

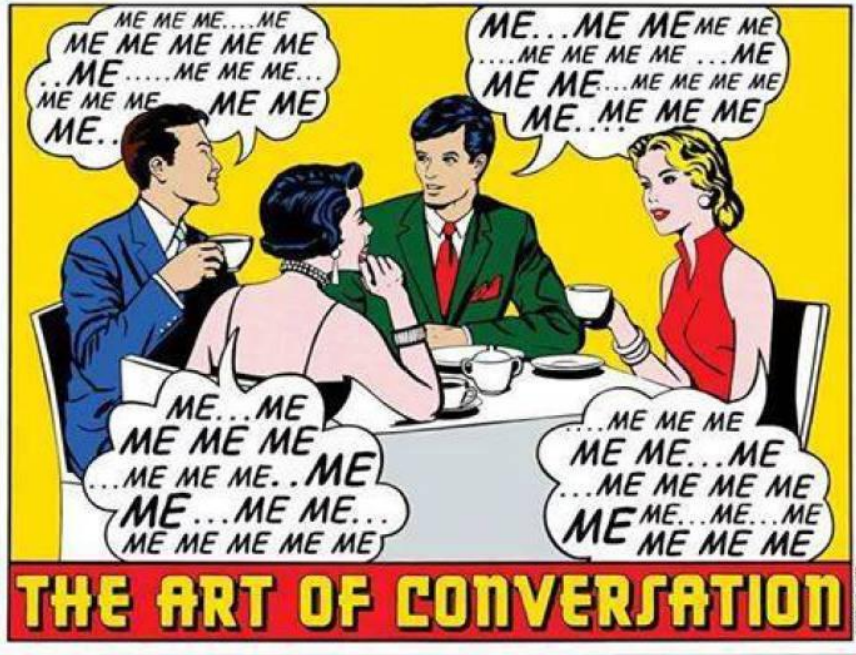
Promoting Conversation Skills Using Scripts, Mapping and Social Reciprocity

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Kathleen Cutrone, MSED, BCBA, LBA
Eden II Programs

- Individuals with ASD exhibit daily challenges in communication.
- They may respond to initiations or initiate basic requests when communicating with an adult or peer, however, engaging in a conversation presents a much greater challenge.
- This presentation will focus on the use of scripts, semantic maps and social reciprocity to increase conversation skills. Existing evidence-based research and potential strengths and limitations of interventions will be discussed.

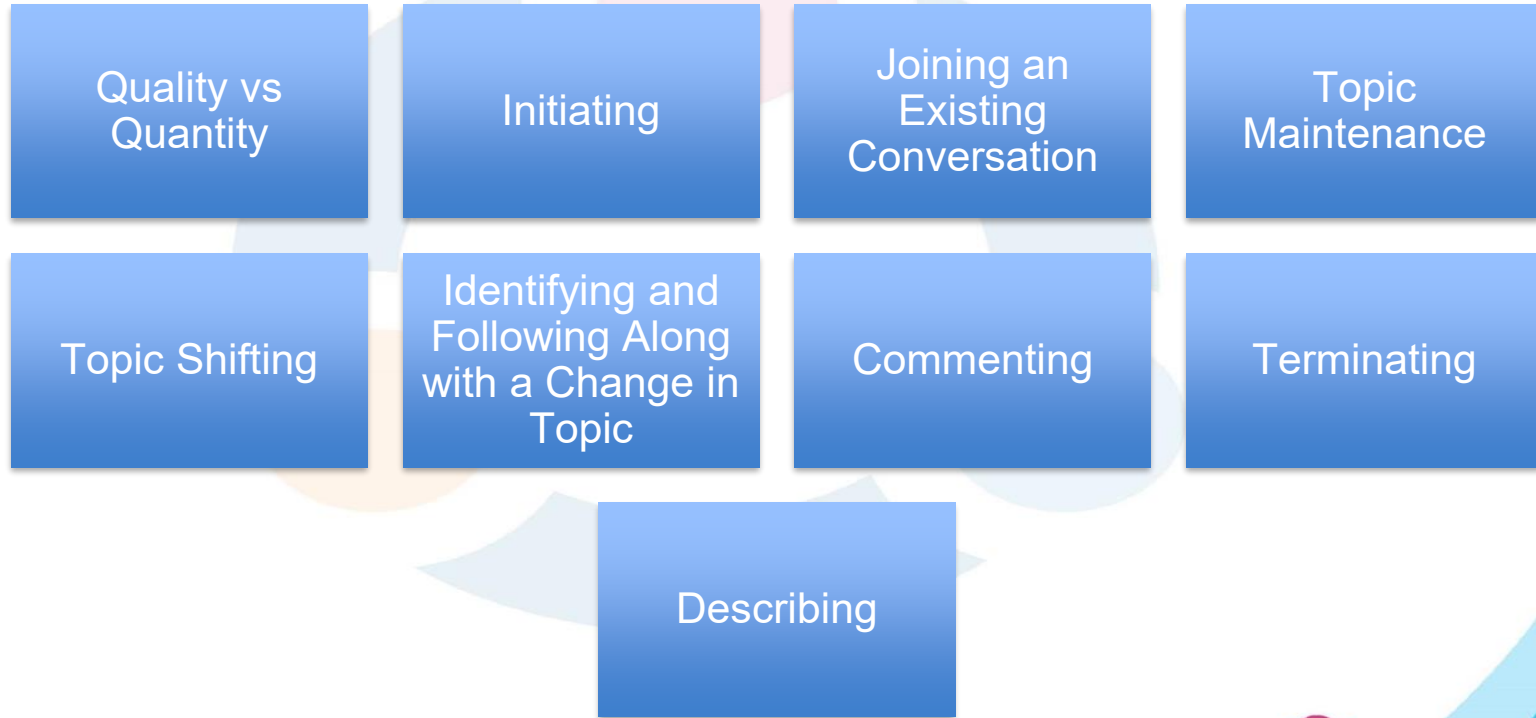
- Identify several articles depicting use of scripts to increase conversation skills
- Identify potential strengths and limitations of scripts
- Identify potential strengths and limitations of semantic maps
- Identify a use of social reciprocity in conversational programming

Conversation



- As we know individuals with autism have great difficulty with conversation.
- We see this from the most basic level to more complex language.
- We are going to look at ways to increase skills for having better conversations

Complexities of Conversation



What's the # 1 answer?
IEP goal for conversation skills?

Quantity



Quality

- Proximity (personal space) **video/modeling**
 - Keep it from getting too abstract-bubbles- but arms length- be cautious
- Engagement (eye contact, body orientation, responsive, staying in place) **video/modeling, reinforcement**
- Able to respond within topic **topic building, vocabulary**
- Able to shift topics with 2nd speaker **topic building, reinforcement for shifting**
- Uses appropriate grammar **identify errors, lang. samples, models**
- Varies sentence starters **reinforce variability/script quadrant**
- Varies from questions to comments **model, textual cues**
- ETC.....

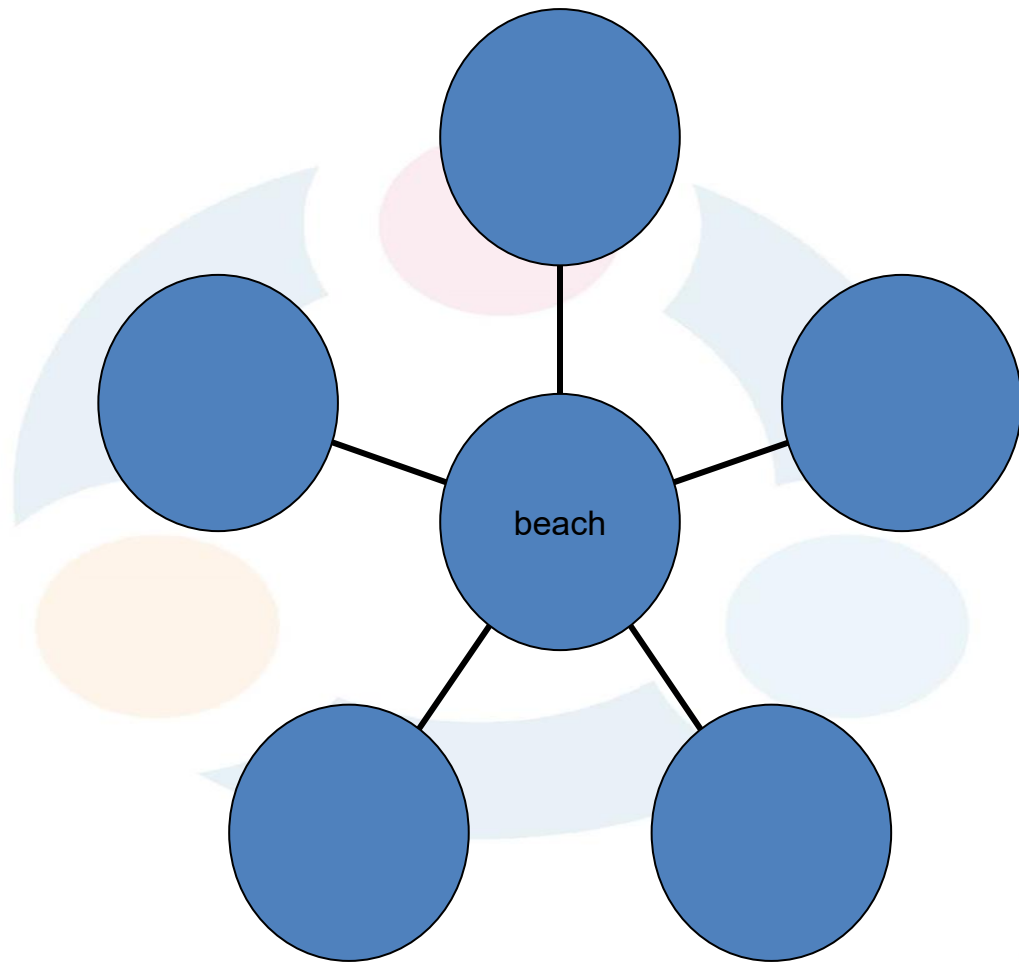


Semantic Mapping

Semantic Mapping

- Strategy for graphically structuring and representing concepts in an organized manner (Johnson et al., 1986).
- In the area of literacy, a semantic map is a graphical model designed to help identify important ideas and how they fit together.
- Related to literature on building vocabulary (lexicon)
- “Thinking maps” to teach metaphors (Mashal & Kasirer, 2011)
- Let’s do the research....





Semantic Mapping and Communication

- McCoy et al, 1989 referenced the use of semantic mapping as a communication tool related to a student's experiences and emotions.

Semantic Mapping

- Use as an assessment tool to assess the inventory of language that a learner currently has in their repertoire.
 - Associations
 - Categories
 - Opposites
 - Attributes
 - Parts to Whole



Making Connections

- The map helps us to see what associations the individual can make to a topic
- Using the map can help the person to learn to make associations and make connections
- We want the participant to come up with the information use later for conversation... so they “own it” rather than us providing them with the information through a script

Popplet.com

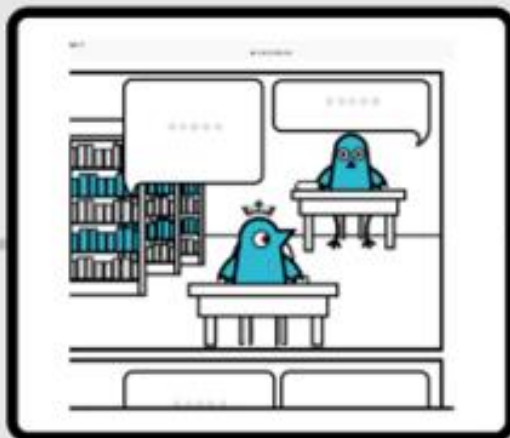


my new popplet

zoom



What are they doing?
Sitting at the table



Where?
Library

Who?
Birds

popplet: Facts About Earth

go fullscreen

log in

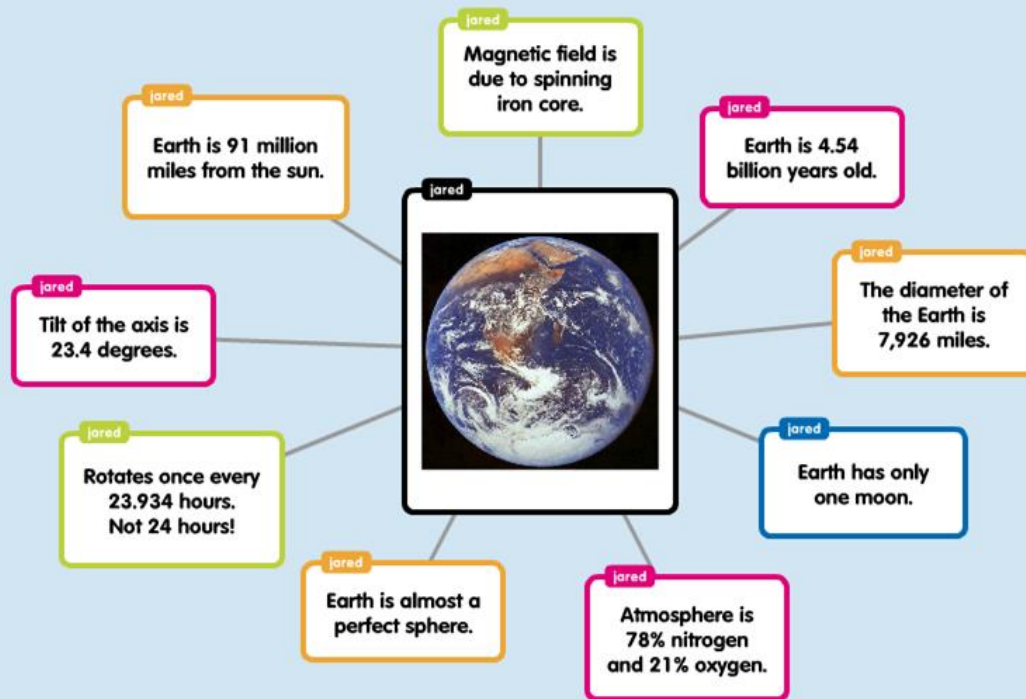
home

view all

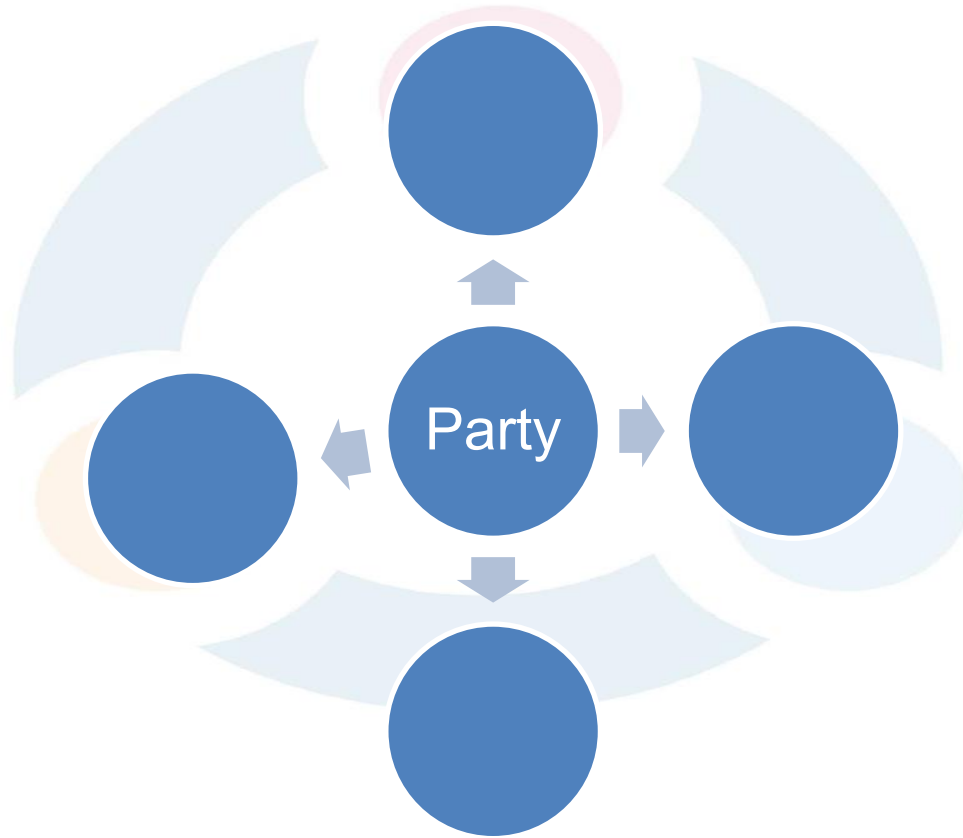
zoom - +

what's popplet?

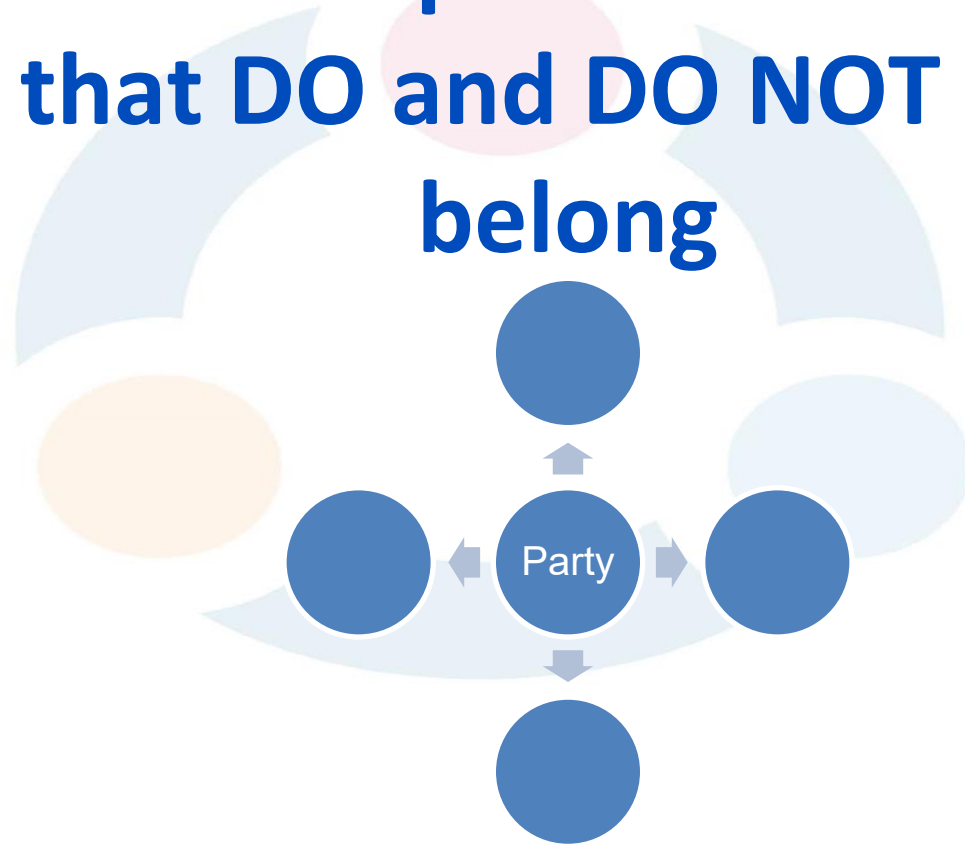
share



Party- Topic /Word Associations



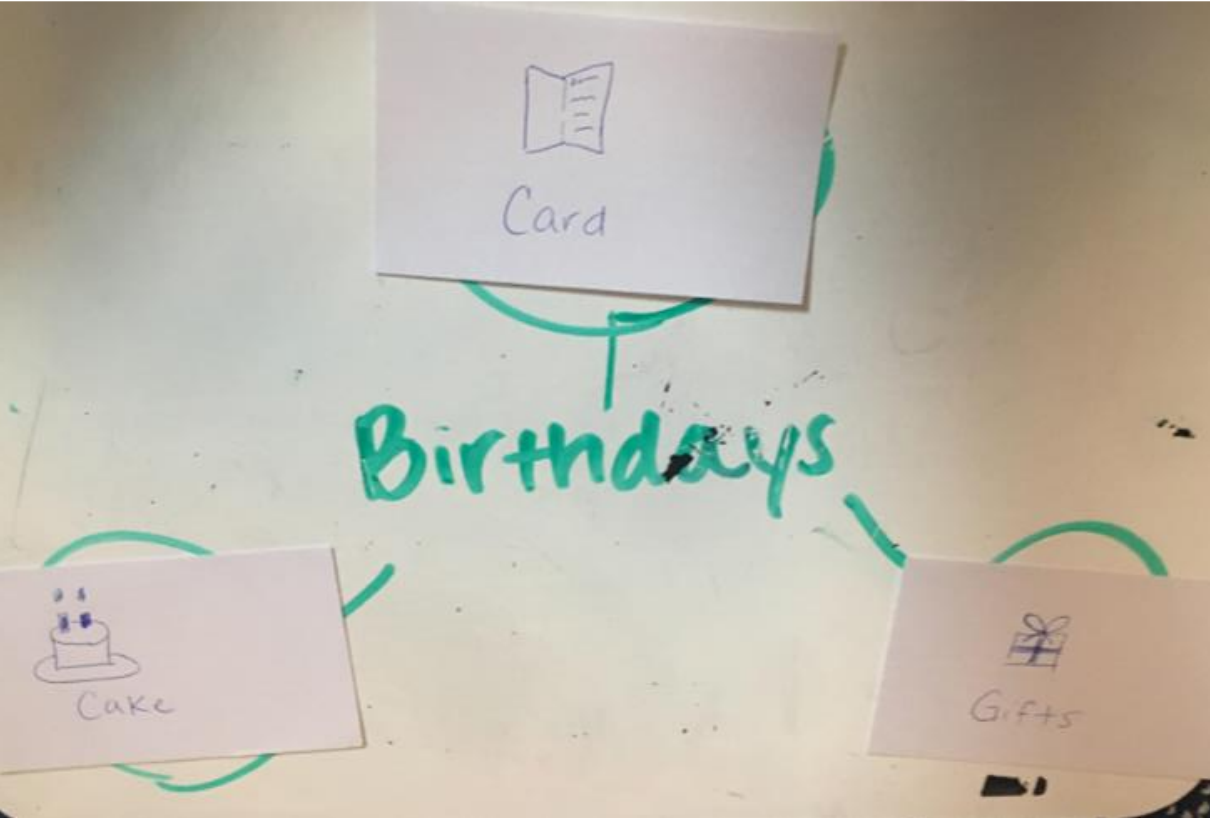
Assessment Activity:
give some pictures or words
that DO and DO NOT
belong





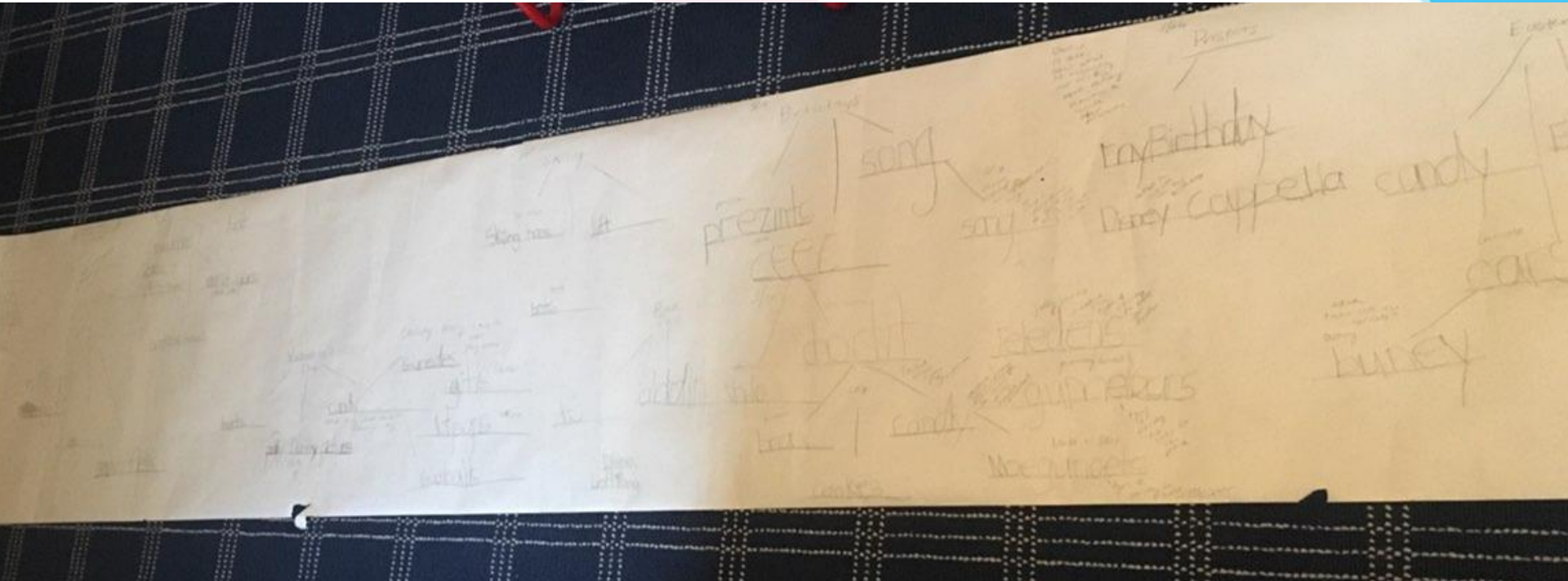
SEE WHAT they KNOW





- Chris selected these words from a set of 6
- CARD
- CAKE
- GIFTS

Sample Mapping- Connected



See Drawings

Don't
forget
to
write
the
names
of
the
people
you
are
giving
the
gifts
to

song

my Birthday

present

story

Daisy Cappella card

see

didn't

relatives

about
1000
people
during
the
war

Lurey

didn't

around 1945

last

card

McGuire

cookies

Don't
forget
to
write
the
names
of
the
people
you
are
giving
the
gifts
to

Semantic Mapping

- Allows for more engagement because the individual generates content themselves with their own vocabulary and experiences.
- Map allows for flexibility in conversation (starting point) by nature of its physical appearance. (circular)
- Connections are formed between words and topics in connected maps

Candidates for Semantic Mapping

- Individuals who have had success with traditional scripts.
- Individuals who possess a well developed vocabulary and who have knowledge of varied language concepts.
- Individual who can attend to a “lesson” for at least a few minutes.

Using Semantic Maps?

- Visual strategy
- Focuses on expanding vocabulary/knowledge
- It can build into “scripts” but the participant is the one who is creating them from their knowledge

Written Scripts

Written Scripts

Written scripts

- Comprised of textual cues used to promote verbal exchanges.
- Provides a learner with contextually appropriate language.
- Often focused on an activity or event/topic

My name is _____.

I like to watch funny movies. I like to laugh.

I like listening to stories.

What do you like to do?

Will you read me a story?

Next Page

Strengths of Using Written Scripts

- Static & Replicable
- Provides continuity for prompting
- Good for visual learners and readers
- *Multiple exemplars* allow for generalization and resequencing
- Good for learners who learn by memorization.
- Can be faded for independent initiations and responses.

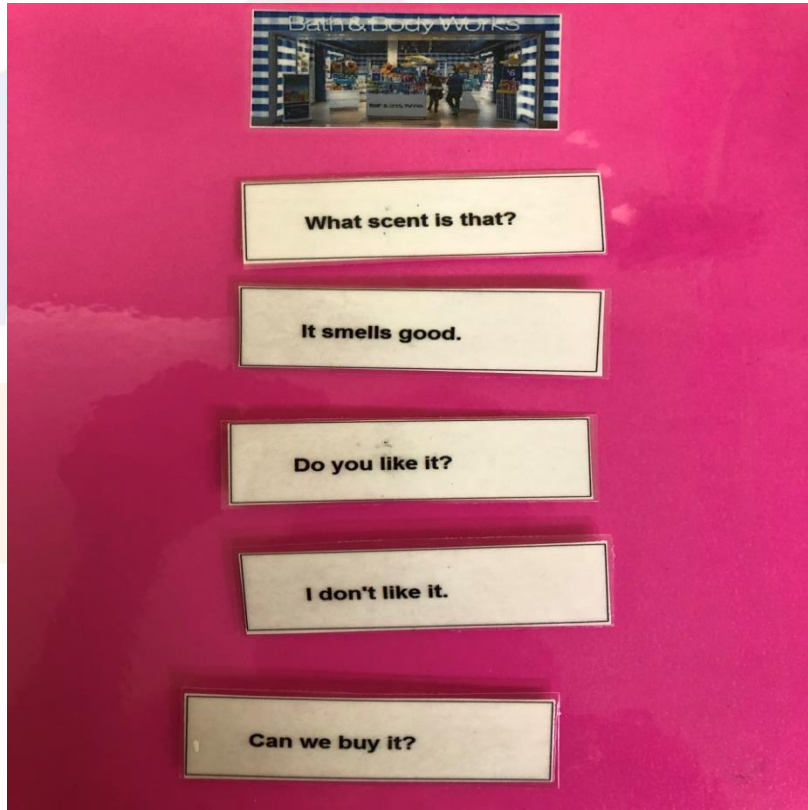
Vocabulary/ Background Knowledge



- Familiarity with topic you are talking about for a more extended conversation
- The individual *must know enough* about a topic to generate conversation.
- Interest and preference is important
- Experience too!



Bath and body works



Going to the Theatre

- The theatre I go to is called



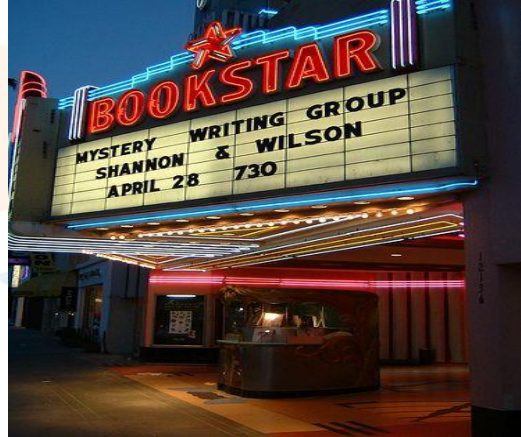
Marquee

- Outside of the theatre is the **marquee**.



Marquee

- A **marquee** lists the shows that are playing at a theater.



Box Office

- The **box office** is where we buy tickets to the show.



Lobby

- Inside the theater is the **lobby**.



Lobby

- When we get to the theatre we need to wait in the **lobby** until the show starts.



Ticket

- Each person who goes to see a show needs a ticket to get in.



Ticket

- The **ticket** lists the day and time of the show and where your seat is located.
- It usually lists a row number, section and a seat number.

Ticket

EVENT CODE	SECTION/AISLE	ROW/BOX	SEAT	ADMISSION	EVENT CODE
KA1103	110	27	9	ADULT	EKA1103
\$125.00	ENTER	110		125.00	
10.35	NO CAMERAS/RECORDERS				FC 1.00
110	PAUL MCCARTNEY				110
CA 48X	THE US TOUR 2005				420CAORW
27	KEYARENA @ SEATTLE CENTER				27
ORW1019	PRESENTED BY LEXUS				A 42621
A23APR5	THU NOV 3, 2005 8:00PM				9

002007557479

ticketmaster

get tickets at ticketmaster.com

NO EXCHANGE EVENT AS PROVIDED HEREIN. NO REFUND. NO RESALE.



Seat Number

- Once we find our row and section we can locate our seat. Each seat has its own number.



Seat Number



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Playbill

- While we wait for the show to start. We can look at our **Playbill**.



Playbill

- The **Playbill** tells us information about the show we are seeing including;
- **The characters in the show**
- **The songs in the show**

Intermission

- In the show, there is an **intermission**. That is the break in the show where the show stops.
- You can use this time to use the bathroom and leave your seat to walk around the theatre if you want to.

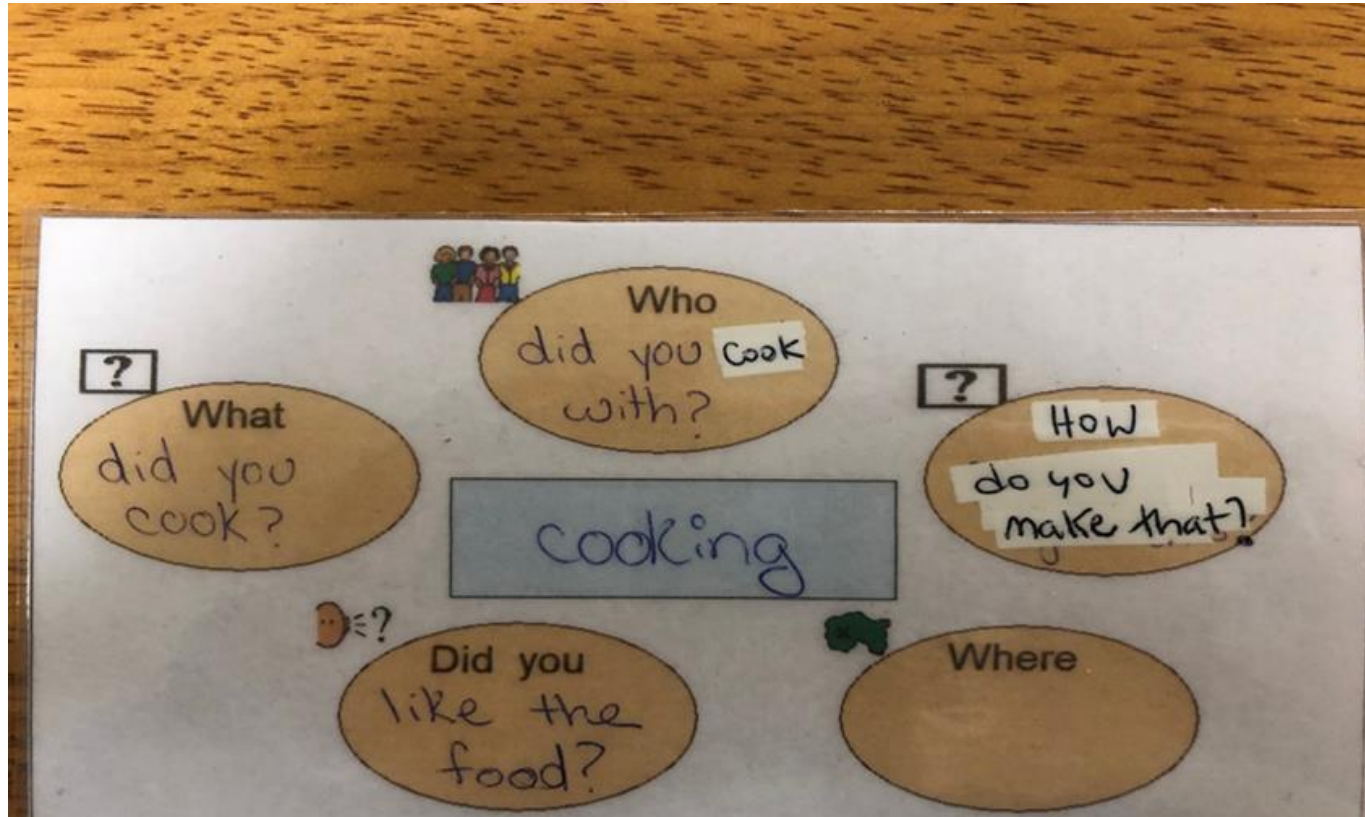
Intermission



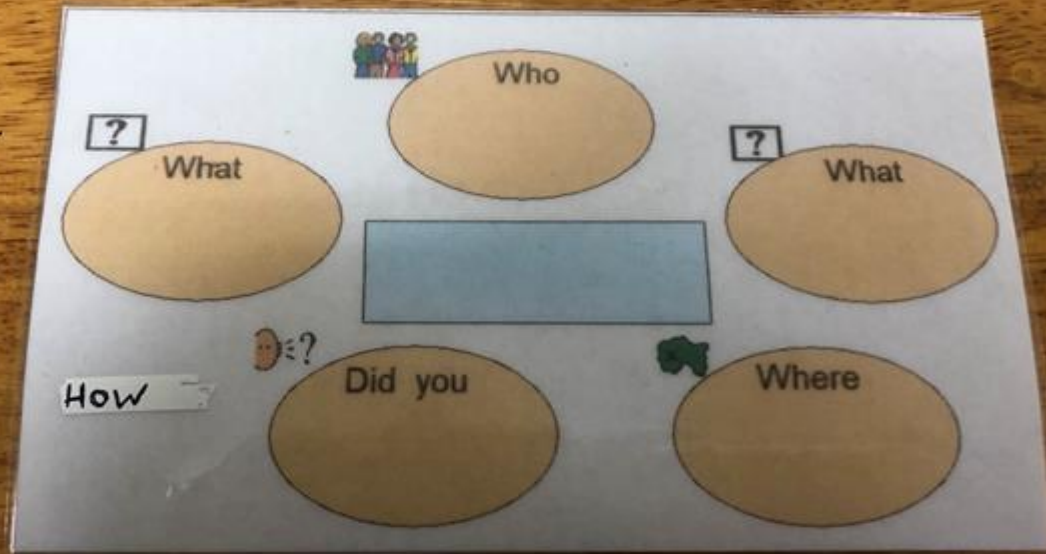
Intermission

- It can get pretty crowded during **intermission** because everyone gets up to use the bathroom and walk around at the same time.
- Make sure to stay with mommy and daddy.

Cooking Conversation



Sentence Starters



Cooking “Vocabulary”

Pasta & Sauce



3 Cans of Sauce



Cavatappi



Sauteed Onions

Cooking “Vocabulary”

Tuna Salad



Tuna



Mayo



Chopped Onions



Hard-Boiled Eggs



Describing Pictures



- He stated:

- “fire”
- “boat”
- “ship”
- “hook”



We pick pumpkins in a *field*.

What does *field* mean?

- 1) An open area
- 2) a place to eat
- 3) a place to go shopping

- An open area with no trees or buildings



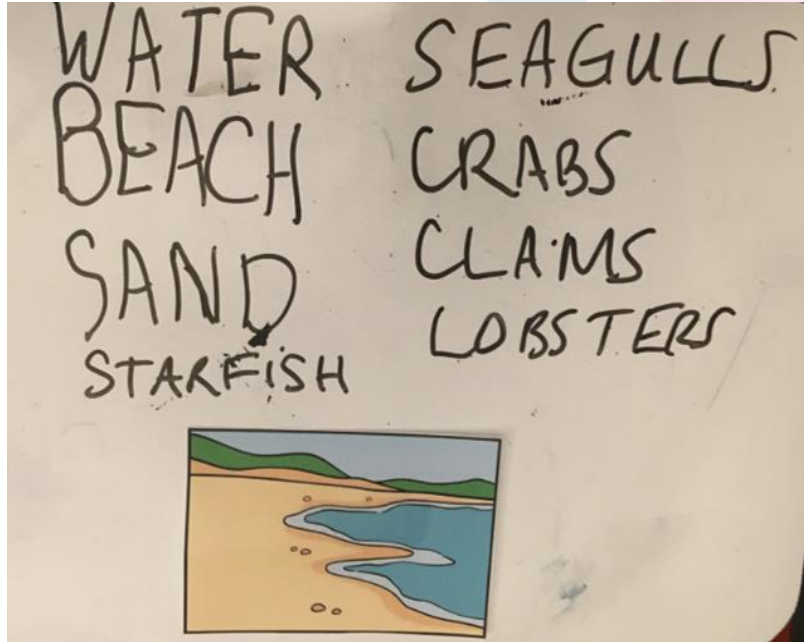
We went to the *orchard* to pick apples.

- What does orchard mean?
 - 1) A restaurant
 - 1) A place where fruit or nuts grow
 - 1) A place where fish swim

- A place where fruit or nuts grow.



Describing Pictures



- All words he used to describe the picture.
- His sentence was: The water is hot.
- He independently commented: “I need a vacation.”

What do you see?



Describe this



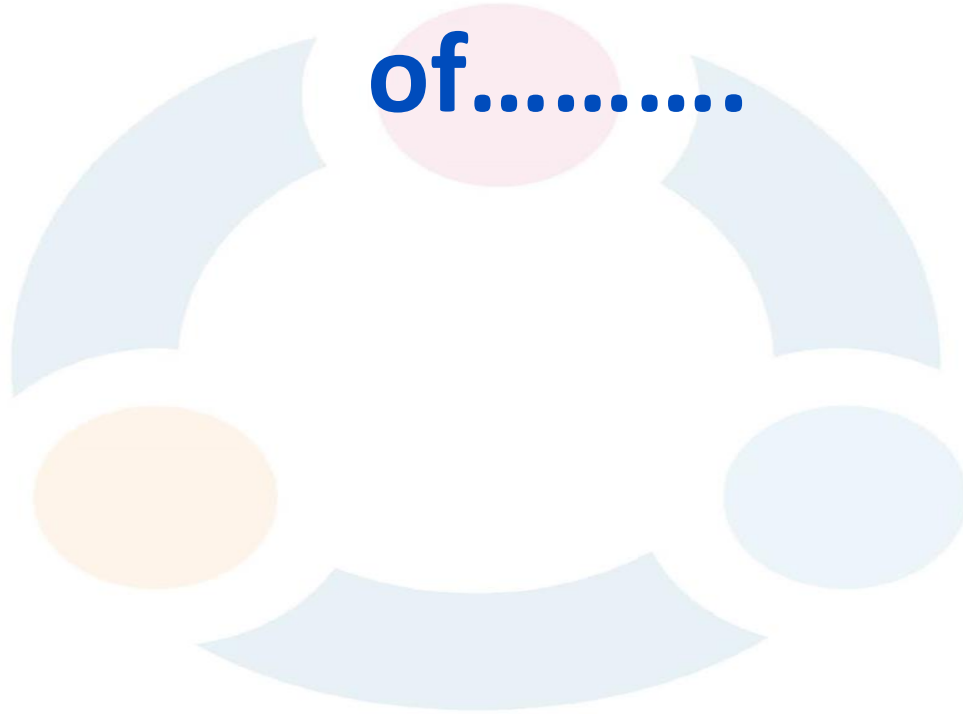
Would you rather Carve a Pumpkin or Paint a Pumpkin?



Let's Talk About This Picture



When I think of Fall I think of.....



Conversations about things that happened



Steps ↓	Date →													
1. Initiates greeting														
2. Asks about something that happened yesterday														
3. Makes a follow up comment														
4. Asks question about today														
5. Makes a follow up comment														
6. Asks question about something happening tomorrow														
7. Makes a follow up comment														
8. Terminates conversation appropriately														
9.														
Total # of Prompts →														
Percentage →														

P= Physical prompted G= Gestural prompt I= Independent

Comments:

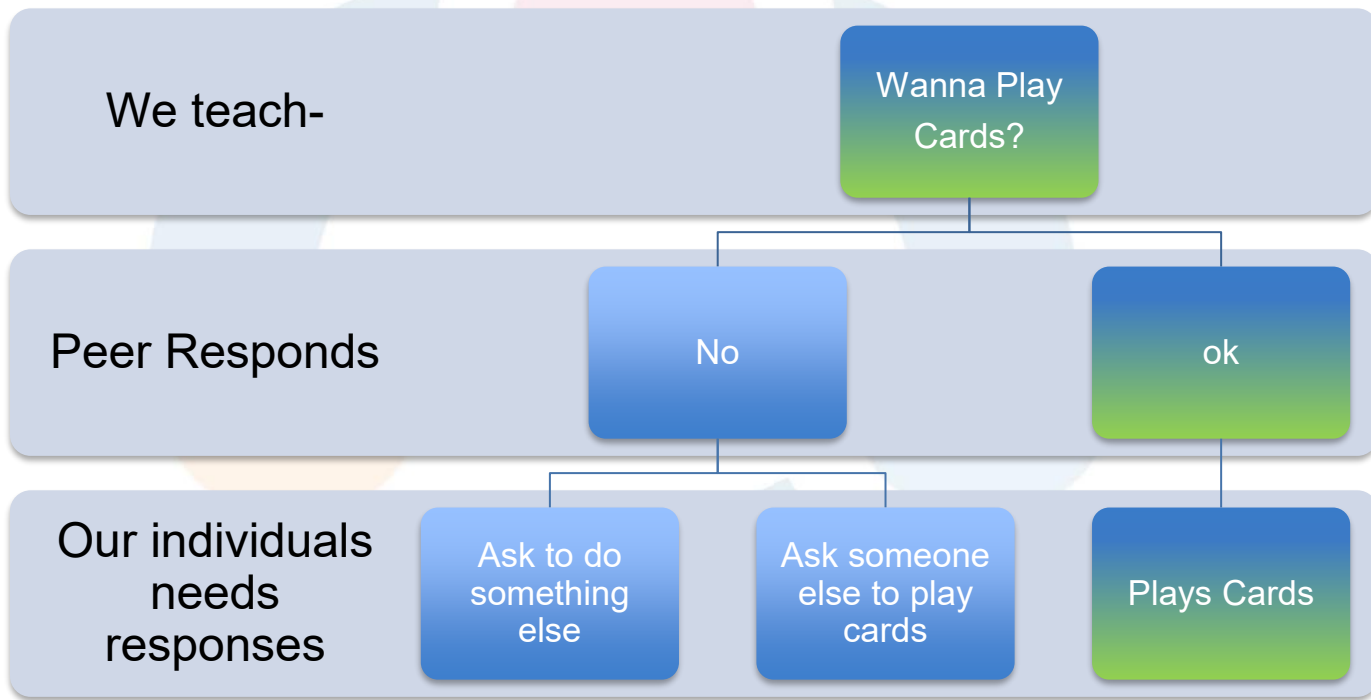


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Promoting Flexibility!!!

- Teach using multiple exemplars
- Vary sentence starters
- Teach for when things don't go according to plan
- How do people respond and is the participant prepared for different responses?

Initiations



Creating responses using quadrant script as a prompt

- Developing responses
- Used with audio scripts as well to keep them “in the game”

Really?	Cool
Wow	Uh-huh



Practicing Conversation Skills

Creating sentences/comments/
initiations using quadrant script
as a prompt

The	I
I like	Maybe



Asking questions

- Using quadrant or list to prompt question asking
- List is sequential- quadrant is more flexible
- 1. Who
- 2. When
- 3. Who
- 4. How
- Practice it as a skill... make it a game
- Turn over a “Wh” card and a topic card/picture

Who	What
Where	Do you



Comic Strips

- Comic strips are visual representations that can provide an opportunity for the participant to observe an interaction or create one
- Get the individuals involved in the development of the comic strip
- Create the first person's initiation- they create a response etc...



(Gray, 1994)

Make your own!!

WWW.MAKEBELIEFSCOMIX.COM

Greeting

Mary



This comic strip was created at MakeBeliefsComix.com. Go there to make one yourself!

Possible Limitations of Scripts

- Does not lend itself to flexibility or spontaneity in topic.
- Possible lack of generalization in the absence of a script.
 - Settings, Staff, Activity
- Data does not often measure for generalization.
- Time to train peers to respond to a script.
- Should understand the words in the script.
- “What did you do last night?” I played a game....
- Instructor developed and may not take into account individual preference or familiarity with topic or vocabulary.

Comparison of Teaching Methods

Scripts	Semantic Maps
Mobile	Desktop Learning
Passive	Active
Static	Creative
In the moment	Must be applied from prior learning experience
Visual or auditory	Visual
Model grammar/sentence structure	Single word level and then build sentences
Results in unscripted responding	Organizes Vocabulary

Questions for Selection

- Is the person an auditory, visual or multisensory learner?
- What strategies for teaching language have been successful in the past?
- Is he/she a rote learner?
- Does the individual engage in learning experiences actively or passively?
- Can the individual generate novel responses once taught a particular strategy?
- Is the individual a strong reader?
- How advanced is the individual's vocabulary?
- Can they vary or recombine previously learned phrases to generate new language?
- Do they have knowledge of various language forms?

Promoting conversation in students on the autism spectrum: scripts and semantic mapping

Dana Battaglia and Mary E McDonald, New York

Editorial comment

Dana Battaglia works in the Department of Communication Sciences and Disorders at Adelphi University and Mary McDonald is based in the Special Education Department at Hofstra University. In this paper they discuss the potential benefits of using scripts and semantic mapping to facilitate communication and conversation between individuals with autism and their peers or adults. They explore the research base for each method and illustrate the type of work they have done with individual children and young people. They conclude that further research is required as there is far more written about the use of semantic mapping in helping written skills, than exists for conversational skills.

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Acknowledgements

The authors would like to acknowledge the individuals on the autism spectrum and their families, whom they have had the privilege to serve.

Introduction

"Charles is a 14 year old with autism who is socially motivated. He approaches adults and peers but frequently doesn't initiate communication. He hovers within the general proximity of adults and peers without communicating with them effectively. His speech-language pathologist and behaviour analyst have come together to formulate goals to teach him conversation skills."

Children with autism are frequently taught communicative reciprocity. This is often accomplished using scripted responses (eg audio, text and video). Teaching communication skills using scripts, however, can be

From a developmental and communication perspective, conversational skills are quite complex and extend significantly beyond the exchange of information. During typical language development, vocabulary and subsequent conversation skills are based upon experience. Children can talk about themselves, events, objects, and other people. While a typically developing 4 year old may be able to discuss a wide range of topics, conversations are initially very topic oriented. Again, with experience, children will embed comments within these topics, as well as ask questions. The termination of a conversation may include a true termination (eg "bye") or a topic shift (eg "I also like libraries"). or



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Reciprocity- almost always forgotten

- Our focus is on our participant with ASD- but do we collect data on the receiver of the conversation?
- Do we record data on responses made to our participant? OR... initiations made to participant?
- Do we expect to see an increase in initiations toward our participant if our participant is conversing more?

Reciprocity



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Research in Developmental Disabilities
24 (2003) 453–465

Research
in
Developmental
Disabilities

Increases in social initiation toward an adolescent with autism: reciprocity effects[☆]

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Received 3 September 2002; received in revised form 31 October 2002; accepted 12 April 2003

Abstract

Level of spontaneous social initiating by three adult caregivers toward a youth with autism was studied during a program to increase the youth's level of social initiating. The adult participants were three staff members of a program for individuals with autism; they

Procedure

- During baseline sessions, 15 disks labeled with adults' names (Sally, Annie & Amber) were placed on Neal's desk
- During these sessions if Neal did initiate, the experimenter gave verbal praise. At the end of each baseline session the 15 labeled disks were traded for 15 tokens, independent of what occurred during the session.
- During probe sessions, disks were not placed on Neal's desk. Neal was simply told at the beginning of the session to talk to Sally, Annie and Amber. During probe sessions if Neal did initiate to Sally, Annie or Amber, verbal praise was given. Tokens were not provided during probe sessions

Procedure

- During training sessions, 15 disks were present on Neal's desk and labeled with an adult's name on them.
- Neal was simply told that the disks were there to remind him to talk to Sally, Annie and Amber.
- During the first leg of the multiple baseline Neal was shown Sally's name printed on the disks. Only Sally's name was pointed out to Neal, and initiations were prompted only to Sally. Each time Neal initiated to Sally, he was verbally praised and told to exchange a disk with Sally's name for a token, until all disks were used.
- Additional initiations to Sally and all initiations to Amber and Annie were followed by verbal praise only.
- Disks were traded for tokens and a token economy was used for exchange.

Young Adult's Initiations to Staff

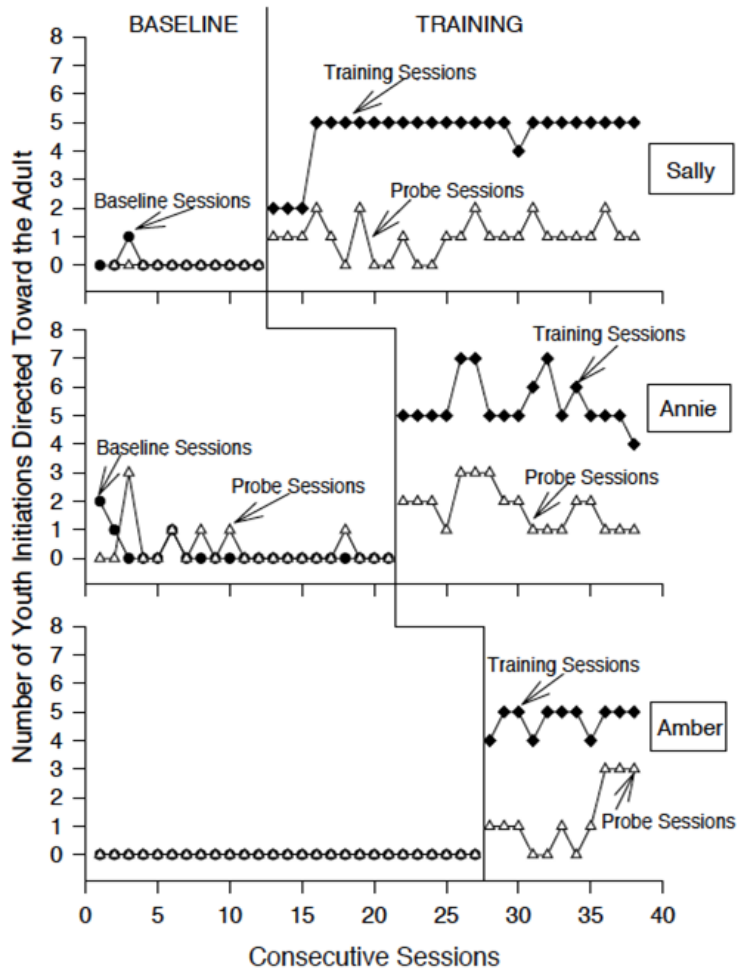


Fig. 1. Number of youth initiations toward adults when disks were present (baseline and training sessions) or absent (probe sessions).

Staff responses to young adult?

100%



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Staff initiations to Young Adult!

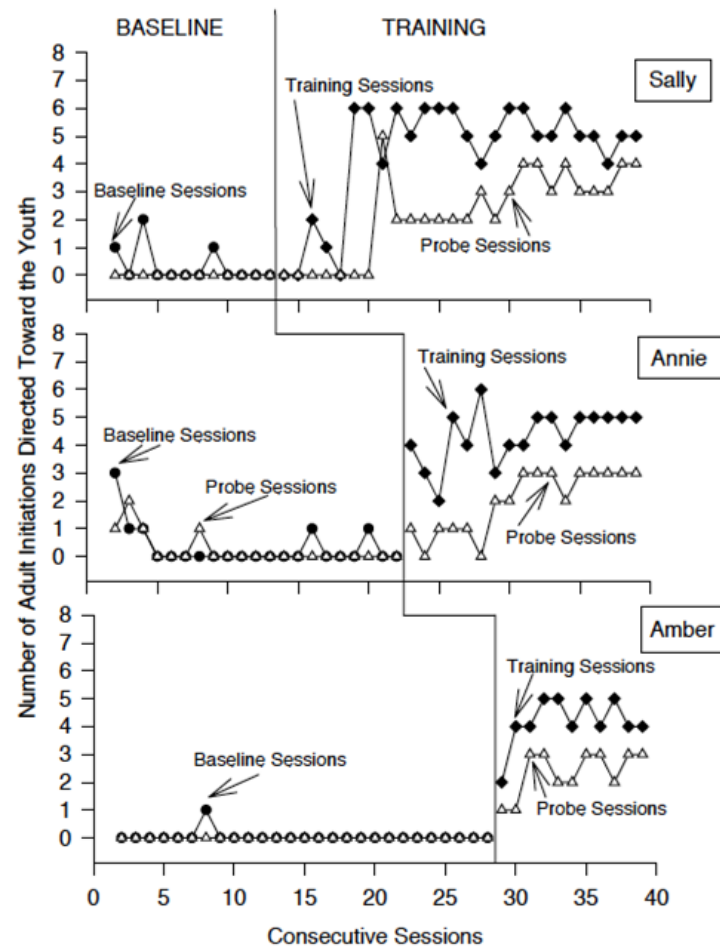


Fig. 2. Number of adult initiations directed toward Neal when disks were present (baseline and training sessions) or absent (probe sessions).

Importance

- It was important for Neal to initiate more
- It was also important to be sure that people were *responding* to him when he did
- And most important to know that people were now *initiating* to him more-
- WHY is this important?

tions. As participants talked more, opportunities to engage in play with peers increased. Second, by promoting social interaction in a natural setting with peers who were unaware of the prompting procedure, children with autism may be more likely to fit in and be less likely to be viewed as different.

There are at least three limitations of this study that need to be addressed. First, the number of phrases that were taught using the tactile prompt was limited to one or two phrases. Future research might evaluate methods for teaching children to make a variety of statements (e.g., incorporating scripts along with the tactile prompt). Second, this study did not account for the direct effects of the device on peers' rates of initiations. In other words, it would be worthwhile to determine if peers' initiations increased as a result of the participants' increased interactions. Finally, when reductions in prompts were implemented, rates of initiations decreased, and some prompting was necessary for participants to maintain initiations commensurate with peers. Additional studies might identify ways to more effectively eliminate the tactile prompt so

that children can continue to initiate and respond in the presence of naturally occurring stimuli.

In summary, this study provided additional support for the use of a tactile device as an unobtrusive prompt to increase social interactions between children with autism and typically developing peers. Additional strengths of this study included investigation of the tactile prompt in a naturalistic setting and an attempt to fade the device and decrease prompt dependency for social interaction among children with autism.

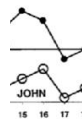
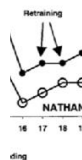
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Received May 8, 2001

Final acceptance October 19, 2001

Action Editor, Bridget Taylor

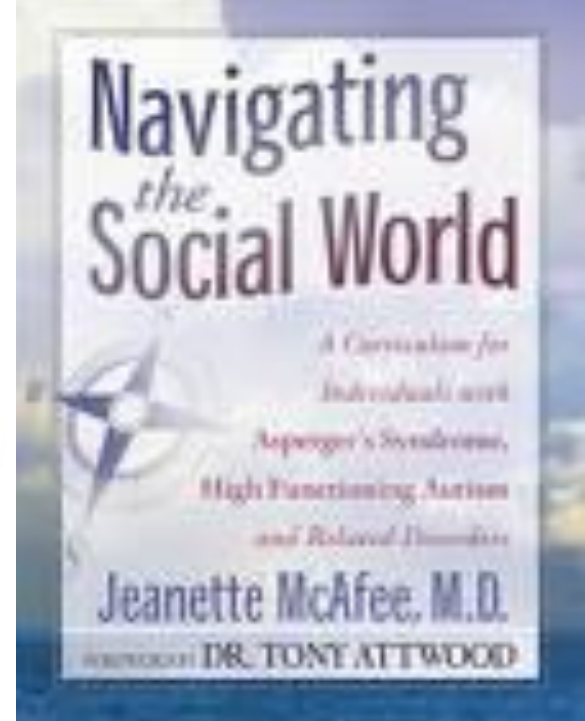
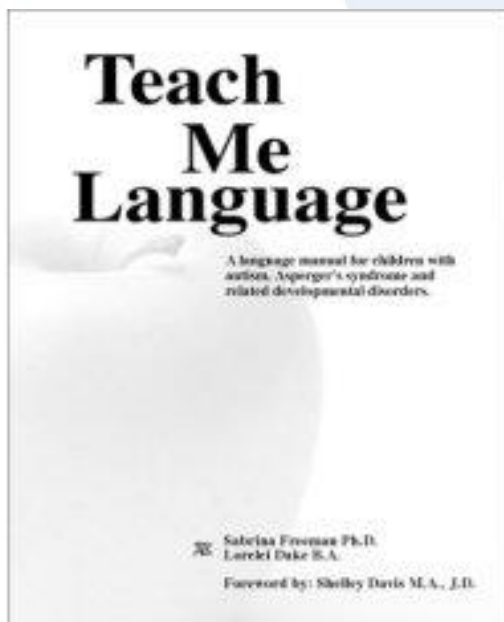
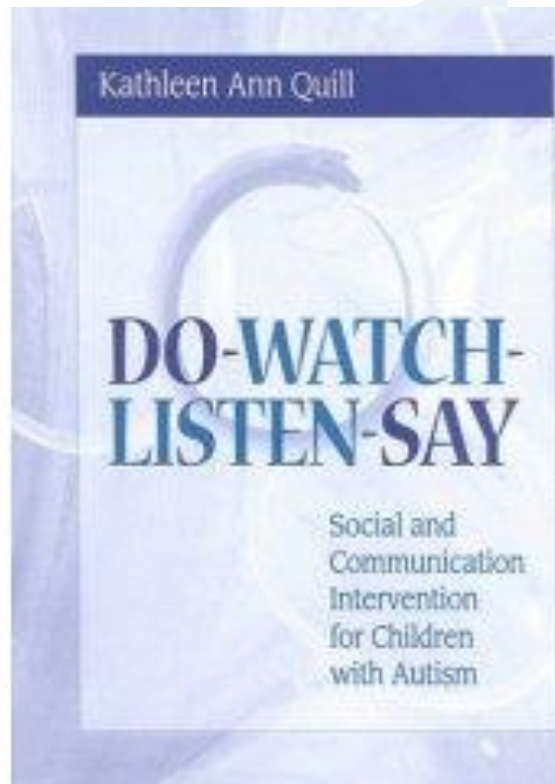


Summary

- Individuals with autism demonstrate deficits in conversational skills due to issues with cognitive flexibility and semantic knowledge.
- The teaching strategies discussed today aim to address these deficits.
- It is necessary for the clinical team to assess a participant's language and learning characteristics in order to determine the most effective intervention.



Resources



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