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## An electronic writing portfolios program for the primary classroom

Ivy Kaufhold Patten

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AN ELECTRONIC WRITING PORTFOLIOS PROGRAM FOR THE  
PRIMARY CLASSROOM

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A Project  
Presented to the  
Faculty of  
California State University,  
San Bernardino

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by  
Ivy Kaufhold Patten

June 1995

Approved by:

  
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5-7-95  
Date

  
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## ABSTRACT

Student Writing Portfolios are a management system for authentic assessment of the writing process. This project creates a writing portfolios program using the HyperCard authoring program for the Macintosh computer. This program allows teachers to keep electronic portfolios for every student in their classroom in one central, easy to access location. The portfolios consist of student information, a writing characteristics checklist, and student writing samples with teacher and student observational notes and comments.

The creation of these writing portfolios was based on research in the fields of whole language, authentic assessment, computer-based assessment, and related areas. Assessment in whole language is based on observation, evaluation of authentic samples of student work, and documentation of these observations. These portfolios are a resource for teachers and students assessing the developmental writing process in their classrooms.

## ACKNOWLEDGMENTS

The development of this project would not have been possible without the support and help I received from many people in my life. First, my husband John, whose knowledge of the use of computers in education persuaded me to write a project using technology along with what I've learned about literacy learning. Thanks also to Joe Gray, Adria Klein, and the entire Reading Education department at CSUSB, for making that knowledge available to me in such an interesting and enlightening manner. I would have never finished this project without the strength I gained from the birth of my son, Sean Berkley, at the beginning of the year. Finally, a huge thank you to my parents, Paula and Berkley Kaufhold, who are my first and greatest teachers.

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## STATEMENT OF THE PROBLEM

### Introduction

Writing is a means of personal expression. Children write for self-exploration and self-growth. They write because they have something to say (Zarry, 1991). With this in mind, teacher assessment of student writing must reflect the developmental process children have gone through to reach their stage of writing. Assessment also needs to reflect students' feelings and insights on their personal writing development.

Authentic Assessment is an evaluation of what students can do. It looks at their experience with literacy. Authentic assessment in student writing provides the teacher with useful information because the teacher observes students as the process is taking place (Jenkins, 1994). Teachers and students choose samples of student writing and look at them together, both participants making observations about the children's writing process. Authentic assessment, therefore, allows teachers and students to work collaboratively to develop a collection of student writing in its many forms: letters, stories, poems, idea maps, journals, and others.

Developing artists rely on portfolios to demonstrate their skills and achievements (Valencia, 1990). They include in a portfolio samples of their work at various stages and times. These portfolios are a rich source of information for artists and everyone who looks at their work. These artistic pieces complement each other and work together to build a picture of the artists' abilities (Valencia, 1990). In much the same way, teachers and students can use portfolios to keep a record of student writing. They contain samples of students' work selected by the teacher and students, observational notes by the teacher, self-evaluation by the students, and progress notes contributed by the



students and teacher collaboratively (Valencia, 1990).

Writing portfolios are a collection of student writing which demonstrate a broad range of interests and abilities. The writing in them represents a process that continues throughout students' school experiences, rather than a one-time product, like a test. Together, teachers and students assess effort, improvement, process, and achievement across a range of student writing (Tierney, 1989). Portfolios give students the opportunity to compile a collection of meaningful work, reflect on their strengths and needs, set personal goals, see their own progress over time, think about ideas presented in their work, and see their effort put forth and recognized (Tierney, 1989). Portfolios also give students the opportunity to share this knowledge with their teachers and others; and the teachers are able to see the process the students have gone through in creating their work.

Children first begin to write with scribbles and drawings to convey meaning. They are children's first records of what they perceive as important (Zarry, 1991). As children become more comfortable with writing for self expression, and they observe the writing of others, they begin to experiment with writing the letters of the alphabet to tell their stories. Everything they notice and learn about the writing process and how written language works gradually becomes a part of their writing, and is recorded in their stories, notes, letters, and other informal forms of writing. These early writing samples tell so much about children's experiences and writing development. The invention of an organized way of recording spoken language demonstrates the creative capabilities of the human mind. Writing is a way of defining oneself to the world. Because these early writing samples are valuable indicators of students' creativity and knowledge; an authentic, flexible and easy to use organizational assessment

method is imperative in a primary classroom.

### Statement of the Problem

Children use pictures, letters, and numbers to resemble or symbolize meaningful aspects of their environment in their attempts to communicate with others (Shook, 1989). These messages are recorded in various ways on paper. In a busy primary classroom, student writing is everywhere, and in many forms. To assess the writing process that is going on in journals, message centers, the post office, the story-writing center, and other informal writing areas in the classroom, samples must be collected and saved by students and teachers. Because these writing samples can take many shapes and forms, this process of collection can become complex and cumbersome. Student writing portfolios can give the students and teachers an easy to use, flexible organizational system to keep this writing where it is accessible to everyone: students, teachers, parents, and administration.

Student writing samples are enhanced with self-comments and evaluation. This commentary gives added insight into the processes used by the students in creating their work. Therefore, an effective writing portfolio involves student commentary, as well as teacher's observational notes and comments. Another helpful aspect in a writing portfolio is ideas about the writing derived by the student and teacher together as they assess the writing. Each writing portfolio in a classroom, therefore, will be different, and tailored to that student.

An effective portfolio needs to revolve around regular and frequent attention by the students and teachers (Far, 1992). This needs to be the easiest possible method for that teacher and his or her class. Since individual teaching and organizational styles differ, it is important that the portfolio system be flexible. Therefore, I am proposing and designing a writing portfolio system for primary

teachers that can be carried out in a variety of ways. In some situations, where technology is available, a computer-based portfolio will be used. Because the implementation of technology-based assessment is in the infancy stage, it allows for the possibility of new, innovative breakthroughs in assessment design (Jenkins, 1994). Teachers can modify this existing program to meet their needs, and the needs of the students in their classroom. The computer writing portfolios will contain the same types of writing samples and information as described previously, such as teacher and student comments and evaluation as well as several different writing samples. Student drawings and story writing are either scanned into the computer or pictures of the work taken with a digital camera. It would also be possible for students to compose the writing and pictures on the computer itself with a commercial student writing program. A combination of the two types of writing samples would provide even greater insight, and give a more complete picture of the students' writing abilities.

For teachers and students who would prefer not to have their portfolios solely on a computer, or do not have the capabilities at their disposal, it would be easy to take the same format of record keeping and make individual student portfolios, keeping the writing samples and comments together and in a place easily accessible in the classroom. These traditional portfolios could include work done on a commercial writing program and printed onto paper to put into the folders, along with the variety of handwritten samples.

### Theoretical Foundations of the Project

With the belief that writing is a communicative process which develops early and gradually becomes more sophisticated as experience is gained, this project is written from a psychosocial linguistics model of literacy learning. It is also based on a whole language philosophy of education. Student language

behaviors, including writing, are largely influenced by social as well as psychological factors (Zarry, 1991). Students write because they have something to say; meaning is most important and the mechanics of writing develop as students experience different types of writing, and their own writing matures.

The process of learning how to write can be viewed from many different angles, or philosophies (Harste, 1988). In a decoding model, students first learn the simplest parts of language, such as letter names, then they learn the isolated sounds that those letters make. Writing is broken down into minute parts, and as students learn the different parts, they begin to piece them together. The focus of this model is on the parts of language, and the mystery of how they fit together. First, letters are fit together to make words, then the letters are scrambled to make new words, and finally those words are put together to form the simplest of sentences. The process is built from the bottom up, with meaning being one of the final phases. An emphasis is placed on learning individual parts of language, isolated from each other.

Another theory is skills-based. Again, meaning is not the central theme, rather, an importance is placed on learning a hierarchy of skills. Memorization is a key skill, and students are expected to learn first the letter names, then their sounds, then isolated words and phrases. Rules of written language are introduced and need to be memorized. These are independent pieces of knowledge which will be used later when children have learned all the individual skills needed before they are ready to learn to read and write. Correctness, and not meaning or communication, is the focus of this early writing. Students are taught to view writing as a set of skills that are learned and perfected, without a real purpose for what they are doing.

A holistic model of reading and writing focuses on meaning. Students are encouraged to explore language, and their earliest attempts are means of communication. Young children read their scribbles and convey their message to others. Pictures and drawings of all kinds also communicate meaning, and are valued. Psychosocial linguistics and whole language view learning from several disciplines of study: linguistics, psychology, sociology, education, and others. The meaning of what is being said is the basis of writing. Mechanics of writing, and the parts of language are learned within the context of literature and are developed as needed in students' writing. As students learn more about the process of writing, and what print looks like, this knowledge is reflected in their writing.

Whole language is a holistic, meaning-centered philosophy of teaching and learning. It is a process which is continuous, and begins before a student enters school. Experience guides the learning, and prior knowledge gives meaning, or purpose, to learning. An emphasis is placed on an integration of the four strands of language: listening, speaking, reading and writing. All four have equal value and are interdependent to literacy learning.

Writing Portfolios are an important tool in holistic, or authentic assessment. They allow teachers and students to collect various samples of student writing, and make observations about the writing process as evidenced in the writing. The philosophy behind this project, therefore, is based on these models focusing on meaning and holistic strategies in writing.

## LITERATURE REVIEW

Electronic writing portfolios are a collection of student writing kept on disk or computer hard drive, and accessed by teacher, student, and other interested parties. In reviewing the literature related to electronic writing portfolios, the theories of whole language and psychosocial linguistics, developmental writing, authentic assessment, and finally, writing portfolios themselves need to be looked at. An important aspect of the portfolios is self evaluation. Also examined here is computer-based assessment, specifically the use of the Macintosh computer and HyperCard software in assessment.

### Whole Language

"Whole language is a way of bringing together a view of language, a view of learning, and a view of people, in particular two special groups of people: kids and teachers" (Goodman, 1986, pg. 7). It is a philosophy, a set of beliefs which empower teachers to provide an environment for their students that makes language learning easy and natural (Freeman, 1992). Within this environment, students direct their own learning, with encouragement and support from their teacher. Many teachers with this philosophy learn from their students to keep language whole and to involve children in using it functionally and purposefully to meet their own needs as language learners (Goodman, 1986). Teachers figure out how learners in their classrooms are interpreting, or making sense of reading and writing by listening to and observing students as they write (Dahl, 1991). This observation is then used to direct and tailor learning to the students specific needs and interests. Students learn according to their own styles and needs, and the whole language teacher recognizes this and uses it to determine instructional practices. The learning that takes place is child-directed, and teachers are aware of student interests and model learning

around these interests (Zarry, 1991). Teachers, therefore, are facilitators, or supporters, of student learning, and students take hold of their own development of language.

“Authoring is a form of learning,” (Harste, 1988, pg.8).

Student writing is communication, and shows what the student has learned and is learning. The students earliest writing demonstrates knowledge of how language, specifically written language, works in our world. In order to experience authorship, children need many opportunities to read, write, and draw every day (Harste, 1988). A true understanding of the process of writing involves reading, speaking and listening as well as actual written language. These four aspects of language are entwined in our process of communication. Children learn to communicate at a very young age using all they know and understand about language. Whole language theory focuses on the meaning derived from all aspects of language. This theory is supported by others, one being psycho-social linguistics, which involves ideas from many areas of study.

#### Psychosocial-linguistics

The theory of psychosocial linguistics aligns with the philosophy of whole language. This theory itself is an attitude, a set of beliefs about how children learn. The principles and practices come from research found in many fields: linguistics, language development, sociolinguistics, anthropology, psychology, and education. Psychosocial linguistics is the study of language behaviors as influenced by psychological and social factors (Zarry, 1991). It is the cognitive and communicative aspects of language. Writing is self expression, a reflection of the writer. Psychosocial linguistics looks at the whole person behind the communication of language. These theories are both connected by a similar philosophy that learning is unique to a child, and differs according to a child's

individual styles. Some students are more visual, some more tactile. These theories recognize that many strategies are needed in a classroom of individuals working as a community.

Whole language and psycho-social linguistics foster an environment for the development of writing. These theories recognize that writing is the result of a need to communicate, and that it involves many aspects of learning. They demonstrate what children know, feel and associate with their environment.

### Developmental Writing

The whole language perspective views writing as a natural process; as it is the expression of ideas and feelings and information on paper, or other surfaces (Zarry, 1991). Just as infants' first babbles are the initial indications of talking, children's first scribbles are the beginning of writing. Young children's writing is an outgrowth of their first gestures and nonverbal communication as infants (Calkins, 1986). It is a more mature way to communicate what was previously explored through children's babbling, then gestures, movement, and talking. The premise of writing from a whole language perspective is that to write, we must have something to say (Zarry, 1991). Therefore, writing is a social process, and a means of communication, and those first scribbles indicate the children's development in their writing.

Literacy requires an integrated approach to all aspects of language: listening, speaking, writing, and reading (Zarry, 1991). This process of language development begins at home with the first babbles of infancy, and continues naturally at school as children expand their literacy experiences. Children begin communicating their knowledge of the social aspects of language soon after birth. These first attempts at oral language are perfected with practice, mimicry of the more advanced language users around them, and experience.



Student writing follows this same process, emerging from the very first marks or scribbles a child makes.

As students' writing matures, the scribbles are replaced by pictures, letters, and numbers to resemble or symbolize meaningful aspects of their environment in their attempt to communicate with their world (Shook, 1989). There are many stages of developmental writing. In the beginning, children use some letter and number symbols, mixing upper and lower case letters. In the next stage, the letters used represent sounds; there is partial phonetic representation of words, and students may begin to use spaces between words. Students then begin to assign letters strictly by the sounds, not conventions. Students at this stage are also using environmental print as models, and assimilating everything they know about language into their writing. Next, a transition begins to occur, and students rely more on visual representations, the use of vowels, and some rules. Finally, students are using a large body of known words, and gain control over functional spellings. Teachers' daily monitoring and observational notes keep a record of the students' progress through these developmental stages of writing (Shook, 1989). This is only one description of the stages of writing development. For many children, writing is a combination of pictures, symbols, and parts of their name. When asked even at a young age, children can give much insight into their writing process by explaining what they have done on paper.

### Authentic Assessment

Students' writing is very revealing. Therefore, recording it from the first scribbles, and interpretations made by the children, can tell so much about what they understand about language, writing, and their world. The earliest attempts show the students' thoughts, what they find important, and how they feel about

different issues and events. This early writing needs to be evaluated individually, taking into consideration other writing done by the student, that student's experiences, and environment. It should be compared to other writing by the same student, as opposed to comparing and "grading" student writing based on teacher expectations, student grade level norms, or the work of other students. When this is done, emphasis is put on what the child is not able to do, rather than the accomplishments of that particular child. Authentic assessment is an individualized, student-centered approach to assessment.

The writing samples of students demonstrate aspects of their learning: the function and intent of writing, content and organization, use of spacing, directionality, spelling, and punctuation (Rhodes, 1993). The samples are a record of student learning. Evaluation of these writing samples enables the student and teacher to chart student progress. Evaluation is a gathering of information needed to provide insights into development and instruction so that students can take the next step forward in learning (Rhodes, 1993). An important aspect of evaluation is that it gives the teacher and student a place to go in instruction. A tool for this type of evaluation is authentic assessment.

Authentic assessment is a means of evaluating real-life situations. It involves observation and evaluation by student and teacher. Authentic assessment provides teachers with useful information about students' writing (Jenkins, 1994). This assessment is on-going and provides a continuous record of student growth. Just as students' first marks on paper provide a record of their writing development, authentic assessment provides a means to evaluate that writing. Criteria for assessment needs to be defined by teachers and students. Built in options for on-going assessment and feedback allow for flexibility in student evaluation. Access to a variety of media allow students to demonstrate

their abilities in many ways (Jenkins, 1994).

This assessment involves collecting writing samples from all types of student writing, and observing the process the students go through in creating their writing. This observation is a very important part of the assessment. Teachers are continuously watching their students and their writing in order to make mental and written notes about the next achievement and the next challenge for that child (Harp, 1991).

### Student Writing Portfolios

One means of authentic assessment is the writing portfolio. Portfolios are vehicles for ongoing assessment by students and teachers (Tierney, 1989). Together, they can assess effort, improvement, and process. Students' early attempts at writing are collected and analyzed by teachers and students together. The student's writing at all stages of development are valued and saved as a record of student progress.

There can be different types of writing portfolios, depending on student needs and age level (Harste, 1988). One type keeps track of works in progress. It is a folder the students can keep going back to and continue to work on. Another type is abandoned or completed writing that the student is no longer working on (Harste, 1988). A successful portfolio approach to assessment involves regular and frequent attention to the portfolio by students and teachers (Far, 1992). Together, they often refer to the portfolio and compare the samples as progress occurs. It is a place where students can go to reflect on their learning, and teachers can monitor student growth. Therefore, the portfolio must be well-organized and easy to access.

Student writing portfolios are highly individualized, tailored by the student and teacher for that student (Far, 1992). The samples are chosen by the

student and teacher collaboratively, and evaluated by both parties, looking at earlier work, and charting growth. The portfolios can contain the following, but are not limited to: samples of student's work selected by the teacher and student, the teacher's observational notes, the students' self evaluations, and progress notes contributed by the student and teacher collaboratively (Valencia, 1990). One very important aspect of these portfolios, and the authentic assessment process, is self evaluation, both by the teacher and students.

Whole language evaluation aids teachers in helping their students to develop individual achievement; the focus of evaluation is on individual learning, on what the child knows (Eggleton, 1990). Information needs to be collected and recorded both informally by students and teachers, and formally, for documentation. This documentation will be used by teachers in conferences with students and parents, as well as a record of students' growth for the administration or community. An individual file for each student is kept with student writing samples, observations of writing, and anecdotal notes (Valencia, 1990). Another option that can be included in these files is a writing checklist, that could be filled out by the student, teacher, or both, collaboratively. Some checklists include rating scales which might be beneficial to some teachers and students who are interested in assessing the characteristics of writing (Rhodes, 1993). These checklists add another dimension to the writing portfolios, and can provide additional information. Another important aspect of these portfolios will be examined next.

#### Self Evaluation in Authentic Assessment

Self-assessments of writing, or reflections of the writing process by student are an integral part of these portfolios. Many instruments are available to help the students reflect on their own writing process (Rhodes, 1993). Another form

of reflection evaluation is the "What did I learn?" question (Goodman, 1991). This question helps the students to examine the purpose of their writing, and to recognize the value of their work. Students learn to be specific in their answers, and these reflections serve as assessment of their own learning (Goodman, 1991). Self-evaluation gives students an opportunity to share what they know and to reflect again on the learning process. Howell (1991) agrees that self-evaluation needs to be an ongoing process in the classroom, making the students aware of their own learning and growth. It should be a natural outcome of the process of creating meaning, used by the learner to improve performance and by the teacher to gauge the students' overall progress (Harp, 1991). Both informal observation and intuitive interpretation provide teachers with control over evaluation in the classroom without the need for standardized tests (Zarry, 1991).

Authentic assessment can take many forms in a classroom. We have already discussed portfolio assessment, student writing checklists, and self evaluation. A relatively new tool in assessment is the use of technology. Research is now being done on how technology can be used for holistic assessment purposes.

#### Computer-based Assessment

"A good assessment system allows students to have a shared understanding of what constitutes good work (Barrett, 1994, pg. 1)." In 1991, Barrett conducted a research project for the Alaska department of Education, exploring a variety of hardware and software options for supporting alternative assessment (Barrett, 1994). Barrett believes that using technology for alternative assessment purposes gives parents, students, and teachers immediate access to many examples of student work throughout the school

year. These include performance assessments, work done on the computer as well as with paper and pencil, and in the use of voice and video samples.

Computers appeal to young children's natural, playful, exploratory behavior (Zarry, 1991). Having their writing portfolios on computer gives students a great opportunity to work with technology, and see its many advantages. One main aspect is the use of technology for assessment is the role of the students as directors of their own learning (Jenkins, 1994). Children choose the writing samples, and put them into their own portfolios, and learn to evaluate them. They learn to evaluate their samples by working with their teachers as they take observational notes and discuss their writing with them. They learn to reflect on their own learning, and to evaluate their own writing by example from their teacher. They become familiar with using the electronic portfolios in much the same way; it is modeled for them.

Computer assessment has some great advantages, as well as some challenges. Some problems with a computerized assessment system include the work it takes to set up and maintain the system, the initial expense of obtaining suitable hardware and software, such as a scanner, HyperCard software, etc., and training a staff for the use of technology needed to run the program (Wilson, 1993). A computer portfolio system, therefore, must be simple, and not require a lot of expensive equipment. Next, an easy to use computer system and software will be discussed and recommended for use with an electronic portfolio system.

#### HyperCard Program

HyperCard is a program for the Macintosh computer which allows the user to combine text, graphics, images, narration, sound and even video in a way that has been previously unavailable to educators (Yarrow, 1994). It allows

teachers to create their own programs for use in the classroom. The HyperCard reference manual discusses what HyperCard is, how to learn the basics, including using sound, and how to create and modify stacks. It goes on to explain other aspects of the program, and how to utilize all the features. There is also a HyperCard 2.0 (1990), or updated reference manual. In the foreword, the creator of HyperCard, Bill Atkinson, states that his program is designed to help someone write his or her own program, like a set of tools such as a pencil, ruler, and a piece of paper (Goodman D., 1990). Another HyperCard manual, HyperTalk 2, explains the object-oriented programming used in HyperCard, how to use HyperTalk, or sound in a program, and other control structures and logical operations.

A review of the literature related to computer-based student writing portfolios shows that although there is a lot of literature and study done on whole language, writing, and assessment, there is not much that links authentic assessment and specifically portfolio assessment to technology. It is a field in the beginning stages of development itself. Programs do exist which combine these theories of language with technology, but there is still a long way to go in devolving computer based assessment tools which involve a holistic approach to language and assessment. Only recently has there been much work in this field. Computers are becoming a mainstay in many classrooms across the nation, and opportunities are increasing for teachers and students to take advantage of the benefits of new technology.

## GOALS AND LIMITATIONS

### Goals

The main goal of this project is to create electronic writing portfolios for storing data on each student in a classroom. This portfolio system is designed for primary grade teachers and students who are assessing the developmental writing process in their classroom. Classrooms that have access to Macintosh computers, HyperCard software, and a computer scanner can keep their portfolios on disk for easy access and flexibility.

### Objectives

This project is designed to enable teachers to record the developmental writing process of their students. It will give teachers a place to store student writing samples in an organized and easy to access manner. An electronic portfolio system for all students in a class is created for storing writing samples. There is space for teacher observations, comments and evaluations of student writing samples to be recorded and stored along with the actual sample. Students' comments about their development in writing will be recorded as well, either being dictated to the teacher who then types the information on the computer, typed by students onto the computer, or dictated and recorded by the computer using sound and or video. These portfolios will integrate technology with a more traditional record keeping style, to allow the teacher maximum flexibility in a personal organization system. This project has additional capabilities and teacher modifications such as video and or sound, which allows the students to read their writing samples, and add this to their portfolio.

### Limitations

This project is designed for primary grade teachers and students only.



Therefore, teachers of older students would need to modify these ideas to work for them and their students. This project is also designed to be used with a Macintosh computer if possible. In order to use the computer-based writing portfolios, it is necessary to have a scanner and scanner software, or a digital camera in order to record the student's actual writing in the computer portfolios. In addition to having a Macintosh computer in the classroom, a teacher would also need HyperCard software. The computer portfolios designed for this project will only run on a Macintosh computer, LC or better. A teacher who is not familiar with using a scanner, or digital camera and HyperCard, would need to allow time to practice and become familiar with the hardware and software needed to run the program. Another limitation of this project is the relative expense of the technology needed to run the program. If a teacher was interested in using the electronic portfolios, and presently did not have any technology available, they would be faced with some initial costs to get the program going. Finally, a problem could arise if a teacher uses the electronic portfolios one year, then the next year, the new teacher does not have the technology to access those portfolios. A similar problem could occur when a student transfers schools midyear.

The limitations of this project revolve mostly around current technology issues. As technology becomes even more mainstream, some of these limitations, might not be an obstacle. For instance, when more classrooms have Macintosh computers available, teachers would not have to make a large investment on their own in order to run this program. Also, in the future, Macintosh and other computers might be more compatible, and therefore it would be possible to run this program on a different type of computer without buying a lot of additional software.

## APPENDIX A

## DEVELOPMENT OF THE PROGRAM

### Authoring Tool

The program used to create these writing portfolios is called HyperCard, and was created by Danny Goodman for Macintosh Computers. HyperCard is a program which allows the user to design his or her own software. It is easy to use and is understandable, even to the computer novice. The program itself is equipped with a help section, and in addition, manuals and books about HyperCard have been written to provide support. One of these books is HyperTalk 2.2 by Dan Winkler, and was used as a reference for this writing portfolios program.

Creating a HyperCard program involves the use of some basic functions and terminology unique to HyperCard. The first is a card. A card refers to a screen within the program. A series of cards is called a stack. A program can consist of more than one stack. The writing portfolio program described here consists of three main stacks, and a stack for each student who has a portfolio. Within each individual card, there are several functions which can be employed. The first is a field. This is an area on a card for text. Different fonts, styles, and sizes of text can be chosen by using a field tool. A button is a device that can be used to move through a stack. A new button is created by using a button tool, and can be moved to any location on a card. The size and shape of the buttons and the fields can be manipulated to meet the needs of the user and his or her program.

### Overview of Program

Electronic Student Writing Portfolios are designed with the HyperCard Program to be easy to use and access. The program begins at the Home Card, where the software is introduced with the title, and the student list is readily

available to add a student or access an existing student portfolio. Each student in a class or group has their own portfolio. The teacher and student can work together to individualize each portfolio with unique student samples and comments. A portfolio typically will consist of one student data card and as many student sample and writing checklists as the student and teacher decide are necessary. Other information can be added to a student's portfolio by making a new card to add to that student's stack.

## GLOSSARY

### HyperCard definitions

**Card:**the name used for an individual screen in your program.

**Stack:** the series of cards that make up your program.

**Field:** an area on a card designated for text

**Button:**a device that can be used to move the user through the stack

**Tools:** a set of “tools” to create your HyperCard program, including a writing tool, a button tool, a field tool, and others.

## Flow Chart

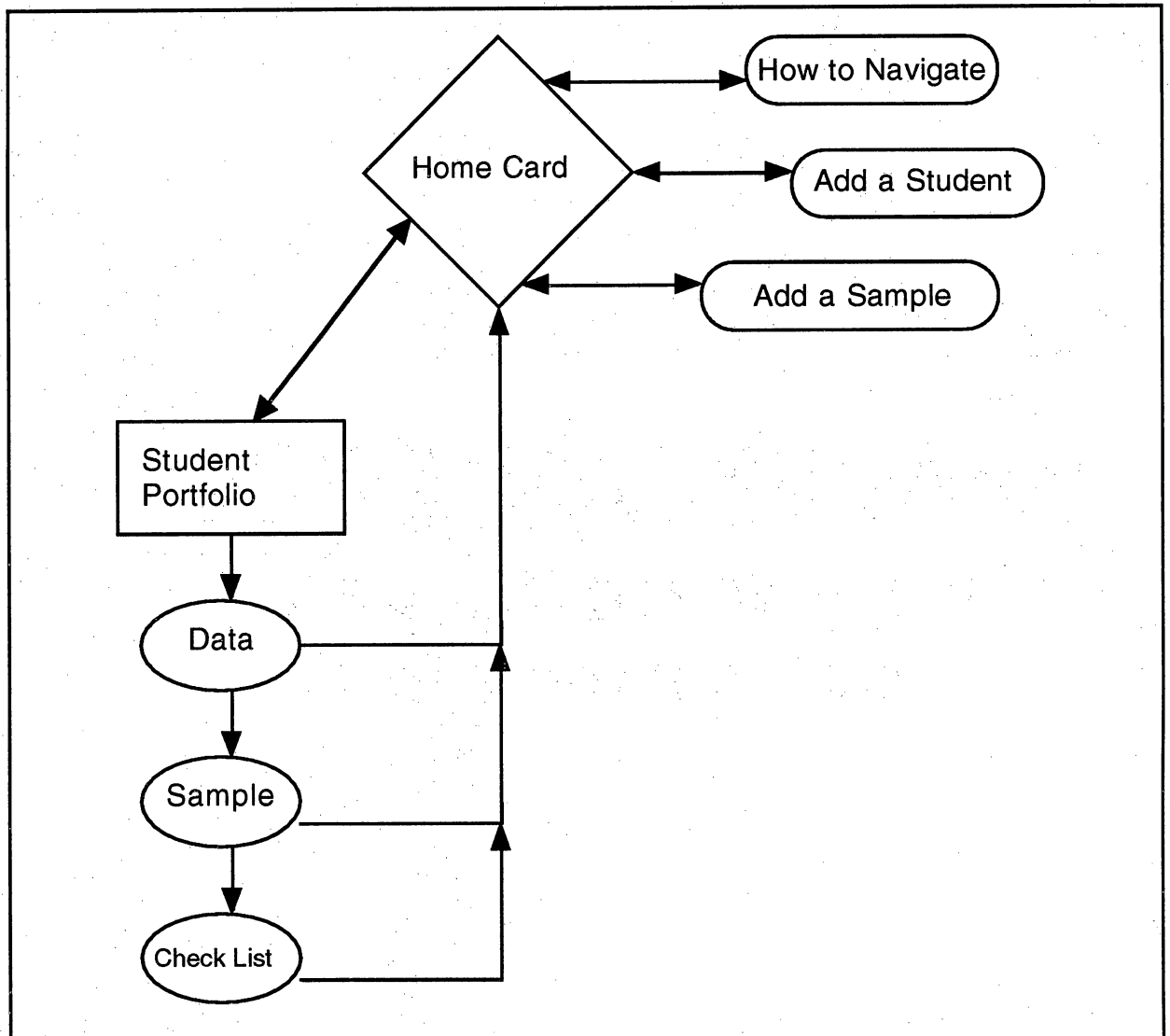


Figure 1. Flow Chart

The Home Card is the first screen the user sees when starting up the writing portfolios program.

How to Navigate, Add a Sample and Add a Student screens are all part of the Help section found on the menu bar at the top of each screen.

Student Portfolios contain three different types of screens: Data, Samples, and Check Lists.

## Sample Screens

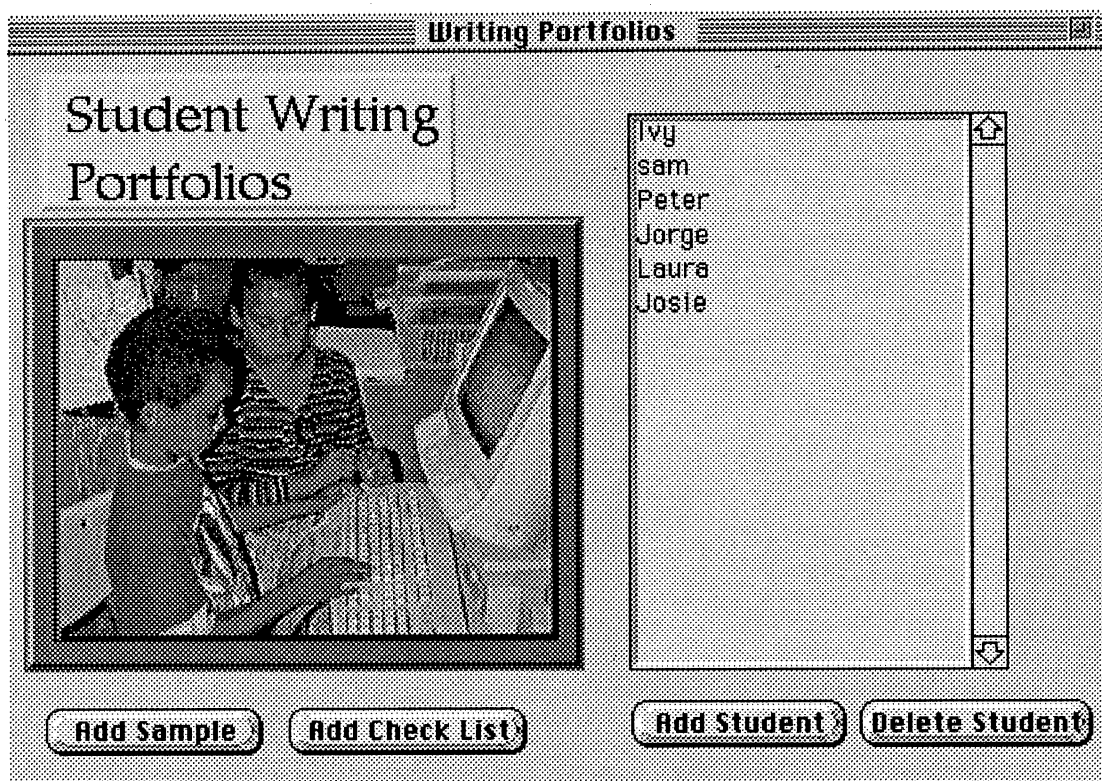
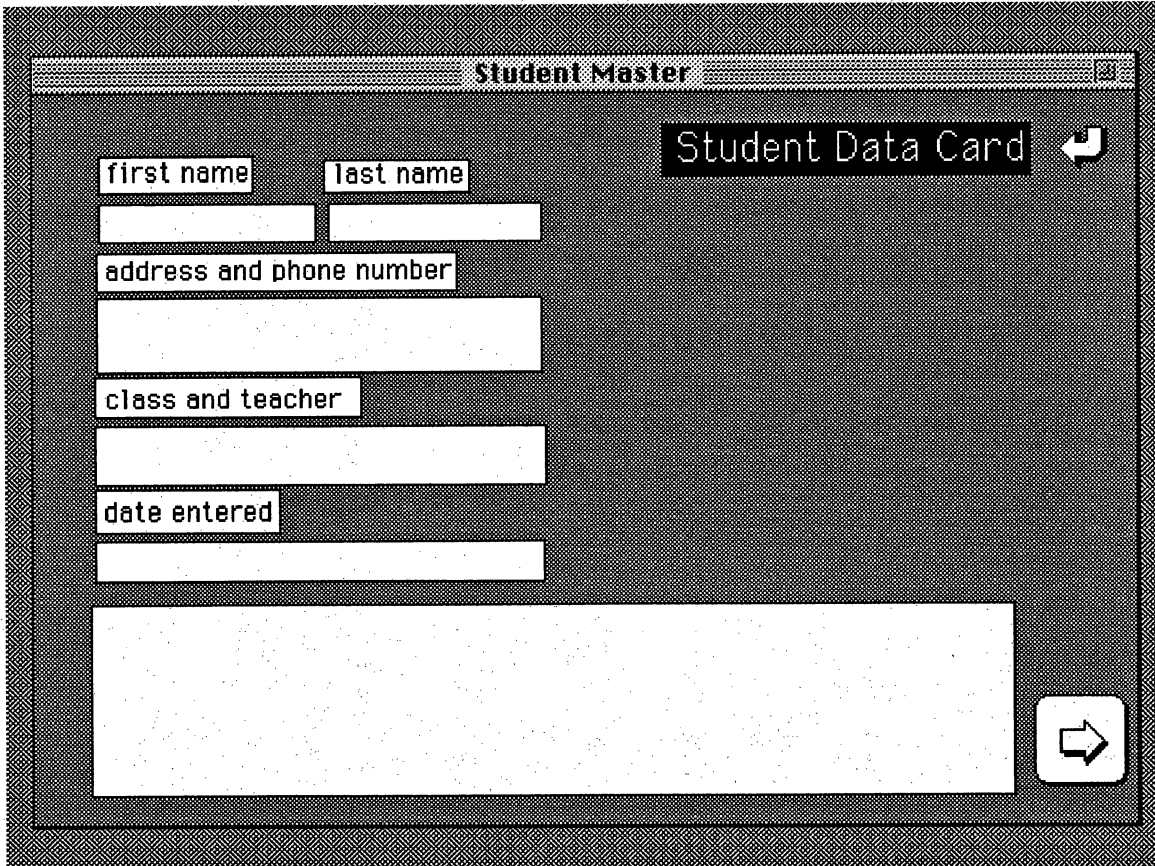


Figure 2. Writing Portfolios Home Card

The Home Card is the primary screen in the program. From this point, you can go anywhere in the Writing Portfolios. Below the menu bar is the Writing Portfolios opening screen. It contains the name of the program, a student list, and three buttons. The student list is a scrolling field which allows the user to add as many student names as needed. The list of names actually doubles as the means to access the student portfolios. Clicking on a name in this field opens that student's portfolio. The button immediately beneath this field "Add Student" allows the user to automatically add a student to the list and

creates a portfolio for the student. When clicked, it will ask the student's name, and start a file for that student. The button in the middle, "Add Checklist," will provide a writing characteristics checklist for the student. When this button is clicked, the program will ask for the student's name, and will make a copy of the checklist and put it into the student's portfolio. The final button in the lower left of the screen will create a writing sample screen to add to student's portfolio.



The image shows a software window titled "Student Master". Inside the window, there is a form titled "Student Data Card" with a return arrow button next to it. The form contains several input fields: "first name" and "last name" (two separate boxes), "address and phone number" (a single box), "class and teacher" (a single box), and "date entered" (a single box). Below these fields is a large, empty rectangular box. In the bottom right corner of the form area, there is a button with a right-pointing arrow.

Figure 3. Student Data Card

This is the first screen in a student's portfolio. At the top of the screen is the same menu bar that appears on each screen throughout the program. This screen is the student data card, which provides basic information on each student in a class. There are two buttons on this screen and several small fields



for typing information. The user simply types the information in the empty field beneath each field asking for that information. The larger field at the bottom of the screen can be used for teacher notes or comments. The arrow button at the top right of the screen takes the user back to the Writing Portfolios Home Card. The arrow button at the bottom right goes to the next card in that student's portfolio.

The image shows a software window titled "Writing Portfolios". Inside the window, the main heading is "Student Writing Sample". Below this heading is a button labeled "Student Comments". To the right of this button is a small rectangular text input field. Below the "Student Comments" button is a large rectangular text area with a vertical scrollbar on its right side. Below this text area is a button labeled "Teacher Comments". Below the "Teacher Comments" button is another large rectangular text area with a vertical scrollbar on its right side. At the bottom left of the window is a button with a left-pointing arrow. At the bottom center is a button labeled "Sample". At the bottom right is a button with a right-pointing arrow. In the top right corner of the window, there is a small button with a curved arrow pointing back to the left.

Figure 4. Student Writing Sample Card

This is the the master for a student writing sample. It contains two scrolling fields, four buttons, and some fields for titles and the date. The field at the top of the screen shows the title of the card. To the right of that screen is a small rectangular field for the date, which doubles as the "name" of the sample, as far as the computer is concerned. Next, there is a student comments field which is

the title for the first scrolling field. This space is for student comments about this particular sample. The next field is Teacher Comments, and is above another scrolling field where the user can type in comments about the student's writing in that sample. The arrow button in the upper right hand corner takes the user back to the home card. The arrow button in the lower right hand corner goes to the next card in the student's portfolio, usually another writing sample. The arrow button in the lower left hand corner goes to the previous card in that student's portfolio. Finally, the "Sample" button in the middle at the bottom of the screen, when clicked, shows the student's writing sample which has either been scanned into the program, imported from a digital camera, or drawn in another program, and pasted into the portfolio.

**Writing Portfolios**

## Writing Check List

date

<input type="checkbox"/> uses scribbles to represent meaning	<input type="checkbox"/> uses a variety of strategies to spell words
<input type="checkbox"/> writes letters and symbols randomly	<input type="checkbox"/> uses upper and lower case letters
<input type="checkbox"/> left to right sweep of letters or symbols	<input type="checkbox"/> beginning to organize thoughts in writing
<input type="checkbox"/> points randomly to letters when reading	<input type="checkbox"/> uses some punctuation correctly
<input type="checkbox"/> uses a few known words in writing	<input type="checkbox"/> uses temporary spelling that is readable
<input type="checkbox"/> uses letter beginning letter sounds	<input type="checkbox"/> beginning awareness of sentence structure
<input type="checkbox"/> uses ending letter sounds	<input type="checkbox"/> writes with confidence and enthusiasm
<input type="checkbox"/> reads back story, pointing left to right	<input type="checkbox"/> spelling becoming more conventional

Navigation buttons: Left arrow, Right arrow, Double Right arrow

Figure 5. Student Writing Checklist

This card is the writing characteristics checklist. Again, the arrow buttons allow the user to move about within the student's portfolio, or back to the Home Card. There is a field for the date the checklist was filled out. The series of fields in two columns describe the different writing behaviors. The small boxes to the right of each field are buttons which, when clicked, are marked with an X. Multiple checklists can be added to a student's portfolio at different times.

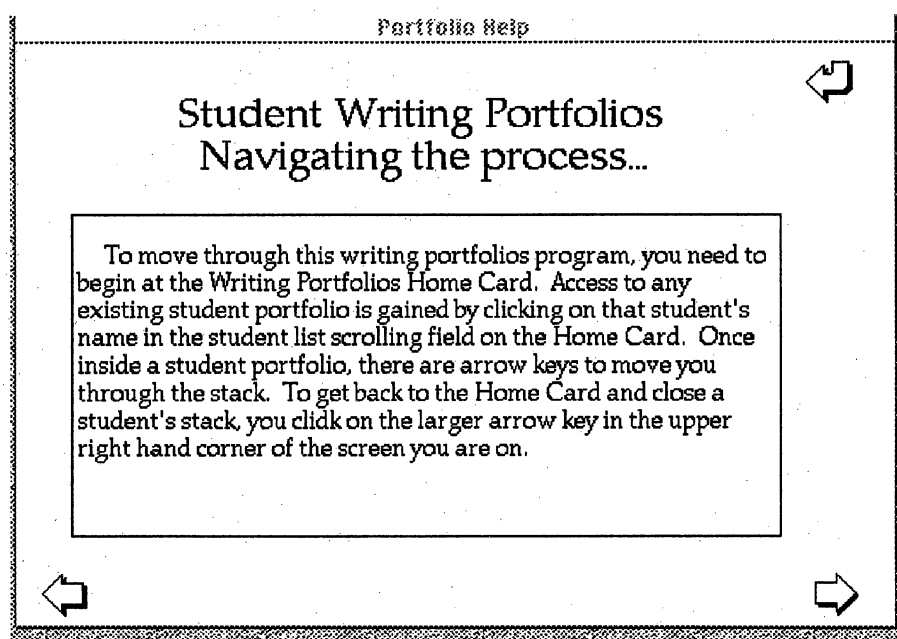


Figure 6. Help screen: Navigating

This card explains the basics of how to run the writing portfolios program. It is accessed from the help menu bar at the top of each screen in the program. The title is at the top of the card. The card also contains three buttons and a field. The field contains the information about navigation in the program. There are three buttons on the card as well. The arrow button in the upper right hand corner of the card returns the user to the Home Card. The arrow buttons on the left and right bottom corners of the screen move the user through the Help Stack.

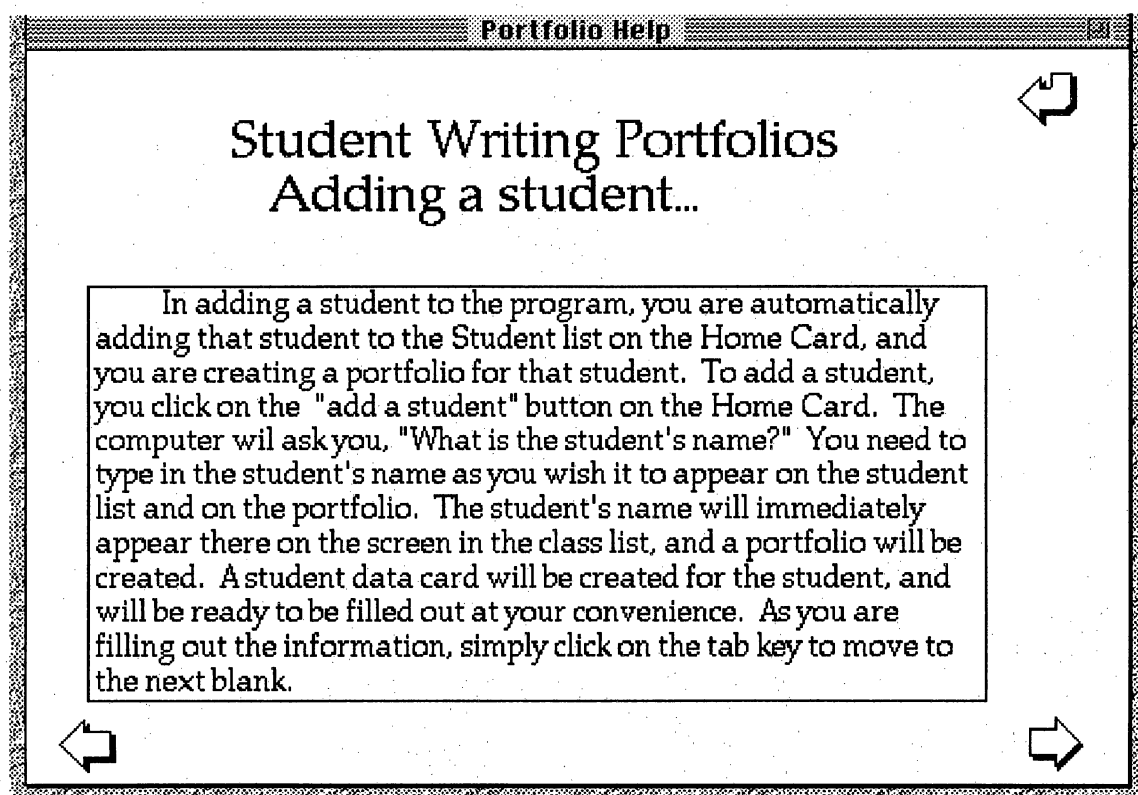


Figure 8. Help screen: Adding a student

This card explains to the user how to add a student to the portfolio program. It works in much the same way as the previous card, Navigating. The buttons move you through the program, and the field provides the information.

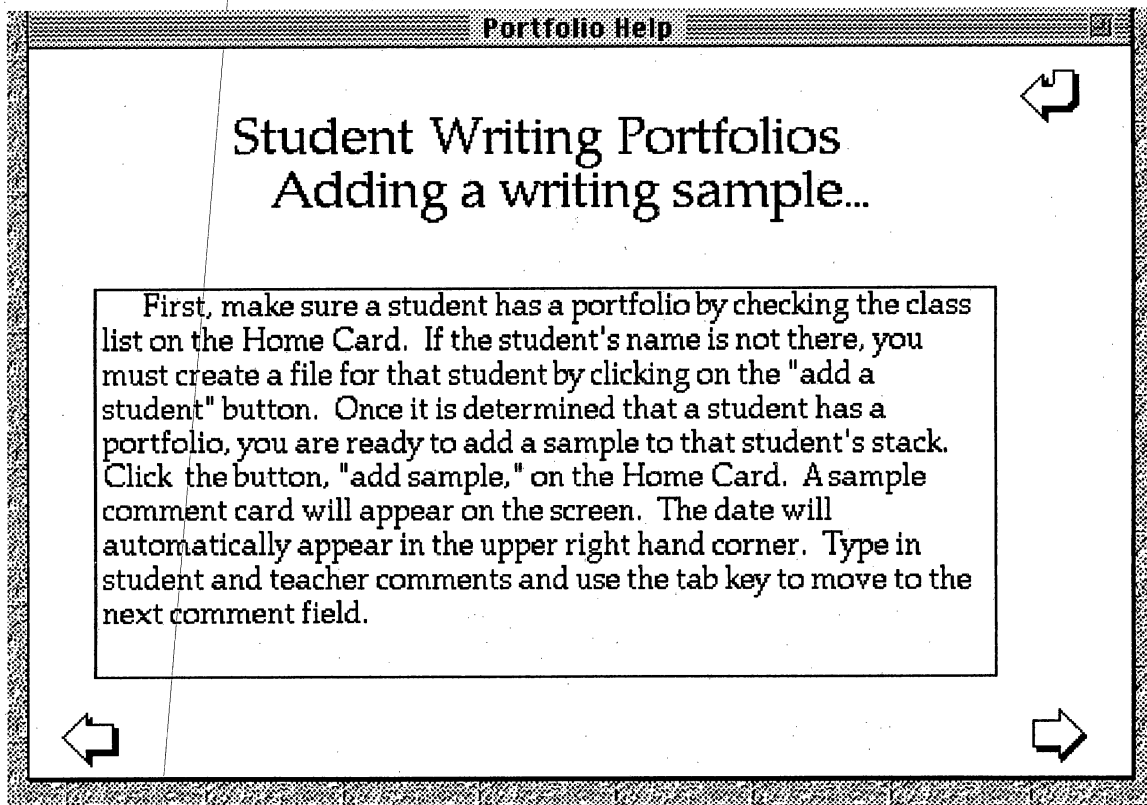


Figure 9. Help screen: Adding writing sample

This is the final card in the Help menu stack. It is also designed the same as the two previous cards. Like those cards, it is designed to be easy to understand and use.

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