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ABSTRACT

This paper describes two case studies of testing programs at local levels. The work was conducted as part of the Assessment Development and Use component of the Northwest Regional Educational Laboratory's (NWREL) Assessment and Development project. Two school districts were recruited to participate in this effort--McMinnville, Oregon, and Kyrene, Arizona. The draft case studies covered the demographics of each site, the testing system in place, the overall history of the activities, and the current status of each effort. Comparisons were made on the following subjects: (1) costs; (2) change agents; (3) role of technology; (4) curriculum alignment; (5) major issues and concerns; and (6) process of change. Extensive appendices attached to each case study provide background materials, such as five year curriculum plans, testing schedules, class profiles, philosophy of education, courses of study, program evaluation plans, and cost options. (LMO)

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Two Case Studies of Local Test Development

Kyrene School District
McMinnville School District

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OVERVIEW OF THE CASE STUDIES

The Assessment Development and Use component of the NIE work of the Assessment and Development [illegible]t at NWREL includes two case studies of local test development. The purpose was to explore the issues and concerns involved at the local level when undertaking such projects. Such exploration included examination of such things as why districts chose the testing system they did, who the principle players were, what decisions must be made, who needed to act as a change agent, how the content for the tests were decided on, and how technology was used. Since many school districts are now developing their own testing systems in response to the current emphasis on minimum competencies and school effectiveness, these case studies might assist developers to know what issues and concerns will arise, the cost of such efforts, and what others have decided to do. The case study effort builds on work previously done by the project in the area of selecting testing options and using item banks.

Two school districts were recruited to participate in this effort--McMinnville, in Northwestern Oregon near Portland, and Kyrene, in Southcentral Arizona near Phoenix. Both school districts have been involved in developing testing systems during school years 1984-85 and 1985-86.

NWREL staff were involved with each district in a number of ways. First, project staff attended a number of meetings at each site in which district staff discussed plans, issues, concerns and alternatives. Second, each site provided a liaison person (or persons) to assist with writing the history of the local effort. (Both of these endeavors have roots extending back several years. One important aspect of the study became, therefore, tracing previous decisions and activities to show the basis for current activities.) Third, discussions and interviews occurred between project staff and important players at each site to explore the reasons for decisions, important

considerations, issues, problems and concerns. Fourth, NWREL staff provided some consultation to the districts to help them find test items and software, to train staff on test development and to provide advice on alternatives.

The draft case studies which are attached cover the demographics of each site, the testing system which is in place, the overall history of the activities, and the current status of each effort.

Based on the case studies, the following overall statements can be made:

1. Costs. Local test development activities are expensive and time consuming. To support the whole curriculum alignment process (including test development, curriculum development, and cross-referencing), one of the two sites estimates it has spent almost $300,000 in the last four years to support its efforts to date. The other district estimates about 72 staff release days for the development of a single set of K-6 tests on one subject, plus an initial investment of $5,000 in computers and software. (Other costs were not estimated by the second district.)

2. Change Agents. Both districts reported that a high level person in the district administration was the impetus for the project and was required throughout the project to organize resources, provide motivation, corrdinate efforts, and provide formal directives as needed. The specific testing approach that each district took depended mainly on decisions made by high level district personnel and consultants (with review and approval by teachers and the school board). These decisions were supported by varying numbers of lower-level personnel who "bought into" the approach. Some decisions on the specifics involved in the approach were made by the teacher committees which did most of the work.

3. Role of Technology. There was no question that decisions made by the two districts concerning their testing schemes were directly affected by the hardware they already had on hand (or had the money to buy) and the availability of prewritten items and prepackaged software. One district was very explicit that they would not pursue a computer-supported testing system unless software could be installed on their machine with little required additional programming. The other district made its pattern of decisions based on easily obtainable items and local software consultants.

4. Curriculum Alignment. It is equally as clear that current federal reports on the status of education in the United States, combined with recent research on effective schools, influenced the districts' targeting of resources on curriculum alignment. Within their resources, both districts attempted to develop criterion-referenced survey tests tied to revised curricula to be given in the fall and spring to assess teacher and district success in meeting achievement goals. Both districts also are attempting to implement mastery learning-type approaches by supporting skill assessments during the school year and training teachers in a mastery approach to learning.

5. Major Issues and Concerns. In both districts common issues and concerns arose--fear of using the results in a punishing rather than supportive way, the time involved in testing (especially mid-year skill tests), the quality of the tests produced, the usefulness of the resulting information, fear of overstandardization of teaching, and the concern that the tests could not measure all important skills and so had limited use for diagnosis. One district also indicated

that the appearance of change by itself was threatening. Thus, efforts were made to phase things in slowly, have lots of training, do a good deal of PR work, and reduce the appearance of change whenever possible.

6. Process of Change. Although both districts could develop a set of tests in a year, the process of curriculum alignment, refinement of the system (curriculum, hardware, software, and tests), and proper use of results, is a multi-year process. There are numerous related efforts involved. For example, one of the districts tied the curriculum alignment effort into staff training, hiring practices, communication with parents, and a career ladder for teachers. In fact, both districts see continual refinement and extension of their testing schemes at least over the next few years or even cyclic and ongoing revision.

KYRENE SCHOOL DISTRICT

District Demographics

Kyrene is located in southcentral Arizona near Phoenix. The district serves about 5000 students in grades K-8. It serves as a feeder district to the Tempe Union High School District. The district currently (1985-86) has six elementary schools and one junior high school. About 265 teachers are responsible for instruction. The district is a rapidly growing suburb of Phoenix. Students are generally lower middle class and predominately white, although small communities of Hispanics and Indians are present.

Description of the Current Testing System

Testing. Kyrene District has been developing a detailed scope and sequence of objectives for all curriculum areas beginning in school year 1983-84. Currently, these are completed in math and communication arts. They have developed one form of a "survey" test for each completed curriculum area in each grade level. The math test was pilot tested in 1983 and became available for use in 1984. Communication arts was developed 1983-1985. Tests in other curriculum areas are currently under development. (See Appendix A for a timeline.)

These survey tests have four multiple-choice test items to test each of 30- 60 percent of the objectives at each grade level in each subject. Sampling of objectives was chosen to decrease test length. About 90 percent of the items on each test are commercially produced. (The district initially used Merrill's custom testing service to test math, but has recently purchased their items. The district keeps these items in hardcopy form.) The scope and sequence of objectives to be tested and the test items were selected by teacher committees headed by an outside consultant. The majority of the items

on the survey tests are in multiple-choice format. However, in the primary grades a portion requires oral responses and teacher observation. In addition, a writing sample is collected at each grade level to measure written communication objectives.

Tests are given in the fall and spring of each year. Students are tested on the skills on which they are working. This means that some students are tested "out-of-level." The out-of-level procedure was implemented in Fall of 1985. Criteria for deciding who gets out-of-level tests and the logistics for handling these cases are shown in Appendix B. The results are used for program evaluation, survey level diagnosis and retention/promotion of students at the district level. Teachers are also encouraged to use the results for instructional planning.

Scoring and Reporting. Since there is no in-house scoring facility, the district has contracted with a local consultant for development of scoring and reporting programs and production runs of answer sheets. The reports available through this system are shown in Appendix C. Briefly, these reports are:

1. Class Profile Report. This report includes a summary for each classroom of skills mastered, and a summary for each student of skills mastered and local percentiles.
2. Individual Student Profile. This report lists, for each student, the individual objectives mastered and not mastered, percent of objectives mastered and the local percentile.
3. School Summary Report. This report provides a summary of mastery and local percentile information for each class and each grade in a school.
4. District Summary Report. This report summarizes grade level and school information across the district.

5. Regrouping Report. This provides objectives mastery class profiles for all students mastering less than 40 percent of the grade-level objectives regrouped by next year's teacher.

The cost of the scoring and reporting functions is currently about $28,000 per year. This includes scoring a total of about 20,000 answer sheets (pre and posttest in all grades and two subject areas), production of all reports, provision of preslugged, general-purpose NCS answer sheets, and instructions for administering and returning the tests. Kyrene district has the responsiblity of supplying scoring keys and to reproduce and distribute tests.

Related Efforts. The first effort that is related to Kyrene's criterion referenced testing program is teacher training. All new teachers receive about three hours of in-service on the logistics and philosophy of the testing scheme. Training on logistics for returning teachers is not deemed to be necessary.

Training on the use of results (e.g., school board, principals) occurs during regular interactions on the topics. For example, presentations to the Governing Board on results is accompanied by information about philosophy and purposes. Training to teachers working on committees occurs when they get to a point where extra information is needed. (More detailed training on use of results for planning instruction is beginning this year and will be described later in this paper.)

Another related effort involves hiring practices. Part of the criteria for hiring teachers relates to their philosophy concerning and ability to use a mastery learning approach to teaching.

A final related effort involves the newsletter that Kyrene usually sends to staff and parents. The emphasis in the newsletter is instruction and regular articles appear on achievement results and current activities on the scope and sequence and test development.

Summary. Thus, as of the Fall 1985, the district has its curriculum developed in math and communication arts, has developed and used locally developed tests in these areas, utilizes outside customized scoring and reporting, and conducts voluntary teacher training on the use of test results.

History of Implementing the Testing System

Initial Impetuses. In 1972 the State of Arizona mandated that all districts would develop a "continuous and uniform evaluation system" (CUES) to establish performance targets for students at each grade level. The superintendent at Kyrene wanted to use this mandate to develop a meaningful criterion-referenced testing system and developed a five-year plan to develop such a system. (The five-year plan is in Appendix A.) The five-year plan was based on and an extension of current Kyrene educational philosophy and curriculum development and adoption procedures (see Appendix D). The five-year plan was intended to be cyclic and was based on the state's textbook adoption cycle.

In 1980 the district received a federal grant for approximately $100,000 to develop such a criterion-referenced testing system. This system was in place by 1980-81 at a total cost of $200,000. Essentially the original testing system involved specifying a minimum set of skills to be attained at each grade level and developing tests to be given in the fall and spring to see how well these skills had been learned. In addition, teachers were to map skills continuously throughout the school year. The district reports that this original product has been adopted by many districts nation-wide.

There were several problems that emerged with this first scheme. First, many students had already mastered most of the tested skills at pretest time which made the tests less than ideal for instructional planning. The tests were essentially minimum competency tests. Second, there was a general lack

of proper use of the system by teachers. For example, many teachers waited until just before they were monitored to update mid-year skills lists. Third, teachers complained of too much recordkeeping. Fourth, it was not based on any real scope and sequence, but only on target skills for each grade, so it was difficult to use for instructional planning. Fourth, there were problems in the logistics of testing and recordkeeping.

In 1981-82 a new Assistant Superintendent for Instruction was hired who was knowledgeable in the area of effective schools research. One reason she was hired was to make adjustments in the criterion-referenced testing program to solve some of the problems which had been encountered. After attempting to tinker with the current system for two years, the decision was made to phase in a new testing scheme based on a revised scope and sequence.

In March 1983, the Governing Board passed a policy to support the new effort. This policy (see Appendix E) advocated a continuous scope and sequence to:

1. promote continuity across grades,
2. make it clear to teachers, parents and students what was expected in terms of skills acquisition, and
3. align the curriculum with testing so that progress in the skills areas could be followed.

The policy also stated that minimums and "extended learning outcomes" would be provided, it provided for survey-type fall skill preassessment tests to be developed in order to place each student in the curriculum, it called for formative assessment to measure student progress and form the basis for promotion, and it required appropriate recordkeeping to track student skill levels. The Assistant Superintendent for Instruction was placed in charge of directing the planning, implementation and evaluation of the system. Efforts were to be made to coordinate the process with the Tempe Elementary and Tempe Union High School Districts.

Thus, the impetus for the current test development effort came from several sources:

1. A state mandate for CUES
2. A superintendent strong in instruction who wanted to respond to the mandate in a meaningful way
3. A desire to redo a previous effort to make it more useful for diagnosis and instructional planning
4. An Assistant Superintendent for Instruction which had a clear idea of what a good criterion-referenced testing system should look like..
5. The availability to the district of money to pursue such an effort, first in the form of a federal grant, and more recently, in the form of "sudden growth" money because this district is experiencing a current jump in population.

In order to implement the new policy, the Assistant Superintendent for Instruction and an outside consultant developed a program evaluation plan which updated the previous five-year plan and called for curriculum development, test development and program evaluation. (Outside consultants began to be used because of two district philosophies. First, one reason that the previous sytem failed was that it was developed entirely in-house without benefit of outside expertise. Second, the district does not feel that one needs to develop ownership by doing everything oneself. It can be equally effective, and much more efficient, to react to products developed by others.) The cycle was to begin in school year 1983-84. (See Appendix F for the evaluation plan.) This plan provided criteria for cyclic review of the curriculum. The criteria included "development ... of an evaluation tool to be used to measure student achievement of a sample of curriculum objectives." After the tests are developed, basic skills areas were to be tested annually and other areas periodically. In order to judge program effectiveness,

criteria were established to student performance on the tests. If students did not perform up to the criteria, provisions were made for the evaluation of instruction. These plans were then reviewed by staff and adopted by the Governing Board.

Two interesting points are, first, that the paperwork to support the effort was developed at different times by different people and was brought together in a coherent whole at the beginning of the current effort. Second, the old testing scheme was, and is, being used until the new curriculum and tests are phased in as part of the cyclic process.

Curriculum and Test Development. Development of the new scope and sequences began in Summer, 1983. The district proceeded by hiring a consultant to do a literature search to see what others had done. The district judged that most other systems also tended to have skills targeted at minimums and so were not useful for diagnosis and instructional planning. Thus, they decided to develop their own scope and sequences and tests. Committees of teachers were established headed by an outside consultant. The outside consultant developed the initial scope and sequences. The committees validated the scope and sequences, selected the skills to be tested and acquired test items identified by the consultant. These products were then reviewed by all staff and approved by the Governing Board.

Since the skills lists were very detailed, not all could be tested in a survey test. The teachers choose from 30 to 60 percent of the objectives to be tested. To avoid the need for local development of items, the district initially used Merrill's item bank. The decision to use previously developed items came from past experience with the poor quality of items developed by local personnel.

The math tests were developed first. These were pilot tested in school year 1983-84. The main result of this pilot testing was to move many skills to an earlier grade in the scope and sequence, and revise the tests accordingly. These changes were made because students seemed to acquire skills earlier than was thought. The pilot test also resulted in a few items being revised or replaced. Revision of items was limited because good quality items were aleady being used and because of the extra expense involved in obtaining item statistics from the outside scorer.

Development of Test Scoring and Reporting. The district initially used Merrill's custom testing service to develop their math tests, score them and produce reports. Because of the expense involved in this and because of the continual addition of new tests, during school year 1983-84 the district contracted with a local consultant to provide scoring and reporting services. This consultant had also scored the old tests and so phased the new tests into the existing scheme. During this time report formats were modified a few times based on input from teachers and other staff. These changes were mainly cosmetic because the teachers like Merrill's presentation of results better than that from the consultant

Teacher Concerns. There was some initial concern by teachers about this effort because of their recent experience with a testing scheme which failed. Many teachers had developed ownership of the old scheme. Others felt that the failure meant that such efforts were futile. Also, there was concern because of change itself--there had been ongoing changes in logistics and report format and this represented another set of changes.

Other teacher concerns developed during the implementation of the testing scheme. Since the skills were made harder, many more students do poorly on the pretests in the fall. Some teachers felt that these tests are too traumatic for the students. (Pretests may be dropped at kindergarten and grade 1 for this reason.)

Costs. As of Fall 1985, the district estimates it has spent about $70,000 per year for the last four years to implement this process. Products thus far include tests in two curriculum areas and revised scope and sequences in one curriculum area, and purchase of 6,000 test items. Costs include staff time, consultant time, printing, and purchase of items. The scoring and reporting costs an additional $28,000 a year. Since this process is cyclic, the district estimates ongoing costs to be about $50,000. (This may change if some of the refinements being currently considered are implemented.)

Current Status

For the most part, the district now feels that the major conceptual framework of the system is complete and is reasonably satisfied with the level of difficulty of skills represented in the scope and sequences and the tests. Because of the amount of change which has occurred recently, the district has decided to let the current tests in the mathematics area and logistics stand for the next two years. Major current work will be in the areas of efforts related to the testing scheme, development of the scope and sequences and tests scheduled for this year by the five year plan, collection of information on tests and items which will be used in the future to refine both the tests and the levels at which skills will be targeted, and laying the groundwork for changes in logistics in two years.

Related Efforts. The district now feels that most effort should be put into training teachers and principals concerning the proper use of the system. The district estimates that about 40 percent of the teachers currently use the testing scheme to its full advantage. Many of these teachers are in schools which have a principal which encourages its use.

1. Teacher Training. Staff development on effective teaching began in 1981-82. The training program was based on the effective teaching literature,

especially the BTES model (Berliner and Rosenshine, 19__). Sessions were offered for district and/or ASU credit. The first emphasis in this training was on classroom management and other topics besides recordkeeping. This was a conscious decision because many of the teachers had negative past experiences with effective teaching being only related to keeping records. The component of the training to begin this school year (1985-86) relates to the development and use of criterion-referenced tests to monitor student progress and modify instruction. The new scopes and sequences and tests will be part of this training to encourage proper use of test results. Another thrust will be to enable teachers to test and monitor district skills in the scope and sequence not on the survey tests.

2. Career Ladder. The district will begin this year to implement teacher advancement based on increasing skills expected as a teacher. This ties into the testing program which will be used to monitor outcomes and teacher training and evaluation which emphasizes effective teaching skills.

3. Teacher Evaluation. Teacher evaluation on the skills demonstrated by effective teachers as shown by research will be implemented this school year. Monitoring student progress and using information to guide instruction will be part of this process.

Logistics. One big area in which the district has been considering change is in logistics. Based on the first two years (1983-1985) of testing information, outside contracting and local test development several needs and issues came to light.

1. It was very expensive to utilize outside scoring. The best turnaround time obtained was two weeks. The district began considering scoring tests in-house in order to decrease costs and improve turnaround.

2. It was very expensive to develop tests from the items housed at Merrill, but there was a need to develop alternative forms and revise the tests based on curriculum changes from the pilot years. (The district bought the items in June, 1985.)

3. Only a portion of the skills in the scope and sequence were tested by the survey tests. Thus there was no formal mechanism to assess student skills in the other areas. This function was left up to teachers. Teachers expressed an interest in a bank of items they could use to develop tests for diagnostic and mastery purposes.

4. It was difficult to keep track of student skills. Such a tracking approach to student skills can require a lot of recordkeeping. Thus far the district has pre- and posttest comparisons of skill levels, but no ongoing method of keeping track of individual students.

These needs, plus the continued availability of "sudden growth" money suggested local computerization of test development, scoring and reporting. This became feasible because, at the same time, the district was deciding on a minicomputer to use for student attendance and business office functions. (This was also being purchased because of the "sudden growth" money.) The district hired a consultant in the Spring of 1984 to study district computer needs and match these to hardware and software options. The HP3000 was selected in Fall, 1984. Pertaine was awarded the contract for training and service. Part of the reason for choosing this hardware and software was that Pertaine was also vending an instructional management, test scoring and item banking system developed by Adams County, Colorado.

In March, 1985 the district seriously began to consider the Adams County software (called the CMI3000). A series of meetings took place between the consultant hired to develop the curriculum and testing scheme, the Assistant Superintendent for Instruction, one principal particularly interested in

computer uses, the Superintendent, the business manager and the director of special services (e.g., special education). These people (plus consultants hired by the district) constituted the "Instructional Computer Committee" which was asked to:

1. define the essential issues and qustions related to acquiring a testing and reporting system;
2. examine and report on the currently available software systems compatible with the district HP300;
3. examine and report on the potential costs of acquiring a system for in-house scoring and reporting; and
4. specify both the short-term and long-term tasks necessary to develop and acquire a system should one prove to be available and cost-effective.

Because of perceived lack of time and expertise to pursue some of these issues, an outside consultant was hired in April 1985 to assist with the computer portion of the task in April, 1985.

Because the district was considering doing item banking, they contacted NWREL after one of the consultants read Arter and Millman's article in JEM. NWREL met with district staff four times to discuss alternatives, look at considerations and identify alternative software. In return, the district agreed to be a case study site.

During these meetings, the following were identified as important design features of the system:

1. There needed to be quick turnaround since teachers wanted pretest of group skills early in the school year to plan instruction.
2. Reports needed to be easy to read and change as little as possible from the ones currently in use. This was seen as important because the teachers had been through so many testing changes in the past three years.

3. The district wanted a system that would produce achievement comparisons between schools and teachers, and would provide item analysis on tests.

4. Two independent purposes for testing were the district level "survey" tests and the interim tests to be developed by teachers. There was a need for security fot the test items to be used on survey tests.

5. Since the district has no permanent programmer, software needed to be purchased "ready made."

6. The district wanted to acquire items which were already pilot-tested in order to minimize the need for local development and maximize the quality of the tests.

7. Special education wanted IEP's automatically generated. This would necessitate a cross-reference of skills to materials.

8. Teachers wanted open access to items, the ability to add their own items, and automatic report cards. The teachers did not have so much concern for curriculum and program evaluation, but rather wanted information for planning instruction.

9. There was a software agreement with the vendor supplying software for other district uses of the HP3000. If the program is not compatible with current systems then the maintainence agreement is void.

10. The HP3000 might not have enough disk space to run an item-banking program.

11. The HP3000 was initially purchased for administrative uses such as payroll and student attendence. There would have to be policy set regarding the availability of the computer for testing.

12. The current software vendor is a business which does not particularly know about educational concerns and issues. The district felt that it was on its own to troubleshoot.

13. The district felt that it needed an evaluation unit to handle this and other functions which are currently spread out in the district.

14. Outside consultants are needed to asist with the plans and also to provide credibility to the process.

The district has tentatively decided to purchase the Adams County software in one to two years. Three other systems were identified which run on a HP3000 computer. The others, however, are not in disseminatable form at this time. The district has no permanent computer person and so wanted a package that could be used "as is" with little additional programming. NWREL also helped the district assess this software package and found it to be reasonably flexible for the tasks desired.

The Adams County software comes with several files which are cross-referenced to each other:

1. Instructional objectives
2. Instructional resources
3. Test items
4. Student information
5. Tests

Survey tests are already developed and stored. The software scores tests has 17 different report features and automatically updates the student information file. The user has the option to use all prepackaged features or use the software to enter and use one's own objectives, items, materials and tests.

In the end, the most important considerations in deciding on how to handle testing logistics turned out to be that the software was prepackaged and different parts could be phased in as time went on. It has the potential for teacher access and use of a large number of items, provides scoring and reporting, and it was vended by the same company which provides other district software (and so would not void the previous maintainence agreement). The overall cost to the district does not seem to be the overriding concern as can be seen by cost projections in Appendix G. It was also decided that the need for match-up to current report formats was a secondary concern.

The current plan, which will be refined over the next year or so will entail developing the scoring, reporting and recordkeeping features first. The district will enter its own skills. After an examination of the skills lists provided with the Adams County package, the district found their own to be more comprehensive and levelled better. Since the district already has tests in place which measure these skills, they will cross-reference tests and items to the skills entered on the system. When tests are scored the computer will automatically update the student record file.

Once the scoring and reporting features are in place, the district might consider (1) developing new test forms and (2) item banking for teacher use. The former plan would entail keeping the Merrill items in hard copy format and restrict them to district survey use. The formal district survey tests would be updated by a teacher committee guided by an outside measurement person every two to three years. The latter might entail using the Adams County items which are already on the system and cross-referencing them to Kyrene's skills. Holes would be filled in with items from other sources.

Once these are in place the district might (1) acquire other items and (2) pursue using the system for other types of program evaluation. The latter would entail some programming in order to send testing results generated from the system to an HP3000 system file which could then be merged with other HP3000 system files and accessed by a statistical package.

The computer consultant is preparing an implementation plan which includes:

1. Changes which might need to be made in the district management structure in order to accomodate the testing configuration.
2. The steps involved in purchasing, installing and maintaining the software.
3. The steps needed to develop tests from the system, including the entry of skills and items onto the system.
4. Activities needed to provide timely reports on student skills.
5. Staff development.
6. The expandability of the system to include future functions.

(See Appendix A for the most recent version of the implementation plan.)

APPENDIX A

EDUCATIONAL PROGRAM DEVELOPMENT

FIVE YEAR PLAN FOR CURRICULUM

	Planning	Design	Try-out/Program Evaluation/Design Revision/Implement
	Year 1	Year 2	Years 3-5
83-84	Computer Sci. Reading Literature Vocabulary Oral Comm.	Written Communication Grammar Spelling Study Reference Skills Science	Mathematics Health Education Social Studies Home Economics Industrial Arts
84-85	Library Sci. Foreign Lang. Handwriting	Computer Science Reading Literature Vocabulary Oral Communication	Written Communication Grammar Spelling Study Ref. Skills Science
85-86	Career Ed. Physical Ed. Music Art	Library Science Foreign Language Handwriting	Computer Science Reading Literature Vocabulary Oral Communication
86-87	Mathematics Health Ed. Soc. Studies Home Ec. Ind. Arts	Career Education Physical Education Music Art	Library Science Foreign Language Handwriting
87-88	Written Comm. Grammar Spelling Study Ref. Skills Science	Mathematics Health Education Social Studies Home Economics Industrial Arts	Career Education Physical Education Music Art

APPENDIX B

MSS TESTING

FALL

SPRING

LEVEL	WHO GIVES	WHO GETS	WHEN	WHO GETS	WHEN
On Grade Level Testing	Classroom Teachers Elementary & Junior High (Fall & Spring) Special Ed. Teachers (Spring)	ALL Students EXCEPT • Special Ed. Students (2 yrs below gr. level) • Gifted Students (who took test in the Spring of '84 and achieved 90% or greater)	During Fall Testing Period	• All students in District (Including Special Ed. and possible retainees)	• Early Spring Test period for Special Ed and potential elementary retainees • All others - Spring Testing period (including Jr. High retainees)
Above Grade Level Testing	Elementary Gifted Teachers Junior High Assigned Math or Honors Teachers	• Identified Gifted Students OR • Students mastering ≥ 70% of grade level objectives • Students in referral process	After Receipt of Fall Grade Level Test Reports (October)	• Identified gifted students in Math • Any student receiving math instruction above grade level as a result of Fall pre-testing	Spring Testing period
Below Grade Level Testing	Special Education Teachers	• Identified Special Education Students in Math EXCEPT those students who took test in Spring of '84	During Fall Testing Period	• Identified Special Ed. in Math and received instruction on below-grade level objectives • Possible retainees (give grade level and one year below grade level test)	Early Spring Test period
	As assigned by principal	• All students new to Kyrene District receive 1 grade level below assigned grade level test	After receipt of results of Fall Testing Period OR As student enrolls		
	Special Education	• Students in referral process	Upon reference		

* In early spring, Special Education and possible retainees will take two tests on grade level and below grade level.

CASS TESTING

SPRING

LEVEL	WHO GIVES	WHO GETS	WHEN
On Grade Level Testing	Special Education Teachers	Potential retainees Special Ed. Students	Early Spring Test Period
	Classroom Teachers	All Students EXCEPT • Potential Retainees • Special Ed. Students	Spring Test Period
Off Grade Level Testing	NOT TO BE GIVEN DURING PILOT YEARS		

APPENDIX C

EDUCATIONAL EVALUATION SYSTEMS, INC. | DETAIL CLASS PROFILE | SUN VALLEY USD DISTRICT

DATE - 05/31/84 TEST - MATH 6 | TEACHER - MCLAUGHLIN ROSE | GRADE - 8 | THOMAS EDISON SCHOOL

STUDENTS TESTED - 26

SKILL / OBJECTIVE NUMBER

SKILL / OBJECTIVE NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
MASTERY LEVEL	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
ITEMS TESTED	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
NUMBER OF STUDENTS MASTERING EACH SKILL	20	25	26	2[illegible]	20	20	21	20	20	12	26	20	13	18	17	10	6	12	8	18	9	17	16	18	5	12	16	2	22	22	20	3	6	4	14	17
PERCENT OF STUDENT MASTERY - CLASS	77	96	100	85	77	77	81	77	77	46	100	77	50	69	65	38	31	46	31	69	35	65	62	69	19	46	62	8	85	85	77	12	23	15	54	65
PERCENT OF STUDENT MASTERY - SCHOOL	0	77	96	100	85	77	77	81	77	77	46	100	0	77	50	69	65	38	31	46	31	69	35	65	62	69	19	46	62	8	85	85	77	12	23	15
PERCENT OF STUDENT MASTERY - DISTRICT	0	77	94	100	85	77	77	81	77	77	46	100	0	77	50	69	65	38	31	46	31	69	35	65	62	69	19	46	62	8	85	85	77	12	23	15

STUDENT NAME	Skills 1–36	LOCAL PCTL- SKILLS	TEST ITEMS 144 CORRECT TOT	CORRECT %		TEST SKILLS 36 MASTERED SKILLS	MASTERED %
ALBERTSON ARTHUR	[illegible]	1	51	3[illegible]	*	6	17
BICKFORD MELVIN	[illegible]	34	84	58		13	3[illegible]
BLACKSTONE SARAH	[illegible]	[illegible]	13[illegible]	[illegible]		[illegible]	[illegible]
CARLSEN SCOTT	[illegible]	19	78	53	*	16	44
CHATHAM KATHRYN	[illegible]	76	122	85		29	81
CULLEN WALTER	[illegible]	94	132	92		33	92
DAVIS EDWIN	[illegible]	61	95	66		22	61
DIXON DARLENE	[illegible]	67	93	65		23	64
FERNANDEZ FRANCISCO	[illegible]	50	95	66		21	58
FOSTER DEAN	[illegible]	82	117	81		30	83
GREENBERG STEVEN	[illegible]	13	65	45	*	13	36
HARRIS NANCY	[illegible]	25	80	56	*	17	47
INGERSOLL KATHY	[illegible]	3[illegible]	93	65		19	53
JOHNSTON JACQUELINE	[illegible]	3[illegible]	96	67		21	58
MARTIN JUDY	[illegible]	19	84	58	*	16	44
MARTINEZ RAFAEL	[illegible]	50	95	66		21	58
MILLER ADRIAN	[illegible]	9	61	42	*	10	28
MORISSEY TIM	[illegible]	61	96	67		22	61
PETERSON PAUL	[illegible]	76	118	82		29	81
REDMOND ROGER	[illegible]	88	129	90		32	89
SANDERS ALICE	[illegible]	88	127	88		32	89
SIMON MICHAEL	[illegible]	28	83	58		18	50
SLATER STEPHEN	[illegible]	5	61	42	*	8	22
UNGER PATRICK	[illegible]	40	92	64		20	56
VAUGHN ELAINE	[illegible]	71	105	73		26	72
WALTERS MARY LOU	[illegible]	50	99	69		21	58
AVERAGE			96	67		22	60

* 27% STUDENTS IN LOW QTL BASED ON SKILLS

SKILL NUMBER AND NAME

MINIMAL SKILLS - - - -
1 -PLACE VALUE WITH DECIMALS
2 -ADD AND SUB WHOLE NUMBERS
3 -MULTIPLY AND DIVIDE WHOLE N
4 -ADD AND SUBTRACT DECIMALS
5 -MULTIPLICATION OF DECIMALS
6 -DIVISION OF DECIMALS
7 -ADD FRACTIONS/MIXED NUMBERS
8 -SUB FRACTIONS/MIXED NUMBERS
9 -MULTIPLY FRACTIONS/MIXED NU
10 -DIVIDE FRACTIONS/MIXED NUM
11 -GRAPHS, CHARTS, TABLES
TYPICAL/EXPANDED SKILLS -
12 -COMPUTE THE MEAN (AVERAGE)
13 -DIVISION OF DECIMALS
14 -RECOGNIZE PRIME NUMBERS
15 -PROPORTIONS-FIND MISS'G TER
16 -MULTIPLY AND DIVIDE INTEGER
17 -ADD AND SUBTRACT INTEGERS
18 -FRACTION TO A DECIMAL
19 -FRACTION TO DECIMAL, ROUNDE
20 -FIND THE PERCENT OF A NUMBE
21 -PERCENT TO A FRACTION
22 -FRACTION TO A PERCENT
23 -SQUARE ROOTS-LIKE 64, 81, 4
24 -CIRCUMFERENCE OF A CIRCLE
25 -AREA OF A CIRCLE W/ FORMULA
26 -CLASSIFY QUADRILATERALS
27 -VOLUME OF RECTANGULAR PRISM
28 -AREA OF TRI,RECT,PARALLELOG
29 -CONE,PYRAMID,PRISM,CYLINDER
30 -TWO-STEP WORD PROBS: ADD/MU
31 -TWO-STEP WORD PROBS: ADD/SU
32 -SCIENTIFIC NOTATION
33 -GRAPHING ORDERED PAIRS
34 -CONVERSIONS AS SQ YDS-SQ FT
35 -COMPARE INTEGERS-GREATR,LES
36 -CONGRUENT ANGLES

EDUCATIONAL EVALUATION SYSTEMS

DISTRICT: SUN VALLEY USD DAVIS EDWIN

SCHOOL - THOMAS EDISON TEACHER - MCLAUGHLIN ROSE

TEST: MATH 8 GRADE: 8 DATE: 05/10/88

PROGRAM STRUCTURE - LISTING OF SKILLS / CONCEPTS	CRITERION FOR MASTERY	ITEMS CORRECT NO	%	NO	%
NUMERICAL SKILLS -					
PLACE VALUE WITH DECIMALS	3/4	4	100.0		
ADD AND SUB WHOLE NUMBERS	3/4	4	100.0		
MULTIPLY AND DIVIDE WHOLE NO	3/4	4	100.0		
ADD AND SUBTRACT DECIMALS	3/4	4	100.0		
MULTIPLICATION OF DECIMALS	3/4	3	75.0		
DIVISION OF DECIMALS	3/4	2	50.0		
ADD FRACTIONS/MIXED NUMBERS	3/4	4	100.0		
SUB FRACTIONS/MIXED NUMBERS	3/4	4	100.0		
MULTIPLY FRACTIONS/MIXED NUM	3/4	4	100.0		
DIVIDE FRACTIONS/MIXED NUM	3/4	0	0.0		
GRAPHS CHARTS TABLES	3/4	4	100.0		
LOGICAL/REASONING SKILLS -					
COMPUTE THE MEAN (AVERAGE)	3/4	4	100.0		
DIVISION OF DECIMALS	3/4	3	75.0		
RECOGNIZE PRIME NUMBERS	3/4	4	100.0		
PROBABILITY AND SIMPLE TREE	3/4	4	100.0		
MULTIPLY AND DIVIDE INTEGER	3/4	2	50.0		
ADD AND SUBTRACT INTEGERS	3/4	0	0.0		
FRACTION TO A DECIMAL	3/4	3	75.0		
FRACTION TO DECIMAL - ROUNDED	3/4	3	75.0		
FIND THE PERCENT OF A NUMBER	3/4	3	75.0		
PERCENT TO A FRACTION	3/4	1	25.0		
FRACTION TO A PERCENT	3/4	4	100.0		
SQUARE ROOTS-USE 64, 81, 49	3/4	3	75.0		
CIRCUMFERENCE OF A CIRCLE	3/4	3	75.0		
AREA OF A CIRCLE W/ FORMULA	3/4	2	50.0		
CLASSIFY QUADRILATERALS	3/4	2	50.0		
VOLUME OF RECTANGULAR PRISM	3/4	1	25.0		
AREA OF RECTANGLE/PARALLELOG	3/4	2	50.0		
CONE, PYRAMID, PRISM, CYLINDER	3/4	4	100.0		
TOOLSTEP WORD PROBS - ADD/MUL	3/4	4	100.0		
TOOLSTEP WORD PROBS - ADD/SUB	3/4	3	75.0		
SCIENTIFIC NOTATION	3/4	0	0.0		
GRAPHING ORDERED PAIRS	3/4	1	25.0		
CONVERSIONS AS SQ YDS-SQ FT	3/4	1	25.0		
COMPARE PERIMETER-AREA FIGS	3/4	3	75.0		
CONGRUENT ANGLES	3/4	0	0.0		

SUMMARY: Local Percentile Rank - 52

	NUMBER OF ITEMS TESTED	ITEMS CORRECT NUMBER	ITEMS CORRECT PERCENT	NUMBER OF SKILLS TESTED	SKILLS MASTERED NUMBER	SKILLS MASTERED PERCENT
MIN	44	37.0	84.1	11	9	81.8
T/EX	100	58.0	58.0	25	13	52.0
TOTL	144	95.0	66.0	36	22	61.1

COMMENT:

EDUCATIONAL EVALUATION SYSTEMS, INC. COMBINED SCHOOL SUMMARY SUN VALLEY USD DISTRICT

DATE - 05/10/84 TEST - MATH 8 TEST ITEMS - 144 SKILLS 36 GRADE - 8 THOMAS EDISON SCHOOL

	TCHR 1	TCHR 2	TCHR 3	TCHR 4	SCHL	DIST
NUMBER OF STUDENTS TESTED	29	27	27	26	109	517
AVG NUMBER OF ITEMS CORRECT	87	64	69	91	78	61
AVG PERCENT OF ITEMS CORRECT	60.4	44.4	47.9	63.2	54.2	42.4
AVG NUMBER OF SKILLS MASTERED	19	15	16	22	18	13
AVG PERCENT OF SKILLS MASTERED	52.8	41.7	44.4	61.1	50.0	36.1
AVG LOCAL PERCENTILE RANK -SKL	72	53	58	88	64	50
PERCENT OF STUDENTS MASTERING 75% OR MORE OF SKILLS	38.3	27.4	38.1	46.8	35.8	27.5

DEMOGRAPHIC SUMMARY	CAT 1	CAT 2	CAT 3	CAT 4	SCHL	DI
NUMBER OF STUDENTS TESTED	56	14	28	19	109	517
AVG NUMBER OF ITEMS CORRECT	79	62	59	83	78	61
AVG PERCENT OF ITEMS CORRECT	54.9	43.1	41.8	57.6	54.2	42.4
AVG NUMBER OF SKILLS MASTERED	19	15	14	20	18	13
AVG PERCENT OF SKILLS MASTERED	52.9	41.8	38.9	55.6	50.0	36.1
PERCENT OF STUDENTS MASTERING 75% OR MORE OF SKILLS	37.9	28.7	38.2	39.3	35.8	27.5

TEACHER NUMBER AND NAME
1 DARLENE JONES 2 EDGAR HILL 3 WILLIAM RANDOLF 4 ALFRED MORGANSTERN

DEMOGRAPHIC CATEGORY NUMBER AND NAME
1 CAUCASIAN 2 BLACK 3 HISPANIC 4 ASIATIC/ORIENTAL

29

EDUCATIONAL EVALUATION SYSTEMS, INC. COMBINED DISTRICT SUMMARY SUN VALLEY USD DISTRICT

DATE - 03/18/84 TEST - MATH 8 TEST ITEMS - 144 SKILLS 36 GRADE - 8

	SCHL 1	SCHL 2	SCHL 3	SCHL 4	SCHL 5	DIST
NUMBER OF STUDENTS TESTED	109	106	102	96	104	517
AVG NUMBER OF ITEMS CORRECT	78	71	58	53	66	61
AVG PERCENT OF ITEMS CORRECT	54.2	51.1	40.1	36.8	46.6	42.4
AVG NUMBER OF SKILLS MASTERED	18	17	12	10	15	13
AVG PERCENT OF SKILLS MASTERED	50.0	47.2	33.3	27.7	41.8	36.1
AVG LOCAL PERCENTILE RANK -SKL	64	54	48	45	52	50
PERCENT OF STUDENTS MASTERING 75% OR MORE OF SKILLS	35.8	33.2	26.3	24.1	29.2	27.5

DEMOGRAPHIC SUMMARY	CAT 1	CAT 2	CAT 3	CAT 4	DIST
NUMBER OF STUDENTS TESTED	339	47	72	59	517
AVG NUMBER OF ITEMS CORRECT	66	51	49	67	61
AVG PERCENT OF ITEMS CORRECT	45.9	35.4	33.7	46.5	42.4
AVG NUMBER OF SKILLS MASTERED	15	11	12	13	13
AVG PERCENT OF SKILLS MASTERED	41.8	30.6	33.3	36.1	36.1
PERCENT OF STUDENTS MASTERING 75% OR MORE OF SKILLS	28.7	20.2	22.3	27.1	27.5

SCHOOL NUMBER AND NAME
1 THOMAS EDISON 2 STARLIGHT PARK 3 SUNSET HILLS 4 MOUNTAIN VISTA
5 SUN VALLEY JR HI

DEMOGRAPHIC CATEGORY NUMBER AND NAME
1 CAUCASIAN 2 BLACK 3 HISPANIC 4 ASIATIC/ORIENTAL

APPENDIX D

FILE IA

KYRENE SCHOOL DISTRICT NO. 28

PHILOSOPHY OF EDUCATION

Purpose of the Philosophy

This philosophy of education has been established by the Governing Board of the Kyrene School District to provide a broad set of internally consistent referrents which guide the activities of the members of the educational staff of the school district as they plan for and implement programs for children and youth.

Mission of the Kyrene School District

It shall be the mission of the Kyrene School District to provide experiences which facilitate the growth of each student that he/she may lead a life which is personally satisfying and which contributes to the society which sustains him/her.

Goals

The broad, overarching goals of the Kyrene School District are:

1. Development of competence in the basic skills in reading, composition, listening, speaking, and computation.

2. Development of skills in ways of creative and disciplined thinking and application of knowledge.

3. Development of fundamental understanding of the humanities and the arts, the social sciences, and the natural sciences (in the form of basic concepts and generalizations).

4. Learning how to learn; how to attack new problems; and how to acquire new knowledge.

5. Development of self-understanding; self-respect; self-direction; and self-instructional skill.

Goals, Continued

6. Development of a zest for learning, an abiding interest in learning.

7. Development of a sense of social responsibility.

8. Development of skill in the exploration and clarification of values.

Interpersonal Relations

The bases for all interpersonal relationships in the Kyrene School District shall be a respect for human dignity. The very foundations of our nation are rooted in this basic principle. The intrinsic worth and dignity of each individual in the school system must be recognized and must be kept in mind in the planning, implementation, and evaluation of the individual's progress and of the overall effectiveness of the school system. The core of values of a democratic society are:

+ All persons should have worth and dignity; a right to respect; should never be a means to someone else's ends.

+ All persons have a right to make decisions about matters that shape their lives.

+ All persons have a right to educational opportunities appropriate to their differences.

+ Diversity is essential to renewal of an open society and a right of the individuals within.

Schooling - Training and Education

In providing schooling, the major thrusts should be of two types - training and education. Training is primarily the imparting of basic skills, knowledge and attitudes, while education is concerned with the more sophisticated processes and

Schooling - Training and Education, Continued

concepts which are built from the basic skills. Education is a broadening process: it opens doors and makes students aware that there are many doors in their lives to be opened, choices to be made as to which ones will be explored and made a part of their lives. Thus, training may be viewed as concerned with those skills, facts, and attitudes which we deliberately "put into" students while education asks the questions, "What is there unique about each individual which should be 'quickened and developed'?" Thomas Carlyle said, "The tragedy of life is not so much that men suffer, but rather what they miss."

Learning Environment

The learning environment must be characterized by the quality of caring. Students must feel that concern for their well-being is primary and that relationships with their peers and the staff of the school are guided by concern for others.

In closing, it must be pointed out that the referrents in philosophy are necessarily broad. This characteristic is positive in that it allows for inclusiveness and flexibility. The broadness can be negative if the Governing Board and educational staff do not continually seek higher levels of understanding of the broad generalizations of the philosophy. Without this dedication to understanding, a philosophy is meaningless and has no value in practice.

CURRICULUM DEVELOPMENT AND ADOPTION

The curriculum of a school system is the organized system of content and processes on which the instructional activities for students are based. It should reflect best knowledge of the growth and development of learners; the content of the various content disciplines of man; and the needs of learners based on the nature of society and the desires of the patrons of the District. It is the intent of the Kyrene School District to develop a set of curriculum documents which provides the basis for instructional activities and to review and revise the documents when appropriate.

The establishment of a significant curriculum document to guide the educational staff in providing learning experiences for students shall be a priority of the Governing Board for the Kyrene School District. The Superintendent of Schools has the responsibility of assuring its completion on schedule. The Governing Board herein pledges the provision of reasonable resources to support the District's plan to develop curriculum documents in accordance with the proposed schedule.

The basic responsibility for curriculum development shall reside with the Assistant Superintendent for Instruction working with principals and teachers. His/her responsibilities include:

--Providing leadership to the schools individually and system-wide.

--Coordinating the planning and the decision-making so that a common direction of action is provided for the school system.

--Working with principals and teachers of the individual schools in designing a curriculum which manifests achievable challenges for all students.

--Communicating to the schools information which affects system-wide agreements and plans for curriculum development.

--Communicating with the Tempe Elementary School District and the Tempe Union High School District in articulating a curriculum spanning grades K-12.

Each year, the plan for completing curriculum designs for the coming year shall be presented to the Governing Board no later than May 1. Periodic reports will be made to the Board of progress during the year of design. The completed document shall

be presented to the Board for adoption in accordance with the provisions of appropriate Arizona statutes.

It is the policy of the Kyrene School District that curriculum content, organizational patterns, and scheduling be in compliance with Title IX of Education Amendments of 1982.

APPENDIX E

FILE ICA

Guidelines for scope & seq.

COURSES OF STUDY AND SUPPORT SYSTEMS

The Governing Board believes that learning will be enhanced by adherence to courses of study which promote continuity and cumulative acquisition of skills and knowledge from grade to grade and school to school. The courses of study are designed to provide teachers and students with the district's expectations of what children and young people are to learn. Teachers are expected to follow those courses of study appropriate to their teaching assignments.

The design of the courses of study system will meet the following guidelines:

1. The skills and knowledge to be acquired will be specified in the form of learning outcomes to be mastered by students. Learning outcomes will be derived from significant content and processes.

2. The learning outcomes will be arranged sequentially so that learnings are built one upon the other; concurrently so that they reinforce one another as appropriate.

3. The learning outcomes will be comprehensive at each grade level, providing challenge for all students. They will include:

   Minimum .1 Foundational learning outcomes which all students are expected to learn. The foundational outcomes will be adapted as needed for individual handicapped students.

   Extra .2 A continuum of extended learning outcomes through which students will progress to the maximum of their ability.

In addition to the courses of study, appropriate support systems will be developed:

1. A criterion-referenced assessment system will be designed to assess student progress and for instructional planning.

   Survey .1 A pre-assessment will be used to determine appropriate placement of each student in the learning continuum.

   diag./mastery .2 A formative assessment will be given to measure student progress in terms of students' acquiring and retaining the stated learnings. In addition, it shall be used to determine schedule of advancement for individual students.

2. Appropriate records will be kept of criterion-referenced data.

The Assistant Superintendent for Instruction shall be responsible for directing the planning and designing, implementing, and evaluating courses of study and support systems on a systematic basis.

Every effort will be made to coordinate the process with the Tempe Elementary and Tempe Union High School Districts.

Courses of study will be considered and adopted by the Governing Board prior to their implementation in accordance with appropriate Arizona statutes.

APPENDIX F

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PROGRAM EVALUATION PLAN

October, 1984

(revised version)

CURRICULUM AND INSTRUCTIONAL PROGRAM EVALUATION

Systematic program evaluation serves three purposes: (1) to determine if the curriculum meets District standards, (2) to determine if student achievement of curriculum objectives meets or exceeds District expectations, and (3) to determine if the instructional program is effective in meeting identified instructional needs.

In conducting program evaluation, two components must be considered -- curriculum and instruction. Curriculum program evaluation will focus on the student learnings and objectives specified for all subject areas, grades kindergarten through eight. The content of the curriculum is outlined in a scope and sequence chart for each subject area. In most areas, corresponding assessment tools are available. Instructional Program evaluation will focus on the manner in which objectives are met. The instructional program includes such variables as the amount of instructional time, the instructional materials and resources used, methods of teaching the content or skills, and supplemental support services and programs.

Program evaluation efforts will take place when scopes and sequence charts are available using the timelines outlined in the District's Five Year Plan for curriculum review. The Five Year Plan identifies by year curriculum areas which are in the phases of "planning," "design," and "try-out, program evaluation, design revision, implementation."

Curriculum Program Evaluation Criteria

There are four criteria levels to be used in curriculum program evaluation. A description of the levels and the evaluation criteria follow.

Level 1: Curriculum Completeness

On an annual basis the entire curriculum will be reviewed to determine if all needed subject areas are included, and if instructional time allocations are appropriate. Subjects will be added or deleted, and time allocations will be modified according to results of the valuation. The evaluation criteria are:

1. A course of study has been outlined for all curriculum subject areas considered necessary for students' present and future functioning in society.

2. The amount of instructional time allocated to each subject area corresponds to priorities of the community/Governing Board.

Level 2: Subject/Strand Completeness
Each curriculum subject area or strand will be evaluated on a cyclical basis according to the District's Five Year Plan for Curriculum Review. Modifications will be made if the evaluation criteria are not met.

The evaluation criteria are:

1. All strands of the subject area have been identified.

2. Strands have been "weighted" in terms of relative importance.

3. "Weighting" of strands corresponds to students' developmental needs and societal expectations.

Level 3: Subject/Strand Quality
Content and placement of objectives (scope and sequence) within each subject and strand area will be evaluated on a cyclical basis according to the same schedule established for Level 2.

The evaluation criteria are:

1. Student needs and interests are reflected in the objectives.

2. Competencies needed to function in society are included in the objectives when appropriate.

3. Recent research and knowledge related to the content of the subject/strand are reflected in the objectives.

4. Objectives are consistent with District philosophy and community values.

5. The sequences of objectives and assignment to grade levels is developmentally appropriate.

Level 4: Student Achievement of Subject/Strand Learnings
Evaluations will be conducted using an established timeframe to determine if students at each grade level have acquired the knowledge and skills identified in the scope and sequence. In the basic skill areas evaluations will be conducted annually. In all other subject/strand areas, evaluations will take place according to the scheduled outlined in the District's Five Year Plan for Curriculum Review. Figure 1 depicts the curricular program evaluation schedule.

The evaluation criteria are:

1. Survey level measures of student achievement of curriculum objectives are appropraite.

    a. Tests cover an adequate number of objectives from a given curriculum area.

    b. Test items measure learning outcomes described in curriculum objectives.

    c. Mastery criteria are appropriate. ← may want to do something

2. A majority of students enrolled in the District achieve mastery of identified grade level objectives.

    a. At each grade level at least 75% of students in the District master 70-100% of tested curriculum objectives in a given strand.

    b. At least 75% of students receiving instruction below or above grade level will master 70-100% of instructional objectives derived from assessing student performance on off-grade level curriculum objectives.

    c. Demographics characteristics of students not meeting grade level mastery criteria reflect the same demographic characteristics as the total school population.

3. A majority of the students in the District meet national achievement standards.

    a. At least one-half of the total number of students in the District rank at or above the 50th percentile on National Percentile Rankings on the Iowa Tests of Basic Skills. achievement distrib. x nat'l

    b. No more than one-quarter of the total number of students in the District rank at or below the 25th percentile on National Percentile Rankings on the Iowa Tests of Basic Skills.

Instructional Program Evaluation Criteria

The instructional program defines the means by which students will acquire the knowledge and skills specified in the curriculum. The two levels of instructional program evaluation are quality and effectiveness.

LEVEL 1: Instructional Program Quality

In evaluating the quality of the instructional program the major question being addressed is whether or not personnel at the District and school levels are providing an adequate instructional program.

1. District level evaluation criteria:

    a. Course of study guides are provided for each curriculum area that include grade level performance objectives, and recommended instructional time allocations.

    b. Enough staff are provided and other needed support staff members for each school.

    c. Adequate resources are provided for instructional materials.

    d. Instructional support services are provided.

    e. Staff training needs are assessed and necessary training provided.

2. School/classroom evaluation criteria:

    a. Teachers are teaching to the objectives specified in the curriculum.

    b. Teachers are following recommendations for instructional time allocation.

    c. Instructional materials and resources are available and are used appropriately according to learning outcomes specified in objectives.

    d. Teachers assess student performance related to specified objectives and use evaluative data to plan instruction.

    e. Teachers use principles of learning in delivery of instruction.

    f. Student performance is routinely monitored, and records are kept.

    g. Remediation is provided when needed.

h. Instructional interventions are evaluated to determine if student achievement is influenced.

i. A plan for use of support services is developed and is operational.

Level 2: Instructional Program Effectivenss
The primary measure of effectiveness is student achievement. If the District student achievement standards are being met, (refer to Curriculum Program Evaluation, Level 4) then the instructional program is judged to be effective. If standards and expectations are not being met at both the District and school levels, intervention should be planned which corresponds to the outcome of the instructional program evaluation, Level 1.

Curriculum and Instructional Program Evaluation Procedures

The Assistant Superintendent for Instruction will be responsible for supervising the evaluation of the curriculum and instructional program.

Curriculum

The "Five Year Plan for Curriculum Review" outlines a schedule for planning, developing, implementing, and evaluatling individual curriculum areas in the program. In the "Planning" phase of the cycle, the scope and sequence of a specified curriculum strand will be reviewed and evaluated according to the criteria outlined for Levels 2 and 3 of Curriculum Evaluation of this policy.

In the "Design" year phase curriculum revisions will be made according to the recommendations resultling from the above evaluation. A draft version of the revised scope and sequence will be submitted to the Board for interim adoption if needed. The final activiy in the "Design" phase will be the development or refinement if needed of an evaluation tool to be used to measure student achievement of a sample of curriculum objectives. The criteria outlined in Level 4, Curriculum Evaluation, of this policy should be applied in the development of this evaluation tool.

In the third year of the cycle a "try-out" of the scope and sequence and evaluation tool will be conducted if major refinements have taken place in those cases where there are major changes and when possible, pilot schools and/or classes will be identified for the "try-out" phase of development. Student performance data and evaluative feedback from teachers at pilot sites will form the basis for the final review/revision of the pilot scope and sequence.

At the end of the third year the final version of the scope and sequence will be presented for Board adoption for the entire District.

During the "Program Implementation" phase of the "Five Year Plan for Curriculum Review" student achievement data will be gathered and analyzed according to the criteria specified in Level 4, Curriculum Evaluation, of this policy.

Instructional Program

Student achievement data will be analyzed according to the timeframe outlined in Figure 1. The instructional program will be evaluated according to criteria outlined in Levels 1 and 2, Instructional Program Evaluation, of this policy.

what about quality?

FIGURE I - Program Assessment Timeframe

Subject Area	Annual Pre/Post Sep.-May K-8	Annual Jan. 1,3,5,7	Annual May 1-8	Bi-Annual Even Yrs March K-8	Bi-Annual Odd Yrs March K-8	Bi-Annual Even Years 7,8
Math	All	-	-	-	-	-
CASS, Study/Ref	-	-	All	-	-	-
CASS, Written Comm.	All	-	-	-	-	-
CASS, Grammar	-	-	All	-	-	-
CASS, Spelling	-	-	All	-	-	-
CASS, Handwriting	-	All	-	-	-	-
CASS, Reading	All	-	-	-	-	-
CASS, Literature	-	-	-	-	All	-
CASS, Vocabulary	-	-	-	-	All	-
CASS, Oral Comm. (Listening/ Speaking)	-	-	-	All	-	-
Computer Science	-	-	-	-	Ran	-
Science	-	-	-	Ran	-	-
Social Studies	-	-	-	-	Ran	-
Career Education	-	-	-	-	-	-
Home Economics	-	-	-	-	-	Ran
Industrial Arts	-	-	-	-	-	Ran
Foreign Language	-	-	-	-	-	Ran
Health Ed.	-	-	-	Ran	-	-
Music	-	-	-	Ran	-	-
Art	-	-	-	-	Ran	-
PE	-	-	-	Ran	-	-

NOTES: ALL = All students will be tested.
RAN = A random sampling of students will be tested.

APPENDIX G

OPTION I

	COST
- Purchase of Adams County System (CMI 3000)	$ 5,000.00
- Purchase maintenance package from Adams County (yearly requirement)	2,500.00
- Purchase maintenance support and interface to current HP system	5,000.00
- Purchase additional hardware in order to install CMI 3000 system	50,000.00
Sub-Total	$ 62,500.00

** By selecting Option I, this allows the district to purchase and install the CMI 3000 package along with the necessary hardware. No scoring or reporting would occur with this option.

OPTION II

		COST
- All components of Option I	Sub-Total	$ 62,500.00
AND		
- Assign coordination of CMI 3000 System		$ 0 - ($40,000.00)
- Hire new or utilize existing clerical staff to input district CASS and MSS objectives (estimate 200 hours at $8.00 per hour)		1,600.00
- Purchase necessary paper products (i.e., answer sheets, etc.) for test scoring and reporting		7,500.00
- Hire personnel to score answer sheets and generate reports (estimate 50 hours at $10:00 an hour)		500.00
- Staff orientation and training		5,000.00
- Miscellaneous implementation costs (i.e., quality control preparation of test directions, consultant services)		5,000.00
	TOTAL	$ 82,100.00/$122,100.00

** By selecting Option II, the district would have the CMI 3000 installed and operational. The CASS and MSS tests would be scored and minimal reports generated. Staff orientation to the new system would be provided on a limited basis. Quality control would need to be done at the school level. This choice provides the option of either assigning the coordination or of hiring new staff to coordinate. No teacher generated tests or custom designed reports would be possible.

OPTION III

		COST
- All components of Option I		$ 62,500.00
- All components of Option II		19,600.00
AND	Sub-Total	$ 82,100.00
- Hire full-time testing coordinator		$ 40,000.00
- Data Processing/Quality Control personnel		20,000.00
- Hire full-time secretary to Coordinator		15,000.00
- District Consultant to analyze reports and determine needed revisions and custom reports		2,000.00
- Programming services to customize reports and tests for CMI 3000 program changes		10,000.00
- Personnel or consultant for statistical analysis of results and for all program evaluations		5,000.00
- Additional hardware to provide for teacher generated tests at each school site		25,000.00
- Additional staff developing and training		5,000.00
	TOTAL	$ 204,100.00

** By selecting Option III, the district would have all of the benefits of Options I and II and also be provided with the needed coordination of the testing and data processing departments through the hiring of a full-time coordinator for the program. The development of a research and statistical analysis department would be initiated through this option. The additional hardware purchases would provide the district opportunities to explore teacher generated tests through the CMI 3000 software. The necessary program revisions and changes to the CMI 3000 package are provided for in this option enabling the district to customize reports and tests.

APPENDIX H

Carolyn

KYRENE SCHOOL DISTRICT
MEMORANDUM

TO: Instructional Computer Committee

FROM: Mike Kelly MK/sm

DATE: 9-26-85

SUBJECT: ACTIVITIES AND TASKS FOR DEVELOPING AND INSTALLING THE STUDENT TESTING AND DATA MANAGEMENT SYSTEM

Please review the tasks and activities listed on the following pages to see if they adequately cover your perceptions of first year needs. The tasks are organized under the following headings:

A. Management structure
B. Systems acquisition and maintenance
C. Test development and item banks
D. Scoring, reporting and record keeping
E. Staff development training
F. Program evaluation

As you may note, there is room for determining dates, budget projects and responsible party to complete the tasks. I need your assistance in determining that information. PLEASE add, delete or change any portion of this document you feel requires changing. I look forward to seeing you Wednesday morning, October 2, 1985 at 10:00 am. At that time, I will be ready to share with you the preliminary report on our activities to date.

CompTask1/D45
c/mk/850926/sm

A. MANAGEMENT STRUCTURE

Objective: To establish an appropriate chain of command in order to develop and install a comprehensive student testing and data management system.

Date	Task	Responsible Party
Oct. - Nov. 85	Determine overall management structure in terms of personnel chain of command and overall coordination Budget = _____	Carolyn Raymond Beth Hill
Oct. - Nov. 85	Identify data processing personnel to assist with systems acquisition Budget = _____	Kent Tamsen
Oct. - Nov. 85	Identify personnel to complete objectives scope and sequence assembly for scoring, reporting and record keeping Budget = _____	Darlene Pany
Nov. - Dec. 85	Identify personnel to perform data entry operations including entering objectives cross referenced to test items Budget = _____	
Nov. - Dec. 85	Identify and assign personnel responsible for completing scoring task and distributing results to schools and teachers Budget = _____	
Nov. - Dec. 85	Identify and assign personnel to conduct program evaluation analysis following five year program evaluation plan Budget = _____	
Nov. 85 thru Aug. 86	Prepare quarterly reports on acquisition, installation and field testing of student testing and data management system Budget = _____	
	Prepare budget and activities for 1986-87 school years based on expansion of item bank system and additional reports and analysis Budget = _____	

B. SYSTEMS ACQUISITION AND MAINTENANCE

Objective: To purchase and install the CMI 3000 system for scoring tests and reporting results

Date	Task	Responsible Party
Oct. 85	Contact Adams County, Colorado School District #12 to obtain procedures for purchasing system and maintenance support. Budget = _____	
Oct. 85	Contact Pertaine, Inc. of California to obtain procedures for purchasing maintenance support for student information base Budget = _____	
Oct. - Nov. 85	Determine enhancement features desired such as preprinted answer sheets, etc. specialized report formats, and associated costs for report paper, answer sheets and hardware necessities (i.e. scanner, cables, additional memory needs, etc.) Budget = 30,000 or more	
Nov. - Dec. 85	Prepare contract papers to obtain CMI 3000 Obtain Governing Board approval Budget = 7,500	
Nov. - Dec. 85	Prepare contract papers to obtain Pertaine maintenance support and other desired enhancements Obtain Govering Board approval Budget = 5,000	
Oct. - Nov. 85	Prepare data processing staff training timeline for bringing CMI 3000 on line Budget = _____	
Dec. 85	Install CMI 3000 system Budget = _____	
Dec. 85	Link student information base software Budget = _____	
Jan. - Feb. 86	Identify reports to be printed and distributed Budget = -0-	

Date	Task	Responsible Party
Feb. 86	Prepare answer keys for each test to be scored Budget = _____	
March 86	Prepare pilot survey test data in order to conduct scanning, scoring and reporting field test Budget = _____	
March 86	Conduct field test of CMI 3000 scoring, reporting and record keeping system Review for accuracy and completeness Budget = _____	
Aug. 86	Prepare plan for updating CMI 3000 data bases and project personnel and hardware costs for years 1987-90. Includes memory expansion, acquisition of additional HP 150 terminals for teacher use, staff training and program evaluation needs. Budget = _____	

CompTask4/D45
c/mk/850926/sm

C. TEST DEVELOPMENT AND ITEM BANKS

Objective: To continue building a central hard copy file of test questions referenced to the scope and sequence objectives in each curriculum area

Date	Tasks	Responsible Party
Oct. 85 Jan. 86	Assemble item bank in hard copy form for test generation in language arts and math Budget = _____	
Oc 85 Jan. 86	Cross reference to scope and sequence in language arts and math for each grade level. Include any statistics. Budget = _____	
March 86	Develop skill sheets for teacher use in language arts and math Budget = _____	
By March 86	Examine additional item banks in other curriculum areas for possible purchase. Determine appropriate size of the item collection for each area. Budget = _____	
	Prepare plan for item bank development/ purchase in other curriculum areas following five year curriculum plan Budget = _____	
Aug. 86	Prepare plan for possible entering of test items in CMI 3000 test bank Budget = _____	
Aug. 86	Determine test development and item bank management system including how test items will be updated and who may update items Budget = _____	
Aug. 86	Identify review procedures for editing, adding or deleting items Budget = _____	

Date	Task	Responsible Party
Aug. 86	Establish security procedures for accessibility to item bank	
	Budget = _____	
Aug. 86 or later	Develop specialized answer sheets for curriculum areas such as gifted, etc.	
	Budget = _____	

CompTask6/D45
c/mk/850926/sm

D. SCORING, REPORTING AND RECORD KEEPING

Objective: To update and catalogue objectives and test items for software in order to conduct survey test scoring, reporting and student record keeping. Field test by spring 1986.

Date	Task	Responsible Party
Oct. 85 - Jan. 86	Assemble Kyrene scope and sequence objectives by curriculum areas, sub-curriculum areas and specific objectives for areas to be tested (math and language arts?)	Budget = _____
Jan. 86	Assign two character code for each curriculum area unique to Kyrene (see page 9-1 user manual)	Budget = _____
Jan. 86	Assign four character codes for sub-curriculum area (see page 9-2 user manual) unique to Kyrene	Budget = _____
Jan. 86	Assign school/location two character code for all schools in Kyrene and prepare school descriptive data and enter into CMI 3000 data base	Budget = _____
Oct. 85 - Jan. 86	Assign ID numbers consisting of the curriculum and sub-curriculum code along with a two digit sequence number from 01 thru 99 (add grade level, difficulty level, skill level, etc.)	Budget = _____
Oct. 85 - Jan. 86	Cross reference objectives to specific test items to be used, assign mastery requirments and unique question numbers by grade levels	Budget = _____

Date	Task	Responsible Party
Jan. - Feb. 86	Enter curriculum, sub-curriculum and objectives cross referenced by test items into CMI 3000 data base Budget = _____	
Jan. - Feb. 86	Prepare student data base including the assignment of student ID numbers. Enter into CMI 3000 system. Budget = _____	
Jan. - Feb. 86	Prepare teacher ID system and enter into CMI 3000. Budget = _____	

D. STAFF DEVELOPMENT TRAINING

Objective: To orient staff and teachers on new student testing system and new report formats.

Date	Task	Responsible Party
Nov. - Dec. 85	Prepare staff development plan and associated activities regarding new system and report formats	
	Budget = _____	
Nov. - Dec. 85	Identify appropriate dates to conduct staff inservice	
	Budget = _____	
March 86	Identify and prepare copies of new report formats to use in staff orientation including objectives list, class mastery profiles, student profiles and district summaries	
	Budget = _____	
March 86	Develop test directions for teacher to follow in preparing answer sheets	
	Budget = _____	
April 86	Establish staff training for using system to develop teacher made tests	
	Budget = _____	

F. PROGRAM EVALUATION

Objective: To establish a computerized management system for conducting student, teacher, and school comparisons of test performance in relation to specific program goals

Date	Task	Responsible Party
Nov. - Dec. 85	Contact Pertnine, Inc. to determine if software is available to conduct statistical anaylsis. Prepare contract to develop specialized/customized software if none available.	
	Budget = _____	
Jan. - March 86	Identify specific program evaluation information desired following October 1984 Program Evaluation Plan and prepare updated time table. (Curriculum and instructional evaluation)	
	Budget = _____	
2nd year or beyond	Establish plan for conducting between school comparisons of achievement results, and between teachers (within grade level) comparisons of achievement results	
	Budget = _____	
2nd year or beyond	Develop achievement prediction model if appropriate software is available and compatible with CMI 3000 system	
	Budget = _____	
1986-87 or later	Pilot test between school comparisons and between teacher (within grade level) comparisons of achievement results using appropriate statistics	
	Budget = _____	
1987 or later	Pilot test achievement prediction model provided testing and evaluation unit has appropriate personnel to conduct such a test	
	Budget = _____	

District Demographics

McMinnville is a community of about 15,000 in Northwest Oregon. The city is about 90 miles from Portland and 60 miles from Salem, the state capitol. The district serves about 4,000 students in six elementary, one junior high school and one high school. The six elementary schools serve from 200 to 400 students, the junior high school serves about 900 and the high school serves about 800. The school population has been fairly stable over the last few years.

Description of Current Testing Scheme

Purpose. The primary purpose of the criterion referenced testing program is to provide ongoing skill level formative information to teachers in order to assist in planning and instuction in grades K-6. A secondary purpose for the CRT program is to provide summative information at the end of the school year on how students are performing on skills which have been locally identified as essential for K-6.

Source of Items. The CRT program is based on the Harcourt, Brace, Janovich reading and Heath mathematics textbook series. Publishers tests were provided with the text series. These tests were locally rewritten as needed and placed into multiple choice format to facilitate computer scoring and student record keeping. The number of test items for each goal vary according to the number of performace indicators established for each goal. A numerical break down of course goals, performance indicator skills and test items are contained in Appendix A. The test items and textbook activities and supplementry materials are cross-referenced to a locally developed curriculum for both reading and mathematics.

Testing Expectations. Every classroom teacher (K-6) is required to administer pre- and post-tests (fall and spring) in reading and mathematics. There is a single form for fall and spring testing which covers all curriculum concepts for the entire school year. Periodic tests (approximately every nine weeks) in reading are optional at the primary level (K-3) and required at the intermediate level (4-6). All teachers in grades K-6 are required to administer a mid-year math test. The periodic or mid-year tests include curriculum concepts covered up until that point in the school year. CRT tests are administered according to preset timelines. These timelines, called curriculum mapping guidelines (see Appendix B), are set each year by a committee of teachers representing each grade level. This committee considers factors such as the school calender, past experience with teaching the reading and math curriculum, and past performance on the curriculum as measured by the periodic tests to set the timeline.

Testing. The district print shop prints all tests required by the curriculum mapping timeline. These tests are delivered and stored in each building prior to the beginning of each school year. The district also pre-slugs answer sheets with student information. Each school is reponsible for submitting class lists. When lists are received, the ScanTron answer sheet is preslugged and given a class designation for use the rest of the school year. Teachers are responsible for obtaining and inventorying all test materials (answer sheets and tests) prior to the test administration date. Principles are responsible for distributing test materials to teachers. Teachers are responsible for testing, collecting and maintaining quality for their classroom's ScanTron test forms. Completed tests, including makeups, are turned into the principal to be forwarded to the district office for computer scoring within one week of the testing date. Makeup tests are not computer scored after this point.

Training. A one hour district inservice on test administration, ScanTron marking, test scoring, interpretation of results and general procedural concerns is given at a K-6 general meeting. A testing manual explaining the procedures of the program is available to teachers. In addition, the computer testing specialist is available to buildings for individual inservices or to answer individual concerns.

Scoring and Reporting. Upon receiving tests, a student aide at the central office checks for proper formatting, erases stray pencil marks, and darkens light marking of answer forms. This takes approximately 20 hours for the entire district ScanTron forms for each of the Math and Reading tests. Turnaround time for scoring the tests from a class can be as short as one day or as long as 2-4 weeks depending upon computer down time and quailty of the ScanTron forms.

Three copies of the results are produced. One copy of the results is provided for the teacher's use in formative evaluation of goal based instruction, one copy is provided for the principal, and the third copy is used by the district office for curriculum evaluation. Teachers receive printouts showing course goals mastered by each student (Appendix C). These lists provide both alphabetical order and rank order scores. Test results are shared with students and parents in individual conferences and must be considered in grading, promotion and retention as mandated by district policy.

Student testing information is kept on disk. Other reports generated by this system include longitudinal profiles of individual student grade and district skill acquisition. Although not used at present, the software has the capability of generating point biserials and Rasch calibrations for each test item.

Software and Hardware. The list below summarizes district software and hardware features and costs.

Software Features:

- Preprints answer sheets
- Scores answer sheets by high speed scanner
- Reports test results using district goals and competency criteria by class, grade and individual student
- Monitors items for level and quality
- Manages test information from year to year
- Menu driven
- Automatically updates test statistics as new information is processed
- Provides support for reporting Rasch scaled scores
- Uses a data base structure to link test information to the students' current class and grade.

Hardware:

- Apple IIe Professional, IBM PC or TRS-80 3/4
- High Speed Scanner
- Printer (150 cps)

Cost:

Software System	$1200.00
Annual Maintenance	$240.00
ScanTron Answer Sheets	$117.00
High Speed Scanner	$2000.00
Printer 1000.00	
Self Feed Unit	$700.00

Standardized, Norm-Referenced Testing. The District also admisisters the SRA test series to all students in the spring of each year. While the CRT provides formative and summative evaluation information which is directly related to the curriculum, the standardized test provides summative information on current student/district standing. The CRT's have been cross-referenced to the SRA to determine if similar goals are being

addressed. It was found that the CRT's measure a broader spectrum than those tested with the SRA. In some cases, however, skills tested on the SRA were not found to be covered in particular grade level course goals. Teachers have been advised where the goal-based curriculum does not address a SRA goal and are expected to supplement the cirruculum to cover this skill.

History Of Implementing The Testing System

Impetuses for the Testing Scheme: During the school year 1980-81 several developments occurred which influenced the testing direction taken by McMinnville. First, the district had been concerned about a decline in reading comprehension scores on standardized tests. Second, 1980-81 was the statewide textbook adoption year. Third, McMinnville School District became interested in the direction the Valley Education Consortium (VEC)* was taking to develop goal-based curriculum guides. It was felt that both the textbook adoption and the goal-based curriculum could serve to improve performance on the basic skills.

The Superintendent of the McMinnville School District, after participating in VEC meetings, also became interested in the use of computers for measuring student acquisition of skills and providing feedback to teachers on student performance and progress. As a result of this interest, the McMinnville

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* The Valley Education Consortium is an association of institutions in the Mid-Willamette Valley which set about the task of developing instructional programs in the basic skill areas of reading, writing and mathematics. Seven school districts in Marion, Polk and Yamhill counties, the Education Service Districts serving these counties, Western Oregon State College, and the Teaching Research Division of the Oregon State System of Higher Education participated in the development of guides that were intended to assist teachers in planning instruction and monitoring student progress.

Superintendent approached VEC for seed money to develop and implement a computer testing program. With the seed money, the district purchased a number of computers and contracted with an independent software developer to develop the system.

This plan called for developing detailed scope and sequences based on VEC skill continuums and then systematically assessing student progress on these skills. Although tests would be in fixed forms, scoring, reporting and tracking student progress would be by computer. But since these plans were developing at the same time as the new textbooks were being selected, the curriculum and tests had to be developed/revised after the adoption and then cross-referenced to the next textbook series.

Reading Adoption (School Year 1980-81). The Reading Facilator, (an elementary principal, expert in reading and assigned for this purpose) with the assistance of the other elementary and secondary principals, appointed a Reading Committee consisting of two teachers in each of grades K-8, a high school reading specialist and a special education teacher from the Learning Resource Classroom program.

All of the teachers assigned to this committee were recognized by their principals and colleagues to be outstanding reading teachers or ones whose particular teaching assignments were primarily reading instruction. This committee was to select textbooks during school year 1980-81 and to develop curriculum guides and tests during school year 1981-82. The Reading Committee met on a weekly basis, usually on Wednesdays after school from 3:00 to 4:00 p.m.

After presentations by textbook publishers and evaluations by the entire staff, the committee made the final choice to adopt the HBJ Program since they felt it to be stronger in teaching the reading comprehension skills felt to need emphasis in McMinnville.

The recommendation made to the administrators by the Reading Committee stated that the HBJ Reading Program was being recommended for use district-wide in Grades K-8, to develop a uniform developmental reading program. An added benefit of a uniform program would be that of providing the same program to students who transferred from one school to another within the district. Prior to this, many principles had allowed teachers to use the reading program of their choice or to pilot new programs instead of using the adopted program.

The only modification in this place was that the kindergarden teachers petitioned to use the Lippincott Series instead of the HBJ Program since they felt it to be stronger in phonics. This request was appproved, but within the understanding that the kindergarden teachers would be required to adhere to the District Testing Program once it was in place.

Developing The Curriculum Guide (School Year 1981-82). The reading committee began working on the Reading Curriculum Guide, using the VEC Reading Goals and objectives as the core work for the document. The following procedure was used.

- Reading Committee members met with all district teachers at their particular grade levels to review the VEC goals and objectives.
- Based on the teachers' knowledge of curriculum and actual practices in the classroom, these goals and objectives were revised and additions or deletions made where needed.
- A consensus was reached by the teachers at each grade level on goals and objectives.

- Following general acceptance of the final goals and objectives, committee members were given release time (about 2 days each) to cross-reference the HBJ series to the curriculum.
- After the committee members had keyed the skills to the objectives, columns were left on each page of the guide for cross-referencing test items to the objectives at a future date.
- The Reading Guide was the first of a series of curriculum guides developed in the district, and it became the prototype for future documents.
- The final curriculum guide included all of the following information:
  - Program and Course Goals
  - Scope and Sequence Summary Table
  - Grade Level Guides which included Objectives, Textbook References, HBJ Unit References, and and Test Item Cross-references.
  - Reading Curriculum Mapping
  - SRA Test Cross-reference
  - Criterion-referenced Test Copies

Criterion-Referenced Test Development (School Year 1982-83). At the end of the 1981-82 school year, a new superintendent and deputy superintendent were contracted by the School Board to begin working in the district during that summer. The new superintendent came from another district where the orginal thrust for goal-based curriculum had developed; and, as a former member of the VEC Board of Directors, he was familiar with current district activities in curriculum writing and test development. As a member of the VEC Board, he had been instrumental in granting the request for seed money to

develop the computer testing system in McMinnville. With the backing of both the superintendent and the deputy superintendent, who had a strong background in curriculum and instruction, the committee's efforts took on new energy and momentum.

The next step by the Reading Committee during the fall of the 1982-83 school year was that of developing the criterion-referenced tests for assessing student progress and program implementation. Because the new reading adoption included a series of test booklets, the committee decided to use these "author tests" as the basis of the testing program, rather than reinventing the wheel. The committee obtained permission from the HBJ publishers to rewrite and revise the author's tests. These tests were rewritten in multiple-choice format to facilitate machine scoring.

Two teachers at each grade level were given release time of approximately two days to revise the test items on their grade-level tests and put them into multiple-choice format. In consultation with the computer coordinator and software developer, the committee determined the number of items to be used on each test and the number of choices for answers that could be used. The revised versions of the tests were submitted to the teachers at a grade-level meeting after school for further suggested changes and for a consensus agreement. The entire test-writing process took about three months.

After the tests had been rewritten, the district contracted with the Northwest Regional Educational Laboratory for a "testing specialist" to review the tests and advise the committee about the validity of the test items as they were written. Subsequent to this review, additional changes were made in the test items and the tests were retyped at the district office in preparation for a pilot test.

Following the final test construction session, the Reading Committee members met once again in the fall, on a release time day, to cross-reference the test items to the Reading Objectives in the curriculum guide, and the last column on the guide forms was filled in. By using release time for this curriculum and test writing project, the only cost to the district was in substitute pay.

Pilot Testing. Two schools in the district volunteered to pilot the tests during the second half of the 1982-83 school year. One school was used because standardized test results were consistently lower than other elementary schools in the district. The other school was used because the principal served as the District Reading Facilitator and the staff was highly-supportive of the project.

The test had been printed, collated and stapled by the district printer at minimal cost to the district, and ScanTron sheets were developed by the computer coordinator and software consultant. A ScanTron reader was purchased by the district and placed at the district office.

The periodic tests were piloted at the end of each reading book in the primary grades and at the end of each quarter for the intermediate grades. The cumulative pre-post tests were administered to all students in early May so teachers would have the results before the end of the school year. Student responses were recorded on the ScanTron forms by the teachers or other adults in Grades K-3 and by the students themselves in Grades 4-6. Completed ScanTron forms were sent to the computer coordinator at the district office for computer scoring.

The computer coordinator and computer software consultant had developed the necessary software to provide the following information to teachers on computer printouts:

- o Student performace on each skill area tested.
- o Student results by alpnabetical and rank order.
- o An item analysis for each class, with both correct and incorrect responses tabulated for the teacher's use.

Printouts were distributed to the principals, the classroom teachers, and the central office administrators showing both group and individual results. Teachers received printouts shown in Appendix C.

At the end of the year members of the Reading Committee met again on release time to review the tests. Revisions to test items were made based on teacher recommendations and information from the item analysis.

Major Issues & Concerns About The Tests. At the end of the pilot year there were teachers in both schools who were positive and some who were negative about the testing program. The positive teachers indicated that the information obtained from the test data were helpful in planning for instruction and remediation. By setting high expections for their students, they found that the students were performing at a higher level.

The teachers who were negative about the program indicated that the tests were too time-consuming, that their creativity in teaching was being destroyed because of the structure being imposed, and that they already knew how their students were performing without the formality of a written test.

The program was perceived to be more successful in one pilot school than the other because of the administrator's interest and investment of time in the project and the willingness of the teachers to cooperate in one of the

pilot schools. Many of the teachers at the other pilot school chose not to complete the pilot program and their administrator allowed teachers to discontinue the program if they wished.

An analysis of the test data from the successful pilot site, and a comparison of the standardized test result during the pilot year to the previous year's results, indicated that the program had been extremely successful for those teachers who completed the project. Even the teachers who were negative about the testing program showed gains on the standardized tests after using the testing program as outlined.

Implementing the New Program (School Year 1983-84). In the Fall of 1983, when the "National at Risk" report became public and school districts across the nation began searching for ways to improve public education, the administration in McMinnville felt it had a head start on most districts with its goal-based curriculum and criterion-referenced testing programs in Reading. After reading much of the research on effective schools, the administrators in the district agreed to implement the testing program district-wide. During the 1983-84 school year, elementary teachers were given inservice training on the effective school model for our district and asked to do the folowing:

- Use whole-group instruction for introducing grade-level objectives in Reading.
- Use skill grouping (rather than ability groupings) to teach the grade-level reading skills.
- Administer the District Testing Program in Reading to assess student acquisition of the skills.

- Use the computer printouts of test results for the following purposes:
  - Diagnosis of student needs.
  - Identification of skill grouping for instruction .
  - Evaluation of student progress.
  - Evaluation of their reading program.
- Follow the Curriculum Mapping that provided a guideline for pacing instruction and for a ministrating the test throughout the year according to a timeline.
- Use a mastery approach with a goal of 80 percent criterion level for at least 80 percent of the students. (This goal was arbitrarily selected based on the effective school research administrators had read.)

After the program was implemented district-wide in 1983-84, administrators still tended to "give in" to teacher resistance and allow some teachers to avoid giving the tests. Ultimately, an administrative directive came from the superintendent for all teachers and principals to comply with the program. This resulted in district-wide compliance, but it also made many teachers angry that the program was being imposed without the freedom to choose whether or not to participate. District-wide compliance could have evolved through a natural course of events over a period of years as the program proved itself to be effective, but the administrative directive certainly expedited the process and facilitated the implementation of the program.

The diagram in Appendix E illustrates the whole-group instructional approach teachers were asked to use in teaching reading. Teachers were expected to pretest all students, identify the ones who demonstrated mastery of the skills on the test and send them to enrichment classes, then teach the remaining group of students in a whole-group approach. After teaching a

concept, teachers are expected to test, then reteach the students who did not master the concepts. After the teacher has completed the teach-test-reteach-retest cycle two or three times, students who still have not mastered the skill are referred to the learning resource teacher for remediation.

Math Program. During the time the Reading Program was being implemented in 1983-84, a new committeee of teachers was appointed to follow a similar procedure in adopting a New Math Program and developing a curriculum guide and testing system to accompany it.

Under the direction of the principal who served as the District Math Facilitator and a lead-teacher who was recognized as an outstanding Math teacher, the committee adopted the Heath Math Program. The VEC format was again used to develop the Math Curriculum Guide and to correlate the math skills to the math objectives.

The development of the Math Testing Program was considerably less difficult than the Reading Testing Program. The Heath Math adoption came with a built-in assessment program which was already in multiple-choice format. It simply required that the information be programmed into the computer ar cross-referenced to the curriculum objectives to provide the printouts of student results according to skill acquisition, as in reading.

This program was in place and all teachers were required to adhere to the mapping guidelines for testing during the following school year (1984-85).

Effects of the CRT Testing Programs. The district has noted several effects of their curriculum alignment effort.

1. Standardized Test Results. The district reports that as a direct result of the district's efforts in curriculum alignment, the students at the elementary levels have, in most cases, shown an increase in both Reading and Math scores (See Appendix F for an example of such results.)

2. Criterion-Referenced Test Results. Teachers are achieving the goal of a criterion level of 80 percent for at least 80 percent of the students on the Periodic Tests. At the intermediate level (Grades 4, 5, and 6), students are not achieving the 80 percent level on all the skills on the post-test. Teachers attribute this to the variability in retention among the students and to the larger number of concepts being taught and tested at these levels.

3. Teacher Attitudes. During the first year of the district-wide implementation of the Reading Program, teachers were extremely negative about the program. Concerns expressed by the teachers centered around the following topics:

   - Grouping: Many teachers had not "bought in" to the whole-group instructional approach. The previous reading program (Macmillan) had an individualized approach. Although the HBJ Reading Program is designed for a whole-group approach, few teachers had attempted to use it in that manner before. Most had adapted that reading program to their ability grouping techniques and found the prospect of changing teaching strategies a little threatening. After a year or two of teaching with the whole-group approach using short-term skill groupings, the district reports that the majority of the teachers were pleased with their success and the accompanying increases in test scores.
   - Curriculum Mapping: Many teachers felt "pushed" to stay on track with the mapping requirements. Comments were made that teachers were no longer able to capitalize on the "teachable moment", that teaching was no longer any fun since they couldn't

take time to teach what they wanted, and that the testing process was too regimented. Most teachers indicated that they had rarely taught the full year's curriculum prior to the use of curriculum mapping.

- o Test Administration: Many teachers still resist the regimen of following a testing schedule, and complain about the amount of time required to administer the tests. Some feel threatened by the computer printouts being used by administrators to evaluate student progress and for program evaluation. There are still many criticisms by teachers regarding the validity of individual test items and the technical aspects of scoring tests and delivering the printout in a timely manner.

The district feels very strongly, however, that the program does work, despite its flaws, and that they have seen the payoffs in the following.

- o Increase in student CRT results.
- o Increase in standardized test results.
- o Increase in student morale, confidence, and self-esteem.
- o Development and implementation of a coordinated district-wide enrichment program.
- o More effective use of the Learning Resource Centers.
- o More effective means of communicating student achievement to parents.
- o More effective teaching techniques, especically in using a mastery approach.
- o Teaching more curriculum concepts and skills by following the curriculum mapping.

Current Status

General Considerations. The district feels that a program such as this is never "done." There are always new needs, new technologies, and new demands being made which cause the program to remain in a constantly evolutionary status. At this point in time the district identifies a need for a more efficient and faster scanning device. Increased speed brings about greater savings in labor costs and meets the need for more rapid turnaround of test results back to the teacher.

Since the program is curriculum imbedded it must be responsive to changes in the curriculum. Although the district has adopted goals/objectives in reading and mathematics, the fact remains that the textbooks used by the teachers have tremendous impact on the curriculum and the testing program must be sensitive to this fact of life. However, that does not mean that every time a new text is identified that the totality of the testing program needs to be revised. Rather, as more comprehensive skill and item banks are developed, the district anticipates the ability to develop reliable and valid tests by cross-referencing with the new materials.

The district also sees impact on the curriculum and tests from the State of Oregon's new program which will identify certain "essential learning skills" for each student. The intent of the state is to require each school to become accountable for the student's learning of these skills. These skills will be imbedded in the curriculum. The district wants to make sure that the testing program is sensitive to measuring student progress on the state identified skills as well as locally identified skills.

Elementary Grades. At the elementary level the district has identified a need for more test items to be developed so that additional test forms can be constructed. Additional forms keep the testing program fresh in the sense that the students do not become use to the older test forms. Further, teachers are developing teach-reteach strategies which require more frequent testing.

Recently, the district made plans to move toward a 6-8 grade middle school instead of its current 7-9 grade junior high school. At this time the curriculum imbedded testing program does not extend past the sixth grade. Appropriate tests must be developed for the seventh and eighth grades in the new middle school configuration.

High School. During the current school year (1985-86) the high school will begin to develop formal course tests. This process faces several challenges. Traditionally, formative kinds of testing at the high school have been the exclusive domain of the teachers. A number of situations have arisen which make curriculum imbedded testing on a more formal basis necessary and desirable at the high school. The Oregon Essential Learning Skills program will carry with it stringent demands for highly visible accountability at the high school. High schools must be in a position to react to the student's skills deficits and without improved assessment programs they will not be able to do that. Further, student mobility from district to district and school to school play an increasingly important role. As students from other programs enter local high schools it is increasingly important that the high school be able to ascertain the student's level of attainment of these "essential skills" and be able to react to them. The traditional teacher constructed test program is not adequately designed for these purposes and standardized testing programs are not sufficiently sensitive for these purposes.

The district states that curriculum imbedded testing at the high school level faces some fairly obvious problems, not the least of which is the general attitude of high school teachers. High school teachers tend to be much more subject matter oriented than skill oriented in their approach to instruction. Also, even within a given subject matter area, measurable course objectives are not consistent across teachers within that area. Curriculum imbedded tests inherently carry with them the concept of teach-reteach. This is particularly true when the results of testing have a more public exposure than the results of the teacher constructed test. That other "publics" outside the classroom may know how students perform on a particular test is a new concept for high school teachers and they tend to regard it as a threat.

Another problem that the district sees in using this testing concept at the high school level has to do with the sheer magnitude and variety of the courses taught. It is not economically possible to test all courses taught at all levels. Which courses will be tested? How will these decisions be made? Who will be involved in these decisions? All of these questions are now being addressed. At this time areas to be developed first are English, Math, and Science. The immediate goal is oriented toward "how to" as opposed to formal testing per se.

The district identifies a number of developmental areas which, when considered in total, present formidable cost concerns. High school teachers are not well trained in test development and construction. Staff development is a concern. Getting key people together to develop items and tests is an absolute necessity. Released time is a concern. Securing and developing a scanning and scoring system must be done. Technology and software development is of concern.

Finally, a major concern for some high school teachers relates to the multiple-choice nature of the machine-scored tests they are to develop. First, they feel that their course content is better measured through essay tests. Second, many courses attempt to teach critical thinking, analysis and other higher order thinking skills which the teachers feel can't be measured in an objective test format.

APPENDIX A

APPENDIX A

Number of Items on Each Test

Reading Tests

Test/ Grade	Number Course Goals	Number Performance Indicators (Skills)	Number Test Items
1	13	40	380
2	14	44	144
3	13	49	181
4	13	53	167
5	13	51	171
6	11	49	183

Math Tests

K	9	39	43
1	12	34	50
2	12	41	50
3	12	54	100
4	12	61	100
5	12	62	100
6	12	71	100

APPENDIX B

TESTING SCHEDULE
FOR 1985-86

EXHIBIT E

TEACHER Testing Schedule SUBJECT Reading

Sept. 3-6		Jan. 27-31	Post-Test 3, Gr. 1 Report Cards, 31st
Sept. 9-13	Pre-Test, K-6	Feb. 3-7	
Sept. 16-20		Feb. 10-14	
Sept. 23-27		Feb. 18-21	
Sept. 30-Oct.4		Feb. 24-28	
Oct. 7-10		Mar. 3-7	
Oct. 14-18		Mar. 10-14	Periodic -Test 3, Gr. 4,5,6
Oct. 21-25	Post-Test 1, Gr. 1	Mar. 17-21	
Oct. 28-Nov. 1	Periodic -Test 1, Gr. 4,5,6	Mar. 31-Apr. 4	End 3rd quarter, Ap.4 Post-Test 4, Gr. 1
Nov. 4-8	End 1st quarter, Nov. 8	Apr. 7-10	Parent-Teacher Conferences, 10-11
Nov. 12-14	Parent-Teacher Conference 14-15	Apr. 14-18	
Nov. 18-22		Apr. 21-25	
Nov. 25-27		Apr. 28-May 2	
Dec. 2-6		May 5-9	
Dec. 9-13		May 12-16	Post-Test, K-6
Dec. 16-20		May 19-23	Post-Test, K-6
Jan. 6-10	Post-Test 2, Gr. 1	May 27-30	
Jan. 13-17	Periodic -Test 2, Gr. 4,5,6 Post-Test, Gr. 1-3	June 2-6	
Jan. 20-23	End 2nd quarter, Jan. 23	June 9-11	

TEACHER Testing Schedule SUBJECT Math

Sept. 3-6		Jan. 27-31	
Sept. 9-13	Pre-Test, K-6	Feb. 3-7	Mid-Year, Gr. 5-6
Sept. 16-20		Feb. 10-14	Mid-Year, Gr. 5-6
Sept. 23-27		Feb. 18-21	
Sept. 30-Oct.4		Feb. 24-28	
Oct. 7-10		Mar. 3-7	
Oct. 14-18		Mar. 10-14	
Oct. 21-25		Mar. 17-21	
Oct. 28-Nov. 1		Mar. 31-Apr. 4	End 3rd quarter
Nov. 4-8	End 1st quarter, Nov. 8	Apr. 7-10	Parent-Teacher Conferences, 10-11
Nov. 12-14	Parent-Teacher Conferences, 14-15	Apr. 14-18	
Nov. 18-22		Apr. 21-25	
Nov. 25-27		Apr. 28-May 2	
Dec. 2-6		May 5-9	
Dec. 9-13		May 12-16	Post-Test, K-6
Dec. 16-20		May 19-23	Post-Test, K-6
Jan. 6-10	Mid-Year Math, K-4	May 27-30	
Jan. 13-17	Mid-Year Math, K-4	June 2-6	
Jan. 20-23	End 2nd quarter	June 9-11	

APPENDIX C

STUDENT PERFORMANCE SUMMARY REPORTS
AND ITEM ANALYSIS REPORT

HBJ - LEVEL 10/ PERIODIC TEST 2 02/06/84 EXHIBIT B

MEMORIAL HURLEY GRADE 4

	NAME	IDNUMBER	TOTAL	2.1	2.2	2.3	2.4
A	DANIEL J	006026	39	78%	83%	73%	78%
A	DANIELLE E	006027	44	89%	92%	91%	78%
A	JASON	008470	40	50%	92%	100%	100%
A	ELIZABETH R	008440	50	100%	100%	100%	100%
B	JENNIFER F	006029	44	94%	83%	91%	78%
B	JEFFREY M	005766	38	67%	92%	82%	67%
B	MELINDA	007968	45	83%	83%	100%	100%
B	KRISTINA M	006030	39	67%	92%	64%	100%
C	JEANANN L	006032	33	56%	67%	91%	56%
C	DEON	00 577	33	33%	92%	100%	56%
C	REBECCA J	006033	37	56%	83%	91%	78%
K	NICKY	007972	48	100%	92%	100%	89%
K	KORY K	006057	32	56%	75%	73%	56%
H	DAVID V	007740	38	72%	92%	91%	44%
L	KARRI	007961	41	78%	92%	82%	78%
O	ERIC E	006601	47	94%	100%	100%	78%
R	STEVEN A	006518	43	83%	100%	82%	78%
R	MICHAEL K	006519	49	100%	100%	91%	100%
R	SANDRA C	004856	48	100%	92%	91%	100%
S	PATRICK J	006523	28	56%	50%	73%	44%
T	CATHERINE F	006045	38	61%	83%	82%	89%
V	GEOFFREY M	006046	46	94%	92%	91%	89%
Z	ADAM	009591	40	78%	92%	82%	67%

TOTALS FOR THIS CLASS 40.9 76% 88% 88% 78%

HBJ - LEVEL 10/ PERIODIC TEST 2

EXHIBIT B

ITEM BY ITEM ANALYSIS OF STUDENT PERFORMANCE - 02/06/84

MEMORIAL — MURLEY — GRADE 4

ITEM	STUDENTS--CORRECT	STUDENTS--INCORRECT	*	BLANK	1	2	3	4	5
1	20 (87%)	3 (13%)	*	0	1	20*	2	0	0
2	15 (65%)	8 (35%)	*	0	15*	3	5	0	0
3	16 (70%)	7 (30%)	*	0	6	1	16*	0	0
4	17 (74%)	6 (26%)	*	0	3	17*	3	0	0
5	18 (78%)	5 (22%)	*	0	2	3	18*	0	0
6	18 (78%)	5 ([illegible])	*	0	18*	3	2	0	0
7	18 (78%)	5 ([illegible])	*	0	18*	5	0	0	0
8	8 (35%)	15 (65	*	0	15	8*	0	0	0
9	18 (78%)	5 (22	*	0	18*	5	0	0	0
10	17 (74%)	6 (26%)	*	0	17*	6	0	0	0
11	21 (91%)	2 (9%)	*	0	2	21*	0	0	0
12	20 (87%)	3 (13%)	*	0	2	1	20*	0	0
13	20 (87%)	3 (13%)	*	0	1	2	0	20*	0
14	20 (87%)	3 (13%)	*	0	1	2	20*	0	0
15	18 (78%)	5 (22%)	*	0	4	18*	0	1	0
16	22 (96%)	1 (4%)	*	0	0	0	1	22*	0
17	18 (78%)	5 (22%)	*	0	2	1	2	18*	0
18	10 (43%)	13 (57%)	*	0	4	6	10*	3	0
19	22 (96%)	1 (4%)	*	0	22*	1	0	0	0
20	19 (83%)	4 (17%)	*	0	19*	4	0	0	0
21	21 (91%)	2 (9%)	*	0	2	21*	0	0	0
22	22 (96%)	1 (4%)	*	0	1	22*	0	0	0
23	22 (96%)	1 (4%)	*	0	1	0	22*	0	0
24	19 (83%)	4 (17%)	*	0	4	19*	0	0	0
25	23 (100%)	0 (0%)	*	0	0	23*	0	0	0
26	22 (96%)	1 (4%)	*	0	1	0	22*	0	0
27	19 (83%)	4 (17%)	*	0	19*	3	0	1	0
28	22 (96%)	1 (4%)	*	0	0	1	22*	0	0
29	17 (74%)	6 (26%)	*	0	2	17*	4	0	0
30	14 (61%)	9 (39%)	*	0	4	5	14*	0	0
31	22 (96%)	1 (4%)	*	0	1	22*	0	0	0
32	23 (100%)	0 (0%)	*	0	23*	0	0	0	0
33	22 (96%)	1 (4%)	*	0	22*	1	0	0	0
34	22 (96%)	1 (4%)	*	0	1	22*	0	0	0
35	21 (91%)	2 (9%)	*	0	21*	2	0	0	0
36	22 (96%)	1 (4%)	*	0	1	22*	0	0	0
37	10 (43%)	13 (57%)	*	0	13	10*	0	0	0
38	21 (91%)	2 (9%)	*	0	21*	2	0	0	0
39	22 (96%)	1 (4%	*	0	22*	1	0	0	0
40	16 (70%)	7 (30%)	*	0	7	16*	0	0	0
41	21 (91%)	2 (9%)	*	0	21*	2	0	0	0
42	22 (96%)	1 (4%)	*	0	22*	1	0	0	0
43	18 (78%)	5 (22%)	*	0	5	18*	0	0	0
44	16 (70%)	7 (30%)	*	0	7	16*	0	0	0
45	22 (96%)	1 (4%)	*	0	1	22*	0	0	0
46	17 (74%)	6 (26%)	*	1	5	17*	0	0	0
47	20 (87%)	3 (13%)	*	0	20*	3	0	0	0
48	16 (70%)	7 (30%)	*	0	6	16*	1	0	0
49	17 (74%)	6 (26%)	*	0	2	4	17*	0	0
50	14 (61%)	9 (39%)	*	0	4	14*	5	0	0

APPENDIX C

FORM USED TO CROSS-REFERENCE
CURRICULUM OBJECTIVES TO TEXTBOOK OBJECTIVES

GRADE LEVEL GUIDE

PROGRAM _____ GRADE LEVEL _____

RELATED PROGRAM GOALS	CROSS REFERENCE	INTRODUCED (I) OR EXTENDED (E)	COURSE GOAL Performance Indicator	Textbook Reference and Other Resources	Media Materials	Assessment Procedures

EXHIBIT A

GRADE LEVEL GUIDE

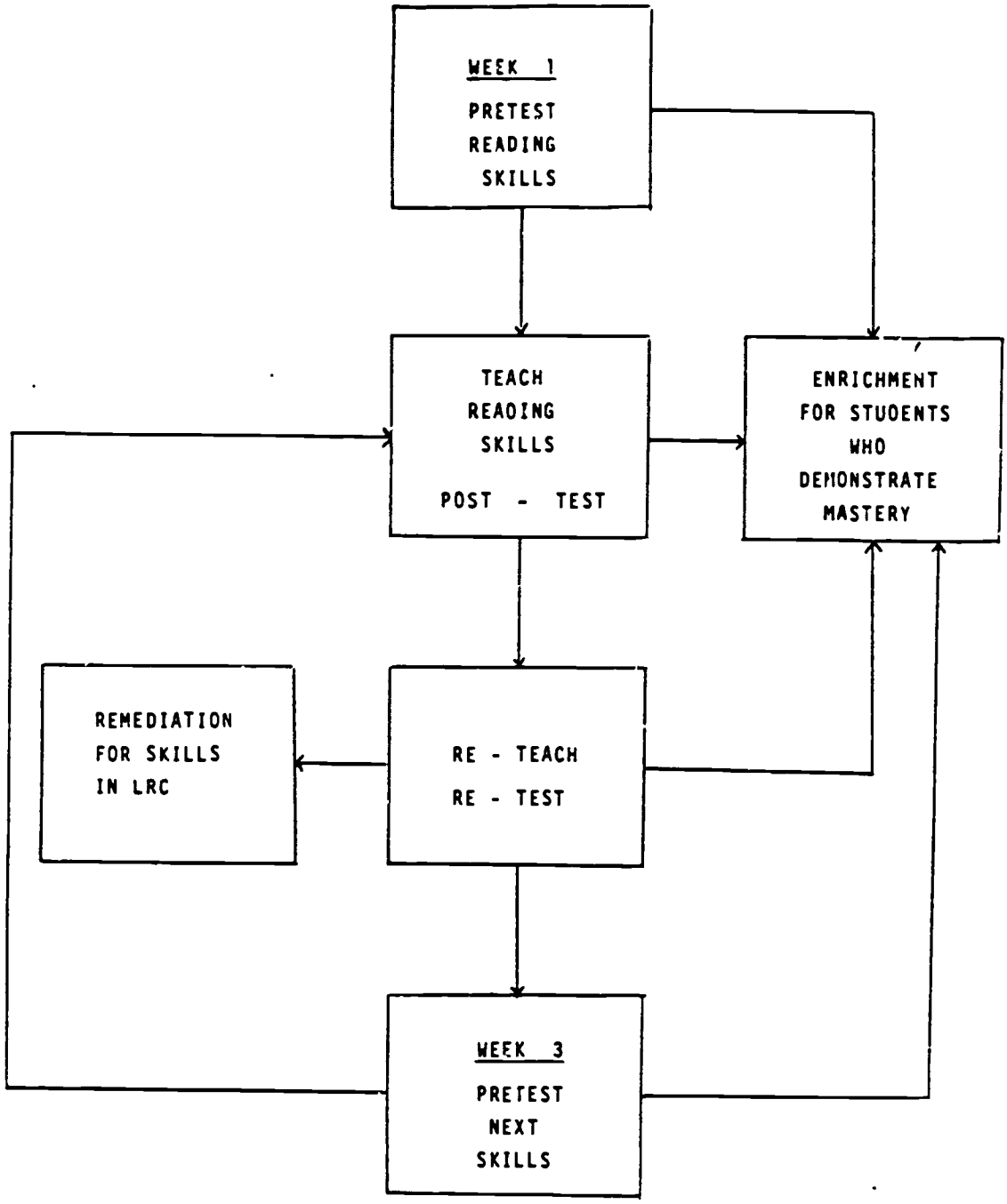
PROGRAM Reading

GRADE LEVEL 2nd Grade

Related Program Goals	Language Arts Cross Reference	Introduced (I) or Extended (E)	COURSE GOAL Performance Indicator	Textbook Reference and Other Resources	Harcourt Brace Jovanovich Unit References		CUM TEST 6	PERIODIC TEST 6	CUM TEST 7	PERIODIC TEST 7
					Book 6	Book 7				
			THE STUDENT WILL:							
I			A) BE ABLE TO DEMONSTRATE PRE-READING SKILLS.							
		E	A-4) provide evidence of manual dexterity.	HBJ 1.2[a]						
		E	A-5) reproduce a printed form or pattern.	HBJ 1.2.3.3						
	Wr A-3 B-1	I	A-7) write the letters of the alphabet without a model.	HBJ 1.2.3.3.4						
I			B) BE ABLE TO DEMONSTRATE AUDITORY DISCRIMINATION.							
	LI A-3	E	B-3) select words that begin and/or end with the same sound.	HBJ 1.4.2					p.3	
		E	B-4) select words which contain the same vowel sounds.	HBJ 2.2, 2.5	26		p2,3,4		p.2	p.2
		E	B-5) identify rhyming sounds.	HBJ 1.4.5, 2.4	4,7,10	10		p.2		
		E	B-6) identify long and short vowel sounds.	HBJ 2.2, 2.5	26		p.2,3,4 6,7,8	p.2		p.2
		E	B-7) respond appropriately to questions.							
			THE STUDENT WILL:							
I			C) BE ABLE TO DEMONSTRATE VISUAL DISCRIMINATION.							
		E	C-1) distinguish likenesses and differences in pictures, symbols, shapes, sizes and colors.	HBJ 1.3, 1.5, 2.5	18	6,15,1,8				
		E	C-6) recognize upper and lower case letters.	HBJ 1.5, 6.3	Level 5 4,9,15,20,24	20,5				

APPENDIX E

TEACHING-TESTING-TEACHING PROCESS
ADOPTED BY THE DISTRICT


WEEK 1
PRETEST
READING
SKILLS
TEACH
READING
SKILLS
POST - TEST
ENRICHMENT
FOR STUDENTS
WHO
DEMONSTRATE
MASTERY
REMEDIATION
FOR SKILLS
IN LRC
RE - TEACH
RE - TEST
WEEK 3
PRETEST
NEXT
SKILLS

APPENDIX F

EFFECT OF CURRICULUM ALIGNMENT ON STANDARDIZED TEST SCORES

EXHIBIT D

	82-83	83-84	84-85	50th %ILE
READING	59	48	70	50
MATH	58	46	77	50
LAN ART	54	44	64	50
SOC SCI		45	66	50
SCIENCE		46	65	50

86