Understanding and Making Sentences:
Picture Sentence Match and Picture Sentence Key

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ABSTRACT:

This one-hour lab will cover the use of Picture Sentence Match and Picture Sentence Key for Windows, for students with severe language difficulties or autism, who are beginning to combine Mayer-Johnson Picture Communication Symbols or sight words into sentences. We will cover sequential difficulty levels, speech options, and access modes for switch control, dwell, mouse, touch display or IntelliKeys. We will examine teacher controls, the score report, and evaluation of language comprehension.

Introduction

Students begin to learn language by attaching meaning to a specific object, then to a picture symbol and eventually to a written word. Picture Sentence Match is designed to help the student move beyond the recognition of individual symbols or words to an understanding of how words combine in a sentence to represent a new meaning. In severe language disabilities the learner will often focus on the meaning of a part of the sentence rather than the whole. Picture Sentence Match challenges the learner to make finer discriminations between pictures and sentences at each level.
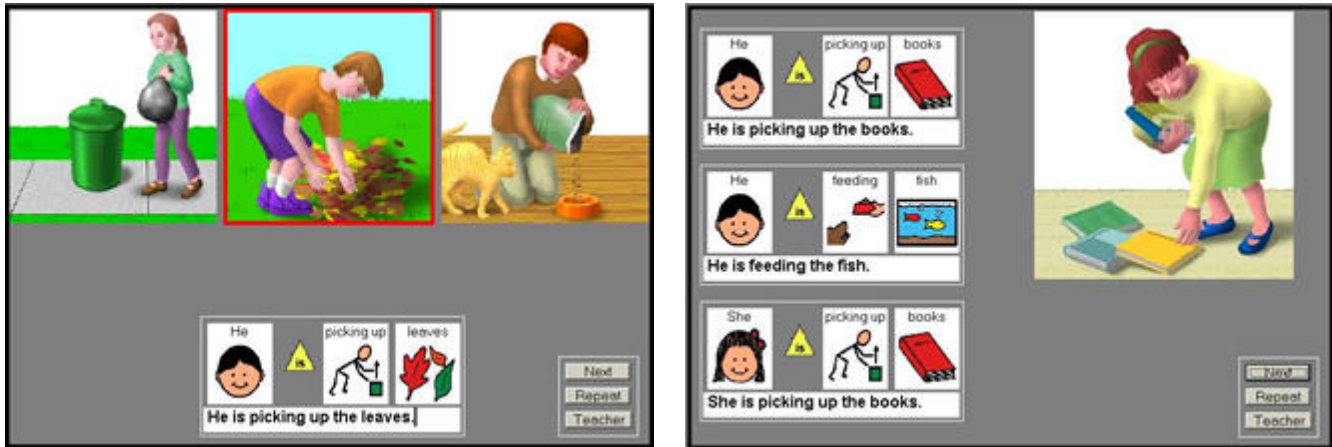
Picture Sentence Key uses the same vocabulary as Picture Sentence Match. It enables the learner to combine selected words or symbols to create a sentence and view an animated picture. Both Picture Sentence Match and Picture Sentence Key work with an errorless form of learning. The learner works until success is achieved. It is an excellent way to model and guide sentence formation.

Target Audience

Picture Sentence Match and Picture Sentence Key are designed for the learner who is beginning to combine words into sentences either verbally or as Picture Communication Symbols (tm). Students with language learning disabilities, PDD, autism, or developmental disabilities can benefit from working with Picture Sentence Match to build their receptive understanding of how words relate to one another within a sentence. These skills can then be applied to Picture Sentence Key using expressive language. Both programs have full access for students with physical disabilities. They are excellent preparation for use of a communication device. Picture Sentence Match uses visual cues and reinforcement, making it an excellent learning tool for the hearing impaired. It can also be useful for ESL students or as an inclusion activity to introduce "normal" classmates to the experience of reading with Picture Communication Symbols[tm]. With the pictures and sound turned off, students can be challenged to read for accuracy.

Picture Sentence Match

Beginning language learners may have difficulty understanding how one word relates to others in a sentence. They may even have difficulty understanding that the picture is related to the sentence. The easiest level will allow the student to become familiar with the program and still achieve a high degree of success. Prompt the student by pointing to the picture and naming the key features. Add more choices as the student learns to focus better on the cues in the picture.
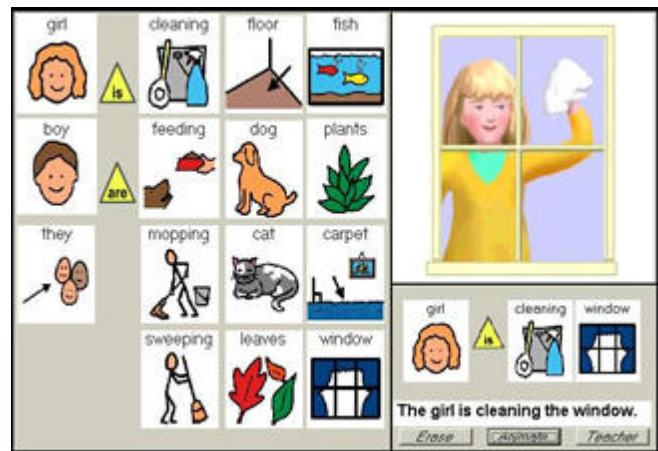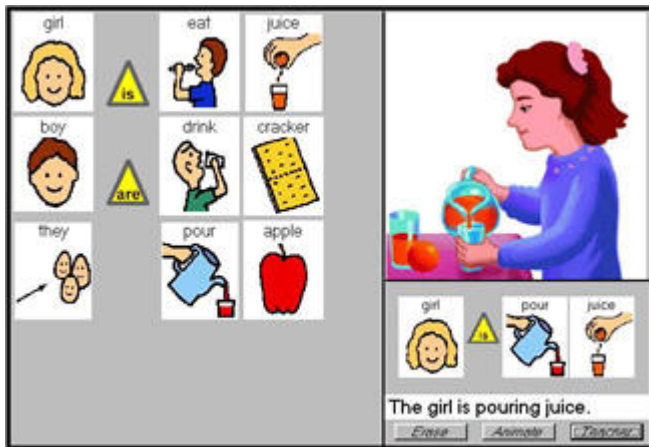

The student who has learned to look at the picture, may still have a tendency to focus on one aspect of the sentence, such as the object or action. Again, develop familiarity and success at the easy level, then move to the medium level and increase the choices as the student improves. More choices can challenge the student to discriminate both object and action at the same time.

Learning to identify pronouns can be very challenging for some students, especially those who fall within the autistic spectrum because pronouns can mean different people at different times. Often students are still challenged by pronouns even when they are able to read text at a higher grade level. When students work at the "Hard" level, they will need to recognize the appropriate pronoun and carefully consider all choices in order to select the correct answer.

Picture Sentence Key

Picture Sentence Key can help students to take the first steps towards combining words into sentences. Words (or symbols) can be selected using any mouse-type interface, touch display, single switch or IntelliKeys[tm]. The program will only allow selection of a word that makes sense in the sequence of the sentence, thus only reinforcing successful responses.

The girl is pouring juice.

The girl is cleaning the window.

Picture Sentence Key has been designed so that the task of selecting symbols can be simplified to the level of a student who is just beginning to learn sentence structure. The root word is displayed with a Mayer-Johnson Picture Communication Symbol. As the words are selected, they are pronounced and expanded into the appropriate form to make a syntactically correct sentence. (i.e., "boy is eat cracker" becomes "The boy is eating a cracker.") The student then hears and sees the syntactically correct form of the sentence repeated, with each word highlighted as it is spoken. This provides an accurate model for some of the earliest grammatical morphemes that occur in language development: the present progressive [-ing] and the noun plural [-s]. The animated feedback provides great motivation and support for the visual learner.

Physical disabilities

Scanning and dwell access are designed to accommodate the needs of learners with severe physical disabilities. In Picture Sentence Match the learner can indicate understanding of a four-part sentence by operating a single switch scan of two to four choices or by selecting directly using a head-pointing device with dwell mode. If the learner is still struggling with physical control, the instructor can ask him or her to make choices with the eyes and enter that choice as indicated. The red outline around the choice indicated gives the learner visual feedback for the choice that was selected.

Picture Sentence Key offers an excellent opportunity for beginning switch users to experience creating sentences. Students who may only be able to choose between two to four choices are enabled to build whole sentences because single switch mode scans only the column necessary for each choice and automatically advances to the next column. Inappropriate responses are ignored, allowing an immediate opportunity to make another selection. The high opportunity for success can be increased even more by selection of a symbol display with multiple objects that correspond to a given verb or verbs. This is an excellent program to present to students who are ready to move beyond cause and effect but don't yet have the control or skill to use a row-column scan or to make multiple, sequenced selections. This can help to prepare students for later use of an augmentative communication device.

Picture Sentence Match and Picture Sentence Key can both help to prepare a student for eventual use of an augmentative system. When a learner first moves into combining symbols/words in a specific sequence, he or she may experience frustration that stems from accuracy of physical control. Picture Sentence Match models the correct sentence formation with minimal requirement for physical control. Picture Sentence Key guides the student in formation of structured sentences using an errorless form of learning.

For beginning students keep the sound on for presentation and ask the students to repeat the sentence back to you. For students who can produce their own sentences, turn the sound off for presentation. Ask the students to describe the picture or read the sentence to you without hearing it first. After the correct sentence is selected, it will be voiced by the computer. Ask the students if they were correct. Then ask them to repeat the sentence again. You can use the Repeat button on the screen to hear the sentence voiced again by the computer.

Extend the vocabulary learned to real life.

Picture Sentence Key and Picture Sentence Match, volumes I and II use the sentence structure: WHO IS/ARE DOING WHAT. We encourage the instructor to extend the activities to describe what they and others are doing. For example: "What are we doing?" "We are picking up the toys." This same activity can be extended to describing photographs of the student and others in everyday activities. It will prepare a student to move into use of his or her own communication system or to use spoken sentences in a more appropriate manner.

Use with IntelliKeys[tm]

A sequence of sample boards and displays is provided in the IntelliKeys mode of Picture Sentence Key, based on IntelliTools keyguards of 12, 15, and 20 holes. The boards for the IntelliKeys can be printed using the Overlay Print utility (included) or Overlay Maker from IntelliTools. It is also possible to modify or create custom boards using Overlay Maker.

References:

Picture Sentence Match and Picture Sentence Key for Windows, Volumes I and II were developed by Computerade Products. They are available from:

Mayer-Johnson, Inc.
P. O. Box 1579
Solana Beach, CA 92075
Phone: 1-800-588-4548
Website: www.mayer-johnson.com

Picture Communication Symbols, Boardmaker, and Picture Sentence Key for Macintosh are also products of Mayer-Johnson, Inc.

IntelliKeys and Overlay Maker are products of:
Intellitools, Inc.
1720 Corporate Circle
Petaluma, CA 94954-6924
Phone: 1-800-899-6687
Website: www.intellitools.com