

Understanding and Improving the Development of Narrative in Children

By
Allyssa McCabe, Ph.D.
University of Massachusetts Lowell

Overview

1. Background
2. Typical development with age
3. Why do some children tell much better narratives than others? Longitudinal study of parent input
4. Cultural differences in input & structure
5. Deficits typical of TBI, SLI, ASD(HF), ADD
6. Difference versus deficit
7. Improving narrative in school & at home

Why is Narrative Important?

- Predicts 4th, 7th, & 10th grade reading comprehension & receptive vocabulary¹
- Helps children make sense of their experiences
- Enables children to connect with family and friends and make new friends

¹Snow, Porche, Tabors, & Harris, 2007

Background: My approach

- Personal narrative chosen
 - Used in all cultures examined to this point (fictional narratives are shunned in some cultures)
 - Exchanged daily
 - Enables children to make sense of their experience
 - Important aspect of relationship formation & maintenance
 - Means of conveying a sense of self

Background

- Conversational elicitation
 - Not a test situation, relaxed
 - Tell a story to get a story
 - Neutral prompts (uh-huh, “tell me more” or repetition of child’s words) for assessment
 - Specific prompts for *who*, *what*, *where*, *when*, *how*, & *why* for improving narrative (what is missing?)

Background:

- Analysis of narrative = way of making sense of it
- A variety of analyses should be considered as personal narratives are rich and complicated
- Each analysis presents a different facet of a narrative

Background:

- A variety of analyses should be employed as personal narratives are rich and complicated
 - High Point Analysis^{1,2}
 - Story grammar³
 - Stanza analysis⁴
 - Dependency analysis⁵ → Narrative Assessment Profile⁶
 - Africanist analysis⁷ based on Okepewho's⁸ work

¹Labov & Waletzky, 1972 → ²Peterson & McCabe, 1983; ³e.g., Stein & Glenn, 1979; ⁴Hymes, 1982; Gee, 1986; ⁵Deese, 1979; ⁶McCabe & Bliss, 2003; ⁷Champion, McCabe, & Colinet, 2003; ⁸Okepewho, 1992

Background

- Dependency analysis¹ → Narrative Assessment Profile²
 - Topic maintenance,
 - Informativeness
 - Event sequencing
 - Reference
 - Connective cohesion
 - Fluency

¹Deese, 1981 → Peterson & McCabe, 1983; ²McCabe & Bliss, 2003

Background: Development

- **Cross-sectional study:** Typical development with age¹
- **Longitudinal study** of parent-child interaction: elaborative reminiscing predicts optimal narrative performance^{2,3}
- **Experimental intervention** (4 yr): training randomly assigned mothers to elaborately reminisce → improved narration & receptive vocab^{4,5}

¹Peterson & McCabe, 1983; ²McCabe & Peterson, 1991; ³see Fivush, Haden, & Reese, 2006, for review; ⁴Peterson, Jesso & McCabe, 1999; ⁵Reese, Leyva, Sparks, & Grolnick, 2010

Cross-sectional Study

- Typical development with age¹
 - 96 European North American children, 50% M,F
 - Aged 4-9 years
 - High Point Analysis

¹McCabe & Peterson, 1991; ²see Fivush, Haden, & Reese, 2006, for review; ³Peterson, Jesso & McCabe, 1999; ⁴Reese, Leyva, Sparks, & Grolnick, 2010

Development w/Age

- 4 years: Leapfrog narrative
- 5 years: End at the High Point Narrative
- 6 years: Classic narrative

¹McCabe & Peterson, 1991; ²see Fivush, Haden, & Reese, 2006, for review; ³Peterson, Jesso & McCabe, 1999; ⁴Reese, Leyva, Sparks, & Grolnick, 2010

4-year-old girl: Leapfrog Narrative

Ch: My sister had, she's had, she broke a arm when she fell in those mini-bike. She had, she went to the doctor, so I, my dad gave me spanking and I
Int: Your dad gave you what?
Ch: A spanking to me. And she had to go to the doctors to get a cast on. She had to go get it get it off, and, and it didn't break again. She still got it off. She can't play anymore. She *can* play rest of us now.

¹McCabe & Peterson, 1991; ²see Fivush, Haden, & Reese, 2006, for review; ³Peterson, Jesso & McCabe, 1999; ⁴Reese, Leyva, Sparks, & Grolnick, 2010

5-year-old-girl: End-at High Point Nar.

Know something? The other day I had to go to the doctor's and I had to get a shot. In the arm. And my MOMMY, she didn't CARE about me getting a SHOT. And my babysitter took me to get a sCARE. And so my mother didn't CARE. I cared, but my MOTHER didn't. My MOTHER cres now, but not much. SHE don't care a LOT. She only cares a little bit. My mom don't care much about me. She DON'T care much about me. Just a little...NOT much.

¹McCabe & Peterson, 1991; ²see Fivush, Haden, & Reese, 2006, for review; ³Peterson, Jesso & McCabe, 1999; ⁴Reese, Leyva, Sparks, & Grolnick, 2010

6-year-old ENA boy: Classic Nar.

Hi, Sally, I broke my arm. **Abstract**
I was, well, um, well, um, um, the day, two days ago, I was climbing the tree. **Orientation, setting**
and I...Well see, I went towards the LOW branch and I and I, I got caught with my baving suit? I dangled my hands down and they got bent. **Actions**

because it was like this hard surface under it. Then they bent like in two triangles. But luckily it was my left arm that broke... **High Point: Evaluation**

Only my mom [was home]. My mom was in the shower, so I SCREAMED for Jessica, and Jessica goed, told my mom. I DONT have Dr. Vincent [anymore]. I had to go to the hospital and get...Mmmm. It was much more worse than you think because I had to get, go into the operation room and I had to get my, and I had to take um anesthesia and I had to fall, fall, fall asleep, and they bended my arm back. And I have my cast on. **Resolution**
Do you want to sign my cast? **Coda**

Longitudinal Study: Parent Input

- Elaborative reminiscing predicts optimal narrative performance^{1,2}
 - 10 middle-class children and parents
 - 25-27 months at outset
 - Followed for c. 4 years

¹McCabe & Peterson, 1991; ²see Fivush, Haden, & Reese, 2006, for review;

Longitudinal Study: Parent Input

- Parental focus varies and predicts child focus in narration
 - Orientation¹
 - Causality²
 - Reported Speech (individual & gender differences)³

¹Peterson & McCabe, 1992, 1996; ²McCabe & Peterson, 1996; ³Ely & McCabe, 1993, 1996; Ely, Gleason & McCabe, 1996; Ely, Gleason, Narasimhan, & McCabe, 1995;

Parents Convey Cultural Values

- Japanese mothers value brief turns, succinct narratives of several similar experiences¹
- Spanish parents: Conversation-focused versus story-focused narration²
- Chinese-American parents: Bicultural selves³

¹Minami & McCabe, 1995; ²Melzi, 2000; ³Koh & Wang, in preparation

Parents Convey Cultural Values

- Why should practitioners care about these differences?
 - To prevent misdiagnosing difference as deficit.
 - To prevent misdiagnosing deficit as difference.
 - To understand how best to work *with* parents as only parents have sufficient time to reminisce one-on-one with a child.

Result: Cultural Differences in Narrative Structure

- Japanese children
- Mexican American children
- Haitian American children
- African American children

Japanese Children's Narration

• 8-year-old boy, Stanza analysis

1. As for the first shot,
2. (I) got (it) at Ehime.
3. (It) hurt a lot

4. As for the second shot,
5. (I) knew (it) would hurt.
6. (It) didn't hurt so much.

7. The next one didn't hurt so much either.
8. As for the last shot, you know.
9. (It) didn't hurt at all.

Japanese Children's Narration

- Combine several similar experiences into single narrative
- "Talkativeness is embarrassing."
- Active listening valued.
- Don't insult your listeners by spelling everything out.

Mexican American Children

Yes, to grandma (to visit in hospital). My mother wanted to take her to the hospital, but grandma didn't wanted to go, but we took her. They didn't do anything to her. And another old lady was there. We looked at her but she was not grandma. The old lady was just talking and talking with my mom and with my sister Areli. Big sister who lives in Riverside (...) And we took her home. But she wanted to go to another house, which was my aunt's house, but that house was very ugly, and my aunt had too many dogs and the house was dirty. And then we took her to... to my aunt's (...) and now grandma says that my sister and my aunt keep the house clean and that it has a new roof. And today we are going to visit her. After school. (Mexican American, 7 years)

Mexican American Children

- Mention of many relatives.
- Reflect parents' focus on conversation → may strike Anglo listeners as tangential
- Bilingual children need to have their parents' speak to them in native language.
 - Better quality of input
 - More talk
 - Closer relationships

Haitian American Children¹

A 7-year-old Haitian American girl (told in English)

1. And once when I was in this wedding.
2. I was a flower girl.
3. And my friend Isadora too was a flower girl. rep, par
4. And I was wearing this dress.
5. Can I show the dress? rep
6. It was a long dress with a ribbon around it. rep, det
7. It was a blue dress. rep, par, det
8. It was a long dress. det
9. And they stuck something on it.
10. I think it's still there.
11. And it was a pretty dress. rep, par, det
12. And I was sooo lucky ide
13. Because there was a flower girl with curly hair
14. —the same thing as me—
15. at this other wedding.
16. This flower girl—they wore ugly dresses. det
17. They was green. det
18. And my friend said it was ugly dress. rep, det

¹Champion, McCabe, & Colinet, 2003; Repetition, Parallelism, Detailing, Gesture, Singing

Haitian American Children¹

18. And my friend said it was ugly dress.	rep, det
19. Their hair was ugly.	rep, det
20. This girl had, her hair was like this, like that (demonstrates).	det, ge
21. And it was up	det
22. And curled up	rep, par, det
23. And curled.	rep, par, det
24. I was like mwww!	ide
25. I was glad I wasn't that flower girl!	
26. Because, and her hair was like, did she wake up in the morning?	
27. And these other flower girls-- their hair was different from my hair.	rep, par
28. Cause theirs was curly too,	rep, det
29. But it was different.	rep, par, det
30. It was skinny curly.	rep, par, det
31. But I don't like the dress	
32. And I don't like their hairs,	rep, par
33. But I like, but they had this same flower girl from at the wedding.	
34. It wasn't different.	rep, par, det
35. And the reception: Ghetto superstar.	rep, par, det
36. And I like "Ghetto Superstar"	rep
37. It goes (singing), "Ghetto superstar, that is what you are."	rep, si
38. Yeah, Mya sings it.	det
39. Maya and Pras from the Fugees.	det
40. Can I show you the dress now?	rep

¹Champion, McCabe, & Colinet, 2003

Haitian American Children¹

- Entertaining, memorable stories—
performative stories—
- Despite fact that they are not conventional
classic narratives (High Point Analysis)
- Nor conventional story grammar format
narratives (i.e., organized around the
precipitation & resolution of goals)

¹Champion, McCabe, & Colinet, 2003

African American Children

- With typical development, produce a variety
of narrative structures
 - Classic
 - Performative

African American Children: Classic (TD)

No but my little brother, He, um he was real young. I think he was two years old. An' my mother was drivin'. An' my uncle was in fron' seat. An' me an' my younger cousin dat lives in Baltimore, She's eight years old. Her name is Whitney. An' my little brother was sittin' next to us. An' we was lookin' aroun'. An' he started playin' with da door. An' the door was unlocked. An' he opened the door an' fell out the car. An' he was flippin' back. An' he his head was busted open an' he had to get stitches. An' me an my cousin Whitney was sittin' in the back o' the car cryin'. Because he fell out the car. My mother kep' goin'. An' he did then my uncle Al said, "Rhonda stop the car because he fell out the car." An' she got out the car. An' she was actin' crazy. An' she got out the car. An' she was actin' crazy. An' she got 'im, like she like OH MY GOD she like MY BABY! And he got a cast around his head, An' he got stitches an' we brought him home. (10-year-old boy, collected by Champion)

African American Children: Performative (TD)

We went to the dentist before and I was gettin' my tooth pulled. And the doc, the dentist said, "Oh, it's not gonna hurt." And he was lying to me. It hurt. It hurted so bad I coulda gone on screamin' even though I think some...I don't know what it was like. I was, in my mouth like, I was like, "Oh that hurt!" He said no, it wouldn't hurt. 'Cause last time I went to the doctor, I had got this spray. This doctor, he sprayed some spray in my mouth and my tooth appeared in his hand. He put me to sleep, and then, and then I woke up. He used some pliers to take it out, and I didn't know. So I had told my, I asked my sister how did, how did the man take (it out). And so she said, "He used some pliers." I said, "Nah, he used that spray." She said, "Nope he used that spray to put you to sleep, and he used the pliers to take it out." I was, like, "Huh, that's amazin'!" I swear to God I was so amazed that, hum...It was so amazing, right? that I had to look for myself, and then I asked him too. And he said, "Yes, we, I used some pliers to take out your tooth, and I put you to sleep, an, so you wouldn't know, and that's how I did it." And I was like, "Oooooo."

African American Children: Performative (TD)

And then I seen my sister get her tooth pulled. I was like, "Oooooo" 'cause he had to put her to sleep to, hhm, to take out her tooth. It was the same day she got her tooth pulled, and I was scared. I was like, "EEhhmmmm." I had a whole bunch cotton in my mouth, chompin' on it 'cause I had to hold it to, hhm, stop my bleeding. I, one day I was in school. I took out my own tooth. I put some hot water in it the night, the, the night before I went to school. And I was taking a test. And then it came out right when I was takin', when I finished the test. And my teacher asked me, was it bleeding? I said, "No It's not bleeding 'cause I put some hot water on it." And so my cousin, he wanted to take out his tooth, and he didn't know what to do, so I told him, "I'm a Pullin' Teeth Expert. Pull out your own tooth, but if you need somebody to do it, call me, and I'll be over." (8-year-old girl)

Cognitive Differences Affect Narration

- Traumatic Brain Injury
- Specific Language Impairment
- High-functioning Autism
- Attention Deficit Disorder

Cognitive Differences Affect Narration

- **Traumatic Brain Injury (TBI)¹**
 - 10 children w/TBI, 12;0 yrs.
 - 10 adults w/TBI 35;2 yrs,
 - 20 matched controls
 - Dependency analysis revealed that TBI narratives:
 - More implicit propositions
 - More repeated propositions
 - More dysfluencies
 - Greater listener burden ration (= #implicit/#explicit props)

¹Biddle, McCabe, & Bliss, 1996; ²Deese, 1984

ENA Girl 7;4 w/TBI

Ummm, I, one, ther was a, we went. There was a fort. There was this ummm fort. A tree fell down and there was dirt, all kinds of stuff there. It was our fort. And one day I have a friend named Jude. She's umm grown up. She has a kid. She has a cat named Gus, a kitten....[bee sting stories]

Cognitive Differences Affect Narration

- **Specific Language Impairment (SLI)¹**
 - 10 boys w/SLI, 8;0-9;9
 - 10 boys matched for chronological age,
 - 10 boys matched for language level (IPSyn)
 - Narrative Assessment Profile:
 - Topic Maintenance = severely impaired
 - Event Sequencing = severely impaired
 - Explicitness (inc. referencing) = severely impaired
 - Conjunctive Cohesion = somewhat impaired
 - Fluency = somewhat impaired

¹Miranda, McCabe, & Bliss, 1998

8-year-old ENA boy w/SLI

I had a x-ray because they're checking on my leg. And I was scred that I was goin' up there and they gave me a balloon. And I went to, um, Toys-R-Us and gave me a toy. But I never, I, uh, I just broke my leg and I just fall down on my bike because I got hurt and my Band-Aids on me, put their off. And I jumped out of my bike and I...I flied and then I jumped down. And I um um our grandma, um she died. She was getting older, our grandma. And she died and the, uh,

8-year-old ENA boy w/SLI

funeral, my ma and dad went to the funeral. And the, Aunt Cindy was there too. And we, uh, they, um, uh, everybody was sad that um, a that died and on my birthday I went on my bike. And I jum...I just jump on my bike and I just balance on my, and I did it with a, I did do it with only my hands. I didn't do it without my hands. And I uh,um...I did one hand too.

Cognitive Differences Affect Narration

Specific Language Impairment of Bilingual Children¹

- 18 bilingual 8-11-yr-olds w/LI
- 21 bilingual 8-11-yr-olds w/TD
- Significant correlations between Eng & Spanish narratives (#utterances, orientations, actions)
- Narratives of children with TD: longer in both languages, more actions & orientation in Sp., and more evaluations in Eng.

¹McCabe & Bliss, 2005

Cognitive Differences Affect Narration

Specific Language Impairment: Personal versus fictional narratives of children w/LI¹

- 27 children 7;0-9;9
- Conversational map & *Frog, Where are You?*
- High Point scores of personal > fictional narratives
- Many fictional narratives contained no past tense verbs

¹McCabe, Bliss, Barra, & Bennett, 2008

Cognitive Differences Affect Narration

Autism Spectrum Disorder, High Functioning (ASD)¹

- 16 emergent adults with ASD, 20.7 yrs.
- 18 matched controls
- High Point Analysis & NAP show that ASD narratives exhibit:
 - Significantly poorer HP structure, either skeletal or rambling
 - Sig. fewer propositions introduced w/conjunctions

¹McCabe, Hillier, & Shapiro, 2012

19-year-old ENA man w/ADD, HF

- Longest narrative he produced:
- Part: I got stung on a trampoline.
- Interviewer: Oh wow, on your foot
- Part: Not on my foot
- Interviewer: Where was it? (this specific question is a departure from protocol)
- Part: Right here

Cognitive Differences Affect Narration

Attention Deficit Disorder (ADD)¹

- 24 children with ADD, 8;89 yrs.
- 33 matched controls with Typical Dev.
- Narrative Assessment Profile shows that ADD narratives exhibit:
 - Impaired use of Referencing
 - Disruptions of Event Sequencing
 - Somewhat reduced Topic Maintenance

¹Staikoa, Gomes, Tartter, McCabe, & Halperin, 2012

African American Child with Impaired Narration: one topic

My daddy. Him, my, our car. And him got it back. Him car got stolen and him got it back. Him got it back. It, it was a hole. When him got it back, there was a hole. When him got it back, there was a hole. Him got it back. He took the speakers in their hole. There was a hole for the speakers. Bigger. It was...it was a speaker right here and a speaker right there. And when it got stolen now, him got speakers back. Go through here. (4;8 boy w/SLI)

African American Child with Impaired Narration: Performative

: No...when I get some pets, they be, they be using it in our house. Because we be taking them outside and they don't be move because they don't need to move. Ain't no need to use the bathroom though. When they come in there, they use it. We be going outside quickest. We be running outs...out the door. We be on the door, and we run out through it. And our pappy in the back, uh, and she, uh, he use it. He got a big cage for all of them. We got lots of dogs. Once when we have five dogs and none ran away. Then we played with them. We brought them some chew toys, and they chew them when they hungry. They get...they, we, be seeing they full. That's the end of my story (4;7 boy)

Improving narrative skills in the classroom

- The Remembering, Writing, Reading program (RWR)¹ combines
 - Dialogic reading
 - Joint writing
 - Elaborating persona narratives
 - Recounting educational & other activities
 - Taking dictation of a narrative while referencing print
 - Bolstering receptive vocabulary
 - Engaging in letter writing & recognition

¹McCabe, Boccia, Bennett, Lyman, & Hagen, 2010

Improving narrative skills in the classroom

- Builds on Language Experience Approach (LEA):
 - To teach children with limited language (age, ESL, and/or impairment) one should use the student's own vocabulary and narrative structure to create reading materials that that student can comprehend¹

¹Dixon & Nessel, 1983

Improving narrative skills in the classroom

Child Name _____ Rereading 1 date _____
Child Date of Birth _____ Rereading 2 date _____
Date narrative recorded _____ Rereading 3 date _____
Rereading 4 date _____

Letter(s) pointed out (circle below & in dictation):

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz

Vocabulary word introduced:

Improving narrative skills in the classroom

Vocabulary word introduced: generous = giving
Narrative:

"Tell me about the fair?"

It was so nice. It had so many real fairs and so many rides. And jewelry and they gave us jewelry. They just let us play. "Get the Pepsi and drink it and then throw it and then fist it and then get another one. And then we get to go to get tickets and then go to get money for my games I wanted, and my mom's going to bring me my games. And then we will go to the mall. And then we'll go get some food and then go to the train.

"Then?"

We went to Mickey Mouse upstairs to buy my collection and buy pink and blue dresses. Shiny and light. And that's the story.

"Your parents were generous, weren't they? Do you know what *generous* means? No? It means giving. Your parents gave you lots of things."

Improving narrative skills in the classroom

1. Prompt student for experience
2. Write down child's words, repeating them in process. Don't worry about not being exact.
3. Ask for elaboration (who, what, when, how, why—parts left out)
4. If necessary, ask yes/no versions of above
5. Introduce a relevant vocabulary item.
6. Read/reread what child wrote (4x)

Improving narrative skills in the classroom

- Prompts: tell a story to get a story
- Or ask about an experience you know child had (“Why don’t you tell me about getting your new puppy?”)
- When reading child’s narrative back to them, ask for more elaboration (“How did the puppy feel when you touched him?”)
- On 4 readings, remind child of relevant vocab.

Improving narrative skills in the classroom: Results

- 48 low-income at-risk children, half in intervention, half in comparable public preschools wo/intervention
- An average of 26 20-minute 1:1 dictation sessions
- Pretest & post-test of receptive vocabulary (PPVT-III) and narrative skills

Improving narrative skills in the classroom: Significant Results (* $p < .05$)

	RWR mean	Intervention mean
PPVT dif, yr 1*	7.24	1.91
PPVT dif, yr 2*	2.75	-2.37
Narr Qual dif, yr 1*	2.16	.45
Narr Qual dif, yr 2*	1.54	-.84

Improving Narrative Skills: Sig. Results

- Prior to RWR, children’s receptive vocab = sig. below national norms.
 - Year 1: Mean = 90.7
 - Year 2: Mean = 87.8
- After RWR, children’s receptive vocab not sig. different from national norms.
 - Year 1: Mean = 98.0

Improving Narrative Skills: a parent involvement program

- For some parents, reading books w/children is fraught due to insufficient knowledge of English and/or literacy
- Even these parents can participate in a program that will help prepare their children for literacy acquisition

Improving Narrative Skills at Home

1. Modeling elaborative reminiscing.
2. Instructions
3. Follow-up
 1. Remind parents of importance
 2. Suggest prompts

Improving Narrative Skills at Home

1. Modeling elaborative reminiscing.

Read Excerpt A

Read Excerpt B

Improving Narrative Skills at Home: Instructions to Parents

1. Talk to your child frequently and consistently about past experiences.
2. Spend a lot of time talking about each topic.
3. Ask plenty of “wh” questions (*who, what, when, where, how, why*) and fewer “yes/no” questions (e.g., “Was Grandpa wearing a red coat?”)/ As part of this, ask questions about the context or setting of the events, especially where and when they took place.

Improving Narrative Skills at Home: Instructions to Parents cont.

4. Listen carefully to what your child is saying, and encourage elaboration.
5. Encourage your child to say more than one sentence at a time by using backchannel responses (e.g., “I see” or “really?”) or simply repeating what your child has just said.
6. Follow your child’s lead. That is, talk about what your child wants to talk about.

Improving Narrative Skills at Home

- Reminded parents 1/month of the importance of talking to their children about the past.
- Some teachers have sent home little forms from time-to-time saying, “Ask your child about what we did today in the garden”

Improving Narrative Skills at Home: Results

- Children in Intervention group
 - Gained sig. in receptive vocabulary (PPVT)
 - Produced sig. more narratives
 - Produced sig. longer narratives
 - Produced sig. more temporal context
 - Produced sig. more total context-setting information
 - Produced sig. more unique units of information

Improving narrative skills: More Info.

McCabe, A. (In Press). A comprehensive approach to building oral language in preschool: Prerequisites for literacy. In D. Barone & M. Mallette (Eds.), *Best practices in early literacy*. New York: Guilford.

Conclusion: Implications

- Personal narrative is the linguistic crossroads of culture, cognition, and emotion.
- Cultural differences in narrative may not always be understood as such and thus affect cross-cultural communication.
 - Beware misdiagnosing difference for deficit
 - But also beware of failing to detect deficits in clients/students from cultural groups not your own

Conclusion: Implications

- Impaired ability to recount memories affects:
 - Ability to make sense of experience
 - Ability to connect with others
 - Literacy acquisition, along with other aspects of oral language
- RWR: Improving narrative at school
- Parent Education: Improving narrative at home