A study investigated the effectiveness of an adapted Writing to Read (WTR) program that focused on the writing process and included the "Stories and More" software for literature-based emphasis. Over 1000 writing portfolio samples were collected from kindergarten through second grade students in 29 classrooms in 6 California school districts (Simi Valley, Ventura, Santa Barbara, Orcutt, Oxnard, and Port Hueneme). Included in the population were several Spanish language classrooms, English-as-a-Second Language classrooms, and classrooms with learning handicapped students. Data were collected from four control sites that had no WTR at all and one control site that had a WTR lab. A reading attitude survey was administered pre and post, and the reactions of teachers, parents, and school administrators were gathered. Results indicated that: (1) the project teachers successfully developed and demonstrated the use of Writing to Read adaptation that included Stories and More software; (2) teacher productivity was increased through the use of Microsoft Works and telecommunications capability; (3) students quickly made the computer a part of their daily life, while it took some teachers longer; (4) parents reported that their children wrote much more at home and loved writing; (5) teachers reported that these students wrote more than previous classes and at a higher quality level; (6) all students described themselves as readers and writers at the post survey; and (7) parents and principals overwhelmingly supported the program. Criteria for scoring writing samples, a classroom observer form, and teacher, principal, and parent questionnaires (one in Spanish) are attached. (RS)
Writing to Read in the Classroom: A Literature-based writing literacy environment
Writing to Read in the Classroom: A Literature-based writing literacy environment

February 21, 1992 I AM MI SELF

DORIAN
In 1990, six school districts, Simi Valley, Ventura, Santa Barbara, Orcutt, Oxnard, Port Hueneme joined together in a partnership with IBM. The Simi Star Project was a successful grant proposal written by Mary Beth Wolford representing the Simi Valley Unified School District. The goals of this project were to:

- conduct a comprehensive, qualitative evaluation of the effectiveness of WTR and VALE in the classroom.
- document the process of migrating Spanish speaking children from VALE to WTR.
- develop an instrument or method to evaluate writing development
- document how WTR complements the Whole Language Philosophy of learning in Kindergarten/1.
- evaluate the equity in the application of technology instructional programs in diverse socioeconomic school districts.

The results of this study would produce further knowledge about classroom centered, technology based curriculum; what level of teacher training and support is required; and to what extent technology affects the child’s interest in learning.

The project was designed in six phases. Objectives of each phase is as follows:

**Phase I: Installation and Training**

**Duration:** September 1990 to December 1990

The objectives of phase I included:

1. installation of 6 file servers: 1 PS/2 Model 65 in one school in each of the 6 school districts participating in the study.

2. installation of workstations: 28 PS/2 Model 25's

3. installation of 1 PS/S Model 30 people sharing information file server

4. installation of software/courseware

5. training
Phase II: Installation and Training

Duration: January 1991 to March 1991

The objectives of Phase II included:

1. installation of remaining workstations
2. installation of software/courseware

Phase III: Data Collection

Duration: September 1990 to May 1991

The objectives of Phase III include:

1. Development of an evaluation plan
2. Data collection

This phase as well as phases IV, V, and VI were heavily reliant upon Educational Instructional Specialist Support from IBM to the Project. Sherrie Kolz, a 2nd grade teacher from Simi Valley Unified, was given two years leave and trained as an IBM WTR specialist. Dr. Jean M. Casey, Associate Professor Language Arts, California State University, Long Beach, was selected as the outside evaluator for the project. Ellen Lee from Simi Valley Unified was made coordinator of the Project and these three individuals along with Jay Flynn, IBM ICEP project manager, developed the overall evaluation plan, training workshops, and design of the project.

Phase IV: Analyze Data Collection

The original project called for data collection and analysis from June 1991 until August 1991. However, due to the delay in availability of equipment, late shipping, hardware compatibility problems, room electrical and design problems, the rooms were not computer ready for full data collection until Fall 1991 and therefore data collection occurred between then and June 1992 and data analysis between June 1992 and September 1992.
Goals of the projected were refined and adapted:

All labs were to have WTR software, VALE at two sites only (Franklin and Juanita) All sites were given Microsoft Works, Children's Writing and Publishing, Stories and More, TLC software and trained for CSUNet telecommunications use.

1. The primary goal of the project was now to demonstrate the use of a WTR adaptation that supports the California State Framework within K-1 classrooms.

2. The second goal, specific to the methodology proposed, was to enhance teacher productivity and competence through the use of a training program. Telecommunications training will also be provided to expand the teachers communication abilities and access to resources.

3. The third goal addresses a serious physical plant problem facing many school districts in California, lack of space. Placing the technology equipment directly into the classroom eliminates the need for separate space for computer labs. The study compared WTR in the classroom with WTR in a lab setting and settings with no computers in the classroom or lab setting. The question the study asked was, "Does integrating technology into the classroom become a natural extension of the teaching methodology and a familiar and non-threatening tool available throughout the school day to students? How is the equity of technology use for all students an important issue for the schools.

Dr. Casey designed an qualitative evaluation plan modeled after her Descriptive Study of ABC School Districts reading program and John Goodlad's nationwide study of schools.

Instruments for the evaluation included:

Observations: An observation checklist was developed see Appendix. Sherri Kolz was trained in the use of the checklist, observer reliability was established and she and Dr. Casey conducted on site evaluations from Sept. 1991 to May 1992.

Reading Attitude: Teachers administered a reading attitude survey to students in Sept. and again in May.

Writing Samples: Teachers gathered a beginning of the year sample, mid-year samples and end of year samples of students writing with a pencil and on the computer, these were scored by the teachers and kept in portfolios.

Teacher Questionnaire: A teacher questionnaire was distributed at the end of the year for a summary of teacher attitudes.

Parent Questionnaire: A parent questionnaire was distributed at the end of the year for
a summary of parent attitudes.

Student Interviews: Randomly selected students were individually interviewed or studied as case studies throughout the data collection period.

Teacher Journals: Teachers maintained anecdotal journals as well as e-mail correspondence for constant support and communication. They also received one on one coaching for implementation throughout the study.
Training

Training was a vital part of this project. Lack of sufficient training is one of the biggest areas of failure in the implementation of technology in schools. Too often one shot workshops or training sessions are all school districts can afford.

Six workshops were provided in this project and many individual coaching for implementation sessions. The purpose of these frequent training workshops and meetings was to:

1. Train participants on new equipment, hardware and software. Designate and train a network operator at each site usually called the lead teacher.

2. Get administrators, teachers and staff from all six school districts, IBM personnel and outside trainers together to form a learning community mutually dedicated to implementation and research on the evaluation of the use of technology in the classroom.

3. Provide new teaching ideas, methodology, inspirations for curriculum development among the teachers and have the teachers contribute to the creation of a teacher's manual for the project and gather effective data from the project.

Implementation

Observations were conducted from September, 1991 to May, 1992 by Dr. Jean M. Casey, Project Evaluator and Sherri Kolz, Educational Instructional Specialist as well as principals at each site. Principals reported their observations via journal notes, conversations, and written interviews.

The observation protocol was developed by Dr. Casey and validated in 1984. Observation results in the formative stages were shared with teachers and administrators at workshops and coaching for implementation occurred throughout the study based on these detailed observations. The final observation was used as a guide for assessing implementation of the program after a year. (Orcutt School was the exception being in the second year of their implementation.)

Specific workshops on hardware and software difficulties and operation, facilitating the word processing progress of students, teacher use of the computers, parent orientation to the program, and gathering evaluation data were covered and reinforced at each meeting. Time for teachers from all districts to share their progress in implementation was given and this was extremely valuable in providing peer motivation to succeed and try new ideas in the program. Thorough training and coaching for implementation is a vital element to the success of any program of this type. School districts trying to replicate this program must include this component in
their program. Acquiring the hardware and software only will not be sufficient to successfully integrate the use of technology as a vital support for the literature-based, whole language classroom. Teachers must not only understand the philosophy of whole language instruction, they must be well versed in early literacy development and aware of the eye hand coordination difficulties of many young children, the need for a risk free environment to support early literacy and encourage writing, and the vital support role that all day access to technology can provide in today’s classroom. Some one in the district must be available to provide technical support for down computers, printers, networks and as a system manager for the school network.

Frequently observations revealed that due to a bad connection or malfunctioning printer the entire program was abandoned for a period of time. The consistency and reliability of the programs results are contingent on good technical support. Sherri Kolz was available full-time to provide 1-1 technical support and training to teachers at all six school districts. Her on-site support was greatly responsible for the operation of the program in many sites.

Faculty that participated in the study were selected independently by each school site administrator. In some cases the number of kindergarten and first grade classrooms in the school was such that all faculty teaching those classes regardless of interest or desire to participate in the program were mandated to participate in the study. In other sites principals ask for volunteers or teachers who were especially interested in the program and in still other sites the desire to participate in Writing to Read in the classroom originated from the teachers who encourage the administrator to volunteer their school site as participants in this study. Principals at all sites were asked to select a lead teacher or coordinator who was trained as a system operator.

The results clearly showed that:

1. the most successful results occurred in school sites where the desire for the integration of technology in the classroom originated with the classroom teachers and the site administrator shared their interest and desire to participate in this program.

2. school sites in which there was interest in the project by only some of the classroom teachers and the site administrators produced the next best results but only in the classrooms of the staff interested and supportive of the project.

3. school sites in which there was dissension between the site administrator and the teachers, year round school implementation, lack of teacher interest or administrator interest (in one case the administrator was removed and another replaced and given the program without any interest or buy in) were the least successful.

The element of teacher and administrator expectation, enthusiasm and interest and support for a program are vital elements in the success of any school innovation.
The focus of this adapted Writing to Read in the Classroom implementation was on the writing process and included the addition of Stories and More software for literature based emphasis.

Over 1,000 writing portfolio samples were collected from K-1-2 students representing 29 classrooms in 6 school districts. Included in the population were several Spanish language classrooms, ESL classrooms and classrooms with Learning Handicapped students. Data was collected from 4 control sites that had no WTR at all and one control site that had a WTR lab.

Pre and Post pencil writing samples were gathered from all classrooms and computer writing samples from experimental classrooms. All were scored by teams of teachers trained to use the Holistic rubric used in the ETS WTR evaluation studies, inter-rater reliability was established in workshop training sessions. A reading attitude survey was given pre and post and results reported on by teachers. (Copies of rubric and attitude survey in Appendix.)

Analysis of Writing Samples

Writing samples were obtained by teachers in September 1991 and in May 1992, these pre and post writing samples were scored by the teachers using a Criteria for Scoring Writing Samples that they had all been trained on. An additional sample was taken in May of children's writing on the computer as opposed to their writings using pencil. Many teachers also included mid year writing samples in the 1000 writing portfolios that were examined. (A copy of the Holistic scoring guide is in the appendix.)

Results indicate:

In the Writing to Read in the Classroom experimental group of kindergarten and first grade students the boys as a group scored 1.6 levels higher when writing on a computer than when writing with a pencil. The girls scored 1.56 levels higher when writing on a computer than when writing with a pencil. The computer as a writing tool increased the level of effective writing these students were capable of doing. This means that a child who scored a level four writing sample in handwriting could write a level 5 or 6 story on the computer. The ease of letter production, the visual and auditory reinforcement of letters and sounds make the talking Primary Editor Plus and talking word processing software like it essential early literacy tools in the integrated whole language classroom. It allows students to effectively process their own language experience stories daily in contrast to the non WTR classroom where adults either transcribe for the student (giving the subliminal message that they cannot do it themselves) or students with limited motor coordination brand themselves failures in comparison to their peers who can use a pencil. During an interview with a teacher in a traditional kindergarten classroom I noticed on the walls kindergarten student
drawings with adult parent aide writings under each one and I asked the teacher why parents wrote on them, "Well, you know kindergarten children cannot write," she said. The results from this project refute that statement and give positive evidence that kindergarten and first grade children can indeed write a great deal when given the proper tools, encouragement and risk free environment to work in.

Kdg. boys in the Writing to Read in the Classroom experimental group averaged 4.88 levels of writing growth and a 96% positive attitude in reading.
Kdg. boys in the traditional instruction control group averaged 2 levels of writing growth and a 99% negative attitude in reading.
Kdg. girls in the Writing to Read in the Classroom experimental group averaged 4.44 levels of growth in writing and 95% positive attitude in reading.
Kdg. girls in the traditional instruction control group averaged 2.1 levels of writing growth and 97% negative reading attitude.

1st grade boys in the Writing to Read in the Classroom experimental group averaged 4 levels of writing growth with a 99% positive reading attitude.
1st grade boys in the traditional instruction control group averaged 2.5 levels of writing growth with a 50% negative and 50% positive reading attitude.
1st grade girls in the Writing to Read in the Classroom experimental group averaged 4.2 levels of writing growth and 98% positive reading attitude.
1st grade girls in the traditional instruction control group averaged 2 levels of writing growth and 50%- and 50%+ reading attitude.

Control site data from a 2nd grade WTR Lab indicated highest writing scores were at the 3 or 4 level as compared to 1st and 2nd grade experimental classes who averaged high scores of 5 and 6.

*Having daily access to the computers for more than one hour a day seems to contribute to increased writing competence. The reading attitude of students in the WTR lab as well as classroom were both over 95% positive as opposed to the much higher negative reading attitude percentage of 50% in control classrooms.

One control site kdg had 10 boys at end of year who could not even score 1 in writing, due to limited eye hand coordination, poor motor skills. All these students indicated a negative reading attitude as well.
In all experimental kdg. classes students could score at least 1 on writing and the average level was 4 with positive reading attitudes.

The Spanish experimental classrooms had many striking examples of ESL students still struggling with written language, empowered by computer use. Positive reading attitude change as well. VALE was used in some of these classrooms but teachers made teacher-made additions to the program.

One experimental K/1 classroom reported 4 Attention Deficit Disorder children and
one dyslexic—they were all doing excellent writing on the computer and were not discernible to observers as being learning disabled. The teacher reported this as one of the most difficult classes she ever had behaviorally and yet easiest to manage and most successful in writing due to WTR.

Parents in WTR experimental classrooms gave a 95% rating of they liked the program and their children liked it. They also gave a 99% rating on knowing about the classroom reading and writing program. Parents in the control group had a significantly lower response as to liking their child's reading program and a significantly higher incidence of responding that they did not know at all what program was being used to teach reading and writing in their child's classroom.

Most teachers and principals in experimental groups reported wanting to continue the program the next year and feelings that it was extremely successful with all their students but particularly, ADD, LEP, LH and gifted students.

Program Strengths and Weakness

Based on results of classroom observations and reports by teachers and principals in journals and interviews, the following recommendations were made.

Teachers unanimously supported the use of Stories and More software as an outstanding support to their literature-based reading programs and a motivator for student writing and reading. This program supports all the goals of the state framework and was found to be effective with both kindergarten and first grade students. The second vital element of the program was the word processing functions available to the students on Primary Editor Plus and Children’s Writing and Publishing software. Teachers discovered that the students in both kindergarten and first grade can benefit from using the word processor from the first week of school. They discovered the fact that written development on the keyboard does occur in stages akin to the stages of language development. They also observed and discovered that many 5-7 years olds do not yet have sufficiently developed eye-hand coordination to successfully print their thoughts and ideas with a pencil but they can indeed be successful in early writing and reading on a computer that speaks.

Primary Editor Plus has a speech capability which permits language processing to occur on a computer. Students can type letters of the alphabet and see them on the screen, hear them and then receive a printed copy of them. This visual, auditory, and tactile response is a very effective teaching support tool for anyone in early literacy stages regardless of age. Students can type their names, words in the environment and those familiar to them on the first day of school, print them out and illustrate them and take them home as evidence of their new found membership in the literacy club. The self-esteem and efficacy of producing adult style professional print at age 5-7 is empowering and inspires students to want to write daily, just as the smile and
The excitement of a parent during early language development fosters continued language progress. This element of empowerment for early literacy learners is one of the great strengths of this program. In the information age equity issues and equal access of technology is vital for all learners, however those needing eye hand coordination support, ESL students and those who were recommended for special ed, or chapter programs and the gifted who often are bored with many standard approaches really benefit most from the integration of technology in the classroom.

The use of technology allows all learners to produce the same quality professional print and feel success in written communication at the vital early stages.

The least favorite part of the program and this varied among individual teachers and their styles of teaching was the WTR Cycle software. Teachers objected to the isolated nature of presenting single words on the computer screen. Research suggests that phonics taught in the early years should be done in a meaningful manner, in context with text that has meaning for students. The presentation of individual phonic sounds again in an isolated manner was often not clearly understandable by either the students or the teacher. This was another area in which they felt there needed to be improvement, if the child is confused about the proper sound to associate with a letter the knowledge is confounding and not beneficial to the learning process. This software received the most criticism. Some teachers developed ways to integrate the cycle words into thematic teaching and the subsequent writing process of the students and maximize the use of this software and move beyond initial objection to it. If used according to student interest and need the graphics are interesting to most students and the subliminal learning of left to right directionality, alphabet knowledge, exposure to sight words and knowledge that letters come together and produce words of recognizable objects in the environment are all useful learning. The graphic visually illustrating the cycle words and the auditory reinforcement of the spoken word are motivating for many students. The computer presentation of the graphic illustration of the word as well as the symbol and sound of it aid concept formation and retention.

Future improvements of the software would allow students to choose their own words to view and select graphics for and also present words in meaningful context or allow students to do this. The Discus software that presents talking books in several languages and allows students to select words and hear them pronounced is an example of a direction this new software development could take.

The VALE software which is the Spanish version of the WTR Cycles was objected to on some sites on the grounds that it was difficult to use in a bilingual program with the English WTR and also that it was not based on sound Spanish early language development research and practice. However the teachers working with Spanish youngsters had excellent success using the word processor for Spanish speakers to write their native language stories and at Franklin School in Santa Barbara hard working, dedicated teachers created support books for the VALE software that they felt...
greatly improved its effectiveness. Sites that did not take the time to adapt the software to the needs of their students refused to use it due to their objections about its effectiveness.

Measurement, Time and Money software was found to be very effective for support of mathematical concepts in the integrated classrooms.

Bouncy Bee learns Letters and Words were both used frequently in many sites and reports from teachers and observations of students showed these software programs to be successful for use in the integrated classroom.

Teachers used Microsoft Works for parent notes, newsletters and school communications. Many report that their communication with parents had doubled due to the access of having computers in the classroom. Most were using the computer more and more to ease their classroom written responsibilities. A computer and printer in the classroom for a teacher's own word processing, record keeping and reporting needs is essential in all classrooms today.

Note: Parent questionnaires revealed almost 100% response from parents that they knew about the WTR in the Classroom program, and liked it or liked it very much and also felt their child liked it or liked it very much. In contrast the response from parents in the control groups indicated that the greater percentage of them did not even know what reading program was in use in their child's classroom. This element of parental awareness and knowledge of a program and the feeling that they are a vital element in their own child's early literacy development is a strength of this program.

The use of networking computers in the classroom was found to be extremely effective by teachers, once the networks and computers were finally up and running. (Do not underestimate the time it takes to make this a reality.) This entire project was delayed a full year due to the difficulty with obtaining, assembling and troubleshooting equipment and facilities and this was when the equipment was all free. Sites seeking to replicate this type program will want to include sufficient time for this equipment installation and then schedule training after equipment is all up and running. Shortchanging equipment installation and teacher training will lead to an unsuccessful program. Networks allow teachers access to many software programs without having to load and unload disks, they allow teachers to choose other software based on their needs, their students needs and interests and have the system operator install it on the network. Teachers can design classes that contain software packages they choose for specific groups of learners. Networks greatly decrease the workload in the classroom so where Writing to Read labs with stand alone software required an aide just to load cycle software, now kindergarten and first grade students can access their software easily and this additional support is not needed as much. In fact although additional aides, parent volunteers are important parts of the literacy classroom, once children and teachers are comfortable with the computers and networks the program can be effectively used by the one teacher classroom, cross-age tutors from middle grades
are the perfect additional tutors to use in this type classroom.

Telecommunications software (Microsoft Works) and access to the CSUNetwork, Computer Online Resource in Education (CORE) allowed teachers to be able to communicate from classroom to classroom, district to district, and from classroom to Atlanta and the offices of the coordinators and evaluators. This improved ability to communicate among all parties of the project was a vital component of its' success. Especially among the organizers of the program. The teachers and school administrators most benefited from access to CORE and its resource about School Grant Funding and conferences among educators like them. A special training workshop was help at the beginning of the project to train lead teachers and administrators at all sites on e-mail, conferencing and the CORE (TRIE) system. *(At the time of the study the network was called Technology Resources in Education and has since been changed to CORE).

The level of knowledge of technology use among the teachers and their integration of technology into their curriculum and classroom day was probably one of the most positive results of the study. When asked if they would continue this program the following year after completion of the study and without any further outside support the teachers reported a 100% response that they would continue the program and would no longer want to work in a classroom without computers as a vital part of the learning environment.

The tapes of literature books and the literature books selections included in the Writing to Read program were found to be very effective by all teachers. They rapidly included Spanish tapes and books and their own tapes and books at this station yet they all concurred that the vital auditory reinforcement provided by students listening to books on tape and reading along with them was a valuable literacy experience in the classroom.

Teachers noted in their journals that they found the the student journals and tapes accompanying them to be a weak link in the program. The instructions on the tapes was criticized as not being complete enough and the workbook like format of the work journals not in line with the type materials they preferred and the state supports in a the literature-based whole language classroom. They did like the record keeping capability the students have on the back of the work journal. This ability of students to record their progress as they work at the various learning stations in the classroom is very important and increases student motivation and responsibility for their own learning. Suggestions were that the record keeping be retained and the booklets transformed into true journals as opposed to missing word or letter worksheet. The tapes could be replaced by more literature tapes at natural reading speed. They also suggested that students be given the opportunity to create their own listening tapes using their language experience stories. They felt this would be an effective addition to the program.
Teachers also commented in the journals that a computer program such as this one should have a teacher record keeping capability within the networked system. A program for teachers to record student names and passwords, keep a record of students writing levels, progress on Stories and More and other software and aide in reporting progress to parents was a highlighted need for improvement in the program.

**Teacher Questionnaire Report**

The combined experience of the teachers involved in the experimental study or the 24 classrooms evaluated was 438 years or an average of over 18 years per teacher. Only one teacher in the study was a new teacher with the pilot project year being her first year of teaching. Given the level of experience of the combined group of teachers they all have sufficient experience to judge the effectiveness of this program particularly in comparison with methods they have used in the past.

A comprehensive teacher questionnaire was administered to them. (Copy in Appendix) Results showed:

Teachers rated the overall program 4.14 on a 5 point scale with 4 being liked it and 5 being liked it very much.

Combined teacher ratings rated the program as very effective for all learners. Specific teacher comments included:

"I love this program and want other teachers to know the importance of keeping at least one hour for WTR in the day all year long and the computers available for writing all day."

"WTR provides the "below average" students with a positive environment in which to grow and develop.

"How terrible it would be to be forced to go back to teaching without computers!"

In summary, most teachers reported they felt that this program taught reading and writing in an improved fashion and all reported they would not want to lose the computers that had now become a integral part of their classroom. Many teachers preferred some parts of the program to other parts but the flexibility in the risk free teaching environment allowed them to use the technology to support the curriculum they felt most suited the needs and interests of their individual students.
Principal Report

Summary

1) Integration of WTR in Kindergarten First Grade

<table>
<thead>
<tr>
<th>Location</th>
<th>Kindergarten</th>
<th>First Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orcutt</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Simi</td>
<td>75%</td>
<td>100%</td>
</tr>
<tr>
<td>Ventura</td>
<td>100%</td>
<td>75%</td>
</tr>
<tr>
<td>Port Hueneme</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Oxnard</td>
<td>75%</td>
<td>75%</td>
</tr>
<tr>
<td>Santa Barbara</td>
<td>Not reported</td>
<td></td>
</tr>
</tbody>
</table>

Some principal comments were:

Principal Report #1

1. Computers were integrated 100% in all kindergarten and first grade classrooms.

2. The most positive results for my students- providing a risk-free environment for learning within own classrooms. Giving K and 1st grade students developmentally appropriate program that enhanced writing skills for all students. Evidence of increased positive self-esteem.

3. The most positive results for teachers- empowerment of teachers to use technology within their own rooms in a very positive, elective way. Teachers have seen that the WTR program really does help students learn!

4. The most positive results for me as principal was:
   Success I have seen for both students and teachers.
   parents feel very good about their students use of modern technology and the level of their writing skills.

5. Problems- technical problems with cables and such and ongoing support in form of paid aide.

6. What will happen next year- continue WTR in K and 1st; expand to use of additional programs. Further use of Stories & More, addition of Writing to Write in Grade 2.
Principal Report #2

1. How successfully do you feel computers have been integrated in K-100% 1st-100% I am extremely pleased with the integration of WTR in Kindergarten and first grade classrooms. Williams' teachers have diligently worked to make the program a success in their classrooms.

2. Positive results of project for students-
   - Established writing program in all K and 1 classrooms
   - Student access to computer technology
   - Infusion of structured phonics program to enhance whole language
   - Printed work allows students not to be concerned or discriminated against as far as neatness or legibility
   - Student independence

3. Positive results for teachers
   - Teacher ownership of technology in classroom
   - Teacher access to computer technology
   - Communication/Articulation with other teachers
   - Flexibility to utilize programs in classroom in a way which fits to personal teaching style

4. Positive results for principal
   - Integration of technology in school
   - Increased teacher communication
   - Positive student feedback

Positive results for parents
   - Student access to computers
   - Increased writing time and written work going home

5. Problems with integration of computers-need more training to be able to troubleshoot hardware and software difficulties

6. Next year will expand to other grades if funding opportunities materialize.
Principal Report #3

Successful implementation of WTR in K and 1 classrooms 75%
Over all about 75% integration has been achieved. The biggest problem for staff was moving away from a lab approach to an integrated program that includes technology.

2. Positive results:
   Students developed a high interest in attending school so that they could use the computers and
   The facility and complexity that student writing was developed.
3. Positive results for teachers
   The use of technology to reinforce and extend the learning parameters for children.
4. Most positive results for principal
   positive learning environment that the computers generated.
   Most positive results for parents
   It was the computer knowledge their children were receiving

5. Problems with integration of computers in classroom
   The development of a mind set that the lab was not another layer of instructional activity

6. Next year continue to refine the projects in instructional application and look to expansion.

In oral interviews with all six principals they all concluded that they were extremely pleased with the program and intended to continue and expand its use the following years.
Parent Report

Of the 376 parent questionnaires returned and reported, all from a random sampling of parents of children in WIR classrooms. 87% of the parents reported that they liked the program very much, 4% that they liked it and 9% were not sure. 91% of the parents reported that they felt their child liked the program very much, 7% that the child liked it and 2% were not sure.

Of interest was the comparison between responses from parents of experimental schools (Simi Star WTR in the classroom schools) and parents from control sites that did not have WTR with computers in the classroom.

The question asked of the parents was:

Are you familiar with the reading program being used in your child's class.
In the Star project 94% of the parents said yes and 6% said no.
In the control schools 49% said yes and 50% said no.

The data shows that parents were much better informed in the WTR in the Classroom settings than parents were in the control schools with other programs.

Parents of both the experimental and control group agreed that computers are a vital part of today's classroom and felt it must be for their child.

Parents of both groups were asked what evidence they see at home of their child's reading and writing skills.

<table>
<thead>
<tr>
<th>Simi Star Parent</th>
<th>Control Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>58% child leaves notes around house</td>
<td>16%</td>
</tr>
<tr>
<td>100% read signs, labels books and other materials</td>
<td>77%</td>
</tr>
<tr>
<td>84% want to be read to</td>
<td>100%</td>
</tr>
<tr>
<td>80% want to do their own reading</td>
<td>61%</td>
</tr>
<tr>
<td>72% want to read to other people</td>
<td>44%</td>
</tr>
<tr>
<td>100% write stories</td>
<td>44%</td>
</tr>
<tr>
<td>98% share their school work and want to read it</td>
<td>55%</td>
</tr>
</tbody>
</table>

Notice that more than twice as many students in the WTR program write stories. Three times as many WTR students leave notes at home (more writing behavior.)

As far as reading behavior a significant number of WTR students 80% vs. 61% control report they want to do their own reading and 72% WTR students vs. 44% control report they want to read to other people. The only area that the control group lead in was
want to be read to, which is a dependent earlier stage behavior. However on all measures of reading and writing performance in the observable real world the students who were in integrated WTR classrooms exceeded students in the control schools at a significant degree in their literacy skills.

Most parents also agreed that more money should be spent on computers and technology in the schools. In summary, parents feel very good about their students use of modern technology and writing skills.

The following are comments included on questionnaires from parents in the Simi Star Project. Control parents did not include any comments. (Copy of English and Spanish Parent Questionnaire in Appendix.)

Parent Comments

1. Two of my children have been through the WTR program. I think it’s wonderful!! Having the kids learn to use computers at such an early age is great. I hope that other computer programs are made available that follow WTR for our children as they advance.

2. The WTR program offered at Joe Nightingale greatly influenced our decision to send our daughter there. We first heard about it at a Rotary Club meeting.

3. I think that we need more parent help with these programs. it would help with the home school work.

4. We have been very impressed with the progress my daughter has made with her reading and writing skills. She loves the program as well. I would recommend it for every school.

5. Even though this is my first child in school, I know she is ahead in her reading and writing ability due to this outstanding program! In kindergarten she came home and read to me, I had no idea she could read, and it’s just progressed from there - the sky’s the limit and she’s able to express in writing whatever she feels! We feel very privileged to have had the opportunity to be in the WTR program!!

6. We moved to this area last year, the school my son came from, he was behind on his writing and reading skills as compared to Joe Nightengale. His teacher was able to catch him up quickly and he is progressing very well with his reading and writing. I am not for sure if his ability to do so well is because of this program but if so I think it is a great program. Thank You!
7. I do have a concern about how well these children are going to be able to spell later. I learned in the traditional way and am an excellent speller. My brother, however, learned in a way similar to this and is an awful speller. They did away with that program shortly thereafter!

8. I have a 1st, 3rd, and 5th grader. The 1st and 3rd got WTR. My 5th grader did not. The 1st and 3rd grader's Writing Skills far surpass my 5th grader. I really feel my 5th grader got the bad end of the deal. I'm convinced he would be a totally different student today had he been exposed to WTR.

9. I strongly believe that this program has allowed my child to develop and become motivated to read and write.

10. I personally think computers are great for our children. But kids should learn how to do it on their own first. Then use the computer 2nd. I don't like the idea of children being taught how to spell words incorrectly. This is my personal opinion.

11. My child loves to read and write and had a good begin in Kindergarten. I had some reservations about the phonics at first but her progress has really escalated within the last month. She reads surprisingly well and can express her thoughts in writing much better.

12. I'm very excited about my kindergarten child being "keyboard literate". She loves working with the computers at school, and spends time at home typing her "journal" words on her own typewriter, and loves to pick out the words she can read in my books and the newspaper. What a wonderful program! Keep up the good work! This is definitely the teaching technique of the future!

13. My son Justin is now in the 2nd grade, and still spells phonetically. He started with the WTR program in KDG.

14. My child enjoys the WTR program very much. I also believe that it has greatly influenced him to be a good speller. He also has the opportunity to express his feelings and experiences to his classmates. He enjoys writing long stories, and although he isn't very vocal he expresses himself well through his stories.

15. I feel that WTR is a great way for children to start to write, read and spell. My daughter loves to write on anything and everything. She does. She write sentences on all of her coloring and drawings of pictures. She feels so good about what she is doing. I feel that this program is a must in all K and 1st grade classes. Thank you to IBM and all the teachers who were able to put WTR into our classrooms.

16. Before sending my child to kindergarten I researched all the "private" schools in the area to compare the programs available with those at the public school. After seeing the WTR program at Nightingale we decided to send our daughter there.
addition, as a parent volunteer once a week in the classroom, I have had the privilege of seeing first-hand the program at work. Based not only on what I have seen in my own child, but the progress I have also seen in others, my opinion is that WTR provides our children with excellent basic skills in an innovative and creative way. Further, the enthusiasm and ability shown by these students is truly remarkable. This program is to be applauded and supported to the fullest extent possible!!!

17. I feel that if computers will continue to be used in a classroom, that the teacher should be able to provide plenty of time and patience towards teaching, and be able to understand when a child is having a problem with certain tasks so that there is never any fear with learning to use the computer, at this age point. (KDG.)

18. Rachel loves it and is so proud when she brings home her completed books. We are so pleased with her progress. We have worked consistently with our children - reading to them, working on sight vocabulary and phonetics since they were very young. We are so happy that the school also places such a high emphasis on reading and writing skills.

19. My daughter seems to really enjoy the WTR program at school. However, she sometimes becomes frustrated and confused when she sees words (in books, etc.) spelled differently then what she's accustomed to (the WTR way). My concern is that she's learning how to spell the "Writing to Read" way and is then going to have to "re-learn" to spell the real way. How she will eventually adjust to this is unknown. I hope my fears and reservations about this program are unfounded.

20. I think the WTR program is great for the children. I think they feel a little more grown up using computers that make them want to learn more.

21. I have spent many hours, in the K-2 class and have worked with the children on the WTR program. They all seem to like it, but sometimes get distracted because the computers are so close together.

22. I feel she likes working with the computer and help her to do better in her schoolwork.

23. I like the WTR program in some respects. It gives the children confidence to read and write especially the bigger words they may not attempt otherwise. But what I don't like is that they have to unlearn the WTR or the "sound" spelling and re-learn the book spelling. I think that makes it a little harder to learn how to spell in the long run.

24. During the brief times I have seen Jennifer use the computers. I feel she enjoys using it and likes the visual screen to see what she is doing and the computers response to her commands.

25. It has been such a joy watch Lexie read & write. Not a day goes by that she does
not write us a note or letter. She loves to try to read as well, she sounds everything out on her own!

26. Our daughter is having a harder time with WTR than our son did. She is making progress but not as marked as his was.

27. I feel the WTR program has been wonderful for both my children and that my oldest child is well beyond her peers after two years in the program compared with students with out access to computers.

28. I thank you for the time and effort put into my child. I appreciate the program and hope you continue using it for other children that need it.

29. By not knowing enough about the program my natural concern is, will it be a difficult transition for this young student to learn the difference between correct spelling and what he has thought was correct all along? I am all for teaching young kids that they can put their thoughts down on paper without getting in trouble for spelling errors.

30. I have been very impressed with the WTR program. I see a big difference between my two children. I think every school should offer this program and the use of computers.

31. This is an excellent program. Last year, I worked in Kevy's kindergarten class, helping with WTR. The progress made by all of the children was unbelievable! Many children seemed to gain much self-esteem by writing down their thoughts and listening to others read their thoughts. Even the strugglers (the younger kindergartners) were able to write and read their own stories-this group of children showed tremendous growth, due to this program. I hope all schools adopt this program. Now, as a 1st grader, kelly is self-correcting her writing. Having weekly spelling words (& tests) have also helped her to write "correctly."

"My child was behind in Kindergarten and is catching up to the other students."

Parents are pleased with their children's progress. Happy, successful children make happy parents.

100% of parents knew about WTR program this is great contrast to control classes with 50% of parents knowing what school reading program is

100% of parents chose 5 or 4 I like it very much or I like it for WTR program

Lots of parent volunteers in the classroom; parents are really pleased with the program.
Parent feedback positive 4- Open house parents commented on how well the children read and write. They were very interested and impressed by the computers and programs.

One parent writes-I enjoy her work when it comes home. She is doing a lot this year. She has grown and learned to spell and read words more and more each day. Keep up the good teaching.

15 parent questionnaires in Spanish
all 15 reported knowing about WTR
all 15 reported liking WTR 5 and 4
all 15 report child liked very much

Another Spanish site reports most positive results for parents
It was the computer knowledge their children were receiving

Letter to IBM from Student Teacher working at Franklin School
May 31, 1992

I have been very impressed with the work our kindergartners have been doing on the IBM Writing to Read program. Everyday the students use the computers to write stories, learn new words and play games. the thing I enjoy the most about the program is the students interest in it. Many of them choose to work on the computers as their free-choice activity. They love it!
The Writing to Read program is an effective and fun way for students to learn.

Thank you,

Michele Albert
(Room 29 Student Teacher)
Case Study Reports

Dorian’s Story

Dorian-Child very upset my parents divorce, very low self esteem

Dorian was a kindergarten child, multicultural learner, child of divorce and visibly unhappy. The teacher introduced the child to the word processing function of Primary Editor Plus. He immediately learned how to log on to the network and could be found daily working diligently on writing stories on the computer. The program allowed each child to write 15 filename stories. One morning I observed him at the computer, he wrote a story and then named it Leo8, the computer responded there already is a Leo8 and Dorian quickly changed the title to Leo9. I said good work Leo, at which time Dorian looked up at me in disgust and said my name isn’t Leo, it’s Dorian. Then why did you name it Leo, I asked. Because I already wrote 15 stories under Dorian, he replied so now I call myself Leo! (This is a five year old!)

The teacher was still concerned about Dorian’s unhappiness in the class due to his parents divorce. She brought in a literature story, “My Mother’s House, My Father’s House”, that tells about children of divorce and how both parents still love them and it is not their fault. After listening intently to the teachers story, Dorian went to the computer. I AM MYSELF he typed out and then drew a happy picture of himself. He brought it to the teacher and read it to her, now I understand he said. They both love me and I am myself. The teacher noticed a breakthrough in Dorian’s personality due to his ability to write out his thoughts and feelings on the word processor. This empowering and validating feature of the computer available in the classroom at all times is a strength of this program.

Matthew’s Story

Matthew is a first graders in a K/1/2 combination class. He was in this same teachers class as a kindergartner as well. Matthew completed all 10 cycles of Writing to Read last year. This year he repeated only the last 5 cycles. Matthew entered school last year unsure and lacking confidence. He was very capable academically, but he had not “unlocked” the key to written communication. He felt that just by attending school he was going to make the transition from a nonreader/writer to a reader and writer. When he didn’t magically begin reading upon entering the door, he became very cautious and unsure of himself. At the beginning of the year, Matthew would not make any attempts if he was not absolutely sure he could complete a task. If asked to read or write something, he would say he couldn’t write or he couldn’t read. With the help of Writing to Read and the Writing to Read atmosphere his self confidence and attitude began to change.
Writing to Read gave Matthew the key he needed to unlock the literacy door. It also "allowed" him not to know everything. He learned that it was O.K. to know only a few sounds or to read only a few words. He no longer felt that he was incapable of these tasks, rather he was taking the "baby" steps necessary to really understand reading and writing. Once Matthew started writing, we couldn't stop him. He knew that all his attempts would be accepted and praised and he was able to see his own learning taking place. Matthew has become comfortable and capable as a writer. He knows that our language is a crazy combination of spelling patterns and "non-patterns" and that over time he will learn all the skills necessary to become a "book" speller. He enjoys writing and reading his writing and he enjoys the compliments and attention he receives from his efforts. He is a true author!!!

Miguel's Story

Miguel was nine years old from Mexico and had never attended school. As a non-English speaker he was sent to a first grade classroom although his age mates would all now be fourth graders. After several months using the computer and the English cycle words, he learned English rapidly and the computer easily and well. He began to tutor first grade students. After six months he returned to the fourth grade classroom where he is not only a successful student but the computer aide for that classroom. His self esteem blossomed and we were told by his principal that when Miguel entered his school everyone looked at him as a "high risk" students and he is now one of the fourth grade computer mentors! The principal was pleased and amazed at this success. The empowerment of the computer gives a boost to self-esteem and the individualized approach to ESL allows learners to work in a risk free environment at their own rate.

David's Story

On the day we visited David’s class, he asked me if I saw his story posted on the bulletin board. I said I would like to see it, he led me to the board and took a chair to stand on to point to the start of the ten page story proudly posted for all to read. After I read it he asked me if I would like to hear more of this story, since he now had it up to 26 pages in the computer. I said I would and he proudly sat me at the computer, put headphones on my head and another pair on his and allowed me to listen to his current story in progress on the Life of George Washington and then his gramma's life and on to Lincoln’s life. He was like a proud father as he watched me listen to his 10 page story being read to me by the computer. I asked if I could have a copy to take to share with other educators and he gave me permission. At recess time I told the teacher how amazed I was to see the work of this gifted first grade student. "Why you should have seen him at the beginning of the year," she said, he had been identified with Attention Deficit disorder (A.D.D.) and hated school. "Well he sure looks gifted to me," I replied. Apparently the computer got his attention and held it for now he was one of the top authors in class. Students that have trouble
attending to school related tasks that mean failure for them due to their limited eye-hand coordination or attention span, find the computer motivating and empowering and don't want to give up that kind of success.
Conclusions

In regard to the three primary goals of this project, stated on p. 2 of this report the following conclusions were made:

A. The project teachers successfully developed and demonstrated the use of a Writing to Read adaptation that included Stories and More software, Children’s Writing and Publishing software and supported an integrated Literature Based curriculum in the K-1 classrooms. The teachers created the “Writing to Read in the Classroom” Simi Star Project Manual. This manual includes a description of the Writing to Read Program, suggestions for management and classroom schedules, room arrangements, student orientation, descriptions of a day in the life of a Writing to Read teacher, sample lesson plans, the role of the parent, telecommunications and other software, teaching ideas, student work and sample forms for site evaluations. The manual documents their success in using WTR in the Kindergarten and First Grade Classroom to complement the Whole Language Philosophy of learning.

B. Teacher productivity was increased through the use of Microsoft Works and telecommunications capability. They reported sending twice as many notes and newsletters to parents as in the past and used the computer often in development of classroom materials.

C. The third goal was to see if integrating technology into the classroom becomes a natural extension of the teaching methodology and a familiar and non-threatening tool available throughout the day for all students. The equity issue of all students having access to technology was a big part of this goal. In the past some groups of students have been kept out of computer labs for various reasons. This study showed that equity could indeed be achieved with computers in the classroom and the students in particular quickly made the computer a part of their daily life, it took some teachers longer but they reported they would no longer care to be without the computers.

Based on this qualitative approach to data collection that included: classroom observations; student, teacher, parent and principal interviews or questionnaires, student attitude survey, teacher journals and 1000 writing samples the following conclusions are presented:

The use of the Writing to Read program with the addition of Stories and More, Children’s Writing and Publishing and teacher adjustment for interest and needs of their particular students produced writers that parents reported wrote much more at home and loved writing. Parents questionnaires confirm that these students want to do their own reading, read to other people and share their writings by reading them to others, twice as much as students in traditional programs. Teachers reported these students wrote more than previous classes and at a higher quality level. Teachers
also were unanimously amazed at the ease with which young children learned to access the computer network and the use of it became a part of the students lifestyle.

Frequent training sessions and a district coordinator who can provide coaching for implementation are equally essential for the success of any Writing to Read in the classroom program. The six training sessions and full time coordinator available for on-site coaching for implementation were essential parts of the success of this project. Administrators seeking to adopt this program must include this vital element.

Addition of a classroom aide was also found to be necessary by most teachers, although many solved the problem with the use of volunteer parent aides and cross-age tutors.

A weakness of the program was the long delay in receiving equipment, difficulties in set up and cabling at school sites, complexity of CD Rom and Printer interface, technical problems with network beyond capability of classroom teacher, this weakness was pointed out by teachers in their journals and observation interviews, principals as well found this to be their only problem area. Technological support must be provided by districts planning to implement technology in their schools, this is a must. Training of teachers is equally important and one shot training attempts will not foster successful implementations.

Another weakness was the cycle software which needs to be updated and revised, (some teachers chose to discontinue its use although most felt that if they had the option of using it specifically for the students they felt needed it, they liked to use it). This software package was created the initial year of development of the WTR program. The newer multimedia capabilities available with technology today allow a more effective and more meaningful whole language presentation of appropriate phonic sounds in context to be developed.

Stories and More the newest software was heralded by the children and teachers as the more effective software program. The students and teachers were equally pleased with Children's Writing and Publishing software by the Learning Company and IBM's Measurement, Time and Money.

Another need expressed frequently by teachers is for a computer record keeping system for teachers to keep track of students progress on levels of writing and reading development via computer and not on old fashioned paper skills grids or record sheets.

The most promising strength of the program is in three areas: Greatly enhanced writing ability of students, positive reading attitude and high self esteem. All students in a classroom experience success when they can produce a professional adult looking computer printout and read it to someone. No longer is a student's limited motor coordination and unreadable handwriting a reason for him to believe that he is
a failure. Children in the Writing to Read classroom produce typed print daily and feel like they are authors or members of the “Literacy Club.” This was evidenced by the post reading attitude survey where they all described themselves as a reader and writer and through interviews with the children themselves.

The average growth of all K-1-2 students in the project was 4.38 levels of writing growth. With many scoring the top score of 6 or even 6+ according to teacher ratings. No participant was unable to score at least level one of writing after being in the project. This group also demonstrated an almost unanimous positive reading attitude at the end of the year. The positive self-esteem and empowerment experienced by students in the program was echoed over and over by classroom teachers and is one of the predominant strengths of this approach.

The average growth of control schools in regular classrooms was 2 levels of writing. Many in these classes were still at a pre-writing stage at the end of the year and the occurrence of a negative reading attitude was twice as likely with this group.

Data collected on classrooms with computers in the classroom so that students had all day access compared to students that visited a computer lab one hour weekly or one or two days weekly showed one or two levels of increased writing ability when the computers were in the classroom. Both groups reflected the same high positive reading attitude. Four networked computers were in each classroom of 30 or more students, teachers felt this number should be increased to at least 6 computers networked in a classroom for better access for all. Teachers also voiced a need for a work station (computer and printer) of their own, to keep student data, write parents notes and newsletters, communicate with administrations on e-mail and do their own lesson planning, grading and word processing. This is a vital part of integrating computers in the classroom.

Parents were overwhelmingly in support of this program and pleased with the literacy demonstrated at home by their children. They reported in many cases that their younger child in this program was a better reader and writer than their older children who had not experienced this program.

Principals all concluded that they found this program highly effective for all members of their school community and would continue the program. However a year round school implementation produced the least effective data and teacher involvement. Reasons may be that teacher’s did not stay in one classroom and rotated too frequently to provide consistency in using the program. This is a problem of school organization and could be remedied through team planning.

It is recommended that more schools adopt a qualitative approach to program evaluation in addition to the quantitative test data they already collect. This study made it quite evident that the writing process growth, the increased self esteem
essential to the learning process and reading attitude are all factors not measured in traditional standardized reading tests and therefore not effective evaluation tools for judging the efficacy of this program.

The most convincing conclusion however came from the voices of the kindergarten, first grade students that this program was designed to serve.

Sean, a first grader, highly intelligent but with limited motor skill, said, “it’s much easier for me to write stories on the computer, I love it, I can write stories about myself.”

Caroline, a first grader says, “I like the computer, it’s like a friend that helps you write your stories.

Kaela, another first grader loves Stories and More software and says, “it makes you like stories more and become a better reader.”

Damien, a kindergarten student, said it best after he finished reading his paper he wrote on the computer about himself. “I can read,” he said with a big grin, “Yes, I can read!”

Concluding Statement

Kindergarten and first grade children in the Simi Star Writing to Read in the Classroom Project during the 1991-1992 school year made greater gains in literacy skills (writing and reading) and reported a more positive reading attitude than comparable kindergarten and first grade children who received traditional instruction. The outcome measures used in the evaluation project reflect that this new adaptation of Writing to Read specifically for the classroom setting enhanced the development of essential literacy skills for kindergarten and first graders regardless of socioeconomic status, cultural group, gender or handicapping condition.
Appendix

Criteria for scoring
Interest Inventory
Observation scales
Teacher, Principal
Parent Questionnaires

33
CRITERIA FOR SCORING WRITING SAMPLES

LEVEL EXPLANATION

6. Ideas are very well developed and expressed. The writing has a fully developed structure, which may not be narrative. The ideas are connected logically and they are well organized. There is good sentence variety and expression.

5. Ideas are fairly well developed and expressed. The writing has a discernible structure. The ideas are connected logically, but they are not so fully developed or so well organized as score 6 papers.

4. Ideas are only loosely connected or not developed. The structure may be disjointed, but what is provided is clearly more than a list. The ideas are relevant but are not developed or expressed well. The sentence structure may be repetitious.

3. Ideas lack development. The writing often merely lists ideas. The phrasing and the sentence structure are repetitious.

2. Ideas have little or no relationship to animals. An idea or a list is provided that is not connected logically to a magic hat. Minimal paper.

1. Only letters or unrelated simple words. All that is presented is One day I found a magic hat...or that sentence appears along with other words or phrases the child is seeing displayed in the room.

PW Prewriting-Mock writing.
### Organization and Management

1. **Classroom organization and management**
   - ___computers are located in an easily accessible manner, used continually
   - ___computers are present, moderate use
   - ___computers are hard to access, little to no use

2. **Computer use and student or teacher control of use**
   - ___students use computers according to interest and need
   - ___teachers assign students to computers
   - ___students can only use computers at a limited specified time

3. **An aide, parent volunteer, cross age tutor or other assistance on computers** is available.
   - ___more than one extra adult assist in classroom at any time
   - ___teacher plus cross age tutors work with computers
   - ___teacher works alone to assist students on computers

4. **Students transitions to and from computer**
   - ___students move to and from computer as needed
   - ___teacher has posted schedule of times for computer use
   - ___teacher uses timer and moves groups in specific time segments

5. **Student responsibility on computers**
   - ___students boot up computers, select program, save and print work
   - ___teacher or aide assist students in software selection and print
   - ___teacher alone loads program, prints work, chooses program, etc.

6. **Computers are primarily used by students with which software:**
   - ___Primary Editor Plus
   - ___WTR computer station software, cycles, silly sentences, games
   - ___Childrens' Writing and Publishing
   - ___Stories and More
   - ___other
7. Students mostly use the computers as:
   ____a tool to write and think with
   ____a drill and mastery program for phonemic sounds
   ____a publications tool to write class newspapers and other meaningful
     classroom publications
   ____a method to gain more information on a specific content area
     (which area___________________________)

8. Teachers use computers for:
   ____a tool to help facilitate student learning
   ____a word processing tool for parent letters, school bulletins, etc.
   ____a telecommunications tool
   ____a record keeping or assessment tool (save student writings for
     portfolios)
   ____developing lesson plans ideas and journal notes for this project.
   ____other

Learning Opportunities and/or instruction
9. Student learning occurs when:
   ____students collaborate with one another on writing projects and
     computer use
   ____students read products of computer work to one another
   ____students take home copies of their products daily

10. Teachers observe students at computers:
     ____teachers moves around class, queries student at computer,
         encourages, scaffolds and keeps anecdotal journal notes on student
         process
     ____teachers has some limited contact with students at computers but
         usually just pertaining to troubleshooting help on computer operations
     ____teacher works with other groups and does not have opportunity to
         interact with students at computers at all

11. Anticipatory set or motivation
     ____students are given appropriate set and motivation to start on
         computers actively and with enthusiasm
     ____students are given limited directions but then do work on computers
     ____students go to computers but seem to not know what to write or do
         there.
12. Teachers integrate curriculum areas with computers
   __teachers teach thematically and utilize networked computers for
   integration in math, science, reading, language arts, art, etc
   __students use computers for WTR reading/writing throughout the day
   __teachers use computers for WTR in reading time only an hour a day
   __computers are used only after other curriculum activities as practice
   or activity.

Evaluation

13. Portfolio assessment
   __teacher keeps a selection of childrens' work daily in a folder and
   evaluates it
   __teacher keeps a weekly sample of printed work in a folder and
   evaluates products weekly
   __teachers do not keep hard copies of printed work in folders.

14. Parent evaluation
   __parents get daily copies of students writings on the computer
   __parents get a weekly copy of student writing on the computer
   __parents do not get copies of student writing done on the computer

15. Administrator evaluation
   __administrator does observation of program weekly, reminds teachers
   to use journals, write lesson samples and coordinate with team leader
   __administrator observes program occasionally and communicates with
   team leader
   __administrator seldom observes program or interacts with teachers
   and team leader

16. Team leader evaluation
   __team leaders checks e-mail daily and keeps contact with all teachers
   and administrator, gets data to project directors
   __team leader runs their own classroom and responds to questions from
   other teachers
   __team leader just manages their own classroom with little contact
   with other project participants

37
17. Parent involvement

- parents were informed my mail or meeting of this project and are quite involved.
- parents were informed of project but have little involvement
- parents are unaware of the WTR in classroom project

Innovation

16. Staff innovation

- staff (administrator, team leaders, teachers, aides, clerical) show great commitment to project and developing product materials to make Writing to Read in the Classroom support the California State Framework English Language Arts guidelines and develop professional materials that will help other sites replicate this program.
- classroom teacher alone has the responsibility for coming up with lesson plan ideas and keeping journal notes on this project.
- no one at site has taken initiative to observe, write and collect product materials necessary for study.

Observer anecdotal comments:
Appendix C. Teacher Questionnaires

**Writing to Read Teacher Questionnaire**

Name: **Mary Zirm**  
School: **Nightingale**

1. How many students are in your class?  
   - 1 year or less  
   - 2 - 4 years  
   - 5 - 9 years  
   - 10 - 14 years  
   - 15 - 19 years  
   - 20 years or more

2. How many years of teaching experience have you had, including this year?  
   - 1 year or less  
   - 2 - 4 years  
   - 5 - 9 years  
   - 10 - 14 years  
   - 15 - 19 years  
   - 20 years or more

3. What reading program(s) do you use with Writing to Read?  
   (may list more than one)  
   **Houghton Mifflin (Whole Language)**

4. How long have you been using Writing to Read?  
   - This is the first year  
   - This is the second year  
   - Used for more than 2 years

5. How do you feel about Writing to Read?  
   - Like it very much  
   - Like it  
   - Not sure  
   - Dislike it  
   - Dislike it very much

6. How would you rate its overall effectiveness?  
   - Very effective  
   - Effective  
   - Not sure  
   - Ineffective  
   - Very ineffective

7. How do you think the progress in reading of most of your students compares to the progress in reading of your students in previous years?  
   - Are reading better than students in previous classes  
   - Are reading about the same as students in previous classes  
   - Are not reading as well as students in previous classes  
   - This is my first year teaching at this grade level  
   - Have no opinion

8. How do you think the progress in writing of most of your students compares to the progress in writing of your students in previous years?  
   - Are writing better than students in previous classes  
   - Are writing about the same as students in previous classes  
   - Are not writing as well as students in previous classes  
   - This is my first year teaching at this grade level  
   - Have no opinion
9. How does the amount of time you spend on reading compare with the amount you spent in previous years?

   Am spending more time on reading than in previous years  X
   Am spending about the same amount of time as in previous years
   Am spending less time on reading than in previous years
   Not applicable (not taught at this grade level)
   Not applicable (my first year teaching at this grade level)

10. How does the amount of time you spend on writing compare with the amount you spent in previous years? (Original rather than handwriting)

    Am spending more time on writing than in previous years  X
    Am spending about the same amount of time as in previous years
    Am spending less time on writing than in previous years
    Not applicable (not taught at this grade level)
    Not applicable (my first year teaching at this grade level)

11. How would you rate the effectiveness of Writing to Read for the following groups of children? (Please check one in each column)

   Above Average  X  Average  X  Below Average
    Very effective
    Effective
    Not sure
    Ineffective
    Very ineffective

12. What kind of feedback have you had from parents about Writing to Read?

    Very positive
    Positive
    Have had no feedback
    Negative
    Very negative

How much time does a typical child in your class spend in each of the following types of activities? (in the regular classroom)

   13. Reading aloud
   14. Reading silently
   15. Creative writing
   16. Developing a sight vocabulary
   17. Learning word meanings
   18. Phonic and/or structural analysis
   19. Penmanship

Note: Enter 1 if a great deal of time
      Enter 2 if some time
      Enter 3 if little or no time
      Enter 4 if not applicable

WTR provides the "below average" students with a positive environment in which to grow and develop.
We are interested in your thoughts about the reading and writing skills of the children and the use of computers in education. Please check whether you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. It is important today that children learn about computers and how to use them.</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>21. The children are progressing as well as expected.</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>22. Money being spent on computers should be spent on other things.</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>23. Too much time is spent on Writing to Read.</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>24. Children this age are too young to learn by computers.</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>25. I hope our school will continue to use Writing to Read next year.</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>26. Our school should emphasize reading skills more than they do at present.</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>27. Our school should emphasize writing skills more than they do at present.</td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>
Questionnaire for Principals

1. How successfully do you feel computers (WTR) has been integrated in your K classrooms? 1st grade classrooms?
   100% 75% 50% 25% 0

2. What are the most positive results of this project for students in your view?

3. What are the most positive results of this project for teachers in your view?

4. Most most positive results for you? For Parents?

5. Problems with integration of computers in classroom.

6. What will happen next year?
Writing to Read Parent Questionnaire

1. What grade is your child in at school? (Please check one)
   - Kindergarten
   - First Grade

2. Are you familiar with the Writing to Read program being used in your child's class?
   - Yes
   - No

3. How have you learned about the Writing to Read program?
   - By talking with my child
   - By talking with my child's teacher
   - By talking to other parents
   - By visiting the school
   - The school sent me a notice
   - By attending a parent orientation

4. In general, how do you feel about the Writing to Read program? (Please check one)
   - I like it very much
   - I like it
   - Not sure
   - I dislike it
   - I dislike it very much

5. How do you think your child feels about the Writing to Read program?
   - Likes it very much
   - Likes it somewhat
   - I don't know
   - Doesn't seem to like it
   - Doesn't like it at all

6. How do you think your child feels about writing stories?
   - Likes it very much
   - Likes it somewhat
   - I don't know
   - Doesn't seem to like it
   - Doesn't like it at all

7. How do you think your child feels about using the computer?
   - Likes it very much
   - Likes it somewhat
   - I don't know
   - Doesn't seem to like it
   - Doesn't like it at all
8. What evidence of your child's reading and writing skills have you seen at home? (Please check all that apply)
   - Leaves notes around the house
   - Reads signs, labels, books and other materials
   - Wants to be read to
   - Wants to do his/her own reading
   - Wants to read to other people
   - Writes words and stories
   - Shares school work and wants to read it

9. How do you think your child's progress in reading compares to your other children's at this grade level? (Please check one)
   - Is doing better than my older children did
   - Reads about the same as my older children did
   - Is not doing as well as my older children did
   - Have no opinion
   - This is my first child at this grade level

10. How do you think your child's progress in writing compares to your other children's at this grade level? (Please check one)
    - Is doing better than my older children did
    - Writes about the same as my older children did
    - Is not doing as well as my older children did
    - Have no opinion
    - This is my first child at this grade level

Many school districts are trying to integrate the use of computers into their programs for the children. We are interested in your thoughts about the use of computers in education. Please check whether you agree or disagree with the following statements.

11. It is important today that children learn about computers and how to use them as soon as possible.
    Agree Disagree

12. Money should be spent on computers and technology.
    Agree Disagree

13. I am concerned about the way my child spells words when writing.
    Agree Disagree

14. My child has begun to make transitions to "traditional" spelling patterns.
    Agree Disagree

15. Writing to Read is a good use of class time.
    Agree Disagree
16. Children at this age should be learning by computers.  

17. My child knew how to read when school started.  

18. My child knew how to write when school started.  

19. I hope our school will continue to use the Writing to Read program being used this year.  

20. Our school puts enough emphasis on reading skills.  

21. Our school puts enough emphasis on writing skills.  

Please feel free to write any additional comments you may have about the Writing to Read program. Thank you for your time.
Questionario de Vamos a Leer Escribiendo (VALE)

1. ¿En qué año está su hijo/hija? (Favor de marcar uno)
   Kinder ____
   Primero ____
   Segundo ____

2. ¿Sabe que la clase de su hijo/hija está usando el programa VALE?  Si ____  No ____

3. ¿Cómo se ha dado cuenta del programa VALE? (Favor de marcar su o sus respuestas)
   Hablando con su hijo/hija
   Hablando con la maestra
   Hablando con otros padres
   La escuela me mandó una carta

4. En general, que piensa sobre el programa VALE (favor de marcar uno)
   Me gusta mucho ______
   Me gusta ______
   No estoy seguro ______
   No me gusta ______
   No me gusta nada ______

5. ¿Qué cree que su hijo/hija piensa sobre el programa?
   Le gusta mucho ______
   Le gusta un poco ______
   No sé ______
   No parece gustarle ______
   No le gusta ______

6. ¿Qué cosas ha visto que su hijo/hija hace en casa que muestan las destrezas de la lectura y escritura? (Favor de marcar todo lo adecuado)
   Deja notas por toda la casa ______
   Lee letreros, libros y otras cosas ______
   Pide que se le lea ______
   Quiere leer por sí solo ______
   Quiere leerles a otras personas ______
   Escribe palabras y cuentos ______
   Comparte su trabajo escolar y quiere leerlo ______
7. ¿Cómo se compara el progreso de la lectura de su hijo/hija con los demás de sus hijos cuando estaban en el mismo año escolar? Esta teniendo más éxito que mis otros hijos/hijas tuvieron

8. ¿Cómo se compara el progreso de la escritura de su hijo/hija con sus demás hijos/hijas cuando estaban en el mismo año escolar? (Favor de marcar una respuesta)
   Esta teniendo más éxito que mis otros hijos/hijas tuvieron
   Escribe igual que mis otros hijos/hijas
   No está teniendo el éxito que mis otros hijos/hijas tuvieron
   No tengo opinión
   Este es mi primer hijo/hija que tengo en este grado

Muchos distritos escolares están tratando de integrar las computadoras en los programas de los estudiantes. Nos interesa la opinión que tenga usted acerca de el uso de computadoras en la educación de sus hijos/hijas. Favor de marcar el lugar apropiado a las siguientes ideas. Marque si está de acuerdo o si no lo está.

9. Es importante que los niños aprendan acerca de las computadoras y como usarlas lo antes posible.
   Si   No

10. El dinero que se gasta en computadoras debería ser gastado en otras cosas.
   __   __

11. Me preocupa la ortografía de mi hijo/hija.
    __   __

12. Se usa mucho tiempo en el programa VALE.
    __   __

13. Los niños/niñas de esta edad son muy pequeños para aprender a base de computadoras.
    __   __

14. Mi hijo/hija ya sabía leer cuando entró a la escuela.
    __   __

15. Espero que la escuela continue usando el programa VALE.
    __   __

16. Nuestra escuela debería darle mas importancia a las destrezas de la lectura.
    __   __

17. Nuestra escuela debería darle más importancia a las destrezas de la escritura.
    __   __