

# NCSC Communication Tool Kit

## Module 5

### Teaching Communication

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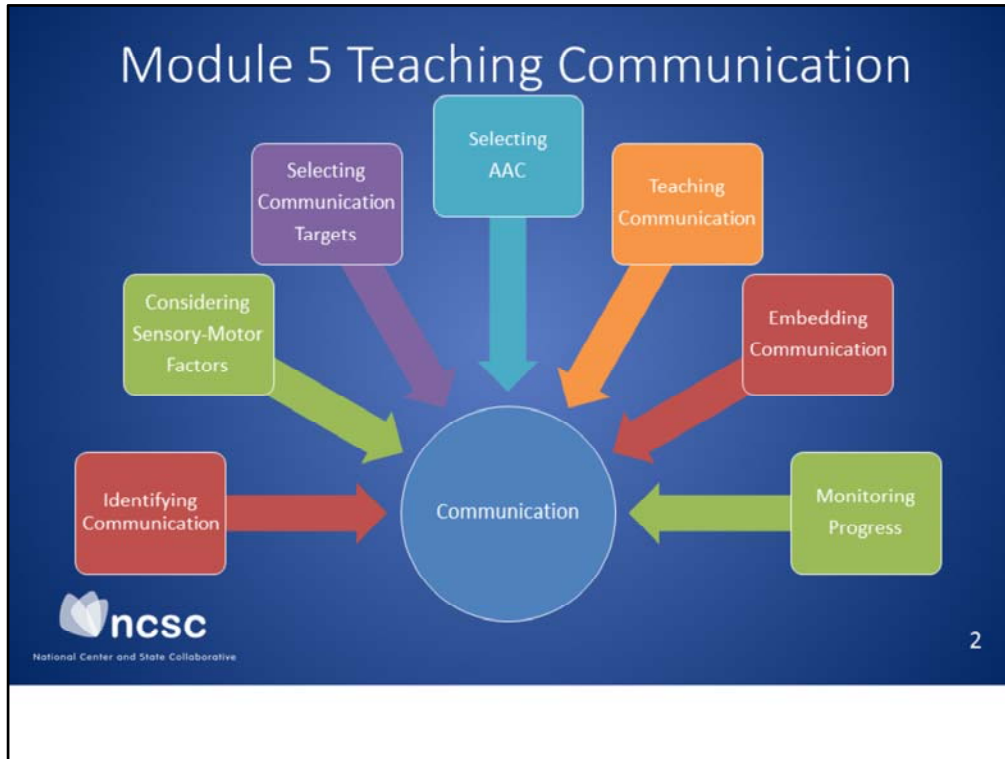
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Welcome to Module 5: Teaching Communication. In this module, we highlight those strategies that ensure that students learn new communication skills-



So far this series of communication modules has highlighted:

Identifying Communication  
Considering Sensory and Motor Factors  
Selecting Communication Targets and  
the Selection of AAC

This module is about teaching communication. We will highlight the evidence based practices for teaching students with moderate to severe disabilities (McDonnell , 1998); as foundation for thinking about how to teach student communication skills.



Promoting Achievement for students with significant cognitive disabilities requires the utilization of six evidence-based practices, as described by McDonnell.

These practices include :

- Ensuring high levels of student engagement or making sure students are interested in what they are learning and want to talk about it.
- Providing frequent opportunities for students to communicate.
- Using systematic procedures to teach communication. This has the advantage of allowing the team to problem solve when the student experiences difficulties.
- Facilitating success and making sure the student can demonstrate the skill by removing barriers and trouble shooting difficult steps or task sequences.
- Providing immediate and specific feedback about student response..
- Monitoring progress through the ongoing analysis of data. This is as essential as teaching itself for promoting achievement.



Establishing a high level of engagement for students with significant disabilities often requires a direct connection to their own experiences. In fact, we all learn better if there is a connection to something we already know and understand. In this section we highlight the importance of determining a student’s preferences - things that they respond or alert when presented or available – by interviewing the family and the importance of authentic communication or extending the communicative exchange into a conversation.



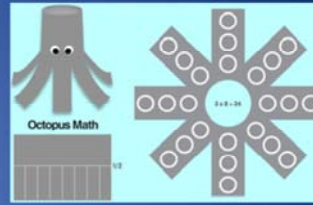
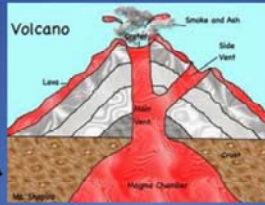
To encourage high levels of engagement we must determine preferences or highly motivating activities, and as much as possible age appropriate activities that might be engaging so as to keep the student interested, as well as provide conversation topics. We can do this by using family interviews to determine student preferences, special people, or possible conversation topics. These are things that the student's behavior – alert, oriented indicate interest. A student whose most favorite thing is mom's voice might engage with stories read aloud in mom's voice or books/literature about mom. Finding out what is highly motivating for a student provided important leverage for communication. Similarly, student dislikes are also important.

Another way to encourage high levels of engagement is to convene a group of same-age peers to create an inventory of age-appropriate conversation topics to determine what similarly aged students enjoy. For example, what do nine year old boys/girls talk about – movies, games, music... What do middle school and high school students talk about? The student might not be interested in those things right now, but sometimes we can find age appropriate activities that are topographically similar to the student's preferred activity. In another example, if the student likes a preschool age cartoon song... we look for age appropriate music that is light and happy. Peer interviews are also important to help determine age-appropriate topics that will promote authentic conversations.

Finally, peers, family, and students themselves can help us identify which words, phrases, messages need to go on the devices the student uses. Peers can even help record those messages so that the voice output is age appropriate. Even pre-school students record

messages on single button switch devices.

# Engaging Academic Content



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In addition to social topics, peer inventories can help identify important school curriculum topics. Engaging a student by finding out what kids of the same age/ are talking about as well as sampling the curriculum, will help the team leverage the student's interest and increase opportunities for communication.

While curriculum can be challenging in terms of student engagement, interesting activities that are connected to something the student knows and understands can be used to facilitate the student's connection to the curriculum. For example, if they have a pet at home... the story about a pet hamster becomes more engaging. Science experiments are always good for engagement but even then.... a connection to something everyday will increase the engagement level – a science experiment we can eat, a robotic car that uses a series electrical circuits are two examples. The important thing to increase engagement is to find a way to connect the student to the content.

For more examples of curriculum connections see the ncsc wiki.

# Authentic Communication

What did you think of the game last night?

We won, it was awesome!

I like I don't like my team the other team I

UK WKU Warren County High School won lost

awesome game terrible game the referees fair messed up

Did you like the game? What team do you like? happy sad bored

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Authentic communication takes the form of a conversation. Pictures, objects or topic boards can be used to start or continue the conversation. This board stimulates conversation about a topic.. In this case sports either high school or local college teams. Authentic communication provides opportunities for more than one exchange.

For example, the person asking the question highlighted in red points to the symbol on the board as s/he speaks “Did you like the game”; The responder (green) points to “Won” and “Awesome game”. The conversation continues with “My team lost” I’m Sad

It is important to note that the intention of talk boards such as these is that it is a true conversation and not a “find the UK symbol” type of task.



## Quiz Question 1

We can find out what motivates a student by doing which of the following:

- A) Conducting a family interview
- B) Conducting peer interviews
- C) Conducting a curriculum inventory
- D) All of the above



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Clear

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## Frequent Opportunities to Respond

- High levels of Engagement
- Frequent Opportunities to Respond
- Systematic Presentation
- Success
- Immediate Specific Feedback
- Analysis of Data



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McDonnell, 1998

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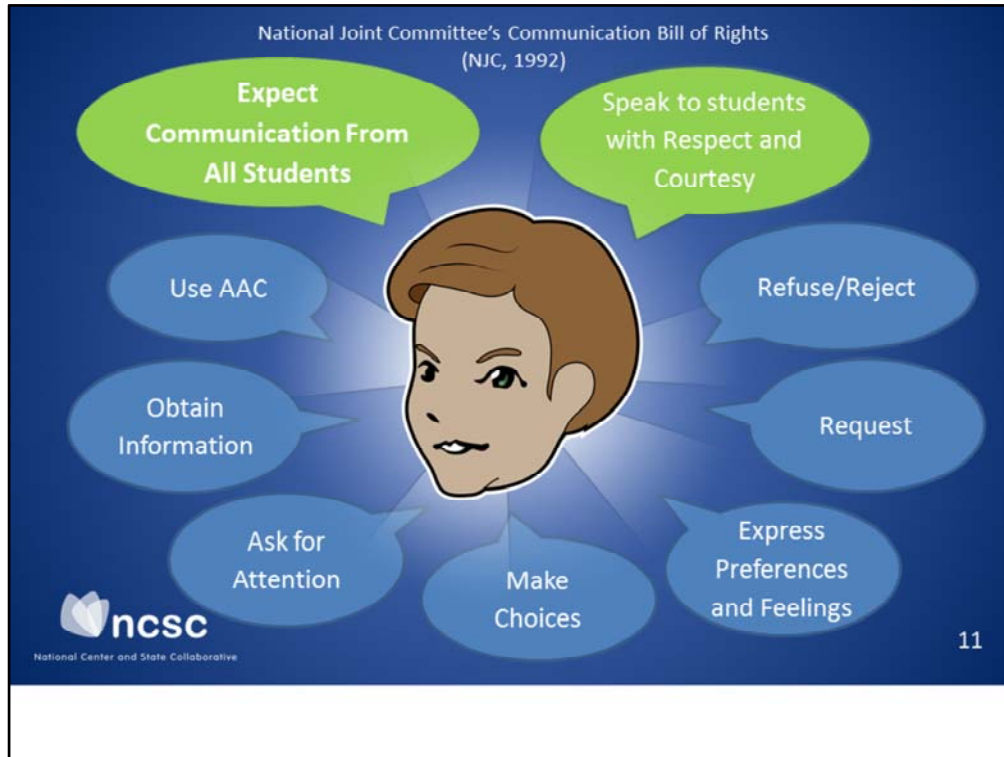
In the next section, we discuss the importance of frequent opportunities to respond, and creating opportunities for communicating.



Topics under frequent opportunities to respond include Expecting Communication from all students and orienting all staff and students to use AAC when the student communicates. We assume all students communicate and have something to say. If we build our instruction on this assumption, then we will be looking for a variety of communication forms. Identifying the forms is essential to building skills.

Next we use a matrix to help us embed basic communication targets – request, initiate, refuse into daily classroom routines and target opportunities for practice using a variety of forms that are appropriate for the situation.. For example, during lunch, the student may use a picture to request more milk, but in the class about science, he uses a device with more communication options on it.

Finally in this section we will discuss environmental manipulation to encourage communication ...



(Animate each of these as they come into the slide and are described”

- Speak to students with respect and courtesy
- Students need a way to refuse or reject even if the refusal can't be honored.
- Students need a way to request persons, objects, assistance
- Students need a way to express preferences and feelings
- Students need a way to make choices
- Students need a way to seek attention or ask for assistance
- Students need a way to obtain information – What's next on the schedule? When's lunch? When can I go home?
- Students need augmentative and alternative (AAC) communication so that their message is understood.
- We must EXPECT communication from All students and therefore we must teach them the correct way to do these things whether they use AAC, signs, symbols, gestures, or facial expressions.

These communication intents can be found in the National Joint Committee's Communication Bill of Rights... These can be posted in the classroom as a way to orient staff and students that communication is important . Embedding these 'rights' may be a way to remind staff to create opportunities for communication. At a minimum, students who do not use oral speech, need a way to seek or ask for attention. This can take the form of a single switch with a recorded message – “Help please” . Students need communication forms (AAC, facial expressions, body language, pictures etc.) to

request/refuse, to obtain information, to seek attention, to choose from options, as well as express preferences and feeling. Using these ideas as classroom expectations could increase communication simply by attending to the communication needs in a systematic way.

## Determine opportunities to practice

Communication Matrix - Determining Opportunities to Practice									
Targets	Opportunities								Total
	Meeting	Language Arts	Snack	Math	Lunch	Music	Science	Social studies	
Ask a question	X	X	X	X	X	X	X	X	8
Request	X	X	X	X	X	X	X	X	8
Initiate	X	X	X	X	X	X	X	X	8
Refuse	X	X	X	X	X	X	X	X	8
Comment	X	X	X	X	X	X	X	X	8
Select a choice	X	X	X	X	X	X	X	X	8



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Using a communication target activity matrix can assist the team in determining which targets can be taught and which mode will be selected based on the type of target. For example, at lunch time – the student may use pictures to request more of something or indicate that the next bite should be \_\_\_\_\_; asking a question during math class might require a different communicative form... pictures but a more complex array. The idea here is to determine if indeed there are enough opportunities to practice the skill. It also cues the teacher/SLP to think about how the student will communicate best during which activities – collect data... or how to phase in new messages.

## Create opportunities – Environmental Manipulation



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Creating opportunities may mean putting preferred items out of reach, ‘forgetting’ to provide a preferred item or an item needed to accomplish a task, have a turn, or inserting a step that requires the student to communicate – such as a switch message on the door that says – May I take a walk? . In this video clip, a voice output switch is placed next to the door. Alex wants to go for a walk. His teacher directs him to use the switch by the door to ask for a walk. The teacher has manipulated the environment - She identified a highly preferred activity for this student, manipulates the environment by placing a switch close to the access point. She acknowledges his use of other forms to request to go for a walk and directs him to use the switch to make the request. Finally, she provides detailed feedback and honors Alex’s request to go for a walk.

## Create opportunities – Environmental Manipulation



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Teacher: Look Alex, buddy, what do you want to do?

Teacher: You can choose a toy.

Teacher: If you want to do that you need to come ask.

Teacher: We can do it but you have to ask.

Teacher: I'm not pushing you in it until you ask.

Teacher: Over there.

Teacher: Come on.

Alex: (walks over and presses button) "I want to go for a walk".

Teacher: Good Job! Okay Alex you can go for it.

Teacher: You have to go get in the chair now.



## Quiz Question 2

To increase communication output from any student, we must

- A) Create opportunities to respond
- B) Manipulate the environment
- C) Expect Communication
- D) All of the above



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# Systematic Presentation

- High levels of Engagement
- Frequent Opportunities to Respond
- Systematic Presentation
- Success
- Immediate Specific Feedback
- Analysis of Data

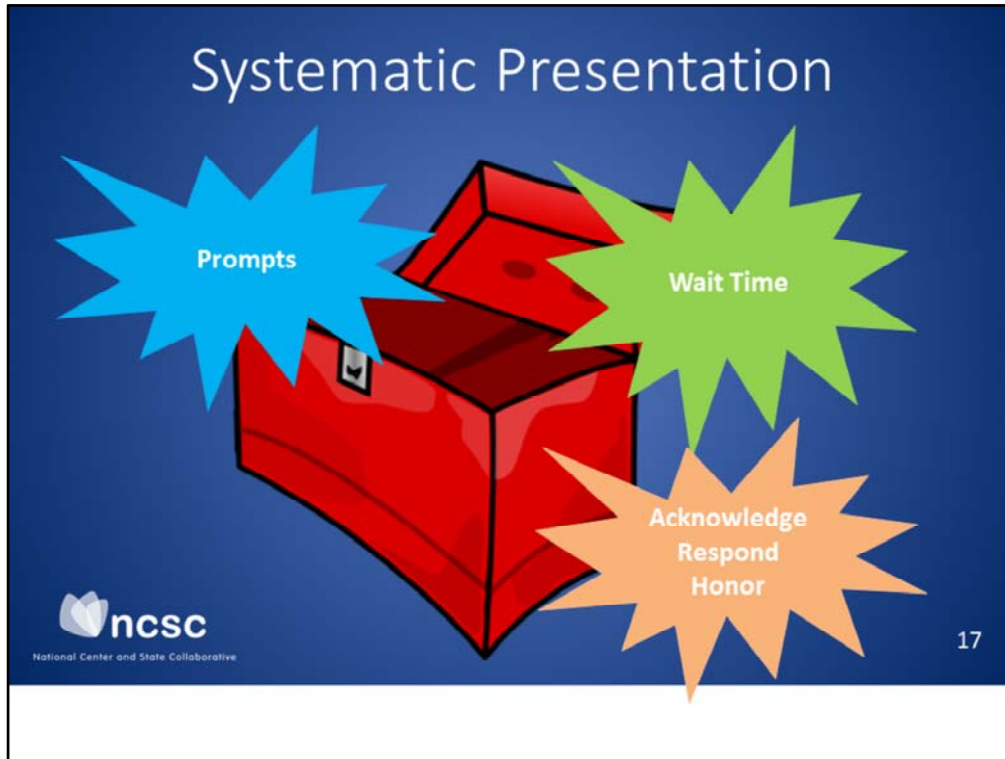
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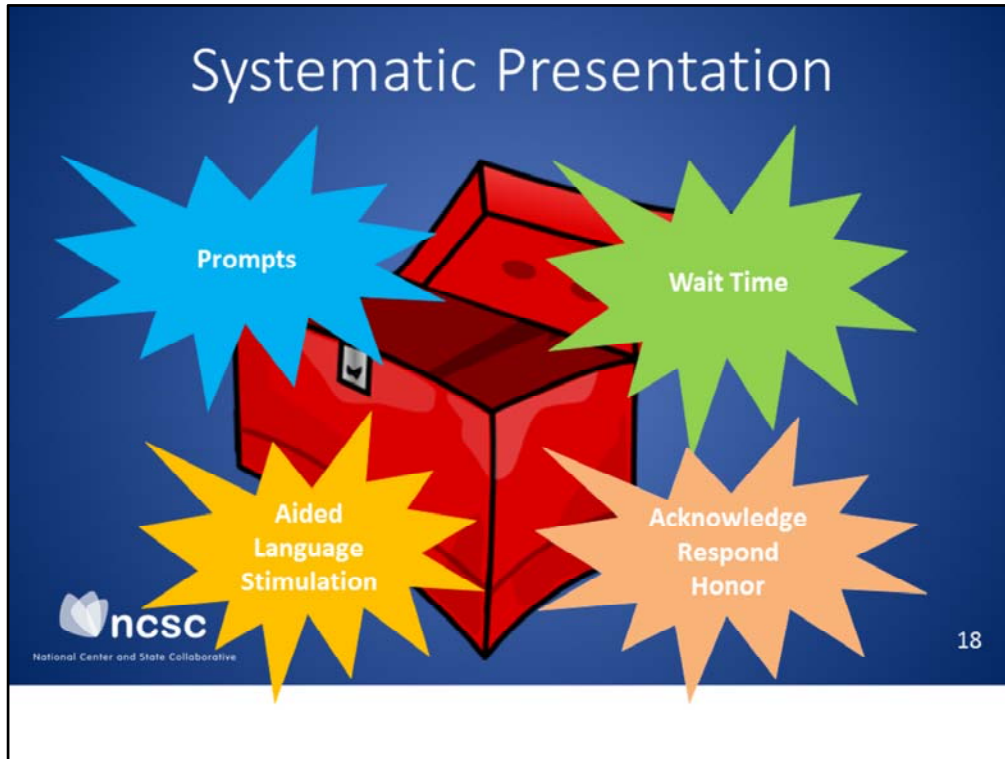
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The third evidence based practice to increase acquisition of targets is systematic presentation. The important thing is that EVERYONE uses the same procedures, under precise conditions, and provides the least intrusive prompt needed by the student can demonstrate. Using these procedures helps the student understand and respond correctly. It also involves use of procedures like simultaneous prompting – where the teacher models the correct response for the student before the student has a chance to make an error, until the student begins to imitate independently.

Aided Language Stimulation is a systematic procedure often used by teachers to MODEL the use of pictures, or voice output devices by actually using the device while communicating



Four items in systematic presentation that are important for teaching communication include prompting in the form of modeling appropriate communication, providing ample wait time for the student to provide a response, and acknowledge, respond-as-if meaningful, and honor as appropriate. For example: Oh, I understand, you said, “more please”. That is acknowledging and responding as if meaningful. “I have some more. Here you go.” That is honoring. Of course, sometimes there is no more. When that happens, one might say “Oh you want more,” and then show there is no more, and say “I’m sorry bag is empty. No more Cheetos.”



The last systematic strategy for teaching communication to be discussed is Aided Language Stimulation. When using this strategy the communication partner uses the student's communication system while speaking to the student. This provides a model for the student on how to use the system, demonstrates that the system is an acceptable form of communication for anyone, and facilitates authentic communication as shown earlier in this module.



The first and most important three steps to improving communication is to acknowledge any behavior as communicative, "Oh that smile means you like it"... respond as if the behavior was meaningful.. "would you like MORE?", WAIT but tell the person what to do ... use that smile to tell me more or...here is a card that has a picture of more... model how to say more... smile, sign, card.... Honor the request for more... "oh can I help you with that" If the behavior is 'inappropriate' sitting on the floor – oh... you are sitting on the floor, sitting on the floor means you are tired and need to rest, lets find a chair to rest". When you are ready to go... use your \_\_\_\_\_ to tell me.

## Acknowledge and Respond



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In this video clip, Simon's teacher acknowledges and responds as if meaningful, and honors a request for more "messy". This teacher may not really be sure that Simon is asking for "more messy" she is 'reading' his actions, affect and responding as if he does indeed want "more messy", and honoring by providing more 'messy' .

## Acknowledge and Respond



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Teacher 2: You want to wash off or you want more?

Teacher 2: You like it don't ya?

Teacher 1: ooh say I think I want some more.

Teacher 2: Want some more?

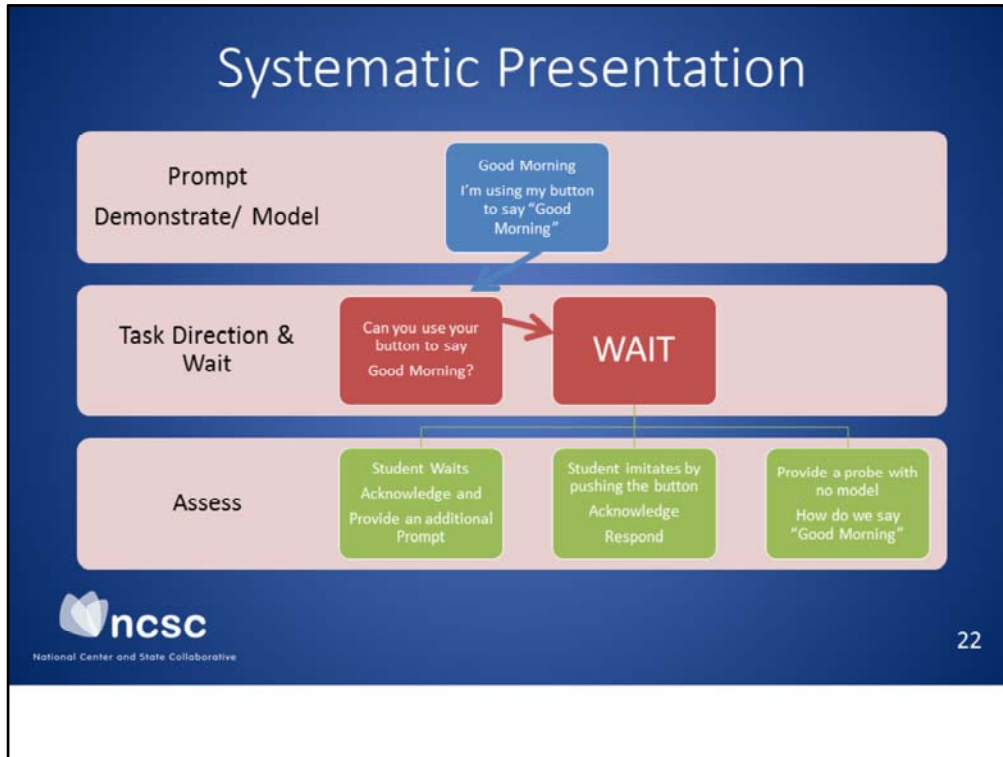
Teacher 1: Hold your hand out.

Teacher 2: I'm smiling

Teacher 1: ewwwwwwww

Teacher 1: You got me.

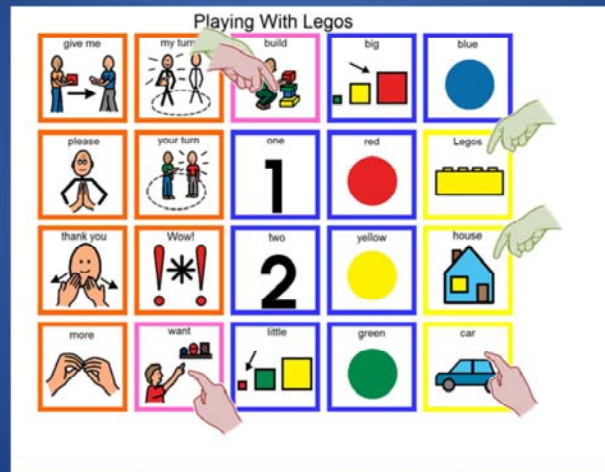
Teacher 2: I like my hands to be messy.



Systematic presentation is an evidence based practice in teaching students with moderate to severe disabilities. We start with identifying a prompt that the student understands and can perform. In this case, the teacher uses a single switch, voice output device to say “Good Morning, I’m using my button to use my say “Good Morning”. The teacher provides a task direction “Can you use your button to say “Good Morning” and waits for the student to respond. If the student responds – teacher acknowledges “yes, you said good morning” ; OR if the student continues to wait – the teacher models again with “his/her” switch and points to the student’s switch and reminds them – Your switch says Good Morning – can you show me? Prompting can continue to a physical prompt if needed. After a few correct independent, responses – the teacher may say – “Good Morning \_\_\_\_\_” to insure that the response is indeed under the control. This systematic presentation could be flipped – meaning the Task Direction could be provided first and then the prompt/demonstration of the skill.



# Aided Language Stimulation



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Another teaching strategy for building communication is Aided Language Stimulation. Just like authentic communication, Aided Language Stimulation requires the communication partner (teacher, parent or peer ) to use the device – in this slide, the partner will point to the pictures as s/he asks a question or makes a comment. It might go something like this.

“ Do you want to build a house with Legos?”

“ I want to build a car.”

## Quiz Question 3

Aided language stimulation helps the student by

- A) Providing extensive modeling
- B) Using the same communication system
- C) A and B
- D) None of the above

# Success

- High levels of Engagement
- Frequent Opportunities to Respond
- Systematic Presentation
- Success
- Immediate Specific Feedback
- Analysis of Data



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McDonnell, 1998

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The next evidence based practice is ensuring Success!



Ensuring communication success involves 1) ensuring that communicating is easy for the student – 2) acknowledging and responding to a variety of communication forms; 3) modeling the use of new communication forms – AAC, signs, words, pictures exchanges; and 4) ensuring accessibility.

The infographic features a dark blue background with a white border. At the top, a light blue rounded rectangle contains the title "Make it Easy!". Below this, four rows of content are arranged vertically. Each row consists of a small square image on the left and a colored rounded rectangle on the right. The first row has a photo of a young boy and a red box with the text "Consider Hearing Motor and Vision". The second row has a photo of a young boy and a green box with "Accept Many Forms of Communication". The third row has a photo of a young boy and a purple box with "Make AAC Cool". The fourth row has a photo of a young girl and a light blue box with "Keep AAC Accessible". In the bottom left corner, the logo for "nscs National Center and State Collaborative" is displayed. In the bottom right corner, the number "27" is shown.

Make it easy. Using a device is hard work. Troubleshoot hearing, vision and motor challenges.

Since a device is hard, use it for really important messages, and then accept other communication forms, such as eye gaze or facial expressions to support the message as well. Acknowledge all communication forms and remember that the strategies of acknowledging, responding as if meaningful, and honoring are all ways to shape communication forms.

Make it OK and even “cool” to use a device by USING the device yourself to model communication. Remember, students must hear words used thousands of times before they use them competently. Strategies such as Aided Language Stimulation show the student how to use AAC and makes it “cool” when peers and teachers can use it as well.

As we stated earlier, using a device is hard, so, make it accessible. If a student has difficulty looking left to right, put AAC options in a vertical column for a student to more easily view.

## Consider Hearing Motor and Vision



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In this clip, the teacher is providing a variety of input to accommodate vision and hearing challenges. She is using words, touch, smell to engage the student in the lesson.

# Consider Hearing Motor and Vision



Teacher: ...and we are going to be reading “Oh My Apple Pie”.

Teacher: Okay Lorell, are you ready? It’s time for reading.

Teacher: Oh My Apple Pie

Teacher: We’re going to read “Oh My Apple Pie”

Lorell activates his switch and says: “Oh my apple pie”

Teacher: Good job Lorell, you’re right. That’s what we are getting ready to read.

Teacher: Big, red apples are delicious to eat. Lisa’s grandma uses apples to make a special treat.

Teacher: Can you look at the apple, Lorell?

Teacher: Good looking, Lorell. Good job.

Lorell activates his switch and says: “Oh my apple pie”

Teacher: You’re right. It’s your turn to read. Will you read it again for me?

Teacher: What’s next?

Lorell activates his switch and says: “Oh my apple pie”

Teacher: Awesome job. Nice reading.

Lorell activates his switch and says: “Oh my apple pie”

Teacher: She peels, she chops, and finally in the oven it goes...

Teacher: Soon the scent of apple pie will fill Lisa’s nose.

Lorell activates his switch and says: “Oh my apple pie”

Teacher: Feel the cold, sliced apples like grandma cuts up? They’re wet aren’t they?

Teacher: Smell, you smell the cinnamon?

Lorell: Aaah.

Teacher: Yeah!

Teacher: Aaay.

Teacher: Hey, it's your turn to read.

Lorell activates his switch and says: "Oh my apple pie"

Teacher: Nice reading, Lorell.



## Accept Many Forms of Communication



In this clip, Steve uses LOTS of communication to request the snack.

## Accept Many Forms of Communication



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Teacher 2: What do you want Steven?  
Steven: (Grunt)  
Teacher 2: What do you want Steven?  
Teacher 2: Do you want a cheeto?  
Teacher 2: Show me more (signs "more")  
Steven: (signs "more")  
Teacher 2: Thank you Steven  
Teacher 2: Good job

# Make AAC Cool



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When peers use the device it becomes "cool"...

## Make AAC Cool



Gage (using his device) : Want a joke?



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Gage (using his device): Want a joke?

Teacher: "Oh. Knock knock." "What do you say when you say a knock knock joke?"

Gage and a couple of classmates: "Who's there?"

Gage: "Why are you crying?"

Children laughing.

Teacher: "That's funny."

Gage: "Aren't you glad I didn't say apple?"

## Keep AAC Accessible



In this clip, notice how the teacher modifies the display after she realizes that the student wants a bite of yogurt but she can't reach the switch representation for bite.

## Keep AAC Accessible



Teacher: "What do you want?"



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Teacher: What do you want?

Teacher: Can you tell me what you want?

Paige: (Moans)

Teacher: We switched the picture of the marker to the left, the drink in the middle, and the picture of the spoon on the right.

Teacher: Okay Paige, tell me what you want. Do you want a bite, drink?

Teacher: Do you want a bite, a drink or a marker?

Paige pressed her switch and said: "I want a bite, please"

Teacher: You told me you wanted a bite. Here you go

## Quiz Question 4

True/False

We can increase student success in communication by making it easy.

- A) True
- B) False




Submit

Clear

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# Immediate and Specific Feedback

- High levels of Engagement
- Frequent Opportunities to Respond
- Systematic Presentation
- Success
- Immediate Specific Feedback
- Analysis of Data

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McDonnell, 1998

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The next topic is immediate and specific feedback.

Acknowledge attempts with specific verbal praise, even if they aren't perfect and shape them toward a more refined production. "Oh, Susan ,you used your device to tell me what you want. Great job! That's really hard work."

If the communication is a request, try to honor it if at all possible. "Oh, you told me you want my help. Ok, I can help you".

If you can't honor a request, then at least acknowledge it. "Oh you told me you wanted my help. I understand you. I can help you with that in a few minutes."



## Specific Feedback.



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Remember Alex, we saw him earlier when we were discussing manipulating the environment. This time listen for how the teacher provides specific feedback on Alex' communication attempts in order to shape a more sophisticated form of requesting.

## Specific Feedback.



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Teacher: Look Alex, buddy, what do you want to do?

Teacher: You can choose a toy.

Teacher: If you want to do that you need to come ask.

Teacher: We can do it but you have to ask.

Teacher: I'm not pushing you in it until you ask.

Teacher: Over there.

Teacher: Come on.

Alex: (walks over and presses button) "I want to go for a walk".

Teacher: Good Job! Okay Alex you can go for it.

Teacher: You have to go get in the chair now.

## Quiz Question 5

True/False

Telling a student they did a 'good job' is sufficient for reinforcing new behavior.

- A) True
- B) False




Submit

Clear

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# Analysis of Data

- High levels of Engagement
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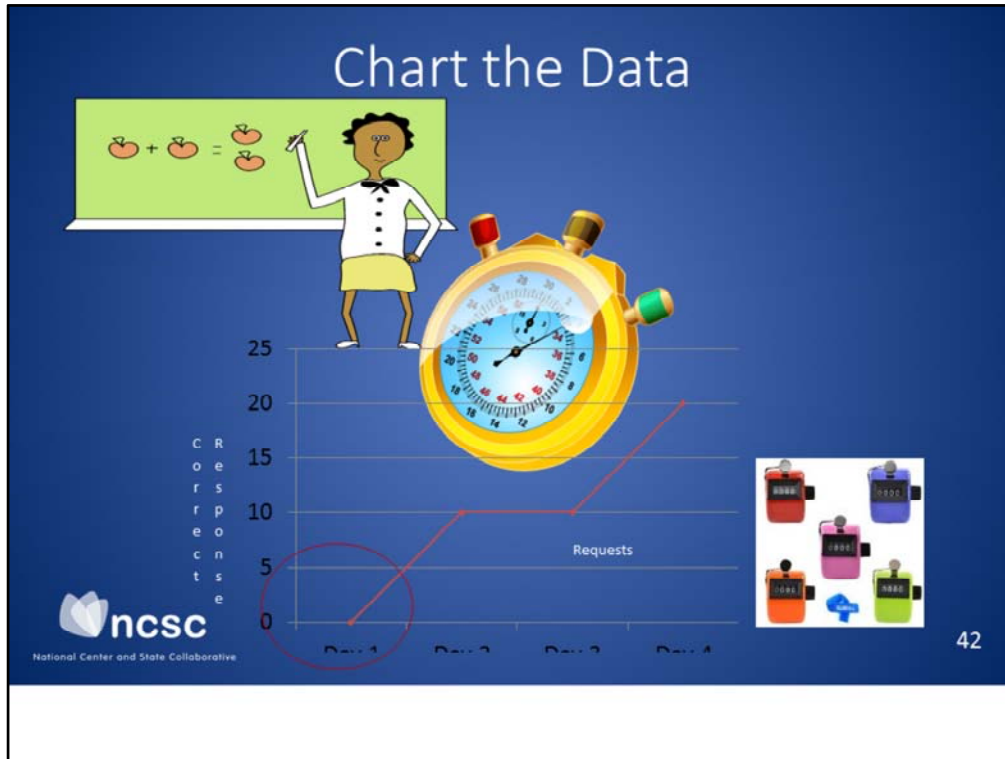
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McDonnell, 1998

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The final section in this teaching module is the use and analysis of data...

Charting student performance data will help the team make important decisions about student progress and identify sources of problems.



Start simple and use a counter to tally the number of communications that a particular student demonstrates in a defined time period. How many communication events occurred in the first thirty minutes? Charting the data collected on a specific target and then conducting an analysis will help the team determine if the strategy is working. It may also help point out that a student is already demonstrating a skill sufficiently. We will discuss collecting and managing data in module 7 in the Communication Tool kit series.

# Teaching Communication requires

- High levels of Engagement
- Frequent Opportunities to Respond
- Systematic Presentation
- Success
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McDonnell, 1998

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Promoting Achievement for students with significant cognitive disabilities requires the consideration of six evidence-based practices.

These practices include :

Ensuring high levels of student engagement or making sure students are interested in what they are learning and want to talk about it.

Frequent opportunities for students to communicate

Communication skills are taught using systematic procedures so that the team can problem solve when the student experiences difficulties.

Success is about making sure the student can demonstrate the skill by removing barriers and trouble shooting difficult steps or task sequences.

Students need immediate and specific feedback about their response.. “Great job, you told me \_\_\_\_\_”... or “uh oh, you forgot to”... in either case the feedback is not just “great job” but very specific in the feedback.

Finally, the ongoing analysis of student performance data. Monitoring progress through the ongoing analysis of data is as essential as teaching itself for promoting achievement.

## References

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Here are some references used to create this module. Thank you!



This module has been about teaching communication using a total communication approach. The next module is about embedding communication into academic content to promote language development.