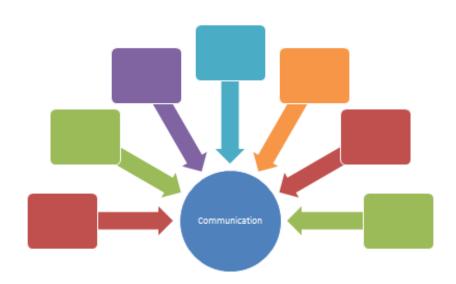
NCSC Communication Tool Kit Workbook



Jacqueline F. Kearns, Ed.D.
Jane O'Regan Kleinert, Ph.D., CCC-SLP
Judith L. Page, Ph.D., CCC-SLP
Lou Ann Land, M.S.Ed.

Every child should know that we see them. We hear them. They matter to us.

Produced by:

University of Kentucky, in partnership with the National Center State Collaborative (NCSC)
The contents of this product were developed under a grant from the Department of Education
(PR/Award #:H373X100002, Project Officer, Susan.Weigert@Ed.gov). However, the contents
do not necessarily represent the policy of the Department of Education and no assumption of
endorsement by the Federal government should be made.



NCSC Communication Tool Kit Workbook

Introduction

The Communication Toolkit is a series of modules which make up the third course in the NCSC Professional Development Module series. This course consists of eight modules. To aid with accessibility a pdf version of each module is available. In addition, the notes pane in presenter will display the narration in text.

Purpose of the Workbook

The workbook is designed to be used as a note-taking guide when viewing the modules. The workbook may be printed in sections, by module, or as a whole document. The table of contents specifies the page numbers that should be printed for each module. If printing in black and white, it is recommended that the gray scale setting be used for best print quality.

The workbook contains references and a glossary. It also contains handouts for use while viewing the modules or for future implementation of communication strategies.

Tips for Viewing the Modules

The communication modules are posted in Adobe Presenter format.

Instructions for viewing Adobe Presenter files are available on the NCSC wiki at https://wiki.ncscpartners.org/index.php/Adobe Presenter

The Communication Tool Kit modules contain quiz questions:

- Quizzes may be in one of the following formats:
 - Multiple Choice
 - o True/False
 - o Fill in the Blank
- To answer a quiz question, you might:
 - Click the circle next to your answer choice(s) and hit submit.
 - Type your answer in the blank(s) and click submit.

Table of Contents

Call to Action	4-5
Module 1	6-8
Module 2	9-11
Module 3	12-14
Module 4	15-18
Module 5	19-23
Module 6	24-26
Module 7	27-28
References and Resources	30-32
Glossary	33-34
Handouts	35-41
Acknowledgements	42



Call to Action

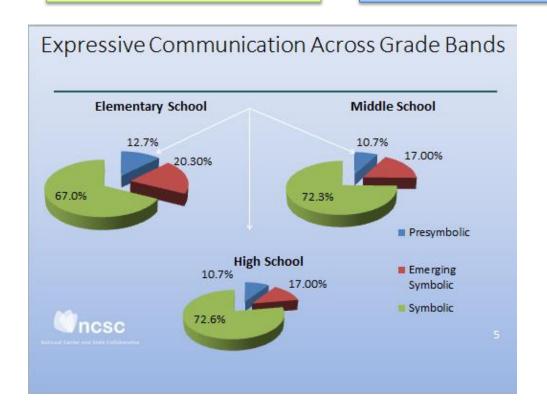


Expressive Communication Definition:

What a student can "say", "sign", or somehow indicate a message or intent.

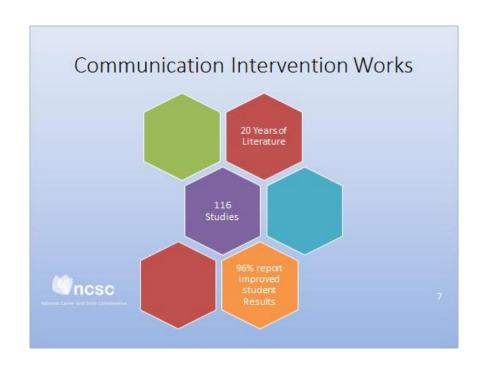
Receptive Communication Definition:

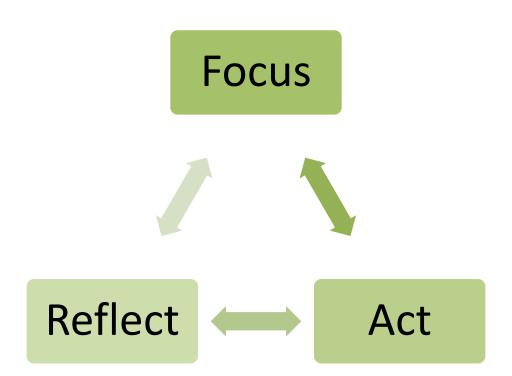
What the student understands.



Data on communication status indicates little or no change in percent of student symbolic communication from 3rd grade to high school.







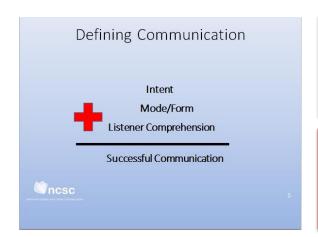


Module 1: Identifying Communication

Learning Outcomes

You will be able to:

- Define communication and its components
- Discuss the communication partner's role in making a student's communication successful
- Practice identifying unconventional forms of student communication

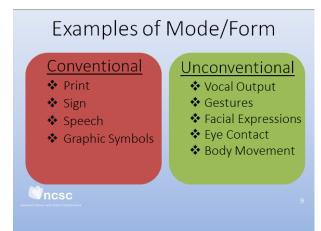


Intent is:

Mode/Form is:

Examples of communicative intents are:

- Refusing/Protesting
- _____
- Commenting



Notes:

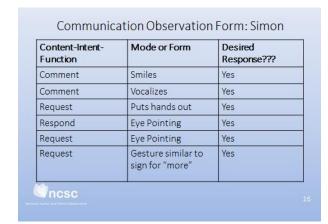


Goal of this module is to increase our ability to identify communication by:

- Learning to recognize behavior as ______.
- Learning to identify the various _____ the student may use for communication.

Guided Practice

Simon





Steven

Practice: Fill in the mode/form of Steven's communication as you watch the video.

Content-Intent- Function	Mode or Form	Desired Response???
Request		Yes
Request	·	No
Request		No
Comment: Frustration		No
Request		No
Request		Yes
O ncsc		

Notes:			



Shelly

ontent-Intent- unction	Mode or Form	Desired
unction		Response???
		12 50
		_

Notes:		

A blank table has been provided in the handout section for use with our students.

Let's Review

- Every student communicates
- Communication requires an intent, a form, and listener comprehension
- Unconventional forms of communication can pose a challenge for successful communication
- We must learn to identify students' communicative attempts regardless of the form or mode they currently use

Things to Remember:
1
1
2
3

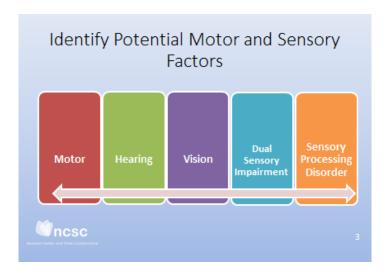


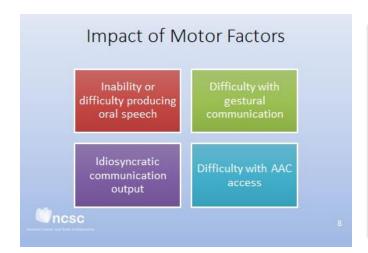
Module 2: Considering Sensory and Motor Factors

Learning Outcomes

You will be able to:

- Identify potential motor and sensory factors
- Consider the impact of each factor on communication
- Discuss the next steps to take to implement an effective plan for developing necessary communication skills



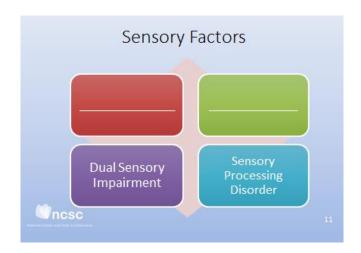


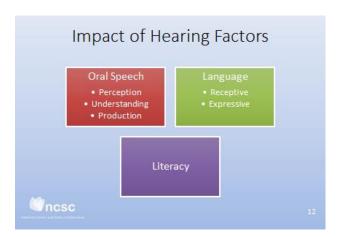
List related specialists for students with motor challenges:

•

•

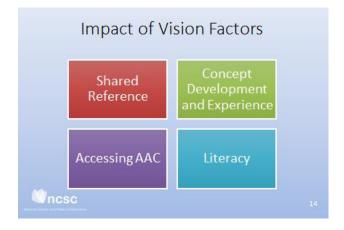






List related specialists for students with hearing
•

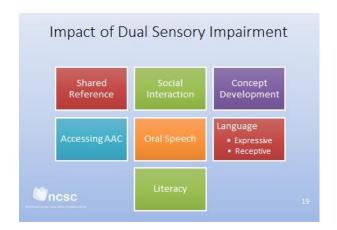
•
•

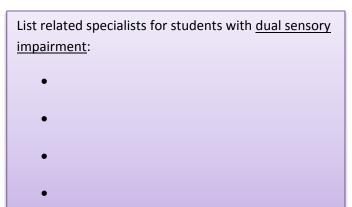


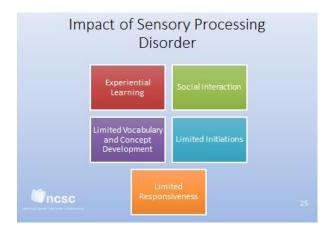
List related specialists for students with <u>vision</u> impairments:

•
•









List related specialists for students with <u>sensory</u> processing disorder:

- •

Let's Review!

When considering sensory and motor factors we must:

- Identify potential motor and sensory factors
- Consider the impact of each factor on communication and any further steps that should be taken.



Module 3: Selecting Communication Targets

Learning Outcomes

You will be able to:

- Differentiate expressive and receptive language
- Identify expressive and receptive language targets
- Identify possible expressive modes
- Select a tangible symbolic representation
- Consider opportunities to teach the targets

What a student understands is ______.

__ encompasses the many ways of conveying a message.





Basic Expressive Targets

1. Initiate a request: Attention, objects, actions, choices

Ex: "Help Please"

2. Refuse: Objects, actions, choices

Ex: _____

3. Express feelings, preferences, comment, compliment, or answering

Ex:_____

4. Select from offered choices

Ex: _____

5. Request information: Events, people

Ex:___

Basic Receptive Targets

1. Identify objects, actions, and choices

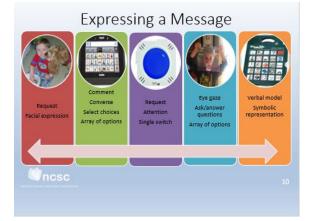
Ex:_____

2. Select answers after reading or listening

Ex:

3. Follow directions

Ex:_____



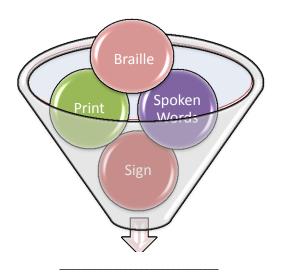
	_		
Total	Commui	nication	Notes

			sage with entation	n a
			lomoher	
Photograph	Picture Symbol	Tactile Graphic	Tactile Representation	Tactile Object
ncsc				12

Notes:	



Ultimate Symbolic Representation



ies Tota	Social ience Studies	Music Science						
8			Lunch 1	Math	Snack	Language Arts	Meeting	Targets
	х х	х х	х	x	х	Х	х	Ask a question
-	^ ^	^ ^	^	^	^	^	^	Ask a question
8	х х	х х	Х	Х	Х	Х	х	Request
	, ,		v	.,	.,	.,		1.00
8	х х	х х	Х	Х	Х	Х	Х	Initiate
8	х х	х х	х	Х	Х	Х	х	Refuse
8	Х	х х	Х	Х	Х	Х	Х	Comment
8	х х	х х	х	х	х	Х	х	Select a choice
	х х	x x	Х	Х	Х	Х	Х	Comment

A blank table has been provided in the handout section for use with our students

Notes:

Let's Review!

In this module, we have learned that it is important to

- Differentiate expressive and receptive language as important components of communication
- Identify basic expressive and receptive language targets
- Use multiple modes within a total communication approach
- Select tangible symbols to promote mutual understanding of targets
- Create opportunities and select strategies to practice the targets

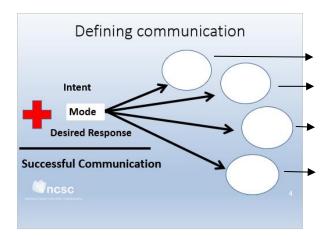


Module 4: Selecting AAC

Learning Outcomes

You will be able to:

- Provide a definition of AAC
- Explain why AAC may be selected to support a student's communication
- Discuss the characteristics of individuals who are candidates for the use of AAC
- Identify various forms of AAC
- Demonstrate how AAC can be used with students with significant disabilities



Types of communications modes:

- _

Definition of AAC:

Augmentative Alternative Communication is a form of communication used when an individual is unable to produce intelligible oral speech.

Augmentative: a form of communication to ______ or ____ existing oral speech

Alternative: a form of communication used by individuals ______ to produce oral speech

Why Do We Use AAC?

- ❖ Provide an immediate means to communicate
- * Facilitate language development
- Enable social interactions
- Provide a means to participate in academic assessments
- Support full inclusion
- Facilitate healthcare access
- Help provide safety from abuse
- Improve post-school outcomes

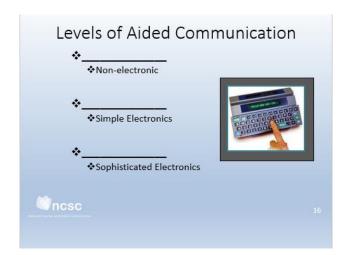


Who is a candidate for AAC?

Anyone who do not use intelligible oral speech regardless of...

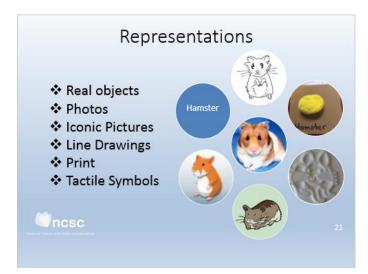
- -
- -
- -





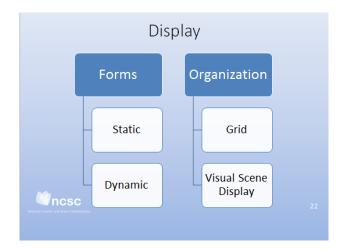
Accomplished by actually touching or pointing to the selected item.

Presents one choice at a time with the student indicating when the desired choice is presented.









Forms

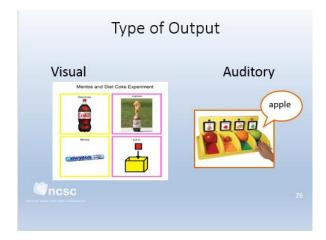
Organization

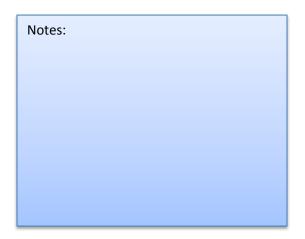
Static: the symbols remain in the same location and same order

Dynamic: the display changes depending on the student's selection

Grid: the symbols are arranged in rows and columns

Visual Scene Display: uses a picture of a common location or event







Let's Review!

In considering AAC for our students, it is important to determine

- If the student is a candidate for AAC
- How AAC will be used
- What form the AAC should take
- How to implement AAC



Module 5: Teaching Communication

Learning Outcomes

You will be able to:

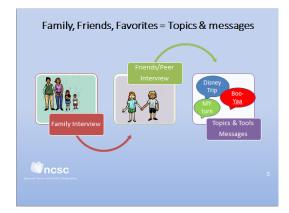
 Promote achievement for students with significant cognitive disabilities by utilizing six evidence-based practices

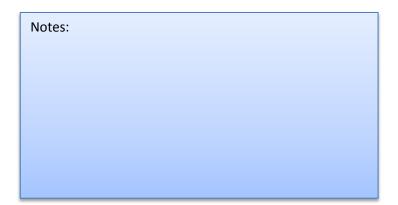


High levels of Engagement

Ways to encourage high levels of engagement:

- •
- Wake up—Alert!
- Authentic Communication







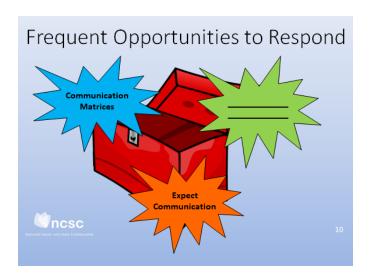




Remember: Keep communication authentic!

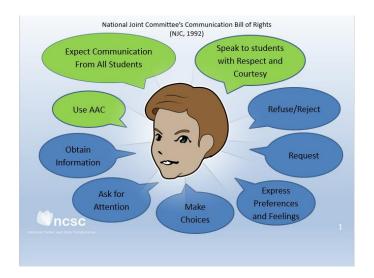


Frequent Opportunities to Respond



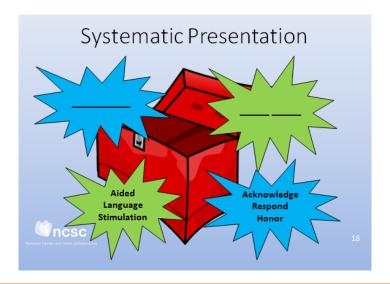






Using a communication target activity _____ can assist the team in determining which targets can be taught and which mode will be selected based on the type of target.

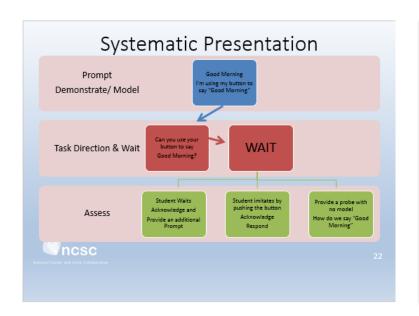
Systematic Presentation



Improving Communication

- 1. Acknowledge _____ EVERY TIME
- 2. Respond as if ______ EVERY TIME
- 3. Honor _____ every possible opportunity

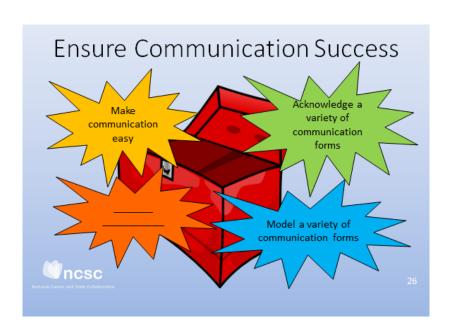






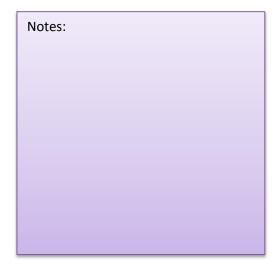


Success









Let's Review!

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 troubleshooting 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.

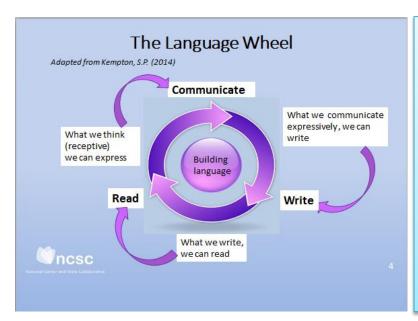


Module 6: Embedding Communication

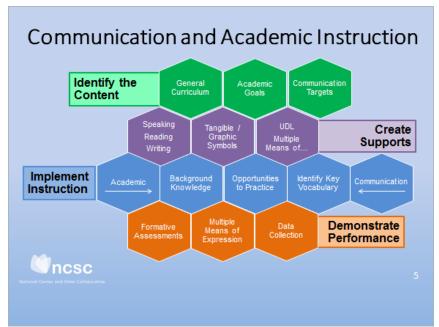
Learning Outcomes

You will be able to:

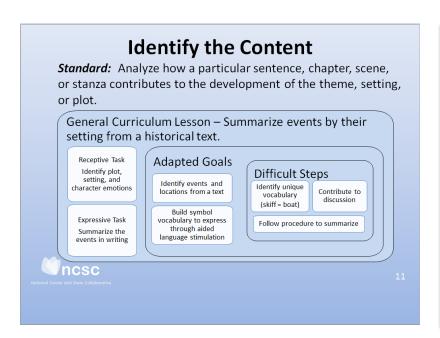
- Recognize where the components of literacy are used within and throughout instruction
- Understand the process for embedding communication into academic instruction













Creating Supports

Develop a strategy and/or system for:

Communication

- Mode(s)
- Symbol System
- AAC

Reading

- Multiple Means of Representation
- Symbol System
- Modify Text
- Assistive Technology

Writing

- Multiple Means of Expression
- Multiple Means of Representation
- Symbol System
- Assistive Technology

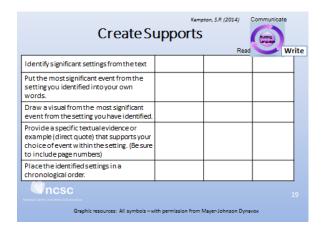
Determine the Symbol System

- Printed Words
- Graphics paired with written words
- Tactile representations paired with spoken word

Modify the Text

- Introduce the characters and settings that will be used throughout the passage.
- Include symbolic representations of the key elements, including events, to highlight important features and vocabulary.







Here is an example of how pictures can be used to support student understanding.

Implementing Instruction:

- 1) Build a background knowledge: Introduce concepts and model symbol use
- 2) Use students core vocabulary to make connections to content vocabulary and concepts.
- 3) Read text and model communication
- 4) Create opportunities to practice
- 5) Make student life connection to the text
- 6) Note taking strategies
- 7) Discuss the text
- 8) Write a summary

Let's Review!

When embedding communication into the curriculum, it is important to:

- Identify the content
- Create supports
- Implement instruction
- Demonstrate performance

Notes to myself:

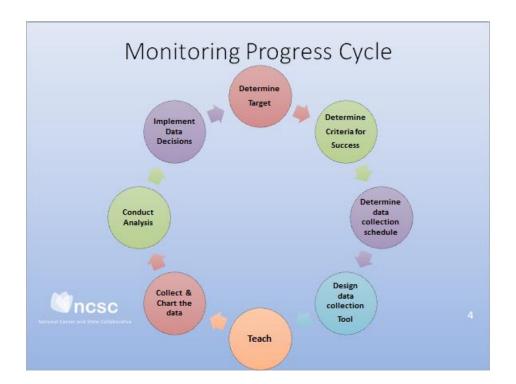


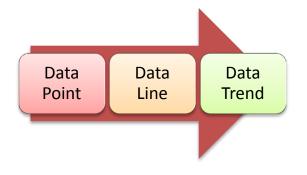
Module 7: Monitoring Progress

Learning Outcomes

You will be able to:

- Identify key features of the monitoring progress cycle
- Analyze progress data to make a decision
- Implement the decision in instruction
- Collect instruction/assessment data
- Chart the data progress



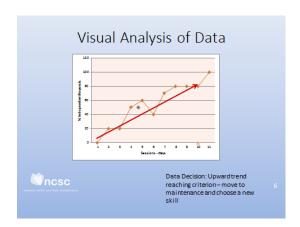


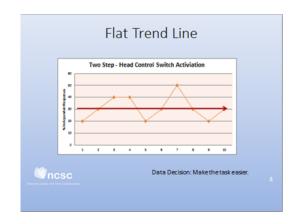
______- the number of correct responses or percent of correct responses.

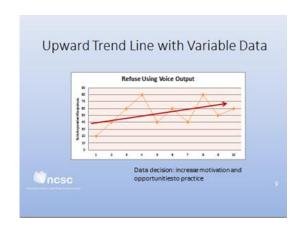
______-line- number of sessions or days indicated by multiple data points.

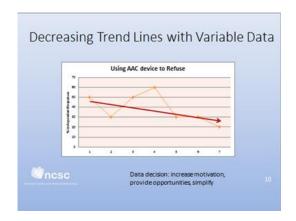
______-a line that bisects the data points and indicates whether the day are increasing or decreasing.

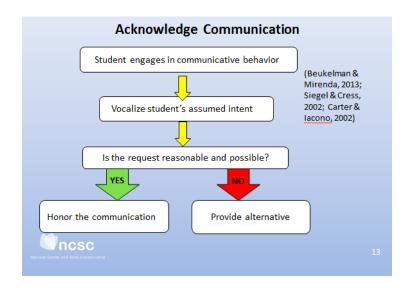








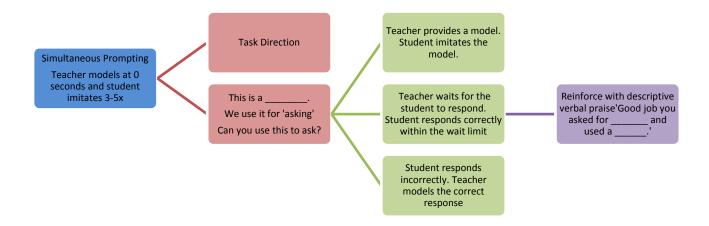




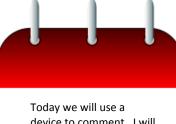


Systematic Presentation

Gibson, A.N., & Schuster, J.W. (1992)



Helpful hint: Use a script



device to comment. I will show you how I use a button to talk. This is how I use a button to talk. Can you show me how to use a button to talk?

Tips for collecting and modifying data

- Determine opportunities to practice
- Determine when to teach and when to assess.
- Create a data collection sheet
- Document which devices and strategies the child uses and which ones work and didn't work.

Let's Review!

Important steps in monitoring progress include:

- Identifying key features of the monitoring progress cycle.
- Analyzing progress data to make a decision about instruction.
- Implementing the data decision
- Collecting the instruction/assessment data
- Charting the data progress



NCSC Reference and Resource List

Alant, E., Dada, S. (2009). The effect of aided language stimulation on vocabulary acquisition in children with little or no functional speech. *American Journal of Speech-Language Pathology*. *18*, 50-64. Retrieved from http://ajslp.pubs.asha.org/article.aspx?articleid=1757603.

Bates, E. (1979). The emergence of symbols: Ontogeny and phylogeny. In W.A. Collins (Ed.), *Children's language and communication* (pp. 121-155). Hillsdale, NJ: Erlbaum.

Beukelman, D.R., & Mirenda, P. (2013). *Augmentative and alternative communication: Supporting children & adults with complex communication needs* (4th ed.). Baltimore, MD: Paul H. Brookes Publishing Co.

Bowen, C. (2011, November). *Supporting speech and language progress in children with CAS or sCAS*. Retrieved from http://speech-language-

therapy.com/index.php?option=com_content&view=article&id=42:support&catid=11:admin&Itemid=10 8.

Carter, M., & Iacono, T. (2002). Professional judgments of the intentionality of communicative acts. *Augmentative and Alternative Communication*, *18*, 177-191.

Clark, B. (2013). *Universal design for learning (UDL) sample instructional unit – Life on the Mississippi*. National Centers and State Collaborative Curriculum and Instructional Resources. University of Kentucky. [Online] Retrieved from

https://wiki.ncscpartners.org/images/f/ff/Middle_School_ELA_UDL_unit.pdf.

Giangreco, M. (2011). *COACH: Choosing options and accommodations for children*. Baltimore: Paul Brookes.

Gibson, A.N., & Schuster, J.W. (1992). The use of simultaneous prompting for teaching expressive word identification to preschoolers with developmental delays. *Topics in Early Childhood Special Education*, 12, 247-267.

Goossens', C. (1989). Aided communication intervention before assessment: A case study of a child with cerebral palsy. *Augmentative and Alternative Communication*, *5*, 14–26.

Griffen, A.K., & Worley, M. (1992) Comparison of simultaneous prompting and constant time delay procedures in teaching sight words to elementary students with moderate mental retardation. *Journal of Behavioral Education*, *2*, 305-325.

Heller, K.W., Ware, S.S., Allgood, M.H., & Castelle, M. (1994). Use of dual communication boards with students who are deaf-blind. *Journal of Visual Impairment & Blindness*, 88(4), 368.

Jaffe, D. (1994). Evolution of mechanical fingerspelling hands for people who are deaf-blind. *Journal of Rehabilitation Research and Development*, *31*(3), 236-244.



Janssen, M.J., Riksen-Walraven, J., Van Dijk, J.M., Huisman, M., & Ruijssenaars, W.M. (2012). Enhancing sustained interaction between children with congenital deaf-blindness and their educators. *Journal of Visual Impairment & Blindness*, 106(3), 177-183.

Kempton, S.P. (2014) Let's find out!: Building content knowledge with young children. Portland, ME: Stenhouse Books.

Kleinert, J., Holman, A., McSheehan, M., & Kearns, J. (2010). *The importance of developing communicative competence* (Synthesis Report #1). Lexington, KY: University of Kentucky National Alternate Assessment Center. [Online] Retrieved from http://www.naacpartners.org/publications/2010KlienertHolmanMcSheehanKearns.pdf.

Kleinert, J., Page, J., Kearns, J, & Goldstein P. (2014). *Listen up! Strategies for building communication*. Human Development Institute, University of Kentucky. Available on request.

Light, J., & Drager, K. (2012, August). *Early intervention for young children with autism, cerebral palsy, Down syndrome, and other disabilities.* Penn State University. Retrieved on 7 April 2015. http://aackids.psu.edu/index.php/page/show/id/14.

Light, J. (1989). Toward a definition of communicative competence for individuals using augmentative and alternative communication systems. *AAC: Augmentative and Alternative Communication*, *5*(2), 137-144.

McDonnell, J. (1998). Instruction for students with severe disabilities in general education settings. *Education and Training in Mental Retardation and Developmental Disabilities*. 33(3), 199-215.

Ostrosky, M.M., & Kaiser, A.P. (1991). Preschool classroom environments that promote communication. *Teaching Exceptional Children, Summer*, 6-10.

Rowland, C. & Fried-Oken, M. (2010). Communication matrix: A clinical and research assessment tool targeting children with severe communication disorders. *Journal of Pediatric Rehabilitation Medicine: An Interdisciplinary Approach*, *3*, 319-329.

Rowland, C., & Schweigert, P. (1989). Tangible symbols: Symbolic communication for individuals with multisensory impairments. *Augmentative and Alternative Communication*, *5*(4), 226-234.

Siegel, E.B., & Cress, C.J. (2002). Overview of the emergence of early AAC behaviors: Progression from communicative to symbolic skills. In J. Reichle, D.R. Beukelman, & J.C. Light (Eds.), *Exemplary practices for beginning communicators: Implications for AAC*, (pp. 25-57). Baltimore, MD: Brookes Publishing Company.

Sigafoos, J., Didden, R., Schlosser, R., Green, V., O'Reilly, M., & Lancioni, G. (2008). A review of intervention studies on teaching AAC to individuals who are deaf and blind. *Journal of Developmental & Physical Disabilities*, 20(1), 71-99. doi:10.1007/s10882-007-9081-5



Snell, M., Brady, N., McLean, L., Ogletree, B., Siegel, E., Sylvester, L., . . . Sevcik, R. (2010). Twenty years of communication intervention research with individuals who have severe intellectual and developmental disabilities. *American Journal on Intellectual and Developmental Disabilities*, 115(5), 364-380.

Tedder, N. E., & Warden, K. K. (1993). Prelanguage communication of students who are deaf-blind and have other severe impairments. *Journal of Visual Impairment & Blindness*, *87*(8), 302.

Texas State Board of Education. *Texas School for the Blind and Visually Impaired*. Retrieved on 7 Apr. 2015. http://www.tsbvi.edu/

Wolery, M., Bailey, D., Sugai, G. (1988). *Teaching students with moderate and severe disabilities*. Boston, MA: Allyn & Bacon.

Zuckerman, D. (1984). Use of personal computing technology by deaf-blind individuals. *Journal of Medical Systems*, *8*(5), 431-436.



Glossary

Adapted text: reducing the complexity or form of the text while maintaining the main idea and essential details

Aided language stimulation: systematic procedure that models the use of pictures or an AAC device by actually using the pictures or device while communicating

Alternative communication: a form of communication used by individuals unable to produce oral speech

Augmentative communication: a form of communication to supplement or clarify existing oral speech

Authentic communication: communicating meaningful content in genuine interactions

Conventional communication: commonly used and easily understood modes of communication

Intent: an individual's reason for communicating

Data line: number of sessions or days indicated by multiple data points

Data point: number of correct responses, or percent of correct responses, divided by the number of opportunities given to a student in a session

Data trend: line that bisects the data points and indicates whether data is increasing or decreasing

Direct selection: a method of access for a communication system, accomplished by touching or pointing to the selected item or symbol

Dynamic display: a display system on an electronic communication device that changes depending on the student's selection. For example, when a student selects the symbol for 'math' on their home screen, the display changes to present vocabulary associated with 'math'.

Expressive communication: conveying a message, regardless of the means

Grid display: an arrangement of symbols on the communication device utilizing lines and columns

High tech communication device: sophisticated, computer-based communication devices which allow the user to generate their own messages and have the capacity for producing synthesized speech

Intervener: a paraprofessional with specialized skills and training who provides support to students who are deafblind

[http://mtdeafblind.ruralinstitute.umt.edu/MainMenu/IntervenersParaeducators/IntervenersTexas.pd]

Listener comprehension: a person's ability to understand the meaning of words or symbols that are used in communication

Low tech communication device: communication devices that use simple electronics, are battery operated, and are typically limited to preprogrammed messages

Mode: the specific behaviors used by an individual to communicate



No tech communication device: simple communication devices that use no electronics

Probe: an assessment technique used to determine the student's level of independence with supports (e.g. AAC) but without instructional prompts

Unconventional or idiosyncratic communication: modes of communication that are unique to an individual

Receptive communication: understanding a message, regardless of the means

Scanning: a method of access for a communication device which presents one choice at a time, with the student indicating when the desired choice is presented

Shared reference: also known as "joint attention", two individuals sharing a referent

Static display: a display system on a communication device where all the symbols remain the in same location and in the same order

Student preferences: people or things that elicit an alert or response when presented or available

Symbolic representation: expressing mental processes and ideas using conventional representations such as spoken words, print, or sign

Systematic presentation: teaching procedure that allows us to control or manipulate the presentation and response consequences

Visual scene display: a display system on a communication device with messages programmed under 'hotspots' on a picture. The hotspots are people, items or locations on the picture that, when touched, activate a preprogrammed message.



Communication Observation Form

Content-Intent-Function	Mode or Form	Desired Response

Kleinert, J., Kearns, J., & Page, J. (2013). TAALC Project, Kentucky Dept. of Education and the University of Kentucky



Matrix

				activities	Schedule of classroom curriculum
				(target 1)	
				(target 2)	Student's commu
				(target 3)	Student's communication targets (academic, social, etc.)
				(target 4)	emic, social, etc.)
				(target 5)	



Communication Bill of Rights Check-List



National Joint Committee for the Communication Needs of Persons with Severe Disabilities

All people with a disability of any extent or severity have a basic right to affect through communication, the conditions of their existence. All people have the following specific communication rights in their daily interactions. These rights are summerized from the Communication Bill of Rights put forth in 1991 by the National Joint Committee for the Communication Needs of Persons with Severe Disabilities.

Does My Student	No	Yes	Comments
Refuse undesired objects, actions, or events?			
Request desired objects, actions, events and people?			
Express personal preferences and feelings			
Receive opportunities for choices and alternatives?			
Reject offered choices?			
Request and receive another person's attention and interaction?			

Adapted by: Kleinert, J., & Keans, J. (2011) from the National Joint Committee on the Communication for the Needs of Persons with Severe Disabilities. (1992). Guidelines for meeting the communication needs of persons with severe disabilities. Asha, 34(Suppl. 7), 2-3

Continued

Does my student have olean, meaningful and outturally and linguistically appropriate communications?	is my student spoken to directly and not spoken for or talked about in the third person while present?	is my student spoken to with respect and courtesy?	Participate in environments that promote one's communication as a full partner with other people, including peers?	Have AAC and other AT devices that function properly at all times?	Have access to AAC (augmentative, and alternative communication), and other AT (assistive technology), services and devices at all times?	Receive a response to any communication, whether or not the responder can fulfill the request?	Receive intervention to improve communication ckills?	Ack for and receive information about changes in routine and environment?	Does My Student
									No
									Yes
									Comments

Adapted by: Rieinert, J., & Kearns, J. (2011) from the National Joint Committee on the Communication for the Needs of Persons with Severe Disabilities. (1992). Guidelines for meeting the communication needs of persons with severe disabilities. Asha, 34(Suppl. 7), 2-3



Name: Date:

	A	Studen	t Responses	Notes	
Behavior	Activity	Dates:			
	Summary				
	Summary				
	Summary				
	Summaria				
	Summary				

Codes: (+)= Correct (-)=Incorrect (5)=Independent (4)=Verbal Prompt (3)= Model Prompt (2) Physical Prompt (1)= No Response after physical prompt



Charting the Data The Student will _____ The Student will _____ The Student will _____ The Student will _____



Student Level Instructional Data Decisions

Data Pattern	Interpretation	Suggested Decision	
Correct responses	Program is working	Continue current program	
increasing			
Errors decreasing			
Correct responses 20%-	Student can perform	Reduce the number of	
50% correct	some, but not all of the	steps or complexity of	
	skill	concept; add examples;	
		teach difficult steps	
Correct responses at or	Task is too difficult	Teach less complex skill or	
near 0%		pre-requisite skill	
High error rates			
Correct rate highly	Compliance problems	Consider motivation and	
variable		attention strategies	
Correct rate drops			
Correct responses	Student ready for fluency	Manipulate consequences	
stalled at 80%;	building	and add practice time	
No increase in rate			
Criterion achieved	Successful	Maintenance,	
		generalization, new task	

(Wolery et. al., 1988)



Acknowledgements

We would like to acknowledge the following graduate students in the Division of Communication Sciences and Disorders at the University of Kentucky for their able assistance in the fabrication and design of this workbook. Their attention to detail and creativity were positive contributions to this project. They are:

Sarah Francis Meyer, B.H.S Laken Mitchell, B.H.S. Lindsay Kroes, B.H.S. Sarah Blakeman, B.H.S.

