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ABSTRACT: Noting that one of the biggest challenges facing teachers in the late 20th century is knowing how to help students learn to use a computer as a literacy tool, this brochure shares six ways that one kindergarten teacher successfully incorporated the computer as an informal literacy tool in her classroom. The brochure first discusses the teacher (considered an exemplary teacher by her colleagues), her emergent literacy educational philosophy, and the students (who reflect the changing demographics of the surrounding urban community). The brochure then discusses the six suggestions: (1) seeking preparation; (2) giving introductions; (3) offering invitations; (4) allowing explorations; (5) providing occasions; and (6) expecting transformations. (RS)
INCORPORATING A COMPUTER INTO THE CLASSROOM: LESSONS LEARNED IN KINDERGARTEN

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Introduction

About the Teacher and Children

Teacher Roles
"I can't just set it (the computer) up, show it once, and expect kids to use it and learn from using it . . . . I've got to help them think of it as a tool they can use. Not just a big pencil, but a whole bunch of pencils and paints and erasers and pictures and sounds and . . . it's all a bit overwhelming, isn't it."

Mrs. Holmes, Kindergarten teacher

One of the biggest challenges facing teachers in the late twentieth century is knowing how to help students learn to use a computer as a literacy tool. In this brochure, we share six ways that one kindergarten teacher successfully incorporated the computer as an informal literacy tool in her kindergarten classroom. An accompanying video is available through NRRC. The brochure is organized into the following sections:

- Introduction
- About the Teacher and Children
- Teacher Roles
Ms. Carol Holmes has taught kindergarten for over 18 years and is considered to be an exemplary teacher by her colleagues and the principal of her school. The ethnic make up of her class reflects the changing demographics of the surrounding urban community. Of the children in her classroom, 50% are African American, 30% Caucasian, 15% are Hispanic, and 5% are designated by the school district as Other. Over 60% of the children qualify for free or reduced lunch. These kindergartners demonstrate a wide range of literacy ability levels as determined by teacher ranking. The children in the classroom work with a computer program called KidPix2. Two computers, a Power Macintosh and a Macintosh Quadra, are available for children's use in the classroom.

Carol has an emergent literacy educational philosophy. This viewpoint recognizes that the not-yet-conventional reading and writing young children do as they develop into conventional literacy are appropriate, authentic, and logical. For example, she knows that when children scribble, draw, write strings of letters, or try out invented spellings, they are often figuring out important aspects of literacy. As they write for various purposes, they are learning about reading and writing. Thus, she works to establish a classroom environment in which children have ongoing opportunities to experience literacy in various functional and meaningful contexts.

Carol also believes that children's ability to use language to think emanates from their ongoing interactions with the adults in their immediate environment. This sociocultural perspective takes into account how, over time, children come to internalize the language and thinking processes of supportive adults, such as caregivers and teachers, who interact with them. At the heart of this perspective is the notion that what children can do with an adult's help today, they will soon be able to do alone tomorrow. Thus, she devotes much class time to talking with children, explaining concepts, and interacting with them in various ways.

The following section includes six suggestions for incorporating the computer into the classroom.
Even though this first suggestion might seem obvious, it is worth stressing. Becoming comfortable working with a computer is an important factor in successfully incorporating the computer into your classroom. There are several ways to do so. First, try to sign up for a computer course at a local university, continuing education center, or computer store. Second, ask permission to take the computer home and explore software programs. Third, ask other school personnel (teaching assistants, parent volunteers, resource teachers, etc.) at your school to share their knowledge with you. Be sure to share your growing knowledge with them. Fourth, ask a youngster you know to help you. Next, after initial preparation, begin to use the computer to manage classroom tasks: write notes to parents, create a calendar of activities, record anecdotal observations of children, compose a letter to the principal, create signs for the classroom, and so on.

SUGGESTION 2: Giving Introductions

Children benefit from seeing the functions and forms of literacy modeled and embedded throughout the day. Plan whole group, small group, and individual teacher/adult and student activities. One whole group activity that routinely occurs at the beginning of the day in many classrooms is the Morning Message. As children gather close to the computer and watch you write a message about events of the day on the computer, they will see how to use the mouse, the keyboard, and features of the software program. Print copies of the message so pairs of children can reread the message and highlight letters/sounds and words they recognize. One small group activity you can do early in the year begins with interviewing school workers. After the interviews, take students’ dictation and use computer tools to revise or edit. Publish as a classroom book. Students also need one-on-one demonstrations. You may let a student help you compose a “happy note” to inform parents about something positive their child has done.

SUGGESTION 3: Offering Invitations

Invite children to use the computer as a literacy tool by creating a big book or bulletin board that highlights different nonconventional ways children can write. Select samples of children’s writing that shows scribble, drawing, strings of letters, groups of letters, invented spelling. Post them on the bulletin board. Then, demonstrate how the children can use the computer to write in these same ways. As you talk about each example, remind them that they could use the computer to create and accomplish various tasks.

SUGGESTION 4: Allowing Explorations

Children need time to explore and get comfortable with the way the computer works. Make the computer available to pairs of children all day, not just during center time. During the first few days or weeks, do not assign specific tasks, but give children time to get to know the computer through trial and error. Understand that many children will enjoy creating many different screens. They will take pleasure in watching the screen be erased. Children also devote time to working with color, even after they discover that the print-out is usually in black and white. For many children, the experience of the moment and the process of creating images and letters on the screen are just as important, if not more so, than making a final product.

SUGGESTION 5: Providing Occasions

Invite parent volunteers, the teaching assistant, or older children to serve as coaches or tutors who can offer suggestions or help to solve problems the children encounter. Ask children to respond on the computer to a story they have heard during circle time. Ask them to draw or write about their favorite part of a book. Occasionally include the computer in the sociodramatic play center as a central part of a doctor’s office, pet store, book store, supermarket, or a florist shop. Children may benefit from a field trip to a location related to a unit theme. For example, arrange for children to visit a florist shop in order to see how the computer is used to order flowers, keep stock of inventory, print out messages, do bookkeeping, and so on. They may use these concepts as they play in the related play center.

SUGGESTION 6: Expecting Transformations

Expect children to take over or transform computer assignments. For example, children will want to write their own books to sell in their sociodramatic bookstore. They will want to write letters on the computer to community helpers when studying thematic units on neighborhoods and cities. Children will use the computer to accomplish their goals. By allowing them the freedom to transform or even generate assignments, you will contribute to their independence as learners and users of literacy.
Further Information

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