	11	13	+2
10	2	32	20	-12
11	No students served during 1987-88			
12	No students served during 1987-88			

Students in grade 9 showed an increase in percentile rank from 11 to 13. In grade 10, pre/post results were available for only 2 students (there were only 3 students at this level in the program). While a decrease in the percentile rank was observed, no further statements can be reasonably made due to the number of students in grade 10 involved in this measurement.

Table M-10. Quantitative Thinking Iowa Tests of Educational Development

Grade	N	Grades 9-12 (Normal Curve Equivalent)		
		Pre	Post	Gain
9	82	23.9	26.5	+2.6
10	2	40.0	32.3	-7.7
11	No students served in 1987-88.			
12	No students served in 1987-88.			

Students in grade 9 demonstrated a gain of 2.6 NCE units on the quantitative thinking subtest. In grade 10, a negative gain of 7.7 was observed. The grade 10 results may not be generalized, however as only two students completed a pre and post test at this level.

Objective III.A3

*By the end of the instructional year, lab students, grades 9-12, who have been enrolled in the program for at least 80 days will display a more positive attitude toward learning than they displayed at the time of their entrance into the program as documented by the Pre/Post Attitude Toward Learning*

*Summary, submitted to the program evaluator at the end of the instructional year.*

### Evaluation Method

Des Moines Plan students at the senior high level completed a pre/post self evaluation instrument designed to measure attitude toward various academic activities.

### Results

Several problems arose in the administration of this instrument during the 1987-88 school year. One of those involved the fact that it was not possible to determine whether the rating scales received were administered as part of a Reading/Writing or Mathematics Lab class. Some of the students may have participated in both programs, while others took part in one or the other.

Because of this situation, tabled results, narrative and recommendations have been placed under objective III A3 in the senior high reading/writing section of this report. If the Des Moines Plan proposal continues to list separate performance objectives for reading and mathematics students involving attitude measure, it will be necessary to submit the documents in such a fashion that will allow for a separate tabulation of the results.

### Objective III A4

*By the end of the instructional year, lab students will respond positively to the program, as indicated by a rate of attendance higher than the district average as documented by Attendance/Parent Contact Reports, submitted with May accountability data to the program coordinator and program evaluator.*

### Results

Table M-11 shows the attendance rate (days present as a percentage of days possible for attendance) for Des Moines Plan students at each senior high building and for the total senior high mathematics lab program. Also indicated is the attendance rate for all students at each senior high building and for all buildings combined to yield a district attendance rate.

Table M-11. Attendance Rate Des Moines Plan/Non Des Moines Plan  
Senior High School Students 1987-88

<u>Building</u>	<u>Des Moines Plan</u>		<u>All Students</u>	
	<u>N</u>	<u>Percent</u>	<u>N</u>	<u>Percent</u>
East	24	91.1	2291	91.8
Hoover	22	92.5	1219	94.4
Lincoln	40	86.2	2524	92.5
North	38	88.8	1052	91.6
Roosevelt	9	89.9	1558	92.9
All Schools	133	89.3	8644	92.5

As shown by Table M-11, the average attendance rate for all senior high students in the district was 92.5. This compared to an attendance rate of 89.3 for students in The Des Moines Plan mathematics labs. As the specification that Des Moines Plan students would display a rate of attendance higher than the district average was not met, this objective was not achieved.

A process objective in the middle school mathematics lab program states that the attendance rate of Des Moines Plan students will be compared to that of non-lab students in the same buildings. The senior high objective on the other hand does not specify the comparison group as being made up of only non-lab students, but instead uses the district average senior high attendance rate which is computed using the attendance records of all students including those in the program. For purposes of consistency and in order to better define the two groups, this objective should be revised to call for comparison of attendance rates between Des Moines Plan and non Des Moines Plan students.

Objective IV B1

*By September 18, 1987, lab teachers will have selected students, grades 9-12 as documented by lists of students (by grade level) who were selected for instruction and the rank order checklist,*

submitted to the program coordinator with September accountability data.

### Evaluation Method

The Des Moines Plan was not implemented until January of 1988 following the first administration of checkpoints. However, as staff was hired at the beginning of 1987-88, students were tentatively identified and served beginning in September by the date specified in this objective. An initial set of class lists was produced from the database on November 17, 1987.

### Results

Table M-12 shows the number of students that were originally identified at each attendance center by grade level for the mathematics labs.

Table M-12. Number of Students Served Des Moines Plan Mathematics Labs (Senior High)  
(As of November 17, 1987)

<u>Building</u>	<u>Number of Students Served By Grade Level</u>				<u>Total</u>
	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	
East	26	0	0	0	26
Hoover	15	0	0	0	15
Lincoln	26	1	0	0	27
North	34	0	0	0	34
Roosevelt	9	0	0	0	9
<b>TOTAL</b>	<b>110</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>113</b>

As can be seen from Table M-12, 113 students were initially identified for participation in Des Moines Plan mathematics lab classes at the senior high level. Efforts are currently being made to develop a revised Des Moines Plan enrollment document that will reduce the amount of data entry performed by The Des Moines Plan clerical staff. This step should allow for generation of initial class lists

in a much more timely fashion. This objective was achieved as the actual process of student selection was completed by the specified date.

Objective IV B2

*During the instructional year, lab teachers will develop and maintain group charts for students receiving lab instruction as documented by group charts on file with the lab teachers.*

Results

Group charts were maintained by each teacher serving senior high students in the mathematics lab program. The group charts served much the same purpose as the Individual Educational Plan (IEP) which is developed for students at the elementary and middle school level. The charts are used as a recordkeeping device to monitor the progress of students in the attainment of objectives that are a part of their individual program. Des Moines Plan consultants monitored the existence of the group charts at the time of regular visits to the buildings.

Objective IV B3

*During the instructional year, lab teachers will instruct 55-75 students daily as documented by lab schedules, submitted to the program coordinator by September 18, 1987, and resubmitted each time a schedule change is made.*

Results

Lab schedules were submitted by each senior high teacher during the month of September. Revisions were made throughout the year as needed. The schedule indicated the lab teaching schedule and the number of students served in each group.

Objective IV B4

*Every nine weeks, lab teachers will make personal contact with the parents/guardians of all students, grades 9-12, who have been enrolled in the program for at least 20 days as documented by Attendance/Parent Contact Reports, submitted with May accountability data to the program coordinator, program evaluator and building principals.*

### Evaluation Method

Objective IV B4 states that teachers will make personal contact with the parents/guardians of all students enrolled in the program for 20 days or more every nine weeks. The attendance/parent contact reports that lab teachers complete are submitted for each semester rather than each nine week period, however. Therefore, it is only possible to determine if such contact occurred during the entire semester which consists of two nine week periods.

### Results

Table M-13 provides information regarding contacts to parents of mathematics lab students at the senior high level.

Table M-13. Contacts with Parents Mathematics Lab Program (Grades 9-12) 1987-88

<u>First Semester</u>		<u>Second Semester</u>	
Number Enrolled	Percent	Number Enrolled	Percent
20 Days	Contacted	20 Days	Contacted
123	50.4	127	55.9

Contacts were made with parents of 50.4 percent of the students served during the first semester and 55.9 percent of those served during the second semester. As indicated previously, it was not possible to determine whether or not this objective was achieved. It should be noted that the number of contacts with parents of senior high mathematics students occupied a considerable range. At Roosevelt, virtually no contacts were reported during the entire year, while at North, 97.6 percent of the parents were contacted during the first semester and 100 percent were contacted during the second semester.

Objective VI A1

*Near the end of the instructional year, a parent survey will be conducted by the program evaluator as documented by the summary of responses obtained from the parent survey on file with the program evaluator.*

Evaluation Method

During the 1987-88 school year, the parent survey that had been used for a number of years in the Chapter I Program was completely revised. This was done in response to a recommendation made in the 1986-87 Report of Evaluation for Chapter I Reading and Mathematics Programs. This recommendation suggested that a more comprehensive questionnaire be designed that would hopefully not only be a better instrument for gathering information from parents about their perceptions of the new Des Moines Plan, but would also yield a better rate of return than had been experienced in the past.

The seven item revised instrument, a copy of which appears in Appendix RW, M- B was sent to a 10 percent random sample of parents of all Des Moines Plan lab students on April 15, 1988. Three hundred eighty five questionnaires were sent out via U.S. mail, 61 or 15.8 percent of which were returned. While this represents a slightly better rate of return than had been experienced in previous years, it is nonetheless insufficient for making generalizations to the population of Des Moines Plan parents. Results of the survey are summarized in the statements below with the qualification that generalizations cannot be made from the responses of this sample to the population at large.

Results

- Forty five of the 61 respondents (73.8%) agreed or strongly agreed that they were satisfied with information they had received about the Des Moines Plan.
- The process for selecting students for participation in this program satisfied 36 (61.1%) of the 59 parents responding to this question. Thirteen (22.0%) were not satisfied to some degree.
- Of the various ways in which parents are contacted by Des Moines Plan lab teachers, 64.0 percent of the respondents preferred scheduled conferences at school with The Des Moines Plan

teacher. Only 2 (4.0%) indicated preference for home visits by the teacher while 9 (18.0%) preferred telephone calls.

- Thirty-one respondents (67.4%) felt that letters provided the best avenue for obtaining information about the District Parent Advisory Council and its activities.
- Over one half (56.3%) of the respondents felt that brochures and information about learning activities for use at home would be the most useful items that could be provided through the Parent Advisory Council.

Although the return rate improved slightly from that in previous years (using Chapter I surveys), the number of returns via U.S. mail was still far from that necessary to allow for generalizations to be made from the sample to the population. This is unfortunate as costs are involved in designing, printing and mailing such an instrument. Given this situation, it would seem feasible to consider giving parents an opportunity to complete this survey during conference time as many participate in this activity. This would increase the response rate and could be set up in a way that would still ensure anonymity of respondents.

### CONCLUSIONS

Results of the evaluation of performance and process objectives suggest that student attendance and communication with parents are two areas that received strong emphasis in this program. In the mathematics program, parents of 84 percent of the elementary students and 67 percent of the middle school students were contacted by telephone or in person during the year.

The rate of attendance for mathematics program students was 89.8 percent of the days possible for middle school attendees and 89.3 percent for senior high. . While criterion levels established by the proposal were not reached, these rates of attendance closely approximate those for nonprogram students at the middle and senior high levels - 93.1 and 92.5 percent respectively.

Student performance objectives involved administration of the Iowa Tests of Basic Skills and Iowa Tests of Educational Development on a pre/post basis as a measure of growth. Criteria for achievement

included the amount of gain in the normal curve equivalent score. On the mathematics composite subtest, established criteria were exceeded when weighted averages were computed for grade 1 only.

Two conditions that may have adversely affected achievement gain during 1987-88 were:

- (a) The Des Moines Plan Lab programs were modeled after the district's Chapter I and II Programs; however, one third of the buildings involved in the lab programs had not participated in the Chapter Programs. Although inservice training was part of the implementation process, unfamiliarity with the model and delivery system could have had an adverse effect on achievement; and
- (b) The Des Moines Plan did not officially begin until January of 1988 following initial administration of checkpoints. This resulted in a considerable shift in the student population at mid year as some students were exited from the program and others were entered. The end result was that pre/post scores were available and included in evaluation results for students that may have received instructional benefits for a shorter block of time than what would be expected. This would be particularly true for students at grade levels in which all pupils complete the Iowa Tests of Basic Skills or Iowa Tests of Educational Development in the fall. This condition bears mentioning though an assumption is that the effect of it on the overall results for the program is probably slight.

Condition (a) should be alleviated with the passage of time. Steps will be taken during the 1988-89 school year to eliminate test scores on the outcome measure for students that have not been served for an established length of time.

While there were at least two instances in which proper documentation to evaluate process and performance objectives was not submitted (noted in recommendations section), it appears from the evaluation that The Des Moines Plan Reading/Writing Program was implemented as called for in the proposal.

### RECOMMENDATIONS

1. The Supervisor of the Des Moines Plan should reassess the usefulness of the Principal's Report of Des Moines Plan Supervision in the operation of this program. If this type of report is deemed useful, steps should be taken to ensure the more timely and accurate completion of this form.

2. It is recommended that the Des Moines Plan Supervisor take action to ensure that valid results may be obtained from administration of an attitude instrument to all individuals for whom it is intended. The value of a pre/post measure is severely compromised when difficulty occurs in matching results from the pre and post administrations.
3. It is recommended that continued emphasis be applied to encourage the improvement of student attendance. It would also be feasible to revise the objective for the senior high program so that it is consistent with the middle school objective in comparing attendance of program with nonprogram students.
4. It is recommended that alternative methods for obtaining the perceptions of parents about the program be considered. It might be feasible to have an opinionnaire or other appropriate instrument completed at conference time or at another school activity that tends to be well attended by parents. Costs of designing, printing and mailing an instrument to measure perceptions are not warranted unless an adequate rate of return is encountered.
5. The development of the process for measuring student performance using a locally developed objectives based instrument rather than a norm referenced test should be continued. Several conditions must be met in order to do this, but it is probable that benefits would be gained from measuring growth using an instrument that is closely matched with the district curriculum.
6. Consideration should be given to limiting the involvement of the Department of Evaluation, Research and Testing in its monitoring of certain ongoing activities that are well incorporated into this program. Examples would include existence of Individual Educational Plans and lab schedules which are monitored on a regular basis by The Des Moines Plan consultants.

35-140

Appendix RW, M - A

Principal's Report of Des Moines Plan Supervision



36-141

Appendix RW, M - B

Reading/Writing, Mathematics Lab Program Parent Survey

Department of Evaluation and Research  
Des Moines Public Schools  
1800 Grand Avenue  
Des Moines, Iowa 50307-3882

April 15, 1988

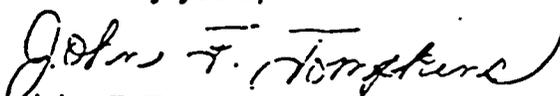
Dear Parent:

The school district conducts an evaluation of The Des Moines Plan each year. As part of this process, we are interested in obtaining input and suggestions from family members of students who have participated in The Des Moines Plan during the 1987-88 school year. We use this information when planning the program in future years.

We would greatly appreciate it if you would take a few minutes to complete the attached survey and return it in the postage paid envelope by May 2, 1988.

Thank you for your cooperation.

Sincerely yours,

  
John F. Tompkins  
Program Evaluator

Atch  
Parent Survey, Des Moines Plan, 1987-1988

PARENT SURVEY

DES MOINES PLAN

1987-1988

Please indicate the extent to which you agree with the follow statements by circling the appropriate response:

1. I am satisfied with the information that I have received about the Des Moines Plan.

Strongly Disagree      Disagree      No opinion      Agree      Strongly Agree

2. I am satisfied with the process for selecting students for participation in The Des Moines Plan.

Strongly Disagree      Disagree      No opinion      Agree      Strongly Agree

3. Personal contacts between the school and home are an important component of this program. Which of the following types of communication have you had with your child's Des Moines Plan teacher during the past school year? (check all that apply).

Home visit from The Des Moines Plan teacher

Scheduled school conference with The Des Moines Plan teacher

Des Moines Plan sponsored activities/meetings at the school

Telephone calls from The Des Moines Plan teacher

4. Which method of personal contact between you and The Des Moines Plan teacher do you prefer? (Please choose one method that you feel is best)

Home visit from The Des Moines Plan teacher

Scheduled school conference with The Des Moines Plan teacher

Des Moines Plan sponsored activities/meetings at the school

Telephone calls from The Des Moines Plan teacher

I have no particular preference for a certain method.

PLEASE COMPLETE THE QUESTIONS ON THE REVERSE SIDE OF THIS SHEET.

The District Parent Advisory Council provides an opportunity for members and parents to receive important information about The Des Moines Plan. It also provides an opportunity for parents to voice concerns or make suggestions about the program.

5. What is the best method for informing you about the council and its activities? (Please check one method)

- Telephone calls
- Letters
- Brochures
- Public meetings
- Other Please describe. \_\_\_\_\_

6. What is the best way for you to communicate with the advisory council? (Please check one method)

- By telephone
- Through a building representative
- By attending a council meeting
- By responding to a survey
- Other. Please describe. \_\_\_\_\_

7. What kind of information provided through The District Advisory Council would be most useful to you? (Please check one method)

- Information on how students are selected for the program
- Description of the program and how it operates
- Information pertaining to evaluation of the program
- Information on learning activities that can be done at home
- Calendars indicating activities related to The Des Moines Plan that occur during the school year.
- Brochures/handbook

Please feel free to make any comments about the program below:

PLEASE RETURN THIS QUESTIONNAIRE IN THE POSTAGE PAID ENVELOPE PROVIDED BY MAY 2, 1988. THANK YOU FOR YOUR ASSISTANCE.

Appendix RW, M - C

Reading/Writing, Mathematics Lab Program Attitude Scale

SELF-EVALUATION  
(Secondary)

Name \_\_\_\_\_ Grade \_\_\_\_\_

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

Directions:

Rate yourself 1, 2, 3, 4, or 5 on each of the items below.

Rating Scale:

- 1 = Never
- 2 = Seldom
- 3 = Sometimes
- 4 = Usually
- 5 = Always

My daily behavior includes:

- \_\_\_\_\_ completing work on time
- \_\_\_\_\_ handing in neat work
- \_\_\_\_\_ following directions
- \_\_\_\_\_ participating in class
- \_\_\_\_\_ listening to others
- \_\_\_\_\_ using class work time
- \_\_\_\_\_ working without disturbing others

My attitude in class is:

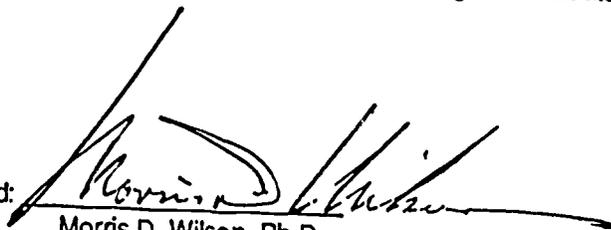
- \_\_\_\_\_ helpful
- \_\_\_\_\_ interested
- \_\_\_\_\_ respectful
- \_\_\_\_\_ improving
- \_\_\_\_\_ disruptive
- \_\_\_\_\_ disinterested
- \_\_\_\_\_ disrespectful
- \_\_\_\_\_ a problem

Report of Evaluation:  
SUPPLEMENT TO DES MOINES PLAN PROGRAM EVALUATIONS  
1987-88

Department of Evaluation, Research, and Testing  
Des Moines Independent Community School District  
1800 Grand Avenue  
Des Moines, Iowa 50307

Diane Schnelker  
Evaluation Specialist  
John Tompkins  
Program Evaluator

Approved:



Morris D. Wilson, Ph.D.  
Director of Evaluation, Research, and Testing

October 20, 1988

## INTRODUCTION

The Des Moines Plan: A Plan for Student Success represents an expansion and reorganization of all district remedial programs. Modelled after the district's Chapter I and II Programs, the implementation of all programs subsumed under the Des Moines Plan is guided by a series of process and performance objectives. While the objectives facilitate the organization of the program, they do not necessarily provide sufficient information on which to base a complete evaluation. The purpose of this section is to supplement the review of the process and performance objectives with a more critical examination of three key areas. Combined, these results should provide a thorough evaluation of the Des Moines Plan. The following areas were examined within each of the programs included in the Des Moines Plan:

1. The validity and reliability of the identification procedures;
2. The nature of the students served in the programs; and
3. Follow up of the recommendations from previous evaluations.

## KINDERGARTEN ENRICHMENT

### Identification Procedures

#### Introduction and Background

Kindergarten Enrichment is a supplemental program to reinforce and extend the foundation concepts and skills of the basic kindergarten program. It is based on a developmental philosophy that recognizes individual differences in the growth and development of young children and is designed to provide students who demonstrate moderate developmental deficiencies additional experiences and time to foster the developmental process. Students who demonstrate more severe deficiencies benefit from interaction with peers of a variety of developmental levels in the regular kindergarten program and are provided with an additional year of reinforcement and growth in the K-1 Transition Program.

Identifying appropriate candidates for the program requires procedures and instruments sensitive enough to distinguish students who are "moderately" behind the growth and development of their chronological peers and those who would benefit from an additional year of kindergarten. Initially, procedures called for administering the Kindergarten Enrichment screening device, designed to

measure specific program objectives, to students who performed below the minimum level considered prerequisite for success in kindergarten during the fall general testing, and who teachers referred for consideration.

Program evaluations raised a number of concerns about the accuracy of the identification procedures. In the first year of implementation, only about one half of the students served in the program were considered adequately prepared for first grade by the end of the school year. While this may suggest the program had little real effect on student achievement, it may also suggest that the identification procedures failed to adequately screen appropriate candidates. This interpretation is supported by a closer review of the identification procedures.

All kindergarten students are assessed three weeks into the school year to determine their standing in the kindergarten curriculum. The primary purpose of this screening is to provide teachers with a suggested point to initiate instruction. Because the intent was not to "place" students in special programs, measures were not taken to empirically validate the screening device or to standardize the administration and scoring procedures. In particular, procedures did not include specific criteria to identify appropriate candidates for the Kindergarten Enrichment Program. Teachers ultimately relied on professional judgment to refer students for placement consideration. The Kindergarten Enrichment screening device was intended to provide finer discrimination among the developmental levels of students referred for placement consideration. However, this device was also not constructed according to recognized test development practices and failed to specify clear criteria to determine placement. As a result, students who were referred and subsequently placed in the Kindergarten Enrichment Program included more students who were functioning below the level targeted for the program. The nature of this misidentification would affect the impact of the program.

Results of the second year's evaluation indicated that 75 percent of the students served in the program were considered adequately prepared for first grade. Administrators and teachers involved in the program felt that greater awareness among regular classroom teachers about the target population contributed to this improvement. Although greater awareness improved the reliability of the

identification procedures, there is still no assurance the procedures accurately identified the desired group of students. Such procedures require establishing a relative measure based on an accurate representation of the range of developmental levels in the entire kindergarten population. Current procedures were neither intended nor created to provide this information.

In 1987-1988, a study was conducted to evaluate the validity of the screening instruments. The first step of this study examined the relationship between the general curriculum screening device and the instrument used to evaluate readiness for first grade. The validity of this screening device is supported to the extent that it is related to a standardized, norm referenced measure already found to predict academic readiness. The second step in this evaluation examined the relationship between current placement procedures for the Kindergarten Enrichment Program and the extent to which students served in the program were considered adequately prepared for first grade at the end of the kindergarten year. Current procedures are supported to the extent that the distribution of first grade placement recommendations among students identified through original procedures is similar to the distribution of recommendations for students identified with a standardized norm-referenced test.

### Method

#### Subjects

Six schools were selected according to a stratified sampling procedure based on achievement histories on the Metropolitan Readiness Test. Two schools were selected from each of three levels: low achievement (lower one third of the distribution of achievement scores), middle achievement (middle one third of the distribution of achievement scores) and high achievement (upper one third of the distribution of achievement scores). Only those schools whose scores fell within these categories for two consecutive years were included in the sampling pool. Schools within each of the achievement levels were randomly assigned to experimental and control groups. All kindergarten students at each of these buildings served as subjects for this study.

#### Instruments

Results of the Early Childhood Assessment Criterion Referenced Screening Device (i.e., Waupun

screening), the Kindergarten Enrichment Teacher Evaluation (i.e., Enrichment screening), and the Battelle Developmental Inventory Screening Test (i.e., BDI screening) were studied relative to results of the Metropolitan Readiness Test. The Waupun screening device, used to locate students within the Waupun curriculum, measures development in four basic domains: auditory, visual, motor, and verbal processes (Wendt & Schramm, 1982). Each domain includes behavioral criteria that measure ability at five levels. Level I measures strictly sensory motor activation and proficiency. Level II measures sensory awareness and simple stimulus discrimination. Level III measures the extent to which students can interpret and describe visual and auditory stimuli. Level IV focuses on the "integration process". Level V addresses the ability to utilize previously integrated processes to memorize and sequence stimuli.

Assessment for entering kindergarten students begins at Level III. The screening device includes three items from each of the auditory, visual, and verbal domains, and five items from the motor domain. If a child completes at least one criteria in each domain at Level III, the assessment is terminated and instruction begins at Level III. If all criteria in each domain are successfully mastered at this level, the assessment items for Level IV are administered. Students who miss all criteria in any area are assessed on the criteria for Level II. The assessment criteria for Level I are administered to students who fail to demonstrate proficiency on the criteria for Level II.

The validity of an instrument used for placement decisions depends primarily on the extent to which the results predict future performance on an independent measure. The test manual for the Waupun screening does not report any evidence to substantiate its use as a screening device for placement decisions. The predictive validity of an assessment measure is enhanced to the extent that it measures what it purports to measure. Any measure designed to predict the likelihood of success in the regular kindergarten program should sample the content of that curriculum. The Waupun screening is designed to locate students within the Waupun curriculum. To the extent that the kindergarten program employs Waupun, the content validity of the screening device is substantiated. However, a review of the kindergarten curriculum objectives indicates that it goes beyond Waupun to include a basic introduction to academic content areas found in other grade levels.

Another way to improve the validity of the test is to ensure it is administered and interpreted consistently. Consistency is maximized by including experimentally supported items on the test, providing explicit administration and scoring instructions, providing test norms based on groups of individuals who represent the target population for which the test was designed, and employing well trained examiners to administer the test. The examiner's manual of the Waupun screening does include explicit administration instructions; however, current administration practices rely heavily on parent volunteers who receive approximately one hour of training in only one component of the test. A minimum of four volunteers is required at each site to administer the entire screening device. The number of examiners and the limited preparation decreases the likelihood that the Waupun screening is administered consistently.

Despite instructions, the manual fails to describe the manner in which test items were developed or sequenced; nor does it provide normative data to serve as a relative standard of comparison for interpretation. The absence of information regarding the empirical development of the test and administration and scoring procedures limits the level of confidence administrators can have in placement decisions that are based on the results of the Waupun screening.

The Enrichment screening device is designed to measure the specific objectives of the five domains emphasized in the Kindergarten Enrichment Program, namely: auditory, visual, verbal, motor (gross and fine), and social/self help. Behavioral objectives were combined with objectives from Level III of Waupun in four of the five domains. Items in the social/self help domain were generated by Kindergarten Enrichment instructors and consultants and reflect behaviors perceived essential for success in first grade. Students receive one point for mastering each objective for a total of 32 points. As the Enrichment Screening Device was developed and introduced in 1985, there are little data available on which to base a thorough evaluation of its technical properties.

The BDI is a standardized, individually administered assessment battery of key developmental skills in children from birth to eight years of age (Newborg, Stock, Wnek, Guidubaldi, & Svinicki, 1984). It is primarily designed for use by special educators and infant, preschool, and primary teachers. The

complete BDI battery consists of 341 test items. Ninety six items were compiled into a comprehensive screening test that provides an efficient method for determining which areas of development, if any, require further evaluation. The BDI screening test is recommended for use as a general screening device for preschool and kindergarten children, to monitor both short term and long term progress, and as a preliminary assessment of students considered "at risk" in any developmental area.

The BDI measures development in five domains (Newborg et al., 1984). Items in the personal/social domain measure abilities and characteristics that allow children to engage in meaningful social interactions. Items in the adaptive domain measure the ability to make use of information and skills assessed in other domains. Items in the motor domain assess the ability to use and control large and small body muscles. Items in the communications domain assess the reception and expression of information, thoughts, and ideas through verbal and nonverbal communication modes. Items in the cognitive domain measure skills and abilities considered conceptual in nature such as perceptual discrimination, reasoning and academic skills, memory, and conceptual development. All of these domains include subdomains to ensure that the various aspects of each domain are adequately assessed.

Items in the domains were sequenced by assigning each item to an age level at which approximately 75 percent of the children in the pilot sample received full credit. Items on the screening test were selected on the basis of high item-domain score correlations and their degree of difficulty to provide optimum discrimination.

Standardized procedures for test administration are provided for each of the structured items. These procedures must be followed to use the norm tables. Normative data were obtained from a stratified random sample of 800 children based on geographical regions and subregions, race, and sex for each age group represented on the inventory. Demographic descriptions of the sample indicate the distribution of ethnic minorities and sex approximated the general population of the United States. Raw scores can be compared to cut off scores at five probability levels for each age group (1.0, 1.28, 1.50, 1.65, and 2.33 standard deviations below the mean), or may be converted to age equivalent scores

which indicate the age at which a raw score represents average performance. Because age equivalent scores are subject to frequent misinterpretation, the authors recommend using them with considerable caution.

While the examiner's manual does not provide a detailed account of the reliability indices of the complete BDI, it does indicate that there is limited standard error of measure among BDI items which testifies to the precision of the instrument. Indices of test-retest and inter-rater reliabilities specifically for the screening test range from .95 to .99.

Information describing the validity of the complete BDI was not available in the BDI screening test manual. The validity of the BDI screening test was established by correlating scores on the screening test for a sample of 164 children to scores on a subsequent administration of the complete BDI. The correlations between the screening test and comparable components of the BDI ranged from .92 to .99. All but one of these correlations were at or above .96 which suggests performance on the screening test is a sound predictor of performance on the complete BDI.

The Metropolitan Readiness Test is administered to all kindergarten students at the end of the kindergarten year as an index of preparation for first grade. It is a standardized, skills-based assessment of the foundation skills considered important for beginning reading and mathematics (Nurss & McGauvran, 1986). The test samples from four domains that have consistently emerged in research as essential for pre-reading and pre-mathematics. The areas include: auditory, visual, language, and quantitative skills. Each skill area includes two subtests to assess specific components of each area. Subtests in the auditory skill area include Beginning Consonants to measure the ability to discriminate among initial sounds in words, and the Sound Letter Correspondence subtest to measure the ability to identify letters that correspond to specific sounds in words. Subtests in the visual skills area include the Visual Matching subtest to measure the ability to discriminate among visual symbols, and the Finding Pattern subtest to measure the ability to locate formations of letters, groups, words, numerals, or artificial letters embedded in larger groupings. The language skill area includes the School Language Subtest to measure basic cognitive concepts, as well as simple and more complex grammatical structures, and

the Listening subtest to measure the ability to integrate and reorganize information, to draw inferences, and to analyze and evaluate material that is presented orally. Finally, the quantitative skill area consists of the Quantitative Concepts subtest to measure basic mathematics concepts, and the Quantitative Operations subtest to measure counting and simple mathematical operations.

A number of norm-referenced scores are available to interpret the results of the Metropolitan Readiness Test. Norm-referenced scores provide a framework for interpreting performance in relation to an age or grade appropriate reference group. Percentile ranks indicate the percentage of students in the reference group who received scores equal to, or lower than, a given student's score. Stanine scores are normalized standard scores that range from 1-9.

Test developers followed recognized procedures for generating the test. After an extensive review of research, test objectives and specifications were developed. Items for the current edition were drawn from a pool of items from previous editions and supplemented with new items generated and reviewed by content area and measurement experts. The test was field tested on a stratified random sample of approximately 2000 students. Once finalized, the test was normed on approximately 4500 students from a random sample of schools stratified on the basis of district size, geographic region, ethnic group, and sex.

The manual also provides information about the reliability of the Metropolitan Readiness Test. Internal consistency refers to the extent to which items relate to each other. The reliability coefficients between subtest scores ranged from .54-.90. The Pre-Reading Composite score had an internal consistency index of .93. Test retest reliability provides evidence of the stability of test scores over a short period of time. The reliability coefficients among the subtests over a two week period ranged from .60-.88. The test-retest reliability coefficient for the Pre-Reading Composite score was .88.

The test authors suggest the extensive review of literature on which the item generation process was based increases the likelihood that the items assess skills important to learning. The test's predictive validity was examined by comparing results of the Metropolitan Readiness Test, administered in the fall of 1985, to results of the Primary 1 Level of the Metropolitan Achievement Test and the

Stanford Achievement Test, administered the following spring. Correlations between the Pre-Reading Composite score of the Metropolitan Readiness Test and the total battery of the Metropolitan Achievement and the Stanford Achievement Tests were .65 and .83, respectively.

### Procedures.

To test the predictive validity of the screening devices, the BDI screening test was administered in place of the Waupun screening in the experimental schools at the beginning of the academic year. Control schools conducted kindergarten screening according to traditional practices. Results from both groups were compared to the results of the Metropolitan Readiness Test administered the following spring.

Examination of the validity of the Kindergarten Enrichment placement procedures required equating the three screening devices and defining basal and ceiling cut off scores to be used as criteria for placement. The Waupun and BDI screening devices were equated by comparing the developmental level of the test items. Careful consideration of the age equivalent appropriate for the Kindergarten Enrichment Program, and the level of functioning sampled on the Enrichment screening device, suggested that the ideal target population included those students who were functioning at an age equivalent of four to five years.

Once the equivalence was established critical levels (i.e., basal and ceiling criteria) were determined for both the Enrichment and the BDI screening devices. Results of previous administrations were examined to determine criteria for the Enrichment Screening Device. The average Enrichment screening score for the first two years of administration was approximately 16. The average screening score for students who were not recommended for first grade at the end of the Kindergarten Enrichment experience was approximately 14. Because current placement procedures tended to identify more students with more severe deficiencies than were appropriate for the program, a score of 15 was defined as the critical point from which to establish basal and ceiling criteria.

An examination of the distribution of scores from previous administrations, and consideration of available resources, suggested a band one half standard deviation above and below the critical point

would identify those students most appropriate for the program. In terms of raw scores, students who scored between 14 and 18 were served before all other students referred for placement. Once these students were identified, students who scored between 13 and 19 (i.e., one standard deviation above and below the critical point) were served on the basis of need and available space.

Comparable ranges were identified on the BDI screening device. The range of possible raw scores associated with the age equivalent on the BDI screening was identified to equate the two devices. The critical point of the Enrichment screening fell approximately halfway between the range of possible scores. As the range of possible scores was the same on the BDI screening, its midpoint was defined as the critical point. Similarly, scores that fell one half standard deviation above and below this point were defined as most appropriate for the program (118-132), and students who scored between 117 and 133 (one standard deviation above and below the critical point) were considered and served according to need and available space.

Placement recommendations made by the home school teacher in consultation with the Kindergarten Enrichment instructor at the end of the kindergarten year were also examined to evaluate placement procedures. Recommendations for students placed according to Waupun and Enrichment screening were compared to recommendations for students identified with the BDI screening.

## Results

### Predictive Validity

The lack of specific criteria to determine a Waupun level from the screening device resulted in inconsistencies in the Waupun screening. To obtain a more reliable index, Waupun screening results were reported as the number of items each student successfully completed. Correlations between the screening devices and the Metropolitan Readiness Test scores are presented in Table S-1. As expected, correlations between the Waupun screening, as reported as the number of items successfully completed, and the Metropolitan Readiness Tests were stronger than correlations between the Waupun level index and the Metropolitan Readiness Test.

Table S-1. Correlations Between Screening Tests and  
Metropolitan Readiness Test Results.

Screening Device	Metropolitan Readiness Test		Total
	Reading	Quantitative	
BDI	0.656	0.578	0.660
Waupun Level	0.428	0.409	0.437
Waupun Items	0.612	0.565	0.620

The table also indicates correlations between the Waupun screening (i.e., the number of items passed on the screening) and the Metropolitan Readiness Test were very similar to those between the BDI screening and the Metropolitan Readiness Test. Squaring these correlation coefficients indicates the amount of variance in the test results accounted for by the screening device. Simple regression analyses indicate the amount of variance accounted for by each of the screening devices was significant ( $p < .001$ ); however, the BDI screening device accounted for greater variance on both subtests as well as the total Metropolitan Readiness Test score than the Waupun screening.

The results of previous evaluations raised concern about the equity of the placement procedures. Analysis of variance procedures were used to examine the extent to which the screening devices distinguished between the ethnic background and sex of students. The results of statistical analyses indicate that while males could not be distinguished from females on either screening device, there were significant differences between minority and nonminority students on both devices ( $F = 18.045$ ,  $p < .001$  and  $F = 4.157$ ,  $p < .05$  for the BDI and Waupun screening, respectively).

Multiple regression analyses were then calculated to determine how much ethnic background contributed to the prediction of Metropolitan Readiness Test results. Table S-2 displays the amount of variance accounted for by the screening test and the ethnic background of students. The results of Table S-1 and S-2 indicate while the addition of ethnic background had little effect on the ability of the BDI screening to predict Metropolitan Readiness scores, it did make a notable contribution to the

predictability of the Waupun screening.

Table S-2. Variance of Metropolitan Readiness Test Accounted for by Each Screening Test and the Ethnic Background of Students.

Screening	Metropolitan Readiness		Total
	Reading	Quantitative	
BDI and ethnic background	0.446	0.382	0.461
Waupun items and ethnic background	0.417	0.420	0.442

Placement Recommendations. Table S-3 displays the distribution of placement recommendations for students screened with each of the procedures. Statistical analyses fail to demonstrate significant differences between these distributions; however, the results may have been contaminated by procedures used to examine the devices. A key problem with current procedures was the omission of placement criteria. The process of equating the screening devices necessitated identifying such criteria which qualitatively altered the nature of the original placement procedures. Specifying this criteria based on the results of previous administrations increased the reliability of the placement procedures and improved their accuracy.

Table S-3. Distribution of Placement Recommendations for Students Served in Kindergarten Enrichment in 1987-88 by Screening Device.

(Percentages)

Recommendation	Waupun Screening	BDI Screening
Retained in kindergarten	2.96	3.45
Referred to the K-1 Transition Program	14.07	3.45
Promoted to first grade	82.96	93.10

#### Interpretation

These results demonstrate the impact of standardized procedures on the placement process.

Specifying cut scores on both devices facilitated the placement procedure and increased the likelihood that students served were functioning within the developmental range appropriate for the program. However, placement instruments must also be a valid measure of "developmental level". The results suggest, of the devices studied, the BDI screening test provides the best predictor of Metropolitan Readiness Test results and is less sensitive to ethnic background.

### Student Characteristics

The distribution of all scores on a standardized achievement measure for the general kindergarten population is characteristically bell shaped. Ninety six percent of the scores cluster around the average score. The remaining four percent of the scores fall in either extreme of the distribution. As the Kindergarten Enrichment Program draws students from the major cluster, student characteristics of the program are likely to reflect characteristics of the district kindergarten population. The following section examines the extent to which the sex and ethnic distribution of the Kindergarten Enrichment Program approximated that of the general kindergarten population.

#### Males and Females

Table S-4 illustrates the distribution of males and females among students served in the Kindergarten Enrichment Program in 1987-88. Statistical analyses indicate the distribution of males and females in the program did not differ significantly from the distribution represented in the general kindergarten population.

Table S-4. Distribution of Male and Female Students in the Kindergarten Enrichment Program and the District Kindergarten Population, 1987-88.

Sex	(Percentages)	
	District Kindergarten	Kindergarten Enrichment
Males	52.32	55.00
Females	47.68	45.00

### Ethnic Representation

Ethnic codes were available for 78 percent of the students served in the Kindergarten Enrichment Program during 1987-88. Table S-5 illustrates the distribution of minority and nonminority students served in the Kindergarten Enrichment Program and among the kindergarten population in general. Statistical analyses indicate there was no significant difference between these distributions.

Table S-5. Distribution of Minority and Non Minority Students Served in the Kindergarten Enrichment Program and in the District Kindergarten Population, 1987-88

(Percentage)

Ethnic Background	District Kindergarten	Kindergarten Enrichment
Minority	18.77	19.86
Non Minority	81.23	80.10

### Follow Up of 1986-87 Recommendations

#### Recommendations

The following recommendations appeared in the 1986-87 Kindergarten Enrichment evaluation.

#### Budget and Expenditures

In 1986-87 the Kindergarten Enrichment Program was offered as a general district curriculum. However, in 1987-88 the program will become part of the Des Moines Plan: A Plan for Student Success. This "Plan" will include most of the academic support programs offered in the district. To facilitate monitoring the Kindergarten Enrichment Program specifically, and the Des Moines Plan in general, the Kindergarten Enrichment Program coordinator should prepare an annual budget for the program.

#### Identification Procedures

The first flag in the identification procedures for the Kindergarten Enrichment Program is the results

of the initial Waupun screening. The placement criteria state that students who score at Level II or a "low" Level III are potential candidates for the program, but the administration and scoring procedures do not specify criteria to discriminate a "low" Level III. Without this specification, compliance with the placement criteria must be assumed. The wide range of abilities within each Waupun level increases the chance for inconsistent interpretation of the results. To increase the reliability of the placement procedures the Kindergarten Enrichment Planning Committee should devise a way to document the results of the Waupun screening more specifically.

Although the placement procedures were employed as specified in the program description, evaluating the results of the Kindergarten Enrichment teacher evaluation form within the attendance areas for each center resulted in the inability to serve all students who qualified for placement on the principal measure. To ensure that all appropriate students have the opportunity to participate in the program, evaluation scores should be rank ordered across the district. Such a procedure also approximates the placement procedures of other programs in the Des Moines Plan.

#### Follow Up

##### Budget and Expenditures

Responsibility for the Kindergarten Enrichment Program was officially assumed by the Des Moines Plan Coordinator in January of 1988. A separate, itemized budget is prepared for each program under the plan.

##### Identification Procedures

After a review of previous results, the program coordinator, in consultation with the Elementary Consultant, recommended that successfully mastering 25 percent of the items on the Waupun screening, excluding the items in the fine motor skills domain, constituted a "low" Level III. Although this criterion could not be applied in 1987-88, it was piloted during implementation of the placement procedures in 1988-89.

Implementation of the study to validate the screening instruments ensured that all students across the district identified within the range considered most suitable for the program were given initial

opportunity for service. The procedures resulted in greater uniformity in the range of abilities represented in the centers across the district.

## **K-1 TRANSITION PROGRAM**

### **Identification Procedures**

#### Introduction

A review of the process and performance objectives indicates that students were identified and served in the program by a specified date; however, the objectives fail to provide an opportunity to examine the identification procedures in greater detail. The purpose of this section is to explore the implementation and validity of the placement procedures.

#### Implementation

According to the program description, students who completed less than 80 percent of the entry level objectives of the kindergarten curriculum by January of the kindergarten year (in this case January 1986), were to be evaluated with the Kindergarten Checkpoint in January and again in May. Students who failed to earn a minimum of 17 points on both administrations of the Checkpoint were referred for placement into the program for the next academic year.

Table S-6 represents the distribution of the placement decisions based on the Kindergarten Checkpoint results. Students for whom only one test result was available were classified according to that single score. Students who had no test results for either administration were considered "not eligible".

Table S-6. The Distribution of Placement Decisions Based  
on Kindergarten Checkpoint Results

Placement Category	Number of Students	Percent of Students
Eligible/Served	102	27.79
Eligible/Not Served	77	20.98
Not Eligible/Served	13	3.54
Not Eligible/Not Served	15	47.69
Total Referrals	367	100.00

These results indicate that 75.48 percent of the students referred for placement consideration were accurately placed according to the criteria. Closer examination of the students who were considered eligible but not served indicates that 51 of these students (66.23%) had only one test score. While some of these represent students who moved from the district before the end of the academic year, the placement decisions suggest program personnel tended to follow a policy of accepting students for whom there was sufficient evidence for an accurate placement. Given the variable rate of development among children of this age, and the consequence associated with retaining students a year, placement decisions based on two test scores increased the likelihood of accurately identifying appropriate students for the program. To the extent that students with only one test score were considered ineligible, 89.37 percent of the students referred were placed according to systematic application of specific procedures and criteria.

### Student Characteristics

#### Introduction

The students targeted for placement into the K-1 Transition Program represent those who are likely to fall in the lower extreme of the achievement distribution. The severely restricted nature of this target group increases the likelihood of finding differences between student characteristics of the program and the district in general. As these students are members of the age cohort that attended

kindergarten in 1986-87, the characteristics of that population were used as the criteria against which to compare program characteristics.

### Males and Females

Table S-7 represents the distribution of males and females in the 1986-87 kindergarten cohort and students served in the K-1 Transition Program in 1987-88. Statistical analyses failed to identify significant differences between these distributions.

Table S-7. Distribution of Male and Female Students in the K-1 Transition Program and the 1986-87 Kindergarten Cohort.

Sex	(Percentage)	
	K-1 Transition	1986-87 Kindergarten Cohort
Males	59.13	51.91
Females	40.87	48.09

### Ethnic Representation

Ethnic codes were available for 93.91 percent of the students served in the K-1 Program in 1987-88. Table S-8 represents the ethnic distributions among students served in the K-1 Transition Program and the 1986-87 kindergarten cohort. Statistical analyses indicate that significantly more minority students and fewer nonminority students were served than would be expected from the age cohort population.

Table S-8. Distribution of Minority and Non Minority Students Served in The K-1 Transition Program and in the 1986-87 Kindergarten Cohort

Ethnic Background	(Percentages)	
	K-1 Transition	1986-87 Age Cohort
Minority	38.89	17.25
Non Minority	61.11	82.75

### Interpretation

Guidelines from the Iowa State Department of Education suggest the percentage of minority students represented in any special program should not deviate more than 10 percentage points from the district minority percentage to ensure equitable delivery of service. While there were no differences in the distributions for males and females between the K-1 Program and the district kindergarten population, the proportion of minority students served in the K-1 Program exceeded both statistical expectations and state guidelines.

### Follow Up of 1986-87 Recommendations

#### Recommendations

The following recommendations were included in the 1986-87 program evaluation.

#### Budget and Expenditures

The K-1 Transition Program coordinator should adjust the budget to reflect the average salaries of all teachers actually involved in the program.

#### Program Characteristics

The program coordinator should ensure that class enrollments do not exceed 15 students.

#### K-1 Transition Student Characteristics

The program coordinator should examine the implications of disproportionate number of males and minority students served in the K-1 Transition Program. If no reasonable explanation can be forwarded to account for such distributions, measures should be instituted to correct the discrepancy.

#### Identification/Placement Procedures

As the program proposal has been accepted for the 1987-88 academic year, administrators are committed to employing the placement procedures as outlined. The program coordinator should ensure that those procedures are administered as specified, including documenting Waiipun levels of all referrals and accepting those students who satisfy the placement criteria defined for the screening device.

The program coordinator should explore the following alternatives to improve the placement

procedures for 1988-89:

1. Examine the purpose of the K-1 Transition Program to determine whether the emphasis should reflect kindergarten or first grade curriculum objectives.
2. Examine the Kindergarten Checkpoint and/or possible alternative placement measures against the curriculum objectives identified above.
3. Identify appropriate outcome measures on the basis of the resolution of item 1.
4. Work with the Department of Evaluation, Research, and Testing to ensure that the placement device consistently and accurately identifies appropriate candidates for the program.

#### Follow Up

#### Budget and Expenditures

During the pilot year, the K-1 Transition Program was funded through the Education Improvement Program fund (i.e., The Plan for Excellence). Funding requirements included submitting an estimated budget for the total cost of the program. Estimated salary costs were based on the district average teacher salary for 1986-87. The average teacher salary for teachers in the program was considerably higher than the average district salary and two more centers were added to accommodate the number of students identified during screening procedures. These factors accounted for the discrepancy between budgeted and expended figures.

In 1987-88 responsibility for the program was assumed by the Des Moines Plan. A separate budget is prepared for each program under the plan based on expenditures for previous years.

#### Program Characteristics

A district committee examining the impact of class size on educational achievement determined a class size of approximately 18 students appeared optimum for student achievement. The original proposal to pilot the K-1 Program specified 18 as the target enrollment. The average class size for the 1986-87 academic year was 18.5 students. Sixty-two percent of the centers had class sizes that exceeded the target level. The results of the pilot and a review of recent research in this area suggested that a class size of at least 12-15 students would be necessary to adequately provide for the

needs of these students. Class sizes for the 1987-88 academic year reflect the new criteria.

#### K-1 Transition Student Characteristics

The results of the 1986-87 evaluation demonstrated significant differences among the sex and ethnic distributions of the students served in the program and the age appropriate district cohort. Significantly more males and minority students were served than would be expected from the general kindergarten population.

While research supports the discrepancy for ethnicity, little evidence is available to support the observed differences between the distributions of males and females. Failing to find such support challenges the validity of the identification procedures. The absence of such a difference in the results of the 1987-88 evaluation suggests that efforts were made to strengthen the identification procedures to identify those students most in need of the service regardless of race or sex.

#### Identification and Placement Procedures

The outcomes noted above are the probable results of an extensive review of the identification and placement procedures guided by the program coordinators during 1987-88. Coordinators assembled a team of kindergarten, K-1 Transition, and first grade teachers to examine the purpose, goals, and objectives of the K-1 Transition Program relative to kindergarten and first grade curriculum expectations. This group then conducted a critical examination of the items on the Kindergarten Checkpoint to ensure they accurately reflected these goals. Each item was clarified with additional administration and scoring instructions to standardize the administration procedures. Identification criteria were determined on the basis of previous results. Many of these changes were piloted in the spring of 1987-88 and will be incorporated into the program in 1988-89. The program coordinators and others involved in this review should be commended for their efforts.

The K-1 Transition Program should also benefit from the examination of the screening device for the Kindergarten Enrichment Program. Ideally, the instrument selected should provide adequate discrimination among student abilities at the beginning and end of the kindergarten year. An instrument common to the Kindergarten Enrichment and K-1 Transition Programs would improve the reliability and

validity of placement procedures for all early elementary school programs.

## DES MOINES PLAN READING/WRITING AND MATHEMATICS LAB PROGRAMS

### Identification Procedures

#### Introduction

The Des Moines Plan became officially implemented at the time of administration of checkpoints in January of 1988. These tests which are given in the areas of reading/language arts and mathematics at grades 1, 3, 5, and 8 and in writing at grade 11 are objectives based tests that are designed to measure attainment of objectives that are appropriate for students at those particular levels. As such, the tests are used as a primary tool for selecting students that will be served in The Des Moines Plan. Scores obtained by students on checkpoints may fall in any one of three categories: "pass," "range of reconsideration," or "not pass." Students who do not pass checkpoints are selected for Des Moines Plan instruction. Those who fall in the "range of reconsideration" may be served particularly if certain other criteria are met. The bands for the various categories are established in order to determine a certain percentage of students at each grade level at which the checkpoints are administered that will be served in The Des Moines Plan. For example, the tests are to identify the lowest 20 percent of students in reading for grade 1.

In addition to be used as an instrument to select students, the checkpoint tests are also used to help determine when a student may be exited from the program. After selection for The Des Moines Plan, students are given three more chances to pass the same checkpoint(s) before being retained at a particular grade level. During this entire period which may span a period of one and one half calendar years, students are continuously being provided supplementary instruction through the reading/writing and or mathematics lab classes.

#### Implementation

An important factor that surfaces in relation to any testing program, perhaps particularly in one in which results are used to select students for special services, is that all students who are eligible to complete the assessment instrument do so. The percentage of students at each grade level for which

checkpoints were completed in January of 1988 ranged from 97.3 to 98.3 percent for grade levels 1, 3, 5 and 8.

### Conclusions

It appears that proper procedures were followed in the first major administration of checkpoints in January, 1988 to the extent that a high percentage of the population at each grade level completed the instrument. Students who did not pass the checkpoint in January were retested in May after receiving service in the Des Moines Plan labs. Records will be kept of the students that failed to pass the initial checkpoint to determine the length of time that these students spend in The Des Moines Plan labs before being exited.

### **Student Characteristics**

#### Introduction

In addition to information concerning the number of students served at each grade level and by building in the Des Moines Plan, further data was collected concerning the ethnic representation of students served during 1987-88. Table S-10 presents data on participation of minority and majority students in The Des Moines Plan during 1987-88. Minority/non minority representation for the district is also presented for comparative purposes.

Table S-9. Minority and Non Minority Representation  
Des Moines Plan Lab Program  
1987-88  
(Percentages)

	Reading	Mathematics	Total Lab	District
Minority	29.21	29.39	28.45	18.03
Non-Minority	70.79	70.61	71.55	81.97

$\chi^2 = 538.216, p < .001$

### Conclusion

As shown by Table S-9, 28.45 percent of the student population in the Des Moines Plan Lab Program (all students, both programs) was made up of minority students. This compares to a district minority percentage of 18.03. When the chi square statistic is computed, it is found that this difference in minority percentage is of the magnitude to be statistically significant meaning in this case that the difference would have occurred by chance less than 1 time out of 1000. State guidelines suggest that the percentage of minority students represented in any special program should not deviate more than 10 percentage points from the district wide minority percentage to ensure equitable delivery of service.

### **Follow Up of 1986-87 Recommendations**

#### Introduction

Several recommendations were offered in the 1986-87 evaluation reports for Chapter I Reading and Mathematics Programs. It would seem appropriate at this point to highlight these and to briefly indicate a follow-up of activities or changes noted in the 1987-88 programs. To do this, several 1986-87 recommendations are quoted followed by the appropriate update.

#### 1986-87 Recommendation

"The program objective that relates to performance of first grade students on the Iowa Tests of Basic Skills should be revised to specify a criterion for attainment consistent with those at other grade levels. This would require specifying the "average gain" to be attained rather than a percentage of students that will reach a certain level. The average gain will best provide information on the entire population rather than only those who achieved a certain score."

#### 1987-88 Follow Up

This objective was revised in order to specify an "average gain" and to therefore be consistent with other performance objectives.

#### 1986-87 Recommendation

"The importance of school attendance should continue to be a thrust of the secondary program. The attendance rate for Chapter I students during 1986-87 was 91.2 percent in math and 90.9 percent

in reading. This represented an improvement from 1985-86 levels, but fell below the rate of 93.0 percent for non mathematics program students and 92.8 percent for non-reading program students."

1987-88 Follow Up

The attendance rates for Des Moines Plan students at the middle school level were 88.9 percent in the Reading/Writing Lab Program and 89.8 percent in the mathematics program. This compared to rates of 92.8 percent for non reading program students and 93.1 percent for non mathematics program students. Attendance rates for Des Moines Plan students fell slightly from levels of the previous year resulting in a wider deviation of their attendance from the attendance rates of non-program students.

1986-87 Recommendation

"Stronger emphasis should be applied in the area of parent contacts at the middle school level in order to meet or exceed specified criterion levels."

1987-88 Follow Up

Criterion levels for parent contact were exceeded in both the Reading/Writing and Mathematics Programs in middle schools during the 1987-88 school year. It should be noted that expectations were made less stringent than in the previous year through a revision of objectives in both programs.

1986-87 Recommendation

"The Chapter I Parent Survey should be abolished as The Des Moines Plan becomes operational during the 1986-87 school year. A more comprehensive questionnaire should be designed and steps should be taken to obtain a rate of return that will allow stating of generalizations from a sample to the entire population."

1987-88 Follow Up

During the 1987-88 school year, a revised parent survey was developed and administered. A somewhat better return rate was experienced, though it was still insufficient to allow for generalization of results to the population at large.

1986-87 Recommendation

"The criterion levels for achievement gains of students should be studied as The Des Moines Plan

becomes implemented. This is necessary to determine that the criterion levels for gain that are specified represent a change in achievement that is not likely due to measurement error or chance.

Statistical tests of significance are useful in determining this."

#### 1987-88 Follow Up

Student performance has been traditionally measured in the Chapter I programs by assessment of the amount of "gains" that students make from pre to post testing with a norm referenced instrument such as the Iowa Tests of Basic Skills. The 1987-88 Des Moines Plan objectives specified this same method for measuring student achievement. A significant question related to the general definition of validity is raised concerning the appropriateness of using such an instrument, i.e. does such an instrument measure what we want to measure as outcomes?

Several years prior to implementation of The Des Moines Plan, an issue was raised regarding the possibility of using a locally developed measure in place of a norm referenced instrument to measure growth on a pre/post basis. Contact was made at that time with the appropriate officials at the state level to determine if this was permitted in a program funded by Chapter I, and if so, under what conditions. The rationale for entertaining this approach was the feeling that a locally developed objectives referenced test would provide a closer match with the curriculum objectives presented to students in the lab programs than would any standardized test. In other words, we would be establishing an outcome measure that would clearly be better matched with the objectives of the curriculum being taught. It was discovered that the major requirement that must be satisfied in order to implement this procedure is the generation of local norms and the subsequent ability to convert these to standard scores and then to Normal Curve Equivalent (NCE) scores for state reporting purposes.

No specific action was carried out in response to this recommendation in 1987-88.

### CONCLUSIONS

#### Identification Procedures

In general, procedures to identify students for all programs included in the Des Moines Plan were

implemented according to specifications outlined in the respective program descriptions. Preliminary results of an evaluation of the device currently used to identify students for the Kindergarten Enrichment Program suggest that a standardized individually administered assessment battery (the Battelle Developmental Inventory) was a better predictor of Metropolitan Readiness Test results and less sensitive to the ethnic background of students than the Waupun Curriculum Screening Device. This investigation is ongoing.

### Student Characteristics

State guidelines suggest that the percentage of minority students represented in any special program should not deviate more than 10 percentage points from the district wide minority percentage to ensure equitable delivery of service. While the distribution of minority students represented in the Kindergarten Enrichment Program satisfied this criteria, the minority representation exceeded this standard in the K-1 Transition and Lab Programs.

### Follow Up of 1986-87 Recommendations

Evidence was available to suggest that a majority of the recommendations specified in 1986-87 evaluations of the programs later subsumed in The Des Moines Plan were addressed by program coordinators. The results of a review of the procedures used in determining gain criteria on the outcome measure in the lab programs is expected.

## RECOMMENDATIONS

### Identification Procedures

1. The Supervisor of the Des Moines Plan should continue to work with the Coordinator of Testing and Research to develop procedures that accurately identify students for the early elementary support programs.
2. The Supervisor of The Des Moines Plan should consider including an item relating to the identification procedures in the process and performance objectives for all Des Moines Plan programs to ensure that such procedures are evaluated on a regular basis.

**Student Characteristics**

1. The Supervisor of The Des Moines Plan should continue to monitor the distribution of minority/nonminority and male/female students in the program. Particular efforts should be directed to ensuring that minority student representation does not exceed state criterion levels.

**Follow Up of 1986-87 Recommendations**

1. The Supervisor of the Des Moines Plan should continue to examine procedures currently employed to determine the criteria for "success," particularly in the lab programs.

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Report of Evaluation:

LONGITUDINAL STUDY OF THE DES MOINES PLAN:

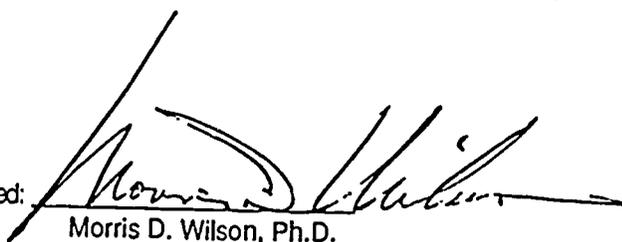
A PLAN FOR STUDENT SUCCESS

1987-88

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October 20, 1988

## INTRODUCTION

### Background

A major component of the long range plans to improve the quality of education in the Des Moines Public Schools focuses specifically on strengthening programs for low achieving students. The Des Moines Plan: A Plan for Student Success was implemented in 1987-88 to coordinate remedial efforts in the district. The Des Moines Plan is motivated by the assumption that all students can learn. Recognizing students learn in a variety of ways, programs in the plan are designed to provide alternative methods to facilitate the acquisition of skills. Early elementary programs center around a developmental philosophy that acknowledges student development through age seven occurs at variable rates. Programs are designed to allow children time and reinforcement to develop an adequate foundation for a successful learning experience in first grade and beyond. Early elementary programs include the Kindergarten Enrichment and K-1 Transition Programs. Students who demonstrate moderate developmental deficiencies are placed in the Kindergarten Enrichment Program, a half day supplemental program designed to reinforce, without duplicating, the regular kindergarten curriculum. Students who demonstrate significant developmental deficiencies benefit from interaction with peers in various stages of development in the regular kindergarten program and may be given an additional year of reinforcement in the K-1 Transition Program.

Students who fail to satisfy district standards in the basic skills areas receive remedial assistance through Reading/Writing and Math Labs. Modelled after the District's Chapter I and II Programs, the basic skill labs allow students to strengthen specific weaknesses through educational experiences that capitalize on their learning strengths. Students at the elementary level are served on a pull-out basis. Students at the secondary level receive assistance through regularly scheduled courses.

Students who receive remedial assistance for three consecutive semesters, and have had the opportunity to participate in summer school programs, but continue to demonstrate critical deficits are retained in special curriculum rooms. These "transition" rooms are inserted between grades 2 and 3, 4 and 5, and 6 and 7. Special emphasis is given to the basic skills of math, reading, and writing.

A key component of the identification procedures for the remedial programs is the district checkpoint program. Checkpoints are criterion referenced tests designed to measure grade level mastery of basic skills. They are administered in grades 1, 3, 5, 8, and 11. Students who fail to satisfy minimum standards are considered for remedial assistance.

The Des Moines Plan was officially initiated in the spring of 1988. While the structure of the program provided for immediate implementation of the early elementary and basic skill lab components, the stipulation that students must participate in the lab program for three consecutive semesters delays implementation of the transition rooms until the 1989-90 academic year.

### Program Evaluation

The philosophy and structure of the Des Moines Plan suggests that early identification and intervention should affect greater change in academic achievement and may reduce the need for additional remediation. More specifically, to the extent that the Des Moines Plan is effective in meeting the needs of students, there should be greater turnover among the students served in remediation programs, particularly among students who participated in early elementary prevention programs. There should also be a reduction in the number of students retained in transition rooms.

The nature of this assumption suggests the true impact of the Des Moines Plan may not be evident for some time. This longitudinal study is designed to provide the information necessary to evaluate the impact of the Des Moines Plan on student achievement. The purpose of this paper is to describe the design and methodology that will be employed in the longitudinal study and to provide information to serve as baseline criteria against which to evaluate the effectiveness of the plan.

### METHOD

#### Subjects

All students, and their parents/guardians, who were identified and served in Des Moines Plan programs during the spring of 1988 will be included in the longitudinal study.

## Measures

### Independent Variables.

Isolating the impact of the Des Moines Plan programs will require controlling for other variables that effect academic achievement. Students' sex, race, socioeconomic level, parent/guardian level of education, preschool experience, participation in alternative support programs (e.g., English as a Second Language etc.), and attendance will be collected to determine the extent to which student achievement is accounted for by these factors and how much is due to participation in Des Moines Plan programs.

### Dependent Variables.

To the extent that the programs are effective, there should be a reduced need for continued services and a reduction in the number of students who are retained. The need for services will be monitored by the results of district checkpoints and the number of days spent in Des Moines Plan programs. Particular attention will be given to monitoring the recidivism rate among students served.

Prior to the introduction of the Des Moines Plan, students were retained at any grade level according to the professional opinion of teachers and approval of parents. Table L-1 illustrates the retention rates by grade for the past 5 years at the elementary level.

Table L-1. Retention Rates for Kindergarten Through Grade Six, 1982-1987

Year	Grade Level								Total
	Kndg.	K-1	1	2	3	4	5	6	
1982-83	87		131	64	32	19	11	3	347
1983-84	93		180	52	23	16	9	25	398
1984-85	94		119	57	21	8	9	62	370
1985-86	58	144	92	38	23	13	10		378
1986-87	44	117	131	67	21	21	7		364

CONCLUSIONS AND RECOMMENDATIONS BASED ON A COMPREHENSIVE EVALUATION OF  
THE DES MOINES PLAN: A PLAN FOR STUDENT SUCCESS  
1987-88

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Introduction of the transition rooms will eliminate retentions by grade. Those students who fail to satisfy district standards in the basic skills after three consecutive semesters will receive an additional year of remediation in transition rooms. To the extent that the plan is effective, enrollment in the transition rooms should be fewer than the combined rates of the grades immediately preceding and following the transition grade. There should also be a progressive decrease in the enrollment figures for each transition level.

### Procedures

Most of the demographic information for students served in the programs is available from student records. Information regarding students socioeconomic level will be obtained through applications for the free and reduced lunch program. Parent/guardian educational experience and students' level of preschool experience will be obtained through a parent/guardian survey.

Student demographic information will be supplemented with district achievement results and attendance records available through the district and a data base designed specifically for the Des Moines Plan.

### Results

The results of the longitudinal study will be updated on a schedule concurrent with the checkpoint assessments for the original cohort. The initial report, scheduled for release in 1988-89, will provide a detailed description of the students under study including the first checkpoint results. Subsequent reports will be released following 1990-91, 1992-93, 1995-96, and 1999-2000.

## INTRODUCTION

A review of the process and performance objectives for each program supplemented with an examination of the identification procedures, student characteristics, and follow up of previous evaluations, identified the extent to which each program in the Des Moines Plan was implemented as intended. These results provided information necessary to lay the ground work for a longitudinal study of the effects of the Des Moines Plan on student achievement. They also identified factors that have implications for the delivery of the programs in general. The following conclusions and recommendations are based on a synthesis of these results.

## CONCLUSIONS

### Philosophy and Goals

The evaluation of the process and performance objectives of the early elementary support programs indicated that both programs provided distinct experiences that consistently and accurately reflected their respective goals and philosophies. However, in 1988-89 the Kindergarten Enrichment Program will be modified to serve students who demonstrate the greatest need for academic support. Accommodating these students will require significant adjustments to both the identification procedures and the outcome expectations of the program. The additional preparation should have a direct effect on the nature of the K-1 Transition Program, and may be felt in the elementary lab programs as well.

### Identification Procedures

Identification procedures for all programs in the Des Moines Plan were determined after careful consideration of district resources. Consistent with the philosophy of the Des Moines Plan, greater emphasis was given to serving students at the elementary levels. For example, provisions for the Reading/Writing and Math Labs included serving 20 percent of the students in grades 1 and 2, 15 percent of the students in grade 3, 10 percent of the students in grades 4-6, 8 percent of the students in grade 7, and 5 percent of the students in grades 8-11. Once defined, checkpoint criteria were established to identify students according to these proportions. For example, students who scored in

the lowest 20% of the scores on the first grade reading checkpoint were served in the Reading/Writing Lab, etc.

While procedures based on percentages ensure that those students most in need receive support services, they also introduce the possibility of serving students who do not really demonstrate need. In other words, current identification procedures do not consider the level of mastery demonstrated on the checkpoints, but are based on the distribution of the checkpoint results and the number of spaces available for service at each grade level. For example, a first grade student who scored 80 percent on a checkpoint could be identified for service if that score fell among the lower 20 percent of all first grade checkpoint scores.

Test development procedures provide one safeguard against misidentifications of this nature. District checkpoints are designed to measure mid year mastery of curriculum objectives and are revised to reflect any modifications in those objectives. Increasing the difficulty of the curriculum objectives should increase the difficulty of the checkpoints and therefore, improve their power to differentiate among students' level of functioning. To follow up the example, a score of 80 percent would not likely fall within the range of identification on a more difficult checkpoint because the range of all first grade checkpoint scores would be much broader. However, curriculum objectives are reviewed on a five year schedule and developing new tests to reflect changes may take up to two additional years. This time line may not be sufficiently sensitive to avoid misidentifications.

#### Organizational Structure of the Management System

The Des Moines Plan was based on the district's Chapter programs. In 1986-87, the Chapter programs involved 31 schools across the district. In 1987-88, the Des Moines Plan included all elementary and secondary schools offering regular academic programming in the district; some 58 buildings. The Des Moines Plan also acquired two early elementary programs with their accompanying personnel. In addition, the Chapter programs relied on two sources of funding; however, approximately 82 percent of the funds for the Des Moines Plan were contributions from five state or federal sources.

While the system utilized to manage the Chapter programs successfully accounted for the

implementation of those programs, the same system failed to withstand the demands imposed by the expansions associated with the Des Moines Plan. Accountability files were established to monitor the objectives of each program in the Des Moines Plan, and within each grade level of the lab programs (i.e., elementary, middle, and high school). Similarities in the nature of the program objectives often resulted in maintaining multiple sets of files with the same documentation. Furthermore, regulations associated with the allocation of funds from external sources complicated the maintenance of account ledgers for each program.

### RECOMMENDATIONS

The following recommendations are based on the conclusions listed above:

1. The Supervisor of The Des Moines Plan should meet with representatives from the Department of Elementary Education, the Department of Educational Services, and the Department of Evaluation, Research, and Testing to review the implications of the modification to the Kindergarten Enrichment Program on other Des Moines Plan programs. Particular attention should be given to examining the impact of this change on the identification procedures and outcome expectations of the K-1 Transition and first grade lab programs.
2. Each year the Supervisor of The Des Moines Plan should meet with representatives from the Department of Elementary Education, the Department of Secondary Education, the Department of Evaluation, Research, and Testing, and the Coordinator of Testing and Research specifically, to review the allocation of academic support resources. The number of students served at each grade level should be determined on the basis of available resources, checkpoint results, and other relevant information.
3. The Supervisor of The Des Moines Plan should meet with representatives from the Department of Evaluation, Research, and Testing, and the Controller's Office to devise a system to monitor the implementation and accounting of the Des Moines Plan more efficiently.