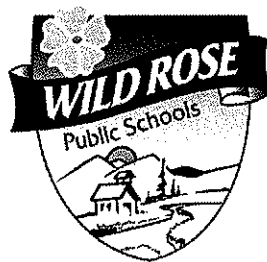


# **ASSISTIVE TECHNOLOGY**

## **BOARDMAKER**



**“Creating Powerful Learning Environments”**

# Boardmaker

**Subject:** Life Skills

**Initial set-up (front loading):** Velcro strip on a desk or on laminated coloured paper and Velcro behind each symbol used.

**Task(s):** Independent task completion. We want the students to independently get materials ready for each task and/or complete activities in the proper order.

## **Activity:**

A strip indicating materials needed for subject is placed on student's desk. The students make reference to this strip before each activity. This can also be done to help students remember the process of completing various activities (math problems etc.)

## **Other Thoughts/ideas:**

1. Use symbolate tool (similar to Writing with Symbols) to write and read students own stories. This is great for kids who need social stories. Note that real pictures can be used.
  2. Language Activity: who, what action, and where. Make 3 dice with one for each question and 3-6 possibilities. Students roll the dice and the person selected has to do the action in the place rolled. Jennifer will skip in the room.
  3. Use Boardmaker for visual schedules and for routine activities.
  4. Nutrition Pyramid activity: have numerous foods on one side of the folder and a pyramid on the other. Kids use sticky tack to place the food in the appropriate category.
  5. Use for steps in cooking or for a chore. This can be like a checklist: students make sure all steps are completed.
  6. Retelling stories in a sequence.
  7. This tool can be used as a behaviour tool with the "If...then ..." model.
  8. Choice Making (e.g. Break time – give pictures of choices )
  9. Home/School communication (pictures to help a student tell about what he/she did at school, or what he/she did at home)
  10. Waste & Our World – sort pictures of items into categories (e.g. biodegradable vs. non-biodegradable, recycle vs. compost vs. waste)
- \* The type of visual you use should match the child's level:
- Object
  - Photo
  - Picture (drawing, magazine)
  - Symbols (e.g. Boardmaker pics)

**Website:** [www.mayer-johnson.com](http://www.mayer-johnson.com)

# Deb and Leslie's Cheat Sheet for Boardmaker

## A. CREATING A GRID

1. Open Boardmaker
2. Click on "Open New Board"
3. Click on Button Tool (see diagram)
4. Click on Top Left Corner (+)
5. Click and Drag Diagonally
6. Click on Spray Tool (see diagram)
7. Move Spray Tool on top of first square *(click + drag)*
8. Click and Drag Across to Right to create 4 boxes
9. Click outside the boxes
10. Breath

## B. ADDING SYMBOLS

1. Select "Silly Guy" (see diagram)
2. Type word for symbol
3. Press Enter
4. 2<sup>nd</sup> word and enter
5. 3<sup>rd</sup> word and enter
6. 4<sup>th</sup> word and enter
7. (Look in Thumbnail View to have a choice of pictures)
8. Breath

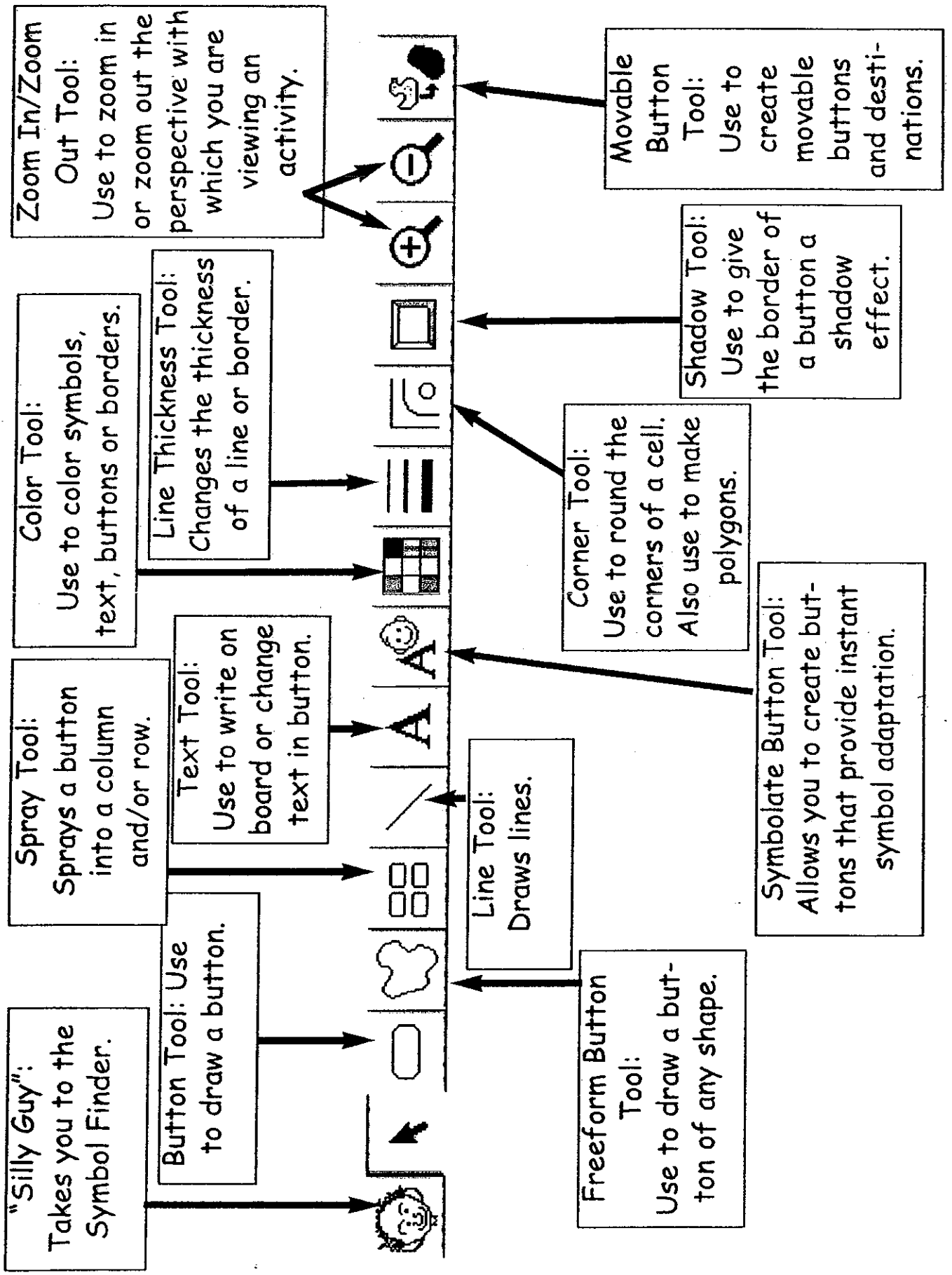
## C. CATEGORY SEARCH

1. Click on Category Search
2. Click on clear all standard categories
3. Check category you want to search. *OK.*
4. Breath

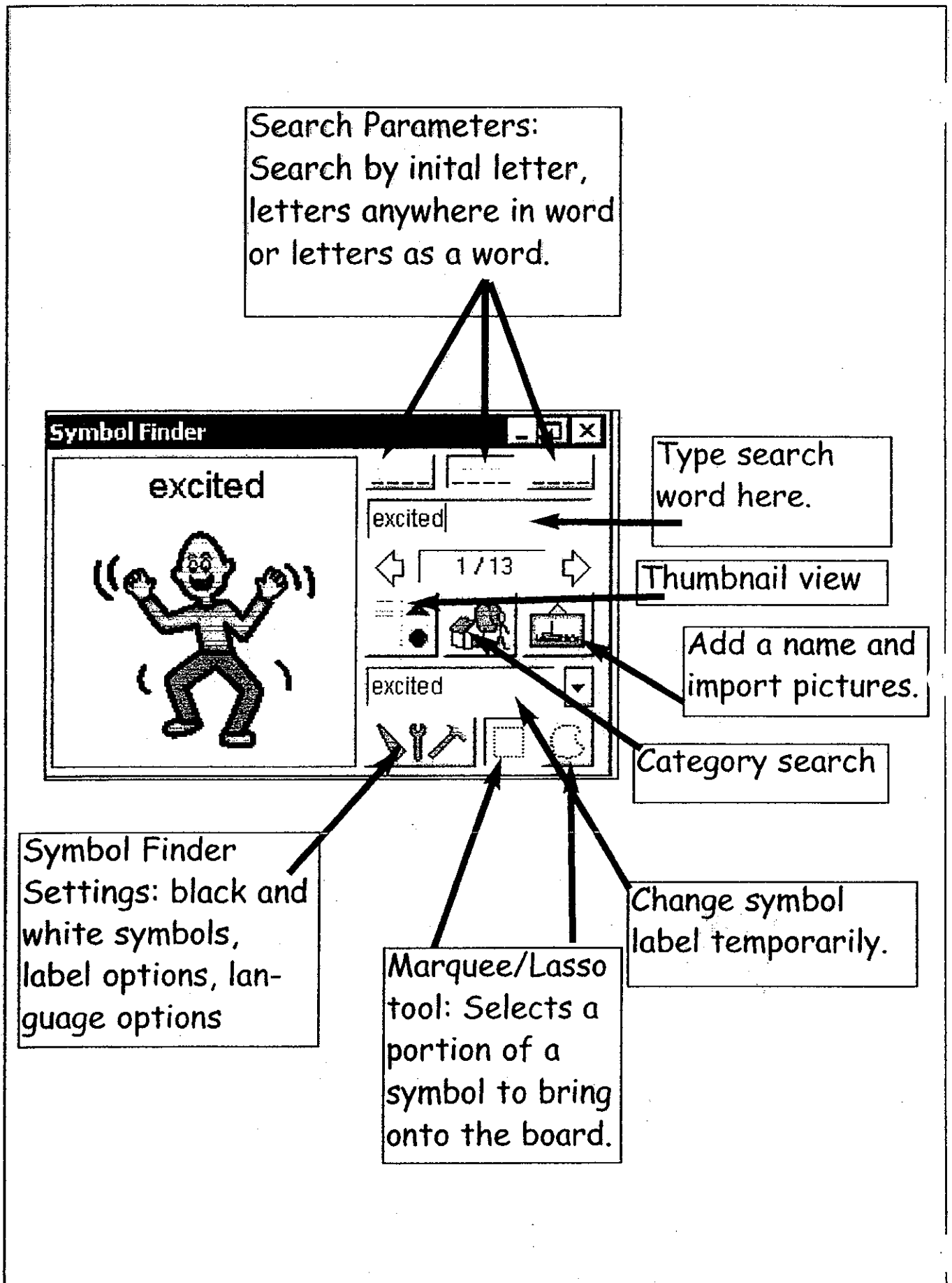
## D. CHANGING THE TEXT

1. Click on the Text Tool button ("A").
2. Click on the original word accompanying the symbol.
3. Type in the word you want to change it to.

**HAVE SOME FUN!!!**



# Symbol Finder



www.mayer-johnson.com

BOARDMAKER

## BOARDMAKER INSTRUCTIONS

### 1. Save a board:

- File – Save As - My Boards folder (default location) within My Documents folder
- Type in a name for the new board in File Name.
- Click SAVE

### 2. Delete buttons:

- use pointer tool
- select button you want to clear
- select Edit – Clear
- OR - Press “Delete” or “Backspace” on keyboard to delete entire button (or just the picture or text on the button)

### 3. Changing the size and position of the symbol within a button:

- click on the symbol picture or text you want to move
- click and drag with the Placement cursor to place the symbol

### 4. Adding Photos/Graphics:

- Add photos or graphics you have saved or that you find on the internet.
- Select button you want to put photo in
- Select File-Import-Picture
- Locate and open your saved photo or picture.
- Open

Internet: →

- Right click on the picture
- copy to desktop
- right click – paste
- left click – drag it to button

### 5. Add Color:

- use pointer tool
- click on item you want to change color
- select the Color Tool (Color Palette will open)
- click on color you want to use

### 6. Resizing/Changing Text:

- Select pointer tool
- Right click on text you want to change
- Can change text, size, style, color

## **7. Swapping Buttons:**

- press and hold down ALT key on keyboard
- while holding down ALT key, click on button you want to move
- continue holding ALT key and drag the button over the top of the button to be swapped
- when the button to be swapped is highlighted, release the mouse button

## **8. Symbolate Button: (like Writing With Symbols/Co-Writer)**

- select the Symbolate Button Tool (A with happy face)
- click on the background where you want the button to appear
- Begin typing in the new button (as you type, a symbol will appear for each word)

Changing symbolate buttons:

- Make sure you have the Symbolate Button Tool on in the menu bar.
- double click on the symbol you want to change
- select the symbol you want
- click OK

Remove symbolate buttons: (and just leave text – to fade out symbol for each word)

- double-click on the picture symbol
- click on "Remove symbol"
- OK

## **9. Paste same button:**

- right click on button
- copy button
- move cursor to new location
- right click – paste button

## **10. Resize Button:**

- use pointer tool
- click on button you want to resize
- click, hold, and drag to resize the graphic inside the box (click on corners or on outside lines to shrink size)

# Use Visuals with Children

ELISA GAGNON AND DEBORAH GRISWOLD

1. **Icon pairing:** Label everything in the classroom with an icon paired with the written name of the item.
2. **Opening group:** Use a group schedule with pictures, words, and clock icons to sequence the day.
3. **Individual schedules:** Popular choices include a small three-ring notebook or photo album with pictures of each activity. You can create a schedule using objects to represent each activity of the day, pictures on a ring to attach to a belt loop, a wipe-off board, cards and a pocket chart, or a computer-generated schedule that is updated each day.
4. **Behavior expectations:** Laminate a visual that represents the desired behavior and Velcro™ it to the child's desk. For example, use icons to represent "Sit," "Quiet," or "Raise your hand."
5. **Grooming:** Create a pocket-sized grooming check card for a child. It could include icons or words representing things such as "Hair brushed," "Face washed," "Shirt tucked in," and "Zipper zipped."
6. **Grocery shopping:** Supply pictures of items to be purchased. For lower functioning students use a piece of the packaging for easy recognition; for higher functioning students, use icons or a written list.
7. **Hand-washing sequence** (brushing teeth, bathing, showering etc.): Display and place icons depicting steps to wash hands (e.g., turn water on, put soap on hands, wash hands in water, turn water off, dry hands) over the sink or bathtub.
8. **Restaurant outings:** Use a picture menu for ordering. At a fast-food restaurant, a nonverbal student can order independently by pointing to pictures or handing pictures of the desired items to the person taking the order.
9. **Song time:** Create a sequence of pictures for key words in the song. Be sure to allow enough wait time for the person with limited verbalizations to respond.
10. **Scheduling reminders:** Place a written reminder on the student's desk to remind him or her of an upcoming event. For example, "Remember: Speech today with Mrs. Johnson at 11:00. After speech you will join the rest of the class in the lunchroom."
11. **Bookmark reminders:** Give a child a bookmark with a visual message. "Remember: You will earn extra points if you stay at your desk during silent reading!"
12. **Classroom rules:** Post rules where all students can see them. Include icons or pictures for students who are nonreaders to remind them of the rules as well.
13. **Choice diversity:** Use a choice board with icons or photographs of choices available during free time.
14. **Reinforcement menu:** Display a menu of preferred and acceptable activities where students can see it as they work. It will remind them of the rewards that they are working toward.
15. **Computer:** Place instructions on frequently used procedures next to the computer. Use pictures or words, according to your student's abilities.
16. **Lunch choices:** Place a menu board with pictures or objects to represent lunch choices. This could be used during opening group to enable students to choose lunch foods or to prepare students for what foods will be served.
17. **Minischedule:** Sequence activities during a shorter time segment or a particular activity. This can be used to teach independent work habits (place under schedules).
18. **Facilitate discussions at home about school:** Send home a Zip-lock™ bag with an item enclosed that will cue students and parents about a particular activity at school that day. For example, if the class went on a nature walk, include a pinecone, or if the class popped corn, include a kernel. This will help stimulate conversations that can include all family members.
19. **Arts and crafts projects:** Display steps needed to complete the project one by one, as well as an image of the finished item. This technique will encourage independent task completion and can be generalized to cooking or other sequential activities.
20. **Holidays:** Enhance your students' involvement in holiday or other special occasions. Place an icon symbolizing the occasion on the class calendar. Count off the days until the event. Use art and music accompanied by visual cues to generate enthusiasm and faster inclusion.

Persons interested in submitting material for *20 Ways To . . .* should contact Judith K. Carlson, School of Education, University of Missouri, Kansas City, MO 64110-2499.

## ABOUT THE AUTHORS

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orders in a variety of educational settings. Deborah Griswold, MS, has taught children and adolescents who have autism and behavior disorders. She is a doctoral student at the University of Kansas. Address: Deborah Griswold, 625 Grant Ave., Ft. Leavenworth, KS 66027; e-mail: mjgrisswold@prodigy.net

(continued from p. 45)

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### Call for Nominations 2000 Distinguished Early Career Research Award Division for Research, Council for Exceptional Children

In recognition of the critical role of research to current practice in and to the future of the field of special education, the Division for Research seeks nominations for the Distinguished Early Career Research Award. This award recognizes individuals who have made outstanding scientific contributions in special education, in basic or applied research, within the first 10 years following receipt of their doctoral degree. Nominations of individuals who received their doctoral degrees in 1990 or later are sought across all areas of special education and across all forms of research methodology. The award, cosponsored by the Donald D. Hammill Foundation, includes \$1000 to be presented at the 2000 CEC Annual Convention DR reception and an invited presentation at the 2001 CEC Convention. To submit a nomination for this award, provide the following:

1. A letter of nomination of 5 pages or less, addressing each of the following:
  - important theoretical contributions or critical research findings attributable to the nominee
  - the degree to which the nominee's work has influenced the work of others both within and outside the field of special education in the areas of practice, teacher preparation, and future research
  - the extent to which the nominee has mentored students or others in research in special education
2. A complete and current curriculum vitae
3. Up to five representative reprints; the emphasis here is to be on primary research reports rather than books or chapters
4. Names, addresses, and phone numbers of up to five referees familiar with the nominee's work.

Submit five collated sets of these materials to Dr. Karen R. Harris, Co-Chair, DR Awards Committee, Dept. Of Special Education, 1308 Benjamin Building, University of Maryland, College Park, MD 20742, by October 21, 1999.

Self-nominations are welcome. Members of the award committee include Marty Kaufman, Barbara Keogh, Donald MacMillan, and Sam Odom.

# USING PHOTOGRAPHS TO TEACH LANGUAGE SKILLS

## by Carolyn A. Weiner, M.A., C.C.C.

You can use photographs at home to help your child learn three important language skills:

- Using symbols to communicate
- How to sort into categories
- Using words to express thoughts and feelings

### Using Photographs to Learn About Symbols

To use language to communicate, children must learn to understand and use symbols. A symbol is a sign that represents something else. For example, the letters of the alphabet represent sounds. The word "dog" stands for a group of four-legged animals.

Photographs can be used to help children develop symbolic communication skills. For most children, the earliest communication is done by pointing and using other gestures that do not require symbols. For children delayed in language development, these gestural levels may cover a span of several years. Some children will remain "stuck" at this level. Using symbols to communicate is too *abstract* for them.

Your child may go to the refrigerator and point to request juice. The child may have difficulty understanding that you would get the juice if the child said "juice." In this situation, you can take a photograph of the juice container and tape it on the refrigerator. Each time your child points at the refrigerator, you can lift the child's finger to the

photograph and say "juice." If there are two possible items of interest, you could put both photographs on the refrigerator and ask which one the child wants.

By pointing to the photograph, your child will be using a symbol to communicate. You can then move the photograph to a small communication wallet that your child can wear or carry in a pocket.

Your child can then use photographs in the wallet to communicate. By using photographs in this way, you clearly demonstrate the advantage of symbols over gestures. The object doesn't have to be present in order to say something about it. Your child, for example, can point to the photograph of "juice" while you're riding in the car. This would mean, "Can I have some juice when I get home?" This is a productive means of communication that can be a basis for using language. Using the word "juice" is the next step, as your child learns to replace photographs with simple words.

### Using Photographs to Develop Sorting Skills

An important language-based skill is the ability to classify or sort events and objects. Schools rely on this skill to teach many subjects including:

- Reading - (Let's find all the words that start with this sound.)

- Illustration of:  
Terms & instructions*
- Math – (Circle every picture with two animals.)
  - Science – (Find the animals that change color in the winter.) *Photo of self to identify Body parts*

Parents can use photographs to help develop classification skills at any language level using these activities:

1. Make up category photo albums with your child. The albums can include very simple categories (things I like, things I don't like); intermediate categories (yellow things, round things, food, animals); or advanced ones (items associated with Africa, objects made of wood). Add photos to the category albums on a regular basis. Your child's albums do not need to be expensive. Just use colored construction paper and looseleaf binders.
2. Identify categories to which photos belong. Cooperate with your child to take a variety of photos around the house. Make lists of different ways the photos could be categorized. For example: food, furniture, clothing, Mom's things, hard things, and small appliances. Discuss which items belong to different categories.
3. Take photos of items in a category. Select just one category for the week or month. As your child to take as many photos in that category as possible.

### Using Photographs to develop Communication Skills

One of the most difficult tasks for language learners of all ages is

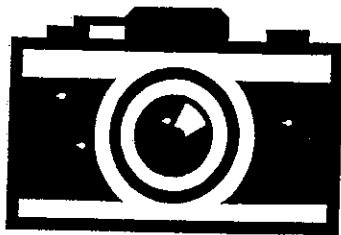
expressing their own ideas in words. As a result, children rely on things in their environment as "props" to help them get their point across. This works out well when children want to talk about things that are present (as when requesting an object by pointing to it). However, a child cannot rely on pointing when talking about objects that are not present, or events that have happened in the past.

In order not help your child learn to talk about things not immediately present in the environment, use photographs to:

1. **Talk about memorable events.** Take photographs of memorable events, such as school parties and family get-togethers. Talk about the photos with your child. Discuss the occasion – the setting, the people and emotions involved, and the sequence of events that occurred. Keep your language slightly above your child's language level, whether it is single words or longer sentences. Use words such as "yesterday," "last Halloween," and "last week." The pictures will help your child "see" what you mean.
2. **Talk about the sequence of an activity.** Take sequences of three to four photos showing a school activity or a frequent household routine. The activities could be completing a worksheet at school or having an evening meal at home. Mix the photos up and put them back into order with your child. Talk about events at both your child's language level and slightly above. Use words such as "first," "last," "next," "before," and "after."

**3. Encourage discussion of topics important to your child.** When appropriate, allow your child to take a camera to school or to a special event. Let your child take pictures around the house. Discuss your child's photos. A child with communication difficulties can learn to use a camera as a welcome helper in the communication process. By using your child's photographs, you know the child will be interested in a discussion. In talking about the photos, you can demonstrate how to put ideas and words together. Your child will then be equipped to show the pictures to someone else and to use more words the next time.

**4. Facilitate home/school interaction.** Invite your child's teacher to take photos and send them home. Encourage your child to tell you about the photos. This lets your child know that school is important to you. It also gives your child an opportunity to demonstrate newly-learned communication skills. The child will have to communicate effectively to tell you about things that you are not familiar with.



**5. Provide practice in learning language skills.** Keep in mind that, unlike an experience which occurs once, photographs can be reviewed and discussed repeatedly. This repetition offers your child the opportunity to continue to learn new language skills while reinforcing already-learned ones.

### Vocabulary

*Abstract* – Relating to ideas, symbols, and relationships rather than concrete objects.

*Classify* – To sort into groups with common characteristics.

*Symbol* – A sign that stands for or represents something else.

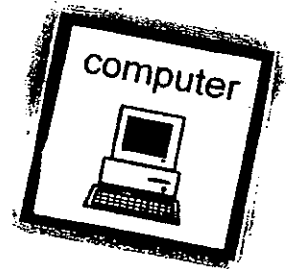
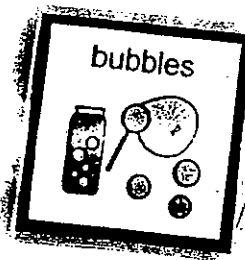
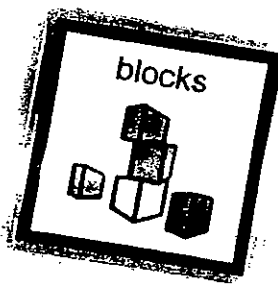
Refer to:

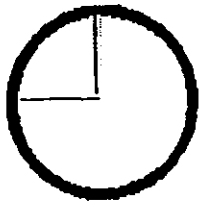
- 2.1 Language development
- 3.7 Learning About Time and Space
- 4.3 Association skills
- 5.0 Section: Home Activities for Speech and Language Development
- 7.1 Help Your Child Use Gesture to Communicate
- 8.3 Pre-Reading Skills



# Break Time

Your Choice \_\_\_\_\_

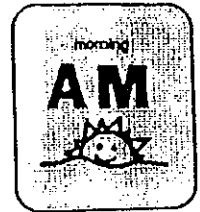




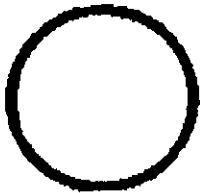
9 o'clock



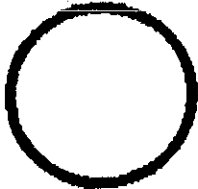
Hang up your coat and hat.



Opening exercises.



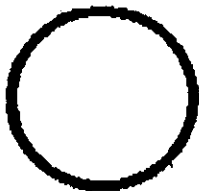
write in your journal



math

math class

$$\begin{array}{r} 2 \\ + 3 \\ \hline 5 \end{array} \quad \begin{array}{r} 3 \\ - 1 \\ \hline 2 \end{array}$$



bathroom



first bathroom

locker

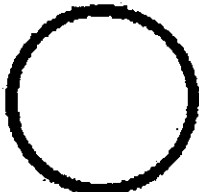


then

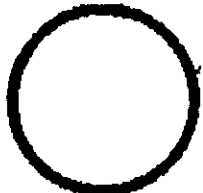
playground



recess



Writer's Workshop



pen pencil



ABC

paper

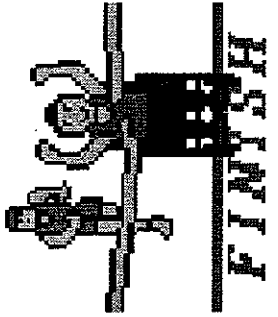


then



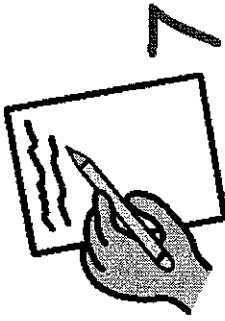
\* remember that some individuals become agitated when things are not done on time---for them, eliminate the clocks.

Yay!



8

write full  
sentence answer



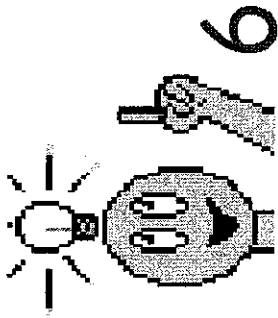
7

# Solving Algebraic Word Problems

don't forget



do the math



6

write equation

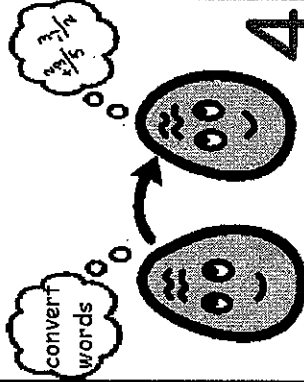


$$2x + 7 = 28$$

looking good!



look for unknown



4



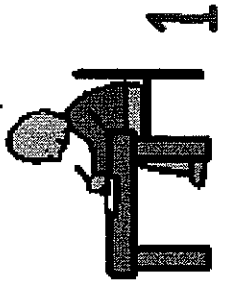
3

pick out relevant  
information



2

read question  
carefully



1

## HINTS

a number added to three means  $x + 3$

twice a number means  $2x$

less means  $-$

a number divided by three means  $x / 3$

three times a number subtracted by four

means  $3x - 4$

## Boardmaker 6™ (Win) v.6.0.1

### Creating a Social Story using the Symbolate Tool

#### Introduction

The Symbolate tool in Boardmaker is an excellent program to use for creating social stories to support students. Social stories may be used to meet a variety of student goals:

- To learn appropriate behaviour in a variety of social situations and interactions.
- To explore feelings of self and others in various situations
- To learn the steps of a skill such as food preparation.
- To prepare in advance for new experiences and situations

This tutorial assumes...

- The Boardmaker program is installed on your computer.
- You know how to create a board in Boardmaker™/Speaking Dynamically™ and add symbols and text to it

#### Learning Objectives

Completion of this tutorial will give you experience with the following:

- Creating a social story using "symbolate "
- Assigning an alternate symbol to a word
- Bringing in a new image to support the text.

#### Case Study:

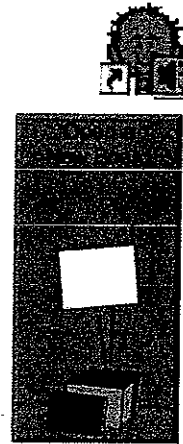
Some students particularly those with Autism Spectrum disorders have difficulty dealing with new situations or changes to their routines. They also may have difficulty understanding emotions and feelings of others and understanding the nuances of social situations. Social stories with picture support can help provide context, prepare students for changes and provide behavioural supports. Mark is a grade 4 student who wants to play with a group of boys in the playground but often pushes and interrupts their game by pushing and touching to indicate his desire to play. The boys become upset at Mark's behaviour and avoid and exclude him. We will create a social story which will help Mark review the appropriate ways that he can ask to join in the game and participate with the other boys

## Starting the Program

Begin by launching the program.

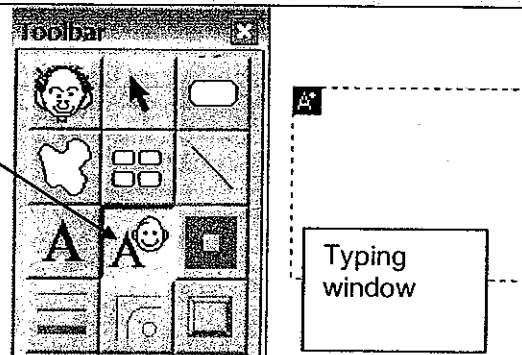
- **Launch** Boardmaker by clicking the alias on your desktop or selecting it from your “**Start – All Programs**” list.
- When the splash screen opens, click on the “**Open a New Board**” button to create a new board from scratch. A blank board will open.

You are now ready to begin working on your social story.



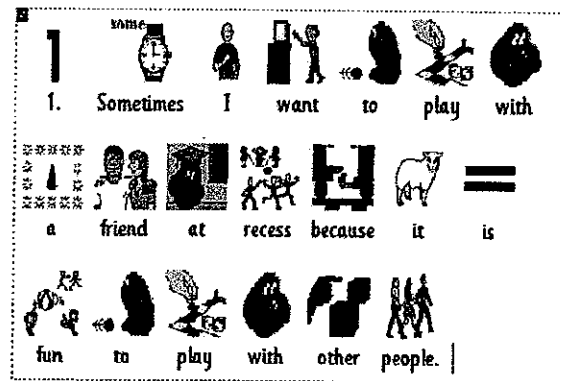
## Creating the Social Story

Begin by clicking on the symbolate tool button.  
Click in your board and a typing window will open.



Begin typing the following text:  
“Sometimes I want to play with a friend at recess because it is fun to play with other people.”

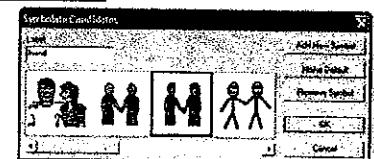
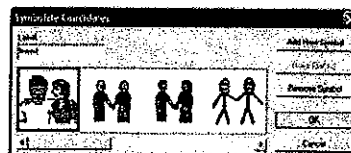
As you type you will see that symbols appear above the words.



Sometimes you may wish to change the symbol which is associated with the text.

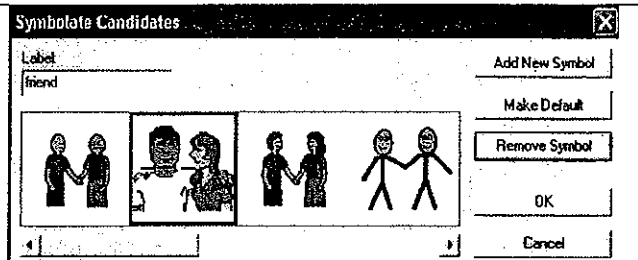
**Double-click** on the picture you wish to change and the symbolate candidates window will appear. Click on the symbol for “Friend”

**Scroll across the window** till you find the symbol that you want. Click on it and it will be sent to your document.



5

If you wish a particular symbol to come up each time that you type the word you may set it as a default by highlighting it and then using the **Make Default** button.



6

You may also choose and add a different symbol from within the boardmaker symbol library. Click on the Add new symbol button and the **Symbol Finder** window will open. Click on the desired symbol and it will appear in your scroll window of choices.

Continue typing your social story until complete. Save your social story and/or print it out for your student.

