Facilitative Co-Construction in Personal Narratives with Children Who Use AAC

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• Michelle Caputo-Boruta, M.A.
Learner Outcomes

After completing this session, participants will be able to:

1) Describe typical co-construction strategies adult communication partners use with children elaborating a personal narrative;

2) Describe specific child-centered co-construction strategies that an SLP might use to facilitate personal narratives of children who use AAC;

3) Describe how use of specific child-centered co-construction strategies can be applied to enhancing the personal narratives of children who use AAC.
Co-Construction Defined

• A typical conversation is a joint collaborative effort: “negotiation of meaning” with requests for clarification back and forth when one person does not understand something in the other’s formulation.

(Tomasello, 2003)
Co-Construction in Aided Conversations

• Communication partners often engage individuals who use AAC in a process of meaning negotiation.

• Co-construction during aided conversations serves multiple functions:
  – Scaffolding use of aided AAC
  – Eliciting information
  – Maintaining narrative and conversational flow
  – Assisting message formation
  – Clarifying information
  – Confirming information

(Iacono, 2003)
Personal Narrative Defined

• A verbalization of a past or present experience

• Typically it evolves in conversation with adults who provide form and structure to the experience reported by the child
Co-Construction and the Personal Narratives of Children Who Use AAC

• Personal narratives are typically embedded in conversations.

• Children who use AAC have difficulties referring to a significant past event (i.e. formulating a personal narrative).

• Adult often use co-construction to facilitate the child’s story telling.

• Co-construction has been found to contribute to increased communication competence and positive communication partner collaboration.

(Brekke & von Tetzchner, 2003; Smith, 2003; Soto, Solomon-Rice, & Caputo, 2008; Sutton, Soto, & Blockberger, 2002)
Challenges to Use of Effective Co-Construction Strategies during Personal Narratives

1) Time consuming nature of multi-modal communication
2) Lack of available vocabulary on AAC device
3) Pre-stored personal narratives may not feel authentic
4) Limited child initiation
5) Overuse of closed-ended questions and yes/no questions on the part of the adult limiting child responses to single words & short phrases

(Waller, 2006)
Co-Construction as a Type of Accommodation

• Communication accommodation is considered along a continuum from highly child-centered to highly situation-centered

• Child-centered communication: perspective of child, child-centered topics, accommodate child’s egocentric behavior, engage child frequently as a conversational partner

• Situation-centered communication: perspective of social situation (e.g. forms of talk used in school or going to church), child keenly observes adults, child practices private speech to develop communication competence (Ochs & Schieffelin, 1983; Schieffelin & Ochs, 1986)
Accepted Personal Narrative Analysis

• Structural analysis of linguistic complexity (Bliss, 2002; Hughes, McGillivray, & Schmidek, 1997)
• Story element analysis (Hughes, et al, 1997; McGregor, 2000)
• Narrative Assessment Profile (NAP) (Bliss, McCabe, & Miranda, 1998)
• Based on complete child narrative
• Typically ignores contribution of communication partner (see Soto & Hartman, 2006; Soto, Hartman, & Wilkins, 2006; Soto, Solomon-Rice, & Caputo, 2009; Soto, Yu, & Henneberry, 2007; Soto, Yu, & Kelso, 2008)
Communication Partner Contributions to Personal Narratives of AAC Users

- The adult’s contribution to the narrative is as important or more important than the child’s.
- The structural nature and quality of the AAC user’s elicited productions may be as much a reflection of the communication partner’s skills to elicit the necessary features of narrative discourse as the AAC user.
- Different elicitation conditions and different types of prompting or questioning may affect the discourse forms produced by the AAC user.
- Soto, et al. (2006) encouraged us to consider partner contributions to the overall narrative discourse but did not provide guidance as to a systematic way of doing this.

(Soto, et. al 2006)
An Alternative Framework for Analysis

Micro-Analysis of Co-Constructive Strategies

1) Elicitation: Adult asks the child to provide detail about a specific topic, e.g. “Tell me where you went today.”

2) Open-Ended Questions: Adult asks questions about past events and attitudes about past events, e.g. “Then what happened?”

3) Prompting: Adult requests the child tell more about an ongoing topic, e.g. “Tell me more about that.”

4) Glossing/Correction: Adult corrects an inappropriate or incomplete utterance, e.g. child says “First I played on the swings” and adult glosses “Didn’t you play with your brother on the monkey bars first?”

5) Repetitions: Adult repeats parts or all of child’s narrative, e.g. child says “I had vanilla ice cream” and adult repeats “Yum, you had vanilla ice cream.”

6) Models: Adult provides examples of content, vocabulary, and grammatical structures during child’s personal narrative attempts.

(Ochs & Capps, 2001)
An Alternative Framework for Analysis

Macro-Analysis of Co-Constructive Strategies

1) Tellership: The participant organization in telling of narratives; ranges from one primary teller to multiple tellers.

2) Tellability: Personal narratives range from low tellability (ordinary, routine events) to high tellability (unexpected events)

3) Linearity: Personal narratives range from nonlinear (unpredictable, emotional) to linear (coherent, forward moving time line); includes temporal markings, temporal sequences, plot coherence, and linear trajectories.

4) Moral Stance: Recognition of moral standards of right and wrong (Ochs & Capps, 2001)
Case Study Illustration

• Examples of co-constructive language strategies used by an SLP during an intervention session towards facilitating personal narrative development of an 8-year-old with severe communication problems who uses AAC.
## Case Study Participants

<table>
<thead>
<tr>
<th>Ana</th>
<th>SLP</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-years-old</td>
<td>Master’s degree in communicative disorders and sciences</td>
</tr>
<tr>
<td>Spastic quadriplegia cerebral palsy</td>
<td>CCC-SLP</td>
</tr>
<tr>
<td>Speech is slow, labored, and produced with soft volume</td>
<td>State licensed</td>
</tr>
<tr>
<td>Produces maximum of 5-word phrases</td>
<td>Licensed Assistive Technology Specialist</td>
</tr>
<tr>
<td>Uses 45 location Vantage II™</td>
<td>State Special Day Class authorization</td>
</tr>
<tr>
<td></td>
<td>Special education teacher with children who use AAC for 15 years</td>
</tr>
<tr>
<td></td>
<td>Worked with Ana for 4 years</td>
</tr>
</tbody>
</table>
Personal Narrative Context

- 46 minute intervention session
- Shown photo of 8th birthday party
- SLP asks “Tell me what happened that day.”
- SLP uses validated language elicitation strategies to prompt personal narrative production such as open-ended questions, fill-in-blank sentences, binary choices, modeling, a visual story map, and programmed intended vocabulary in VOCA
- SLP writes everything Ana says on a large piece of paper visible to Ana
- At end of session, narrative is edited and programmed into Ana’s VOCA for later use

(see Soto, et. al, 2009)
# Micro Analysis Examples

<table>
<thead>
<tr>
<th>Type of Co-Construction Production</th>
<th>Ana</th>
<th>SLP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elicitation</td>
<td>“Tia Trina”</td>
<td>Oh, tell me about that part. Tell me about who came to your party</td>
</tr>
<tr>
<td>Question</td>
<td>My birthday.</td>
<td>Because it was your birthday?</td>
</tr>
<tr>
<td>Prompt</td>
<td>“Where cake? ((pointing on Vantage™))</td>
<td>Oh, cake is something that you eat.</td>
</tr>
<tr>
<td>Glossing</td>
<td>“Bought, Mom bought”</td>
<td>There’s time, it says work, oop, oop, try it again, oop, oh I see bought, I see buy, buys, and bought.</td>
</tr>
<tr>
<td>Repetition</td>
<td>“Have Piglet.”</td>
<td>Have Piglet.</td>
</tr>
</tbody>
</table>
Micro Analysis: Elicitation

• Typically took form of “tell me” and “tell me with your Vantage™ to facilitate verbal initiation.

<table>
<thead>
<tr>
<th>Ana</th>
<th>SLP</th>
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</thead>
<tbody>
<tr>
<td>259 “Tia Trina.”</td>
<td>Oh, tell me about that part. Tell me about who came to your party.</td>
</tr>
</tbody>
</table>
Micro Analysis: Questioning

• Most common type of strategy
• Solicited emotions, clarified information, elicited additional information, facilitated device use, and provided choices for content and grammar
• Not used to exert control

<table>
<thead>
<tr>
<th>Ana</th>
<th>SLP</th>
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</thead>
<tbody>
<tr>
<td>278 My birthday.</td>
<td>Because is was your birthday? ((laughing))</td>
</tr>
</tbody>
</table>
Micro Analysis: Prompting

• Response to requests for AAC navigation help resulting in narratives of greater detail and grammatical accuracy

<table>
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<tbody>
<tr>
<td>17 Where cake?</td>
<td>Oh, cake is something that you, than you eat.</td>
</tr>
<tr>
<td></td>
<td>((pointing on Vantage™))</td>
</tr>
</tbody>
</table>
Micro Analysis: Glossing

• Preference for positive praise versus glossing
• Occasionally used during periods of prompting when AAC usage errors occurred
• Style was non-threatening and informal

<table>
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</thead>
<tbody>
<tr>
<td>244</td>
<td>There’s time, it says work, oop,oop, try it again, oop, oh, I see bought, I see buy, buys, and bought. You knew exactly where to find it, Mom bought.</td>
</tr>
<tr>
<td>245 “Bought, Mom bought.”</td>
<td></td>
</tr>
</tbody>
</table>
Micro Analysis: Repetition

• Acknowledged agreement
• Confirmed tentative understanding of productions not sufficiently intelligible
• Confirmed tentative understanding following errors with AAC device use

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>82 “Have Piglet”</td>
<td>Have Piglet. ((pointing on easel))</td>
</tr>
</tbody>
</table>
Micro Analysis: Modeling

• Acknowledged activities and facilitated receptive language
• Facilitated narrative productions for vocabulary and grammar

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</tr>
</thead>
<tbody>
<tr>
<td>534</td>
<td>Watch what I’m going to do.</td>
</tr>
<tr>
<td>535</td>
<td>I’m going to put an “s” there and make it has.</td>
</tr>
<tr>
<td>536</td>
<td>My birthday cake has Piglet and Pooh and Eyore and Tigger.</td>
</tr>
</tbody>
</table>
# Macro Analysis Examples

<table>
<thead>
<tr>
<th>Type of Macro Analysis</th>
<th>Ana</th>
<th>SLP</th>
<th>Co-Constructive Strategies</th>
</tr>
</thead>
</table>
| **Tellership**         | Me. | How can we start our story? Who is the story about? Okay, me. | Repairing errors
Prompts and questions
Repeating for confirmation
Modeling |
| **Tellability**        | My birthday. | What is that picture about? OH YOUR BIRTHDAY. | Transforming low tellability to high tellability through emotion and excitement. |
| **Linearity**          | “I.” | How can you tell me, how can you start talking about your party at Mama’s house? You wanna start with I? ((signing I)) I | Questions |
|                        |     |     | Repeating for confirmation |
Macro Analysis: Tellership

• Two tellers: Ana as the primary teller and the SLP as the secondary teller
• Through co-constructive strategies, tellership facilitated by repairing perceived errors, eliciting information with prompts and questions, repeating information for confirmation, and elaborating narrative details.

<table>
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<th>Ana</th>
<th>SLP</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>How can we start our story who?</td>
</tr>
<tr>
<td>42</td>
<td>Who is the story all about?</td>
</tr>
<tr>
<td>43 Me.</td>
<td>((pointing to Vantage™)) Okay, me.</td>
</tr>
</tbody>
</table>
Macro Analysis: Tellability

• Low tellability event – a birthday party
• SLP transformed low tellability event into high tellability event through emotion and excitement

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<tr>
<th>Ana</th>
<th>SLP</th>
</tr>
</thead>
</table>
| 60 61 My birthday. | What is the picture about?  
                           OH YOUR BIRTHDAY. |
Macro Analysis: Linearity

• Ana’s limited expressive language skills precluded creation of linearity through use of temporal markings (verb tense), temporal sequencing (“after, then, when”), plot coherence (ordering of events) or linear trajectories
• Ana’s limited expressive language skills precluded creating non-linearity through emotional outbursts, incoherence, uncertainty, and parallisms.
• SLP facilitated temporal marking and temporal sequencing through strategies of questioning and modeling
Macro Analysis: Moral Stance

- Limited expressive language skills precluded recognition of moral standards of right and wrong, and use of early vocabulary describing moral stance (modals “can, have to, supposed to, okay”).
- Expressions of emotion were the beginnings of moral stance.

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>271 “Nervous.”</td>
<td>Really, ((laughing)), nervous?</td>
</tr>
<tr>
<td>272 ↑↓↑</td>
<td>Oh my goodness.</td>
</tr>
<tr>
<td></td>
<td>Let me write that down.</td>
</tr>
</tbody>
</table>
Summary of Micro and Macro Analysis Findings

1) Purposes of co-construction strategies varied
   • Elicitation: soliciting information
   • Questioning: solicit emotion, clarify information, elicit additional information, facilitate device use, organize the story, provide choices for content and grammar
   • Prompts: help with VOCA, increase detail
   • Glossing: rarely used; preference for positive praise
   • Repetition: confirm agreement and provide tentative understanding
   • Modeling: describe activities and content of narrative
Summary of Micro and Macro Analysis Findings

2) Child-centered constructive strategies were implemented rather than situational strategies
   • Encourages story telling from the child’s perspective
   • Adult follows child’s lead which limits adult control
   • Children with severe communication deficits have problems relying on private speech and must rely on AAC
   • Children who use AAC benefit from familiar communication partners
Clinical Implications

The results of the case study suggest child-centered co-construction used by an SLP who follows the student’s storytelling lead, keenly observes how the student attempts to solve communication problems, and allows sufficient time for student responses, might be an effectual approach for enhancing the personal narratives of children with severe communication difficulties who use AAC.
Significance of the Case Study Results

1) Consider replacing commonplace situation-directed and adult controlling co-construction with child centered co-construction during discursive exchanges with students who use AAC.

2) Consider following the child’s lead and allowing more time for student responses involving AAC devices.

3) Consider using more open-ended queries and repeating what the student has produced.

4) Modeling might be used to enhance vocabulary, grammatical development, linearity, cohesions, moral stance, and emotional stance rather than encouraging the more typical beginning, middle, and end to storytelling.

5) Corrections might be replaced with positive praise.
Conclusions

• Framework for analyzing adult communication partner’s co-constructive contributions to a child’s personal narrative.

• Descriptive evidence that child-centered co-construction may be a more effective approach than situation-centered co-construction for developing the personal narrative skills of children who use AAC.

• Child-centered co-construction strategies might be facilitative in supporting communication in certain learning contexts.

• Extends notion that adult co-construction is effectual in both school settings in a wide sense (Brekke & von Tetzchner, 2003) and during shared storybook reading (Liboiron & Soto, 2006) to further include personal narrative development.
Thank You!

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References


