

AT Tech Tip:

Communication Strategies For: Using an Etran with Color Encoded Eye Gaze



InterACT Team

The Interdisciplinary Augmentative Communication & Technology Team



When a student can use a large number of symbols for eye gaze-based communication, it is time to introduce “encoded eye gaze”. Using a location-color encoding method of communication, the Etran can be expanded from 8 to 32+ symbols. Symbols are grouped together and color encoded. The student eye gazes first to the general location on the Etran and then eye gazes to the color of the selected symbol.

| Communication Partner | Student Response |
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| <ul style="list-style-type: none"> • Position yourself facing the student • Hold or position the Etran with PCS or word choices facing the student at his/her eye level • Establish joint attention with the student • Review the symbol locations on the Etran if the student is unfamiliar with the choices • Look directly at the student as you present the question (do not inadvertently look at the preferred symbol) • Carefully watch the student’s head movements and eye movements to determine their selection • Once the student has indicated the location of the symbol, confirm his/her selection. (i.e. “ You’re telling me your choice is in this section.”) • Next, tell the student to go ahead and find the color • Once the student has indicated the border color, confirm the exact symbol selected. (i.e. “You’re telling me it is this red one | <ul style="list-style-type: none"> • The student locates and fixes his/her eye gaze on the chosen group of symbols for about 3 seconds and then looks back at communication partner for confirmation • The student then looks at a color symbol for 3 seconds to indicate the color of the border outlining the selected symbol and then looks back at communication partner for confirmation. |

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| which means you are thirsty.) | |
| Examples: “What letter does the word “snake” begin with? | The student locates the group of letters that contains “S”. Then he/she gets confirmation from the communication partner that they know which section was selected. Finally, the student looks at the blue symbol since the “S” is outlined in blue. |
| “How are you feeling right now?” | The student locates the group of symbols which contains the word “sleepy”. He/she receives confirmation of the selection and then looks at the yellow symbol since the picture of “sleepy” is outlined in yellow. |
| Pros: <ul style="list-style-type: none">• This is an effective method for communication when a larger range of symbols need to be available for a student who uses eye gaze• Vocabulary can continually be modified and re-arranged | Cons: <ul style="list-style-type: none">• The student needs to be able to visually locate symbols from a large field• The student must understand the two-step eye-gaze process.• The student must be provided regular opportunities to use the overlays in order to recall the symbol locations quickly |