Everyday Interactions and Activities: Field Studies of Early Learning Across Settings

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Abstract: This symposium presents research that uses video-based ethnographic methods to sample the range of ecological events and contexts in young children’s lives and thereby document the what and how of naturally occurring learning and development. All four papers presented focus on the interactional arrangements of social, cultural, and material supports for learning within contexts. The specific focus is on the social functions and social occasioning of practices across settings. The first two papers examine two common interactional arrangements—questioning and imitation—and the qualities of these arrangements across settings. The final two papers examine two common childhood activities in context—building with blocks and watching television—in order to understand how children engage in these activities and how that engagement is mediated by different interactional arrangements across settings. The combined effect of these papers is to begin to map the socio-material arrangements and interactional routines that contribute to young children’s everyday learning, a neglected focus in the learning sciences.

Symposium Overview
The learning sciences have largely neglected the study of young children and have generally ceded learning at this age to more traditional developmentalists and their methods. The dominant methods of developmental research over recent decades have been experimental. Laboratory studies offer assurances of statistical reliability, internal validity, and generalizability. What this dominant tradition lacks as a focus is a commitment to adequately sample the range of ecological events and contexts in young children’s lives and thereby to directly study the what and how of naturally occurring learning and development. For this we need to capture and analyze the daily learning activities and settings of early childhood.

These studies involve video-based microethnographic analyses of children’s routine activities at home and/or preschool. The data are drawn from two large-scale field projects investigating children’s interactions and learning in and across the socio-material contexts of their everyday lives. The first three papers are based on video data recorded in young children’s (ages 2-5) preschool classrooms and homes. Activities in seven classrooms at three preschools were recorded weekly for three-five months in each school. In addition, ten focal children (five boys and five girls) were video-recorded in out-of-school contexts. Approximately 500 total hours of interaction were video-recorded. The video records were viewed, logged, and selectively transcribed for further microanalysis. The analysis in the final paper draws from data collected for a study of children’s learning from screen media, particularly television. We simultaneously recorded the video stream from the television and the embodied activities of children and others in the viewing space, synchronizing the two videos to allow analysis of how children’s interactions in the room were affected by and coordinated with the television shows they viewed. Participants included 13 children (ages 1-6 years old) from nine families, as well as their parents, friends, and siblings. Approximately 60 hours of video were collected for this study.

Two overarching themes unify these studies. First, each study documents the interactional, organizational, and material supports for learning in the naturally occurring activities of young children. Secondly, these studies specify qualities of how children think and learn with others. Two further analytic foci connect these studies—foci distinctively available to field methods; these studies all seek to explore the social functions and social occasioning of children’s practices within and across settings. By social functions, we refer to the work that specific practices (e.g. questioning) do among people (e.g. how questions serve attention-getting functions for children with adults as well as information-getting functions). By social occasioning, we refer to the precipitating contextual conditions that give rise to a specific practice (e.g. a family-local practice of inquiry about scientific or natural things). Both of these questions are important for the learning sciences in that they address questions of how and under what conditions practices emerge in the flow of activity and where they lead in downstream activity.
These studies could be seen to lack unity if viewed from the perspective of the four focal practices: questioning, imitating, block building, and TV viewing. Conventional wisdom would suggest two of these practices are to be understood as much more ‘general’ (i.e. imitating and questioning) and two are more ‘specific’ (e.g. block building and TV viewing). By bringing studies on these four practices together, we mean to problematize this conventional wisdom. We mean for a comparison of these practices to open up new questions about the movement and transformation of practices across contexts and about the movement of people across contexts, into and out of practices. There are arguments of course that imitation is likely to be a general learning practice, because imitating is built into the human genetic structure (Rizzolatti, Fadiga, Fogassi, & Gallese, 2002) and that questioning is a general practice, because questions are encoded into the syntactic and/or prosodic structure of languages. TV viewing and block building would not seem to have these sorts pre-structured affordances, but perhaps that only seems the case if we bias our view of prior structure to person-internal structure (e.g. grammar, prosodic production, or mirror neurons) and not extend considerations of prior structuring to the external environment as well. TV viewing makes a strong case for thinking in these terms as well, because screen-based viewing opportunities (on televisions, computers, tablets, and smart phones) are nearing ubiquity, at least in Western culture contexts. The comparative questions we want to ask with the different practices are fundamentally transfer questions, understood differently from traditional mentalist transfer: how do practices circulate and stabilize across contexts and how do people circulate among practices across contexts?

Together, these four papers examine learning over several levels of interactional arrangement—from the moment-to-moment analysis of questioning and imitation to the more extended interactional arrangements that surround play and media usage. These papers also explore learning across multiple contexts and among multiple interactional partners, which include parents, siblings, and school peers. The combined goal of these papers is to partially map the socio-material arrangements and interactional routines that contribute to young children’s everyday learning and to open up new questions about learning and participation in practices, within and across contexts.

**Questioning among Preschool Children**

Lauren Penney & Reed Stevens

It is generally accepted that children use questions as tools to learn about the world, and for the past century much research has been done on the topic of children’s questions. Researchers have catalogued the types of questions children ask (e.g. what, where, why, how) and at what age they begin to ask each type of question (Davis, 1932; Meyer & Shane, 1973; Kearsley, 1976; Tyack & Ingram, 1976; Hood & Bloom, 1979). Brown (1968) studied the grammar and structure of the question forms that children produce. Other researchers have analyzed the different ways adults respond to children’s questions (Tizard, Hughes, Carmichael, & Pinkerton, 1983; Van Hekken & Roelofsen, 1981). More recently, there has been investigation into how children’s questions contribute to their causal reasoning (Frazier, Gelman, Wellman, 2009; Chouinard, 2007; Callanan & Oakes, 1992; Hood & Bloom, 1979). This prior research analyzes the spontaneous questions of children, yet focuses specifically on questions that indicate information gathering and knowledge building (i.e. Wh-questions: what, where, when, why, how), and analyzes questions out of the context of the larger conversation.

Our research extends prior work by more closely examining the role that questions play in the lives of young children. We use conversation analysis (e.g. Goodwin & Heritage, 1990) as well as quantitative analysis to explore all of the spontaneous questions asked by two-year-old to five-year-old children in their everyday environments. In this paper we expand upon existing taxonomies that have been created to categorize the various functions that questions play in the conversations of children. Our expanded taxonomy includes a missing category of questions we call “social” which serve various social functions. We then argue that unlike existing research, children’s questions should be analyzed at a unit level larger than just the question or question-answer pair. Using turn-by-turn analysis we take a detailed look at several sequences we call lines of question-based inquiry (LOQBI) and explore how different the analysis would look if these sequences were analyzed as individual question-answer pairs. We conclude this paper with a discussion about how questions function as a tool that children employ to interact socially with each other. Ultimately this paper makes two new arguments: 1) children’s questions often need to be analyzed in extended sequences (as opposed to broken into question-answer pairs), and 2) these questions are multifunctional and frequently not only seeking information.

The question sequences we are calling LOQBI have been noted, but not fully explored by prior research (Chouinard, 2007; Tizard et al., 1983). In this paper we document and analyze inquiry sequences from video-recordings of preschool children across multiple settings. Our findings extend recent work by Chouinard (2007) in that we find children’s questions are not one-offs but are sustained for sense making or information gathering purposes. In Chouinard’s study, questions continued until satisfactory adult answers were provided, while in our study children continue questioning, even after initial answers are provided, to explore a line of inquiry. For example, when Charlie commented that he was supposed to see Santa Claus but didn’t, his teacher
replied, “Maybe he’s still working in the North Pole.” Charlie then asked several questions about this topic, starting with, “What is the North Pole?” This LOQBI continued for two minutes and was question-heavy, with Charlie asking 11 questions—all of which had something to do with understanding the Santa Claus story. This conversation covered where Santa Claus lives, what he does, with whom he associates, and how he does his work. Charlie received an adequate response to his initial “What is the North Pole” question, yet he continued asking questions about the Santa Claus story. This three-year-old child was asking a stream of questions about a topic he was interested in, and asked different questions as he learned more about the topic. These questions were all related and the topic was the reason for the continued questioning—not inadequate answers.

Next we argue that children’s questions perform various functions in a conversation beyond seeking information. Freed’s (1994) taxonomy of question functions in adult didactic conversations, for example, is a continuum from “information sought” (the speaker seeks information from the hearer) to “information conveyed” (the speaker conveys information to the hearer). Freed says questions that fall into the information sought category ask for factual information (e.g. “What time are you going home?”) while information conveyed questions are used to express importance or emotion (e.g. “And you know what’s upsetting?”) (p. 626-629). Research on children’s questions has focused mainly on questions that are about information gathering, yet the research on adult questions indicates this is not the only way questions are used in conversation. Many taxonomies of children’s questions have been created, many of which stem from Piaget’s (1932) categorization of “why” questions (Piaget, 1923; Davis, 1932; Meyer & Shane, 1973), others of which are developed independently (Tyack & Ingram, 1977; Callanan & Oakes, 1992). However, these taxonomies focus primarily on the information gathering and knowledge building questions asked by children. This field study captures and begins to explore the full range of questions asked by young children in their natural environments. One of our findings is that many of the questions children direct towards other children perform a social function, that is, children use questions to invite others to play (“Who’s the conductor?”), as well as to negotiate and arrange their play together (“Wanna watch some dog movies?” or “How much player is this?”). These questions are not asked to simply seek information, but the children also use them as an interactive social tool.

Our first argument in this paper is that analyzing these LOQBI as sequences allow us to see the connected nature of this type of questioning—something that is lost when questions are analyzed individually or as question-answer pairs. Our second argument is that children’s questions perform various functions in a conversation beyond seeking information; children use them as they socially interact with each other during pretend play. We hope this paper begins a discussion about the range of questions asked by young children.

**Children’s Initation in its Natural Environments**

Siri Mehus, Reed Stevens, & Lauren Penney

Imitation is one of the fundamental means by which humans learn from other humans. Our particular propensity for doing as we see and hear others do is quite possibly unique to humans and forms the basis of human culture (e.g. Gergely & Csibra, 2005; Meltzoff et al., 2009; Meltzoff, 1988; Tomasello, 1999). While the importance of imitation for human learning has been well demonstrated in experimental laboratory research, few studies have investigated the ways in which children imitate other children and adults in their natural habitat—e.g. in the homes and childcare classrooms in which they spend their days. Even fewer have employed the ethnographic approach of investigating such practices from the participants’ perspectives. Laboratory studies help us understand how children can learn through imitation—i.e. what the human brain is capable of—but they do not tell us much about how children do learn through imitation—i.e. the role of imitative learning in the course of children’s development in their social worlds.

In this study we set out to investigate imitation in terms of how it is occasioned and how it functions in the socio-material contexts of children’s everyday lives. We ask, in other words, when does imitation happen, and when it does, what happens next? Our data consist of video-recorded interactions between young children and their families, teachers and peers in home and preschool environments. Our analysis reveals that imitation in children’s daily lives often occurs in the context of some social routine, game, or shared activity. Within these interactional environments, the purpose of making an appropriate and successful move in the activity motivates the imitative act. Examples of social moves that often involve some form of imitation include reciprocating, one-upping, joining in, aligning, mocking, arguing for equity, and participating in improvisational games.

Many of children’s imitative acts in everyday life are partial and transformative. By this we mean that the imitator repeats some part or aspect of another person’s initial action, but also adds or changes something in the repetition. We submit that the ways in which children imitate—e.g. whether and how they transform or adapt the repeated act—are shaped by the activities in which these imitative acts are embedded. For instance, we analyze one sequence that takes place in a preschool classroom in which a group of children (3-5 years old) are seated around a table. They engage in a spontaneous improvisational game that involves repeating and upgrading the previous utterances of other children (Transcript 1). We compare this to a sequence that occurs in the home of a three-year old girl (Marie), in which she and her five-year old brother prepare to engage in a
battle against their father, employing Star Wars ships they have built out of Legos (Transcript 2). We find that in the context of this activity, direct imitation with minimal transformation is a resource for the child in forming an alliance with her brother, in opposition to their father.

<table>
<thead>
<tr>
<th>Transcript 1: “I'm a tiger”</th>
<th>Transcript 2: Forming an Alliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 J: I'm a tiger.</td>
<td>5 Dad: Hey, what about this? What if I made a ship and you guys,</td>
</tr>
<tr>
<td>2 M: I’m a jaguar. ((Emily looks at Madison))</td>
<td>6 I let you guys destroy it?</td>
</tr>
<tr>
<td>3 J: I’m a jaguar too.</td>
<td>7 Evan: Yeah...!</td>
</tr>
<tr>
<td>4 G: I’m a lion.</td>
<td>8 Marie: Yeah...!</td>
</tr>
<tr>
<td>5 J: (to Madison) Eat the lion.</td>
<td>9 Dad: Would that be fun? All right.</td>
</tr>
<tr>
<td>6 G: I am the more bad thing.</td>
<td>… (approx. 1.5 minutes while Dad builds his ship and repeatedly predicts that he will win the battle, which Marie and Evan contest.)</td>
</tr>
<tr>
<td>7 E: What about I’m a monster. ((Madison looks at Emily))</td>
<td>49 Dad: I’m having a little trouble keeping my ship together.</td>
</tr>
<tr>
<td>8 M: I’m a monster too. ((looks at Gabriel))</td>
<td>50 Do you have any glue? Am I allowed to use glue?</td>
</tr>
<tr>
<td>9 J: I’m a monster too. ((Points from Madison to Gabriel)) You’re a monster.</td>
<td>51 Evan: No!</td>
</tr>
<tr>
<td>10 W: I’m a monster too.</td>
<td>52 Marie: No!</td>
</tr>
<tr>
<td>11 T: Will. We need to concentrate on cutting.</td>
<td>53 Dad: Okay: The door is opening. ((sound effect)) That’ll be my driver.</td>
</tr>
<tr>
<td>12 J: ((to Gabriel)) What are you?</td>
<td>54 Marie: Well I have your driver! ((chanting))</td>
</tr>
<tr>
<td>13 T: Madison no (thank you.</td>
<td>55 Dad: [Oh, I know what I need. (.) This. The ultimate-</td>
</tr>
<tr>
<td>14 J: What are you Gabriel?</td>
<td>56 You will be fighting the ultimate iron giant. Ha ha ha.</td>
</tr>
<tr>
<td>15 M: What are you Gabriel?</td>
<td>… (approx. 40 seconds of talk about the ships and the battle)</td>
</tr>
<tr>
<td>16 E: (2/0)</td>
<td>71 Evan: Dad, you only have three guns?</td>
</tr>
<tr>
<td>17 E: I’m a giant.</td>
<td>72 Dad: I don’t know. You wait and see. There’s a lot of surprises coming for you mister.</td>
</tr>
<tr>
<td>18 W: I’m a giant=</td>
<td>73 Evan: Phhuh huh</td>
</tr>
<tr>
<td>19 G: (to Madison) I will attack to you.</td>
<td>75 Marie: Ha ha ha.</td>
</tr>
<tr>
<td>20 (1/0)</td>
<td>76 Evan: Ha ha ha ha.</td>
</tr>
<tr>
<td>21 M: We can attack bigger. I’m a Giant.</td>
<td>77 Dad: Ha ha ha</td>
</tr>
<tr>
<td>22 Z: I’m a giant.</td>
<td>78 Marie: Ha</td>
</tr>
<tr>
<td>23 G: I’m a tiger that goes after the giant.</td>
<td>79 Evan: Blah blah blah. Your ship is really dumb.</td>
</tr>
<tr>
<td>24 J: I’m a giant. I will eat you=</td>
<td>80 Marie: Blah blah blah. (((makes &quot;talking&quot; gesture)))</td>
</tr>
<tr>
<td>25 E: I’m a giant.</td>
<td>81 Dad: [It’s very very powerful.</td>
</tr>
<tr>
<td>26 W: I’m a giant=</td>
<td>82 Evan: Very very ugly.</td>
</tr>
<tr>
<td>27 Z: I’m a giant=</td>
<td>83 Marie: [Very very ugly.</td>
</tr>
<tr>
<td>28 M: I’=</td>
<td>84 Dad: [You know why it’s so powerful? Cuz you think it’s weak but it’s</td>
</tr>
<tr>
<td>29 E: I’m as big as the world.</td>
<td>85 actually ((engine sound, stands up and zooms ship through air))</td>
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</table>

The naturally occurring sequences of talk and action do not provide evidence that learning has occurred, at least not in the form we are accustomed to finding it in reports of laboratory experiments or results of standardized tests. Rather, they provide a glimpse of the everyday activities through which children, over time, learn about their worlds and develop the interactional competence to participate in them (e.g. Schieffelin & Ochs, 1986). Furthermore, by examining these sequences closely, we can gain insight into how children might learn from these activities by identifying the specific opportunities for learning they provide.

By analyzing the two instances described above, we find that the different forms of imitation occasioned by participation in these activities have different implications for learning. As Marie (Transcript 2) echoes her brother’s words and actions, she has the opportunity to “try on” new phrases and mannerisms, using her whole body to inhabit a role and enact its relationships with the roles taken on by her brother and father (ally and enemy). Though Marie mimics her brother quite closely, she seems to be taking up his actions and integrating them into her understanding of her own role and purpose, rather than simply “parroting” him – this can be seen in lines 79 and 80 where Marie directly imitates part of her brother’s utterance (“blah blah blah”) but “makes it her own” by adding an appropriate gesture (the fingers-to-thumb “talking hand” gesture).

The learning opportunities for participants in the improvisational game in Transcript 1 are perhaps even more substantial. Designing a next move in the game requires parsing the syntax of previous moves and working out the overall structure and “rules” of the one-upping game. Children comment on one another’s moves, providing feedback on previous moves, as well as guidance and motivation for improvement of future moves. This extended play sequence provides a rich environment for building linguistic and interactional competence at lexical, syntactic, and discourse levels.

Finally we note that in our data, a primary interactional environment for many types of imitation is the activity frame of play. Imitation is not just a move within these games, it can be the fundamental building block out of which these games are created. It is troubling to consider that the dominant social organizational conventions of formal schooling, with its emphasis on assessment of individual performance, may tend to shut down this powerful, child-driven, engine for social learning.
Block Building at Home and in Preschool
Danielle Keifert & Reed Stevens

Prior research has shown that parents and teachers support children’s reasoning in different settings, including home, school, and museum (Callanan & Jipson, 2001; Callanan & Oakes, 1992; Crowley, et al., 2001; Hood & Bloom, 1979). While providing important insight into joint parent-child interactions, this work typically limited to one type of learning (parent-supported children’s learning) in single settings (designed science activities). Yet, the majority of day-to-day encounters with science phenomena likely occur independent of predetermined social arrangements and outside of designed settings (Crowley & Jacobs, 2002). What we need to better understand is how spontaneous interactional arrangements in multiple settings shape everyday practices that form the foundation of later STEM learning and how preschool children support each other’s learning during these practices. Through a comparative case study of two episodes of a preschooler building with blocks at home and preschool, this paper examines the interactional arrangements for a common activity in and across these settings. We adopt the lens of Newman, Griffin, and Cole (1989), who argue that the individual is not the correct unit of analysis to compare across settings, favoring instead the larger functional system within which tasks—or activities like building with blocks—are defined by the ways in which people orient to and accept different goals during interaction. Thus, while the comparison in this paper is of the same child building with blocks in two settings (home and preschool), the analysis of the differences in those episodes considers the interactional arrangements that constitute the system within which the task occurs (playing with Jenga blocks at home with mom nearby versus building a Bad-Guy block trap with peers at school). Following interaction analysis traditions, a turn-by-turn analysis provides the grounding for understanding both how the interactions and block-building activity unfold, as well as how the interactional arrangements shape that unfolding activity (Goodwin & Heritage, 1990; Heritage, 2008; McDermott, et al., 1978; Schegloff, 1972).

The focus is on two episodes of four year-old Jamie building with blocks. At home, the interactional arrangement allows Jamie to self-direct his block-building activity with his mother nearby. The construction of the block structure co-emerges with an evolving narrative about the building’s function as verbalized by Jamie. He begins by narrating that he is “building a stack…a freight stack”, but quickly states that he is making “a building”. Jamie then encounters trouble with his building saying, “my building that’s kind of not staying up, Mommy” and his mother chimes in with “Well you know what I think the problem is sweetheart, is that your side pieces are a little bit taller than your stack in the middle.” Initially Jamie rejects this advice saying that if he switches the sidepieces to another orientation (so they are oriented like the blocks in the middle) “That, it would be too low!” When Mom suggests using more pieces he says he only wants to use three. By rejecting Mom’s advice Jamie remains the sole constructor of the block structure, so even when he later decides to rebuild following Mom’s advice, he still can claim ownership of the building. Throughout the 24 minutes of block play observed, Jamie’s story telling and building of his block-structure co-emerge, changing only when he, the sole constructor of both, chooses to make changes and based on Jamie’s own development as a problem-solver.

In the school episode, Jamie participates in block building in an interactional arrangement consisting of several participating peers and building blocks. The video segment begins with Jamie at work with schoolmates building a “Bad-Guy Trap” (so named by the children). At school the block-building activity is also shaped by an overarching story, which the co-builders draw from cultural forms of storytelling (good guy versus bad guy, setting a trap for the bad guy) as well as a form of division of labor where each builder is responsible for a component of the building. This can be seen when a violation of the ownership of different parts of the structure occurs as when one child reaches over and takes blocks from Jamie’s area of work. Jamie quickly claims to the group “Noam’s taking, was taking those o:::!!” in a whiny tone. This form of policing of each other’s behavior is a form of maintaining the norms and rules established within the working group (McDermott, Gospodinoff, & Aron, 1978). The construction of both the story and the building structure also include opportunities for negotiation of roles and activity (“Let’s make half like that and half like that!”). Each of the components of the interactional arrangement (peers, story, available blocks, division of labor) contributes to the overall of the structure, which in turn shapes and is shaped by the co-authored story, all of which must be negotiated.

Across these two settings we see Jamie working on constructing both a story and a building structure made of blocks. However, the experience of “block building” for Jamie is very different when the larger functional system, the interactional arrangement, is considered. The interactional arrangements in each setting, particularly the sole ownership of the activity at home and the shared ownership of the activity with peers while at school, shapes the way in which story and building structure co-emerge. When building at home, Jamie’s talk focuses around his co-evolving story and building structure, and he is the sole decision maker regarding structural and narrative features. In this arrangements Jamie is able to focus on physical-spatial problem solving, choosing when, if at all, he takes his mother’s advice. However, when building at school, much of Jamie and his peers’ talk is about negotiating the story, the building structure, and access to materials. Jamie’s peers contribute significantly to the process making Jamie one of many contributors to specifying and constraining the activity. In fact, much of Jamie’s activity at school surrounds social negotiation with his co-builders. So although we
may say that Jamie is performing the same task of “building with blocks” in both settings, the nature of the task is strikingly different as a result of the differing interactional arrangements. The activity is effectively transformed by the nature of the interactional arrangement and through this transformation Jamie is exposed to very different forms of story and building construction, various problems solving techniques (physical and social), and how to effectively use the affordances of different arrangements to achieve his own goals.

Recognizing the differences in opportunities for learning, problem solving, and negotiating available resources in differing interactional arrangements provides important considerations for researchers. As we look to better understand learning across multiple contexts (whether designed or non-designed), and how learning connects across these contexts to build foundations for STEM skills, we must consider the ways in which interactional arrangements shape these foundational experiences. Although in the comparison provided the experiences seem to provide complementary opportunities for Jamie to develop competence that may support later STEM learning, this may not be the case for all comparisons of similar activities. In continuing research, we will broaden our analysis of Jamie’s opportunities for learning in both home and school contexts, and consider how experiences may mutual enhance or inhibit the development of STEM reasoning across settings.

TV Viewing Practices and Children’s Reasoning
Pryce Davis & Reed Stevens

Television is a controversial medium—categorized for wasting valuable time, promoting violence in children, and harming family relationships (Wartella & Robb, 2008). Despite possible negative effects, TV viewing dominates young people’s media consumption. From age two to age eleven, TV viewing among children increases from an average of one-and-a-half to five hours a day (Wartella, Richert, & Robb, 2010; Kaiser Family Foundation, 2010). If we accept the premise that television viewing is central aspect of preschool-age children’s lives, then uncovering the types of thinking and learning that accompany TV viewing should be a major subject of study. While many studies have focused on children’s learning from TV (e.g. Fisch, 2004; Uchikoshi, 2006; etc), these studies are interested in the aftereffects of TV viewing. Instead, we should try to understand what kinds of thinking happen during TV viewing. Rather than focusing on questions about whether kids watch too much TV (e.g. Condry, 1993), if TV viewing is positive or negative in and of itself (e.g. Zimmerman & Christakis, 2005), or how we can design interventions to reduce TV viewing (e.g. Dennison, et al., 2004), researchers should be asking: How do children make sense of what they see on television? How can we make visible and understand children’s television-mediated reasoning? In what contexts does reasoning occur? Only after we address these questions can we as educators encourage fruitful television watching or take advantage of the skills children develop while watching TV at home.

In this study, we draw data from a corpus of videos and ethnographic field notes of children watching television and interacting with their families in their homes (see Dugan, Stevens, & Mehus, 2010). We analyze side-by-side synchronized recordings of kids watching TV and what they are viewing. This data, together with parental journal data about their kids’ everyday activities and viewing habits, forms our “in-room, in-show, in-world” framework. This framework allows us to accurately and completely as possible record children’s actual experience of watching and reasoning about television.

For this paper we present a case study of two siblings—LeAnne (6) and Harrison (4). These siblings were selected as being generally representative of the data as a whole. They typically watch 4-5 hours of television per week. Their mother claims they are “interactive” and “talkative” television watchers, who often repeatedly watch the same episode. In this particular case study, we present these siblings viewing two different episodes of their favorite children’s science program (“Henry’s Amazing Animals”). The two vignettes represent the two relevant trends in the data. First, children often seem to passively view TV. Secondly, children do display active reasoning about TV under two particularly important practices: Co-viewing with adults and repeated viewing of single episodes.

In our first vignette, the children watch an episode for the first time. While watching the show the children sit quietly by themselves and hardly take their eyes from the screen. There is scant activity or talk taking place in the room and little visible reasoning. Of course, the show is presenting a near constant stream of information about animal camouflage. Overall, this vignette reflects the stereotyped “couch potato” view of children watching television, and demonstrates none of the activity and reasoning claimed by the children’s mother. This isn’t to say that the children are not reasoning, but that their reasoning is invisible to researchers.

In the second vignette, the children watch an episode that their mother says is one they have viewed many times as it is Harrison’s favorite. In this episode the kids talk almost constantly, both to each other and to the researcher in the room. Their talk reveals that the children are engaged in many types of reasoning. The children not only repeat information from the show, but also give information minutes before the show gives the same information. Furthermore, the show prompts them to share novel information as when LeAnne sees something on the screen that causes her to share how starfish eat (which is not presented in the show). In other instances, the children connect information from the show to their personal lives. For example, an image of the
we should attend to as we attempt to understand the active agent in the circumstances. In fact, they display quite child yet attentive to what the kids’ thinking. This work extends previous findings by demonstrating instances of actively construct knowledge about the show’s topics, which they take into their everyday support reasoning. Repeatedly viewing allows kids to continually engage with the same causal inferences. In what contexts does reasoning occur (or only become visible) during certain viewing practices and with certain kinds of social support. These practices are highlighted in the differences between the two vignettes. First of all, the children hadn’t seen the first episode before so the information may be novel to them; they stay silent because they are trying to comprehend what is being presented. However, they had seen the second episode multiple times and are familiar with the information. So, they are free to actively grapple with the information in order to construct their understanding. Little work exists on unprompted repeated viewing, although experimental work has found forced repeated viewing to increase comprehension without decreasing interest (Crawley, et al., 1999). Secondly, in the second vignette there is a more immediately present adult with the kids than in the first vignette. Previous research points to adult directed co-viewing as an important practice (Friedrich & Stein, 1975; Valkenburg, Krcmar, & de Roos, 1998). In the first vignette, there are two adults in the room with the children: The mom who is on the computer and the researcher manning the recording equipment, but they are both silent and out of view. So, the children do not interact with them. In the second vignette, the researcher is easily in the kids’ view. This researcher passively observes, and doesn’t ask questions or prompt the kids. However, the kids talk to him and treat him like a co-viewer. In a way, he is given the role of the student and the kids teach him about the animals on the show. So, unlike previous research on co-viewing the adult is not explicitly driving the kid’s attention, but is merely passive yet attentive to what the kids’ point out.

To conclude, we return to the driving questions of this research. How do children make sense of what they see on television? How can make visible and understand children’s television-mediated reasoning? We contend that, although often passive, kids engage in complex reasoning while watching TV under certain circumstances. In fact, they display quite varied reasoning skills, from sharing novel knowledge to drawing causal inferences. In what contexts does reasoning occur? Certain TV viewing practices are more likely to support reasoning. Repeatedly viewing allows kids to continually engage with the same information, so they can actively construct knowledge about the show’s topics, which they take into their everyday lives. Co-viewing helps prompt reasoning, even when the adult is not explicitly driving the child’s attention, but is merely passive yet attentive to what the kids’ thinking. This work extends previous findings by demonstrating instances of child-directed co-viewing and repeated viewing, meaning that the child is requesting the repeated viewing and is the active agent in the co-viewing. Taken together, these findings give a conceptual foundation about the things we should attend to as we attempt to understand the role and effects of television in children’s lives.

References


