## Your Preschool Classroom Computer Center: How Does It Measure Up?

*Staff at the Center for Best Practices in Early Childhood have been working with young children, computers, teachers, and families for 20 years. The Center’s expertise and experiences can help you make your classroom computer center an effective, appropriate learning environment. Take this handy quiz to assess your preschool classroom's computer center. Then turn the page and discover some important factors to consider about each question. Use the information to improve (or validate) your use of the computer center in your classroom.*

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1. Is your classroom computer accessible to all children?
   If you answered yes, children in your classroom are given opportunities to participate equally in technology activities. No one is denied access to the computer because of a disability.
   If you answered no, you probably aren’t familiar with adaptations that make the computer accessible so all children can participate equally in technology activities. A variety of alternative input devices can help children with physical disabilities be successful and gain independence as they use the computer. Adaptive devices include switches, switch interfaces (Discover:Kenx, IntelliKeys, Switch Interface), and touch tablets (TouchWindow, Key Largo, and IntelliKeys).

2. Is your computer center a safe place for children to learn?
   If you answered yes, you undoubtedly have taken precautions so children cannot trip over electrical cords or pull equipment off the table by pulling on exposed cords.
   If you answered no, you need to consider the location of the computer in your classroom. The computer should be placed against a wall and near an outlet, so that electrical cords are hidden from view and away from children. If wires do need to stretch across the room, they should be secured with tape or covered so children do not trip over them or accidentally pull a piece of equipment off the table. The computer center should also be in a low traffic area. Not only is it safer but children will also be able to attend more to the computer if there are fewer distractions. The monitor and input devices should be placed in secure positions with extra wires hidden from children’s view or placed out of children’s reach. A computer center that is free of extraneous cords is not only a safe center, but one that is more friendly and inviting to children.

3. Are multiple child-size chairs available for the children at the computer center?
   If you answered yes, you are aware that having at least two child-size chairs at the computer center encourages children to work together to develop cooperative learning, language, and social skills.
   If you selected no, then re-evaluate the purpose of your classroom computer center and consider the many proven benefits of children to working together at the computer. Consider the space in which your computer is located. There should be room for at least two child-size chairs to encourage social interaction among children. Children’s feet should touch the floor while they are seated at the computer, and they should not have to crane their necks to see the computer monitor.

4. Is the computer monitor placed at a child’s eye level?
   If you answered yes, you have created a comfortable setting in which children can interact with the computer. Placing the computer monitor at the children’s eye level means children do not have to strain their necks just to see the screen.
   If you answered no, you might consider placing the computer on a low table, preferably one that is adjustable. It works well to use a computer cart so the computer can be moved for small and/or large group activities. Also, the top shelf on a computer cart can be removed so the monitor can sit on the main surface. Do not be afraid to move the monitor; if necessary it can be placed on the floor or on a plastic milk crate. To position the monitor screen at the child’s eye level, you may need to adjust both the height and angle of the monitor. The monitor should be between 18” and 26” from the child’s eyes. Omit screen glare by adjusting the lighting and/or closing window blinds/shades. For further information, visit the Computer Ergonomics for Elementary Schools web site at <http://www.open.k12.or.us/cergos/>. This web site offers information about what teachers can do to make working at a computer more comfortable and healthier for a child’s body.

5. Are children allowed to use the computer independently?
   If you answered yes, you know that many children can use the computer independently with the help of rules, KidDesk, and touch screens or other alternative input devices. You know that adults can monitor the computer area to facilitate learning experiences but do not have to be at the computer center directing children’s activities.
If you answered no, consider ways to help children become more independent at the computer center. Children should be taught rules for responsible behavior in the computer center; however, you will find that the equipment is not so delicate and fragile as you might think. Many children are able to remove CD-ROMs from their cases, insert them in the drive, and close the door. If KidDesk or other desktop protection software is used, a child can also select a software program he/she desires. Touch screens and other alternative input devices provide a means to use the computer independently for children who may not be able to use a mouse well.

6 Do children use a sign up book to manage turntaking?

If you said yes, children are facilitating their own turntaking. The center is child managed and adult facilitated. Children are writing for a purpose and have the opportunity to recognize other children's names. You realize that while some children write their names with conventional spellings, others may use invented spelling or a scribble as their mark. You may be using an adaptation of a bound blank sign up book. Children are encouraged to sign their name in the book for a turn at the computer. Names are carried over each day with a new section started at the beginning of each week. Children who sign up are the mouse users at the computer. Peers may come and go and participate without signing up.

If you said no, consider using a sign up book in your classroom to facilitate a child-managed technology center. With the sign up book, children are less anxious about not having a turn today because they know they will get a turn tomorrow. To make a sign up sheet, bind 30 blank pages (the back of scrap paper works great) together between card stock. Use one book each month. Place the book and a pencil next to the computer. Each day, open the book up to a new page and record the date on the top of the page. Encourage each child to write his/her own name and accept any stage of writing. To help adults recognize a child’s name, you could write the child’s name in parentheses next to the child’s writing and place a number by the child’s name to track the order of sign up. Tracking children’s writing samples over time reveals that children gradually move to the left and the top as they move through the writing stages. An added advantage to the sign up book is that it can be used to document changes in children’s writing as the school year progresses.

7. Is turn-taking managed in ways other than through use of a timer?

If you answered yes, you understand that children need time to create and accomplish tasks on the computer. Without a timer and with other appropriate management techniques (such as a sign up book) in place, children learn to manage their own turntaking and exhibit fewer anxious and less aggressive behaviors.

If you answered no, you might be a teacher who thinks using the computer is so important that each child should get to use it everyday, even if for only a few minutes. However, consider the restrictions using a timer puts on children. It inhibits quality time for creating and exploring. A timer also makes children feel rushed and uneasy. They are more concerned with how much time they have rather than with what they are doing on the computer. Using a timer encourages aggressive behaviors in children waiting for their turn or in a child using the computer and trying to finish before his/her turn is up. You probably do not use a timer at the other classroom centers but, instead, allow children freedom to create, explore, and interact with classmates. Treat the computer center the same and you will get better results in behavior, cooperation, and turntaking.

8. Are props (toys, games, books) related to the software provided at or near the computer center?

If you answered yes, you understand that many interactive early childhood software programs are perfect for extending activities or for providing the basis for exploring science and math concepts, experiencing music and dramatic play, creating images, and extending interest in emergent writing. Children enhance their learning experiences when props (toys, games, books) are provided and the computer center becomes an extension of other learning centers.
If you answered no, think about the benefits of integrating the computer center as explained above. Choosing software that relates to classroom projects and topics, then providing appropriate props, encourages children to make connections and extend their learning.

9. Are classroom CD-ROMs easy for children to access?
   If you said yes, you have a system that allows the children in your classroom to make their own decisions about software from the titles you have designated, and you have made it easy for them to find, select, and load a CD-ROM into the computer.
   If you said no, consider the following when making software accessible to children: Keep the CD-ROM storage at a child’s eye level and, regardless of how it is stored, provide clues with each title that will tell the children what the title is. Portions of the software box or manual can be attached to the modified method of storage and used as identification clues.
   If children are able to open the jewel cases, a unit designed for storing CDs can be used. It should be located at a level where children can see all the software and have access to all the titles you have designated for their use. Easy access for all children may make it necessary to remove the CDs from the jewel cases and place them in a different type of container. Some children are unable to open the cases and will benefit from the CD-ROMs being stored in heavy paper or vinyl pockets with some type of picture label attached to the pocket.
   Most children are able to retrieve software from a hanging shoe bag (or something similar) if the bag is hung so they can reach the top and bottom pockets. Again, some type of picture representation should be attached to each pocket, indicating the software title to be found in the pocket. Heavy paper pocket folders also work well to store individual CDs. The folders’ size allows part of the software box to be glued or taped to the front as a visual cue to the contents.

10. Do you use KidDesk (Family Edition and/or Internet Safe) as a desktop management program?
   If you answered yes, you are aware that children can manage turn taking and software choices at the computer if they use the KidDesk program. It protects the computer’s hard drive and gives children the freedom to make software choices from selections the teacher has already chosen. KidDesk allows children to safely and independently navigate through programs.
   If you answered no, you may not be familiar with KidDesk and may be unaware of its many advantages. By using a program like KidDesk, children can safely use the computer with little or no adult intervention. The program allows children to make independent software choices, electronically interact with other children in the classroom, and safely exit programs. Its many clever and child-appealing features entice children to explore and experiment with tools they see their teachers and parents using. A teacher can also customize the desktop to allow each child access to certain software programs or to set up scanning for a child who needs to use a switch instead of the mouse. KidDesk’s many desktop accessories encourage the development of emergent literacy skills. Children read environmental print when choosing the accessories or software programs on the desktop. They develop concepts of word and story when they send e-mail to a classmate, communicate with family members by “writing” notes, produce calendars, and open their own electronic mail and “read” messages sent by classmates. KidDesk features that support emergent literacy include the picture frame, address card file, phone/voice mail, mailbox/e-mail, note pad, calendar, and the name plate.