



Gestalt Language Processing and AAC

Provided by Saint Cloud State University (SCSU) Faculty

Mary Baumann-Spooner

Prachi Bengeri

Doctor Sarah Schaefer

Sample Slide Title

The following text is used as a “place holder” to show possible layout options for slides.

The universe...

- Explore the vast expanse of the cosmos.
- Embark on a journey through the infinite wonders of the universe.
- Discover the boundless mysteries that lie beyond our world.
- Uncover the secrets of the universe and unlock its hidden treasures.

Introductions

- Mary Baumann-Spooner, Clinical Instructor at SCSU
- Prachi Bengeri, Assistant Professor at SCSU
- Dr. Sarah Schaefer, Assistant Professor at SCSU

Agenda

- Echolalia and Gestalt Language Processing (GLP)
- Identifying GLP
- Implications for language assessment and intervention
- Goal writing ideas
- Considerations and suggestions for AAC users who are GLPs
- Questions

Audience Poll

[Jamboard Poll in Google Link](#)

Please click on the link in the chat and follow the prompts.

Echolalia Brief History

- "Echolalia is the repetition of utterances produced by others." ASHA practice portal on autism spectrum disorders.
 - Immediate
 - Delayed
 - Mitigated

Echolalia History Continued

- Historically and even currently- sometimes described as meaningless and having no communicative function- vocal stereotypy, disruptive vocalization, movie talk, etc. Some professionals might even try to eliminate echolalia. (Stiegler, 2015).
- Many researchers have shown that echolalia can have many communicative functions, e.g. turn-taking, labeling, requesting, affirming, and protesting. (Prizant, 1983; Stiegler, 2015).
- For many children who are autistic, this might be how they develop language. (Prizant, 1983; Blanc, 2012; Stiegler, 2015).

Natural Language Acquisition

- Natural Language Acquisition is a framework named by Marge Blanc to understand and analyze the language development of children that fit the description of predominantly Gestalt Language Processors (Blanc, 2012).
- 6 Stages: 1 Echolalia, 2 Mitigated Echolalia, 3 Isolation of single words with recombinations, and 4,5,6 Generation of sentences with grammar
- Gestalt language is considered a natural language developmental process, **language delay NOT disorder**
- Relies on meeting sensory needs first and following the client's lead to build off their motivating activities and break down gestalts

Analytical Language Processor

1. Processes language in single words
2. Uses single words
3. Combines words “get-more”
4. Generates 1st simple sentences, for example, “Wanna go out.”
5. Generates expanded sentences with correct grammar like, "I want to go."
6. Generates complex sentences such as, “I don't want anymore, but you can have it.”

Gestalt Language Processor

- Processes language in "chunks", called gestalts
- Different acquisition stages than an analytical language processor
- Gestalts start out unintelligible and may be missed by adults
- Might use rich intonation
- GLP is a language delay not a disorder

Gestalt Language Processor Continued

- Children learn gestalts, phrases and apply multiple meanings to that phrase, which they may eventually "mitigate" to create more original utterances.
- **Neurotypical AND neurodivergent** children can be gestalt language processors.
- Gestalt and Analytical Language Processing are not mutually exclusive. A child can be both! Some can show characteristics of one more than the other. (Prizant, 1983; Evans, 2022)

Regulation Importance

- Regulation is the building block of attention
- Attention is the building block for learning
- [Interactive Learning Tree Floortime Link](#)

NLA therapy with a GLP with Apraxia/Dyspraxia



Natural Language Acquisition (NLA) Stage 1

- Language gestalts may be wholes, scripts, songs, episodes repeated
- Communicative use of whole language gestalts “Let’s get out of here”
- GLP are hardwired to hear long, melodic sounds
- GLP may pay attention to intonation, versus single words
- Communicative use of echolalia

NLA Stage 2

- Isolated single words: Two-word combinations of referential single words
- Further mitigation: isolations of single words; recombination of words, and generation of original two-word phrases
- Examples may be, "Get more", "Want....out?"
- This stage's use of single words is Step 1 for Analytic Processors
- 2-word combos can have many different meanings

NLA Stage 2 Continued

Stage 2B) Recombining these chunks

“Let’s get + some more?”

Hear lots of language with Gestalts to expand “Let’s get + other endings”

Recombining of phrases

NLA Stage 3

Mitigations

Mix and match combinations of partial scripts

Stage 2A) Mitigations into chunks

“Let’s get” + “out of here”

isolation of echolalia

NLA Stage 3 Continued

- First generation of novel utterances
- May appear as if they are regressing. However, spontaneous language is emerging
- Stay in this stage for awhile

NLA Video Example of Stage 3



NLA Stage 4

- Original phrases and beginning sentences
- Generation of first sentence
- "Let's get some more toys!"
- Now ready to learn grammar but don't want to rush stage 3 to 4
- Self-generated grammar

NLA Stages 5 and 6

- Stage 5: Original sentences with more complex grammar
- Stage 6: Original sentences with complete grammar system
- Stages 5 and 6 use L. Lee (1974) Developmental Sentence Analysis
- "I don't want any more, but you can have mine."

Assessment

- Assess using language sampling- 2 or more samples
- Samples across settings- home, school, therapy session
- Input from caregivers- might help understand some of the scripts, or gestalts
- You can use the NLA scoring protocol or describe the function of the gestalts in context
- Communication forms and functions MM example

Goal Writing for GLP

- Goal writing- include skills that can increase functional communication for the child
 - Using phrases (scripted or self-generated) for various communicative functions
 - Imitating expanded recasts to increase language specificity
 - Increase in spontaneous utterances during play- again, can be scripted or self-generated
 - Combining words or phrases to make functional requests
 - Can be written for verbal or aided communication!

Goal Examples for Verbal Language

Stage 1

In a conversational setting, when well-regulated, the student will spontaneously generate a variety of language gestalts to express a variety of communication intentions...

Stage 2

In a conversational setting, when well-regulated, the student will spontaneously generate a variety of 'mix and match' utterances...

Goal Examples for Verbal Language Continued

Stage 3

In a quiet therapy setting, with playful adult-modeling student will spontaneously generate:

1. single words derived from previous mitigations
2. unique words

Goal Examples for Augmentative and Alternative (AAC) Communication

- When provided with aided language input, student will use aided AAC to combine a variety of mitigated gestalts to communicate a variety of self-selected intentions (e.g., answering/asking questions, commenting, expressing emotions) at least 2x per day over 4 out of 7 consecutive days as measured by the IEP team.
 - Navigate and activate
 - Modalities

*remember mitigations are a mix-and-match combination of partial scripts (Blanc, 2022)

Intervention with GLPs

- Use high interest activities when working on language- follow their lead
- Have sensory and motor supports available to help with regulation, consult with OT
- Facilitate initiation and not just response
- Analyze functions of gestalts, gauge comprehension
- Use more comments and imitations than questions and commands
- Joint attention routines- varied in subjects, location, objects "map" onto existing concepts

Adapted from Stiegler (2015)

GLP who use AAC

- Need a ROBUST language system
- Evaluate with the following:
 - AAC Genie App
 - Test of Aided Symbol Performance
 - Early Functional Communication Profile
 - Functional Communication Profile-Revised
 - Communication Matrix
 - Communication Form and Functions Checklist
 - Minneapolis School District AAC SETT

AAC apps for GLP

- AAC Apps for GLP that have recordings, links to video clips, and whiteboards:
 - TouchChat with WordPower
 - Speak for Yourself
 - Lamp Words for Life
 - Proloquo2Go or Proloquo4Text
 - TD Snap

Supporting Gestalt Language Processors with TD Snap

- Need to set up a Tobii Dynavox Account to watch video
- Account with Tobii Dynavox is free
- [TD Snap Video watch from 48-58 minutes](#)



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Gain knowledge and skills with self-guided resources created by Tobii Dynavox professionals including videos, recordings, quick guides and online courses, many of which provide ASHA continuing education units (CEUs).

Tips from Video for Whole Quicks

- Stage 1 Gestalts
 - Set home page to Quickfires, My Phrases page instead of Core Words
 - Put gestalts where they belong in the language layout such as “Moo” in Quickfires as it means “I love you”, “I like this” and want to say it a lot
 - Put “Ouch I poked my eye” on the Feelings page and then it opens the Health Problems page

Tips from Video continued

- Stage 2 Mitigation
 - Create Topic Boards to support mitigation
 - Program the gestalt and add mitigation words to build upon
 - “Let’s go to the zoo” meant let’s go to places
 - Create a button that opens a popup page with words to help mitigate
 - Create a button that links to the First-Then board with “Let’s go” then “to the Zoo”.

Case Examples

- AB- birth through young adulthood
- CW- young 3 year old just starting to show some expressive language
- IT- preschool student expanding gestalts to verbalizations and AAC use
- BM- echopraxia
- AS- using books and songs to increase communication
- MW- 6 year old non-speaking AAC user

Resources

- [Teacher Pay Teachers Gestalt Language Learners Handout](#)
- [Developmental Sentence Analysis](#)
- [Communication Development Center NLA Overview Website](#)
- [Meaningful Speech Website- research and resources](#)

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Closing Slide, Thank you!

mary.baumann-spooner@stcloudstate.edu

prachi.bengeri@stcloudstate.edu

sarah.schaefer@stcloudstate.edu