

Children Interactions in Literacy Tutoring Situations: A Study with Urban Marginalized Populations in Argentina

Celia Renata Rosemberg

National Council of Scientific and Technical Research

Florencia Alam

National Council of Scientific and Technical Research

Alejandra Stein

National Council of Scientific and Technical Research

Abstract

The study analyzed the conversational exchanges through which child tutors mediated literacy abilities and knowledge with young children in the framework of the project “From Child to Child: A Tutor-Child Literacy Program,” that is being conducted in Buenos Aires, Argentina. The analysis considered the conversational moves deployed by both participants in the dyad, as well as the relationship between the tutor and the tutee. Likewise, it examined longitudinal variations in the interactions registered between the first tutoring sessions and the tutoring sessions that occurred after one year of the program. The tutoring sessions were video-taped and the different conversational moves deployed by the tutor and tutee were analyzed using an especially developed system of categories. Subsequently, the distribution of the categories of the tutee and tutor’s interactional moves in the corpus was analyzed quantitatively. Results showed significant longitudinal differences in the quantity of conversational moves: the tutors and the tutees increased their participation in the performance of the activities. The results demonstrated an increase in all the conversational moves the tutors utilized to promote the learning of the younger child tutee and a decrease in those conversational moves that do not promote learning.

Keywords

child tutors, conversational movements, early literacy

Introduction

We analyzed conversational exchanges as 12 and 13-year-olds read to and carried out writing activities with preschool age children. These conversations took place during a literacy tutoring program for children from urban-marginalized populations (Rosemberg, 2009 – ongoing).

The program was implemented in the Province of Buenos Aires, Argentina in

neighborhoods frequently referred to as “villas de emergencia” due to the precarious nature of the neighborhoods’ housing. These “villas de emergencia” are characterized by housing

Corresponding Author:

Celia Renata Rosemberg

National Council of Scientific and Technical Research

Email: crosem@hotmail.com

Mailing address; CIIPME Ptte. Perón 2158 – CABA – CP 1040, Argentina.

mostly built from wood and salvaged materials, and are located in areas with insufficient or non-existent infrastructure services such as running water and electricity. The neighbourhood is accessed by narrow dirt or cement floored passages. In the city of Buenos Aires 116,000 people live in “villas de emergencia,” and in the outskirts of the city another 1,114,500 people live in these conditions (Statistics of the City Government of Buenos Aires, 2009). The majority of the residents live in conditions of poverty and destitution and are immigrants or descendants of immigrants from the provinces of Northern Argentina, as well as border countries such as Bolivia, Paraguay, and Peru. As has been observed in other groups of people that belong to minority cultures or have a low socioeconomic level (Craig & Washington, 2006; Nettles & Perna, 1997; Taylor, 1983), the children in these populations generally have fewer opportunities than their middle class counterparts to access the literacy process at an early age within the family environment. The adult residents of these neighborhoods in Argentina have a very low level of education: 59.8% have not been educated beyond primary school (MINEDUC, 2006), and they do not usually have books, magazines, or other texts in their homes (Arrúe, Stein, A., & Rosemberg, 2012; Rosemberg, Stein, A., & Borzone, 2011). As a result, few of these children participate in family literacy situations, such as a parent and child reading out-loud from a book of stories.

A significant body of research (Snow & Ninio, 1986; among many others) has emphasized that participation in these types of family situations has a positive impact on the acquisition of different skills involved in the literacy process. These skills include the acquisition of vocabulary (Sénéchal, Lefevre, Hudson, & Lawson, 1996), the style of written language (Morrow & Temlock-Fields, 2004; Snow & Ninio, 1986), metalinguistic

consciousness (Bus, van Ijzendoorn, & Pellegrini, 1995), and narrative ability (McCabe, Bailey, & Melzi, 2008). All these skills have been shown to be associated with future school performance (Snow, Porche, Tabors, & Harris, 2007). Among children living in urban-marginalized populations in Argentina, the consequences of late access to the literacy process are reflected in increased instances of grade repetition (21% in primary school and 39% in secondary school) and dropping out of school (1.5% in primary school and 12% in secondary school) (MINEDUC, 2009). These indicators demonstrate the difficulty the educational system has had generating teaching strategies that match the needs of these children; strategies that guarantee foundational reading and writing skills. This inability to meet the instructional needs of urban-marginalized students continues throughout primary school.

Indeed, in these communities, many of the children who do pass through primary school achieve low levels of literacy. Even in subsequent grades, many of them cannot read texts fluently; characterized by low levels of accuracy in decoding words, slow reading speed, and inaccurate intonation (Hasbrouck & Tindal, 2006; Hudson, Lane, & Pullen, 2005). Their reading difficulties are made evident by low-level performance on national and international exams at the end of primary school and at the beginning of secondary school (DINIECE, National Evaluations; PISA 2006 “Science Competencies for Tomorrow’s World: Volume 1: Analysis”).

The project “From Child to Child: A Tutor-Child Literacy Program” (Rosemberg, 2009 – ongoing) was conducted precisely with the objective of promoting the reading and writing education of children who live in the urban-marginalized populations described earlier. The program is based on the idea that interactions in tutor relationships in which one of the subjects (the tutor) instructs the other

(the tutee) on matters of which the tutor has more experience and knowledge are not unidirectional. On the contrary, prior research (Roscoe & Chi, 2004) demonstrated that both tutor and tutee can benefit from this type of exchange.

In general, prior research on this subject has focused on the impact of tutoring on the development and acquisition of social and cognitive skills. The previous methodologies involved the implementation of a program in which tutors received training with regard to how they should carry out the tutoring (King, Staffieri, & Adelgais, 1998, quoted in Roscoe & Chi, 2004), as well as the realization of tutorial situations in natural contexts (Graesser & Person, 1994; Roscoe & Chi, 2004). Using quasi-experimental methodologies, they compared the performance of subjects of different ages or levels of expertise that collaborated to solve tasks, to the performance of subjects that solved the tasks alone. This research demonstrated that the subjects that worked together obtained better results than those that worked alone.

Although much research has concluded that subjects learn more when they work collaboratively (Guberman & Saxe, 2000; Kronqvist, 2008; Ogden, 2000), there exists some research (Fawcett & Garton, 2005; Forman & McPhail, 1993; Gauvain & Rogoff, 1989; Tudge, Winterhoff & Hogan, 1996; Verba 1988) that shows that in order for the collaboration to be effective, a series of intervening factors must be considered: (a) the persuasive abilities of the more capable partner, (b) the degree of mutual involvement in the collaborative process, (c) the amount and quality of feedback during the correction process, (d) the degree of shared responsibility, (e) a previous relationship between the children, and (f) the amount and quality of verbal interaction. It has also been shown that tutoring efficacy depends on the tutors' previous training, the degree to which the tutoring

program is structured (Casanova, 1988, quoted in Gensemer, 2000), and on a minimum difference of two years of age between tutor and tutee (Berliner & Casanova, 1986; Palincsar, Brown, & Martin, 1987; Recrut, 1994; Schrader & Valus, 1990, quoted in Gensemer, 2000).

We considered the results of these previous works when we designed "From Child to Child." We wanted to capitalize on the interactions between children of different age groups in order to generate a social fabric that enables 4 and 5 year-olds to access literacy before they begin first grade in primary school. At the same time, the program generates opportunities for the older children (12-13 year-olds) to develop, in meaningful situations, a greater understanding of the writing system and to improve their abilities as readers and writers (Leland & Fitzpatrick, 1993).

Other research that has studied children's learning in native and urban-marginalized communities (Rogoff, 1993; Rogoff et al., 2007; Stein, & Rosemberg, 2012a; Stein, & Rosemberg, 2012b; Rosemberg, Stein, & Alam, (2013) has shown that in these cultural contexts, interactions between children have an important impact on young children's development and performance. In their analysis of family literacy situations that were generated in the homes of urban-marginalized populations of Buenos Aires via an early literacy program Rosemberg and Borzone (2005) and Stein and Rosemberg (2012a) demonstrated that siblings and other older children actively participate in these situations and collaborate with the adults. Although they do not possess high levels of literacy, siblings and older children are the ones who in most cases read to the younger children and mediate initial writing skills.

As maintained by Tomasello (2003) and Nelson (2007, 2010), learning to write involves not only a certain level of developmental and socio-cognitive preparation on the part of the learner, but also the support of cultural partners

(children and adults). This support structures the learning experience of the child as he or she performs different activities. In these activities, the interactions generate a fabric of social relationships that enables learning--a "zone of proximal development"-- (Álvarez, 1990; Nelson, 1996, 2007; Vygotsky, 1978; Wertsch, 1991) in which the young child, in collaboration with the more experienced person, can make use of cultural tools, such as writing, sewing, etc., that they will later be able to use on their own. Learning is not the direct result of the transference of knowledge from an expert to a beginner, but a gradual process that is produced via participation in these cultural systems of mediated activity (Bruner, 1986, 1997; Roscoe & Chi, 2004; Verba, 1998).

The important role that social interaction plays in learning has motivated a diverse body of research focusing on the tutoring process between dyads of different ages and levels of expertise that interact to solve a task jointly (Juel, 1996; Kermani & Moallem, 1997; Topping & Bryce, 2004).

A series of studies in this line of research comparing the differences between child-child tutorship and adult-child tutorship (Ellis & Rogoff, 1982; Lacasa & Herranz, 1989) have identified the strategies that each member of the dyad utilizes, and the benefits that each situation provides. In general, studies have shown that child tutors use more demonstrations and direct models, and provide a greater quantity of assistance that, in some cases, can lead the young children to carry out the task for themselves; the adults, however, use more directives and, in general, tend to substitute the most complex information (Cazden, 1988).

For example, Ellis and Rogoff (1982) compared the teaching strategies used by adults and children in tasks where they were asked to categorize objects related to activities that had different degrees of familiarity for the young

children: a typical adult domestic activity and a typical school activity. The results showed child tutors more frequently used non-verbal instruction as opposed to verbal instruction, and they more frequently gave information on specific items as opposed to information related to objects grouped by super-ordinated categories. It was also observed that child tutors performed better when they framed the categorization of objects in the context of the school activity, probably because they were more familiar with this situation.

Much research on the subject of tutorial interactions focuses on the development of one of the subjects involved in the dyad: the tutor (Chi & Roy, 2010; Greenwood, Carta & Hall, 1998; Roscoe & Chi, 2004, 2008; Verba, 1998) or the tutee (Chi, Roy & Hausmann, 2008; Guberman & Saxe, 2000). The results mostly focus on the amount and type of progress achieved by the tutees as well as the tutors.

The research focusing on the benefits of the interactive situation for the tutor maintains that the tutors can learn through explaining and monitoring. The results of one study by Roscoe and Chi (2004) involving university subjects demonstrated that the tutee, through their elicitations, can lead the tutors to carry out a larger quantity of revisions and expansions. Moreover, they observed that although the tutors were responsible for introducing the topic, the tutees stimulated the subsequent discussion through their elicitations.

In other studies, researchers compared the benefits obtained by dyads with the same level of expertise with dyads of different levels of experience (Tudge, 1992; Tudge, Winterhoff, & Hogan, 1996). These studies demonstrated that children obtained better results when they interacted with a child with a higher level of expertise than when they interacted with a child of the same level. This research also indicated that the most profound differences in learning were observed when the child tutee accepted

and understood the reasoning exhibited by the tutor.

The above works were generally centered on the results of the tutoring programs with regards to learning, and although they do pay attention to the forms of collaboration and verbal interaction, they do not analyze in detail the conversational movements that permit the negotiation of the collaboration in the task. Research pertaining to Conversation Analysis (Gardner & Forrester, 2010; Goodwin & Heritage, 1990; Schegloff, 1992, 2000; Schegloff, Jefferson & Sacks, 1977; Sindell, 2009) has developed concepts that could be useful in analyzing the exchanges that permit the realization of pedagogical tasks in tutoring situations. These concepts permit an understanding of the conversational moves, defined as the contributions each participant makes to the exchange (Sinclair & Couthard, 1975). Conversational moves can provide information, give feedback to the other participant, and repair the communication when a problem with regard to mutual comprehension arises. The present work aims to analyze the conversational exchanges through which child tutors mediate literacy abilities and knowledge to young children, in the framework of the project "From Child to Child: a Tutor-Child Literacy Program" that is currently being carried out in Buenos Aires, Argentina. The analysis considers the conversational moves deployed by both participants in the dyad, as well as the relationship between the tutor and the tutee. Likewise, it takes into account longitudinal variations in the interactions that were registered between the first tutoring sessions and the tutoring sessions that occurred after one year of the program.

Methodology

The Data

We analyzed literacy tutoring sessions that were implemented within the framework of a

program where 100 children between the ages of 4 and 5 participated as tutees and 100 children between the ages of 12 and 13 participated as tutors. The program is called "From Child to Child: A Tutor-Child Literacy Program." The tutoring sessions consisted of a dyad (one older child and one younger child) performing diverse activities together: reading stories, playing games, and doing other learning activities in order to promote the learning of vocabulary and the writing system. The activities designed to develop the learning of the writing system included the writing of one's own name and other simple words, playing games with rhymes and sounds in order to promote the development of phonological consciousness, and the identification of letters. The activities designed to promote the development of vocabulary presented the young children with synonyms, antonyms, hypernyms, and hyponyms of words that the children had been previously exposed to in the texts, as well as games where they were asked to categorize objects, actions, people, and events according to thematic, spatial, temporal, functional, and taxonomic criteria.

We analyzed the interactional process of 27 tutoring sessions. Dyads were selected in which both participants had attended all of the workshops and had worked together throughout the program. The young children were aged 4:2 to 5:11, and the older children from 12:2 to 13:11.

The Children and Their Families

All of the children that participated in the tutoring sessions attended the same educational institution in the province of Buenos Aires, which receives children aged 3 to 17. The 4 and 5-year-olds attended the kindergarten and the 12 and 13-year-olds attended the middle school. The children lived with their families in "villas de emergencia" in Buenos Aires and, for the most part, the children's families were migrants from the north of Argentina or from

neighbouring countries such as Bolivia, Peru, and Paraguay. Although all the families spoke Spanish, there were some differences in the varieties of Spanish used. The children's parents had a low level of literacy and were either unemployed, or had low-qualified and unstable occupations that offered no social benefits. Within the homes of the young children, there were neither story books for children, nor books or magazines for adults.

The Child Literacy Tutor Program

The program took the form of bi-monthly workshops. In the first workshop, the pedagogical coordinators and members of the research team, who were specialists in literacy research trained to implement educational projects, instructed the older children on how to carry out the tutoring together. With the coordinator's scaffolding, the older children read the story books that they would later read to the younger children. First the coordinators read a story to the tutors in order to provide them with a model of fluent reading. Afterwards, each tutor read the story out loud to another tutor. The coordinators also explained to the older children how to formulate different types of questions. Likewise, they reflected on the vocabulary in the texts and on how to explain the significance of unknown words to young children. In the second workshop, each of the older children read stories to one of the younger children from one of the books in the series "En la Casa de Oscarcito" (Rosemberg & Borzone, 2008), and performed the activities and games proposed within the book. This situation is designed in order to promote the young children's early literacy skills.

Collection and Transcription of the Empirical Evidence

The first session was not recorded because we decided to begin recording after the children had become accustomed to the activities and

games that characterize the tutoring situations. The second and third sessions were video and audio recorded. These sessions took place at the beginning of the school year during the months of April and May (initial stage). Likewise, the final two situations of the school year were filmed and audio recorded in the months of October and November (final stage). The sessions were recorded by an observer who was familiar to the children. The recordings were then transcribed according to the methodology and conventions of Conversational Analysis (Tusón, 1995). For the purposes of the analysis, we created a literal transcript of the audio archives. The transcripts were complemented by information from the situational context which consisted of descriptions of the activities and of the illustrations discussed. They were also complemented by descriptions of the non-verbal behaviour that was filmed in the videos, such as gestures and body position. We analyzed 139 activities performed by 27 dyads, 62 corresponding to the initial stage and 77 to the end of the final stage.

Procedure for the Analysis of the Data

The reading activities and games designed to promote the learning of writing and vocabulary constituted the first unit of analysis. Within this unit the minor conversational moves utilized by the tutor and tutee during the performance of the activities were considered.

For the analysis of the conversational moves, a system was developed that conceptualizes the different types of conversational moves deployed by the tutor and tutee. The system was developed considering, simultaneously, different theoretical categories that had been elaborated in previous research (Beals, 1997; Beals & Tabors, 1995; Goodwin, 2000, 2007; Gumperz, 1982, 1984; Macbeth, 2004; Rosemberg & Silva, 2009; Schegloff, 1979; Schegloff, Jefferson & Sacks, 1977; Tarplee, 2010; Weizman & Snow, 2001), as well

as the analysis of the empirical evidence obtained by the constant comparative method (Glaser & Strauss, 1967; Strauss & Corbin, 1990). Comparing the different conversational moves used by the tutors enabled us to identify the distinctive functions that these moves have in the exchanges. The same procedure was followed in order to elaborate conceptual categories regarding the participation of the tutees in the tutoring situation. This allowed for the development of a system of categories that was adjusted to the empirical information (Strauss & Corbin, 1990; Vasilachis de Gialdino, 2006).

Subsequently, the distribution of the

categories of the tutee and tutor's interactional moves in the corpus of recorded sessions was analyzed quantitatively. Differences in the average number of conversational moves between the activities filmed at the start of the year and the activities filmed at the end of the year were identified, and statistical Student's t-tests were employed to establish the significance of these differences. Pearson's r coefficient was calculated to measure the correlation between the conversational moves used by tutors and tutees in the initial and the final stage.

The following is the system of elaborated categories, presented with illustrative examples.

The Tutor's Conversational Moves

Types of conversational moves	Description	Example
1. Regulation	Moves in which the tutor directs the conduct of the tutee, and controls their performance in the activity.	<p>Tutor: {Reading the instructions} What part is Malevo missing? Draw them and write the names ((pointing at the images in the book)) <i>Look, here. What's missing? Look.</i></p> <p>Tutee: {Looking the other way}</p> <p>Tutor: ((Touching him on the arm)) <i>Look, here. What's missing?</i></p> <p>Tutee: The ear.</p> <p><i>Tutor: {Lee la consigna} ¿Qué partes le faltan a Malevo? Dibujalas y escribí los nombres ((señala la imagen del libro)). Mirá, acá ¿qué le falta? Mirá.</i></p> <p><i>Aprendiz: {Mira para otro lado}</i></p> <p><i>Tutor: ((Le toca el brazo)) Mirá, acá, ¿qué le falta?</i></p> <p><i>Tutee: La oreja.</i></p>
2. Repair	Moves in which the tutor attempts to reestablish mutual comprehension. These are moves that involve the recognition on the part of the tutor that a word in their	<p>Tutor: {Reading the story} Later the rabbit climbed the mountain and arrived at the magician's house with the six tiger moustaches and the tail of the monkey. 'Now make me grow,' ordered the rabbit. The magician thought, 'if the rabbit did this while he was small, <i>if I increase</i></p>

	<p>speech, the instructions, or the events detailed in the text could be problematic for the tutee due to the word's imprecision, ambiguity, or the tutee's unfamiliarity with the word. It also involves an attempt to resolve this comprehension problem in that turn or the following turns.</p>	<p><i>his size</i>, a big rabbit would be very dangerous for the rest of the animals'. The rabbit waited, the magician approached him and caught him by the ears and threw him down the mountain.</p> <p>Tutee: Who was thrown?</p> <p>Tutor: <i>The rabbit, because he pulled off the monkey's tail and six tiger moustaches</i> in order to be bigger. <i>Do you see?</i> ((pointing at the image))</p> <p>Tutor: <i>{Lee un cuento} Luego el conejo subió la montaña y llegó a la casa del mago con los seis bigotes del tigre y la cola del mono. Ahora haceme crecer, le ordenó el conejo. El mago pensó: si siendo tan chiquito el conejo hizo lo que hizo, si lo aumento de tamaño qué no hará, un conejo grande sería muy peligroso para el resto de los animales. El conejo esperaba, el mago se acercó, lo atrapó de las orejas y lo arrojó hacia abajo de la montaña.</i></p> <p>Aprendiz: <i>¿A quién?</i></p> <p>Tutor: <i>Al conejo, porque le arrancó la cola al mono y al tigre los seis bigotes para ser más grande ¿viste? ((señala la imagen))</i></p>
3. Contribution	Moves made by the tutor in which additional information is provided to the tutee.	
3.1. Modeling	<p>Moves in which the tutor models the desired performance for the tutee.</p>	<p>Tutor: {Reading the instructions} Connect the numbers from one to ten and discover what figure they form {End of reading}. You have to do it like this, look ((<i>taking a pen and pointing to the number 1</i>)). You see, here is the dot, you have to connect it with this ((connecting it to the number 2)), you have to do it like this, give it to me, <i>I'll show you</i> and after, you do it, you have to connect it ((gives the pen to the tutee)).</p> <p>Where's the 3?</p> <p>Tutee: ((Points to the 3))</p> <p>Tutor: You have to connect it.</p> <p>Tutee: ((Connects the numbers))</p> <p>Tutor: <i>{Lee la consigna} Uní los números del uno al diez y descubrí qué figura se forma {fin de lectura}. Tenés que hacer así mirá ((agarra</i></p>

		<p><i>el lápiz y señala el número 1)), viste que acá está el uno el puntito este tenés que agarrarlo con este ((une con el número 2),) tenés que hacer así, dame que Yo te muestro y después seguís, tenés que remarcarlo ((le da el lápiz al niño)). ¿Dónde está el 3?</i></p> <p><i>Aprendiz: ((Señala el 3))</i></p> <p><i>Tutor: Tenés que unirlo.</i></p> <p><i>Aprendiz: ((Une los números))</i></p>
3.2. Expansion	<p>Moves in which the tutor provides additional verbal information that expands on what the child says or reads.</p>	<p>Tutor: {Reading the instructions} What things can't we see in the sky?</p> <p>Tutee: The truck, the pencil, the bird ((pointing at the images while naming them))</p> <p>Tutor: We don't see the bird in the sky?</p> <p>Tutee: Ah, yes!</p> <p>Tutor: <i>When the bird flies we see it in the sky.</i></p> <p><i>Tutor: {Lee la consigna} ¿Qué cosas no podemos ver en el cielo?</i></p> <p><i>Aprendiz: El camión, el lápiz, el pajarito ((señala las imágenes que nombra))</i></p> <p><i>Tutor: ¿El pajarito no lo vemos en el cielo?</i></p> <p><i>Aprendiz: ¡Ah sí!</i></p> <p><i>Tutor: Cuando el pajarito vuela lo vemos en el cielo.</i></p>
3.3. Giving the answer	<p>Moves in which the tutor gives the answer that the tutee must give.</p>	<p>Tutor: {Reading} Draw the drawings that start with ta {End of reading} Does table start with ta?</p> <p>Tutee: ((Nods))</p> <p>Tutor: Yes. Shoe?</p> <p>Tutee: Yes.</p> <p>Tutor: No. Cross it out.</p> <p>Tutee: ((Crosses it out))</p> <p>Tutor: Tail?</p> <p>Tutee: Tail?</p> <p>Tutor: <i>Yes, it starts with ta. Draw it.</i></p> <p><i>Tutor: {Lee} Pintá los dibujos que empiecen con me {detiene la lectura} ¿Mesa empieza con me?</i></p> <p><i>Aprendiz: ((Asiente))</i></p> <p><i>Tutor: Sí. ¿Zapato?</i></p> <p><i>Aprendiz: Sí.</i></p>

		<p><i>Tutor: No. Hací una cruz.</i></p> <p><i>Aprendiz: ((Hace cruz))</i></p> <p><i>Tutor: ¿Media?</i></p> <p><i>Aprendiz: ¿Media?</i></p> <p><i>Tutor: Sí, empieza con Me. Pintala.</i></p>
4. Feedback	Moves in which the tutor reacts in an evaluative manner, positive or negative, to the intervention of the tutee.	<p>Tutor: {Doing a “connect the dots” activity} Five?</p> <p>Tutee: ((Points at the number 8))</p> <p>Tutor: That’s the number eight. The five is like this, look at the five ((Takes a pencil and writes the number 5))</p> <p>Tutee: ((Pointing at the number 5 in the activity that they are performing))</p> <p>Tutor: <i>Excellent!</i></p> <p><i>Tutor: {Realizan una tarea de unir números} ¿El cinco?</i></p> <p><i>Aprendiz: ((Señalando el 8))</i></p> <p><i>Tutor: Ese es el ocho. El cinco tiene, así mirá es el cinco ((Toma el lápiz y escribe el número 5))</i></p> <p><i>Aprendiz: ((Señalando el 5 en la actividad que están realizando))</i></p> <p><i>Tutor: ¡Muy bien!</i></p>
5. Repetition	Moves in which the tutor repeats his utterance without making modifications.	<p>Tutor: Table ((Signalling at the table)) Does it start with ta?</p> <p>Tutee: Ta-ble.</p> <p>Tutor: <i>Does it start with ta?</i></p> <p><i>Tutor: Mesa ((Señala la imagen de una mesa)) ¿Empieza con me?</i></p> <p><i>Aprendiz: Me-sa.</i></p> <p><i>Tutor: ¿Empieza con me?</i></p>

The Tutee’s Conversational Moves

Types of conversational moves	Description	Example
1. Regulation	Moves in which the tutee tries to control the sequence of an activity.	<p>Tutor: We’re going to do this first ((Pointing at an activity in the book))</p> <p>Tutee: <i>No, we’re going to do the other one first.</i> ((Pointing at a different activity))</p> <p>Tutor: No, not that one. There’s nothing more</p>

		<p>to do in that exercise. Tutee: xxx <i>We're going to say what happened after when the story starts.</i></p> <p><i>Tutor: Vamos a ver esto primero ((Señalando una actividad en el libro)).</i> <i>Aprendiz: No, vamos a hacer el otro primero ((Señala una actividad diferente a la indicada por el tutor)).</i> <i>Tutor: No el otro no. El otro no tenía nada para hacer.</i> <i>Aprendiz: xxx vamos a contar lo qué pasó después cuando empezó el cuento.</i></p>
<p>2. Verbal responses</p>	<p>Moves in which the tutee reacts verbally to a tutor's question.</p>	<p>Tutor: {Reading} What's the wolf like? What's the grandmother like? Connect it with arrows {End of reading}. Who has...the grandmother or the wolf...who has big eyes, like this, big, big eyes? Like yours, that are here ((Points to the eyes behind the mask that the child has on)) Who has them: the wolf or the grandmother? Tutee: <i>The wolf.</i></p> <p><i>Tutor: {Lee} ¿Cómo es el lobo? ¿Cómo es la abuela? Uní con flechas {Deja de leer y dice} ¿Quién tenía...la abuela o el lobo... quién tenía ojos muy grandes, grandes así grandes, grandes? Así como los tuyos, que están acá ((le indica sus ojos tras la máscara que tiene puesta)). ¿Quién tiene: el lobo o la abuela? Aprendiz: El lobo.</i></p>
<p>3. Non-verbal answers</p>	<p>Moves in which the tutee reacts to a question posed by the tutor using gestures or demonstrations.</p>	<p>Tutor: {Reading} What's the wolf like? What's the grandmother like? Connect it with arrows {End of reading}. Who has...the grandmother or the wolf...who has big eyes, like this, big, big eyes? Like yours, that are here ((points to the eyes behind the mask that the child has on)) Who has them: the wolf or the grandmother? Tutee: <i>The wolf.</i> Tutor: <i>Good, connect the dots here and here {Helps the tutee make the line} And who has small eyes?</i></p>

		<p>Tutee: ((Points at an image in the book)) Tutor: Not those, not those {Shows the tutee where they should choose from} Tutee: ((Points in the book)) Tutor: The grandmother ((takes the pencil from the tutee in order to make the line))</p> <p><i>Tutor: {Lee} ¿Cómo es el lobo? ¿Cómo es la abuela? Uní con flechas. {Deja de leer y dice} ¿Quién tenía...la abuela o el lobo... quién tenía ojos muy grandes, grandes así grandes, grandes? Así como los tuyos, que están acá ((Le indica sus ojos tras la máscara que tiene puesta)) ¿Quién tiene: el lobo o la abuela? Aprendiz: El lobo. Tutor: Bueno uní con flecha acá, acá {Le ayuda a realizar la línea} Tutor: ¿Y quién tiene ojos chicos? Aprendiz: ((Señala unos imágenes del libro)) Tutor: No de esos no de estos ((Le muestra de donde debe elegir)). Aprendiz: ((Señala en el libro)) Tutor: La abuela ((Le toma la mano para realizar la línea)).</i></p>
4. Initiation related to the topic	Moves made by the tutee that are related to the topic, but that do not constitute a response to the tutor's previous intervention.	<p>Tutor: {Before reading a story, the tutor shows the tutee the first image} The biggest green planet ((pointing at the planet with the pencil)) Tutee: <i>What's it called?</i> Tutor: It's called the green planet.</p> <p><i>Tutor: {Antes de la lectura de un cuento el tutor le muestra la primera imagen} El planeta más grande de color verde ((señalando del planeta con el lápiz)) Aprendiz: ¿Cómo se llama? Tutor: Se llama el planeta verde.</i></p>
5. Initiation related with the tutoring situation	Moves made by the tutee that are not related with the topic of the activity that is being carried out, but that are related to the tutoring situation in general. These moves do not constitute an answer to a	<p>Tutor: {Reading a story} I hope a fox eats these bad chickens, said Oscarcito. You see, sometimes the chicken are saved by pure luck, answered Tomás. Tutee: {Interrupting the reading} <i>This!</i> ((points at an image of a chicken that</p>

	tutor's previous intervention.	<p><i>appears in another activity in the book))</i> Tutor: Yes, this is a chicken, but first I'm going to read you this and later we'll read that.</p> <p><i>Tutor: {Lee un cuento} Ojalá un zorro se coma esas gallinas malas, dijo Oscarcito. Mirá que a veces las gallinas se salvan de pura suerte, le contestó Tomás.</i> <i>Aprendiz: {Interrumpe la lectura} ¡Esta! ((señala la imagen de una gallina que aparece en otra actividad del libro))</i> Tutor: Sí, esta es una gallina pero primero te cuento esto y después pasamos a ese.</p>
6. Unrelated initiation	Moves made by the tutee that are not related with the tutoring situation or the activity, and do not constitute a response to the tutor's previous intervention.	<p>Tutor: {Reading} It seems like Cachilo is thirsty xxx a jug of water to your dog that is looking for something to drink that Cachilo never drinks xxx the dog of my story. Take my story. Read it, mom. Tutee: <i>Look, she is looking ((pointing in another direction))</i> Tutor: Don't look, don't look.</p> <p><i>Tutor: {Lee} Parece que Cachilo tiene sed. xxx un tarro de agua a tu perro que está buscando para tomar que Cachilo nunca toma xxx el perro de mi cuento. Tomá el cuento mío. Mamá leelo.</i> <i>Aprendiz: Mirá está mirando ((señalando hacia otro lado)).</i> Tutor: <i>No mires, no mires.</i></p>

Results

The results of the qualitative analysis of the conversational exchanges produced during the tutoring sessions demonstrated the different types of moves that both participants of the dyad used while they read texts and performed activities that had been designed to promote the learning of the writing system and unfamiliar vocabulary.

As mentioned in the methodology, the qualitative analysis enabled the elaboration of a system of conceptual categories that showed the forms and functionality of the conversational moves used by the participants. The child tutors utilized regulatory moves in order to control the participation of the young children: focusing their attention on the activity at hand ("look", "listen"); fixing the sequence of activities ("first we'll read the story and after we'll play this game

where we put the drawings with the words”); determining who is going to do the activity (“will you do it alone or should I help you?”); and regulating specific actions in order to carry out the activity presented in the instructions (“paint,” “write,” “put this with this,” “do it like this”). Likewise, conversational moves were observed during which the tutors repeated all or part of a previous emission; for example, an instruction to carry out a task.

The analysis also demonstrated that by using repair moves, the tutors collaborated with the young children when they identified problems relating to comprehension. These difficulties may have stemmed from the events narrated in the stories, the dialogues that are included in them, or vocabulary that was unfamiliar or difficult for the young children to understand. Likewise, the analysis allowed us to identify contributory moves through which the tutors provided additional or clarifying information, expanded on information provided by the young children, modeled the performance that the tutors were trying to elicit from the young children, or gave an answer themselves that should have been provided by the young children.

Feedback moves were also identified on the part of the child tutors in reaction to the younger children’s performance. These moves were both explicit (positive and negative evaluations of the younger children’s performance) and implicit (repeating the younger child’s emission). Using these moves, the child tutors reacted to the younger child’s participation and tried to help them to continue contributing to the situation; orienting and stimulating them in the activity that they were performing.

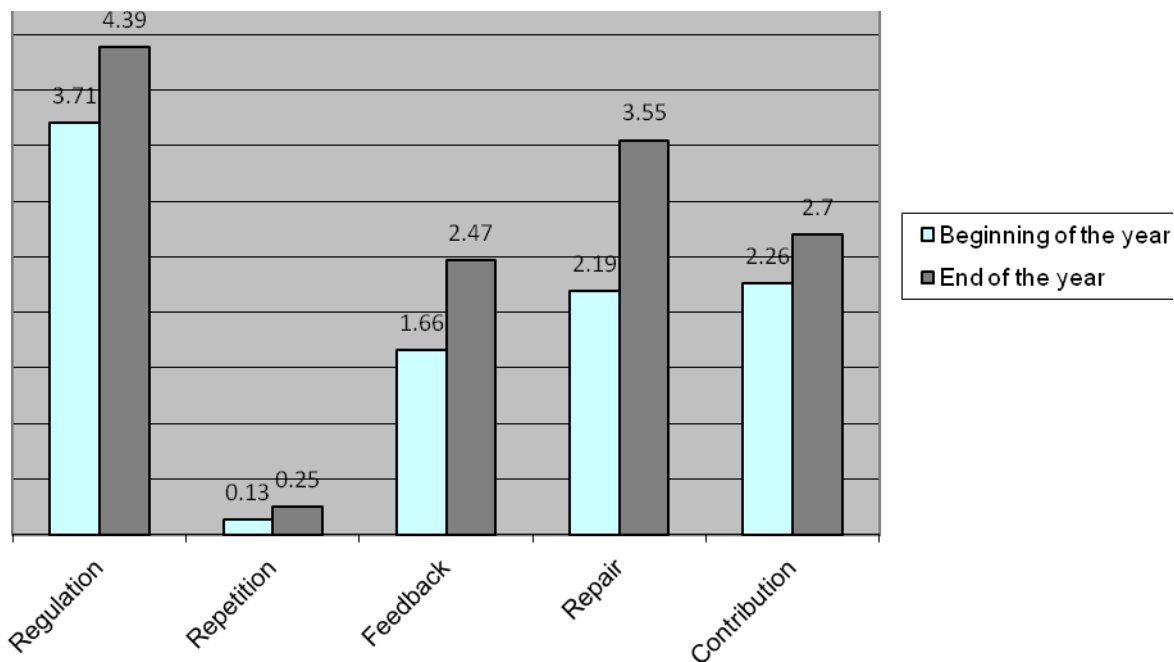
In turn, the qualitative analysis of the young children’s participation during the tutoring sessions demonstrated that they utilized different conversational moves that permitted them to participate jointly with the performance and sequence of the readings, games, and activities.

The analysis also demonstrated that the young children utilized moves of verbal and non-verbal responses to react to the tutors’ interventions (questions, affirmations, or indications). However, the young children did not just adopt the role of responder during the tutorial exchanges. The young children’s active role in these pedagogical exchanges is clearly demonstrated by the initiating moves that they performed during the tutoring sessions. Some initiating moves were also observed that were not related to the activity, reflecting momentary distraction on the part of the young child with respect to the pedagogical activity.

The results of the longitudinal analysis of the conversational exchanges demonstrate some quantitative differences with regard to the types of conversational moves utilized by both participants in the dyad between the sessions carried out at the start of the year and those carried out at the end of the year. These differences demonstrate that both the tutor and the tutee played a more active role at the end of the year compared to the beginning of the year.

Figure 1 presents the averages at the start and end of the year of the different types of conversational moves that the tutors utilized in order to help the young children perform specific activities related to the acquisition of the writing system and vocabulary, as well as the comprehension of the stories.

Figure 1
Types of conversational moves utilized by the tutors at the beginning and the end of the year



As demonstrated in Figure 1, there was a significant increase in the tutor's participation during the final tutoring sessions, reflecting an increase in the average of the different types of conversational moves that the tutors utilized while they shared the reading of a story and aided the young children's acquisition of different skills and abilities involved in the literacy process.

Indeed, whereas during the initial stage of the program the tutors utilized an average of 3.71 conversational moves per session in order to regulate the participation of the younger children, in the final sessions the number of regulatory moves increased to an average of 4.39. The average number of moves in which the tutors repeated their own emissions increased from 0.13 to 0.25. The tutors also showed an increase at the end of the year in the average number of feedback moves (1.66 to 2.47).

In addition, the repair moves that the tutors utilized increased from 2.19 at the beginning of the year to 3.55 at the end.

Likewise, contributory moves increased from 2.26 to 2.70.

The Student's *t*-tests statistical analysis, with regard to each of the different types of conversational moves between the beginning and the end of the year, shows a significant difference in the quantity of repairs $t_{(137)} = 2.20$, $SEM = 0.61$, $p < .05$ and the quantity of feedback $t_{(137)} = 2.17$, $SEM = 0.37$, $p < .05$. However, the statistical analysis does not show a significant difference in the quantity of regulatory moves $t_{(137)} = 0.94$, $SEM = 0.73$, $p = .35$, moves of repetition $t_{(137)} = 0.81$, $SEM = 0.15$, $p = .42$, or contributory moves $t_{(137)} = 0.72$, $SEM = 0.61$, $p = .47$.

However, the detailed analysis of the tutor's contributory moves during the tutoring sessions demonstrate significant longitudinal differences when the analysis separates the contributory moves that expand on the tutees' emissions from those that involve modelling and from the contributory moves that involve providing the answer themselves. This data is presented in Table 1.

Table 1
Change in types of contributory moves utilized by the tutees from the beginning to the end of the year

Contributory moves	Beginning of the year	End of the year
<i>Expand</i>	0.56	1.6
<i>Model</i>	0.26	0.33
<i>Provide answer</i>	0.71	0.56

As observed in Table 1, while the tutors increased the average number of moves in which they modelled or expanded on the tutee's emissions during the final stage of the project (expansions: 0.56 to 1.60 and modelling: 0.26 to 0.33), the contributions on the part of the tutor in which the tutor provided the answer directly decreased (0.71 to 0.56). With regard to expanding moves, these differences are significant ($t_{(112)} = 2.33$, $SEM = 0.45$, $p < .05$). This is not the case for modelling moves ($t_{(112)} =$

.22, $SEM = 0.27$, $p = .83$), nor contributions that involve providing the answer ($t_{(112)} = .49$, $SEM = 0.29$, $p = .63$).

In keeping with the tutors' increased participation in supporting the performance of the tutee that was observed at the end of the year, the longitudinal analysis of the conversational moves on the part of the younger child also demonstrates an increase in the different types of conversational moves, as can be observed in Figure 2.

Figure 2
Types of conversational moves utilized by the tutees at the beginning and the end of the year

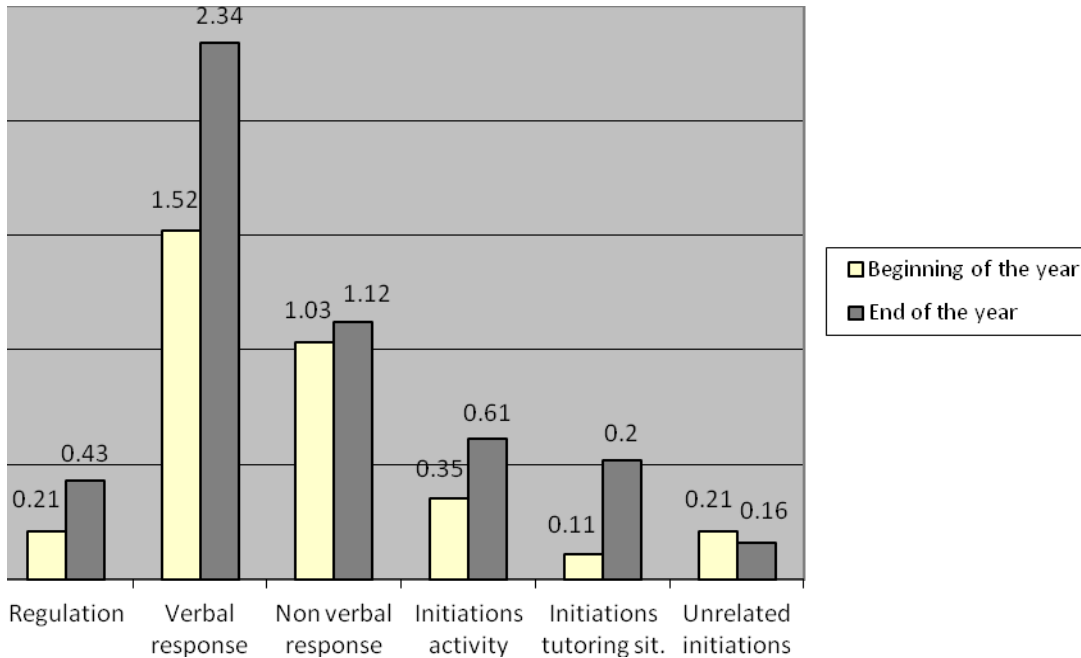


Figure 2 shows that during the final tutoring sessions the average number of moves carried out by the young children in order to regulate the activity themselves increased from 0.21 to 0.43. Their verbal and non-verbal responses to the tutor's interventions increased from 1.52 to 2.34, and 1.03 to 1.12, respectively, and their initiations related to the activity, as well as their initiations related to the tutoring situation, increased from 0.35 to 0.61 and 0.11 to 0.52, respectively. Likewise, at the end of the year it was observed that there was a decrease in the average number of unrelated initiations on the part of the tutee (0.21 to 0.16).

The Student's t-tests statistical analysis detected marginal differences solely in the verbal responses $t_{(130)} = 1.90$, $SEM = 0.43$, $p = .06$. The analysis did not detect differences in regulation $t_{(136)} = 1.46$, $SEM = 0.15$, $p = .15$, non-verbal responses $t_{(137)} = 0.28$, $SEM = 0.30$, $p = .78$, initiations related to the topic $t_{(137)} = 0.90$, $SEM = 0.29$, $p = .37$, initiations related to the tutoring session, $t_{(137)} = 0.20$, $SEM = 0.09$, $p = .84$, nor in initiations unrelated to the tutoring session $t_{(137)} = 0.48$, $SEM = 0.11$, $p = .63$.

With the purpose of studying the relation between the participation of the younger children and the tutors during the tutoring sessions, and to establish if both varied in a concomitant way, the correlation between the young children's verbal responses and the repair and feedback moves that present significant differences between the initial stage and the final stage was analyzed.

The correlation analysis demonstrates that during the initial stage the young children's verbal responses is associated with the tutors' quantity of repairs $r = .33$; $p < .01$, as well as their quantity of feedback $r = .57$; $p < .001$. During the final stage, verbal responses are also associated with the quantity of repairs $r = .29$; $p < .01$ and feedback $r = .35$; $p < .01$, as well as with the quantity of expanding moves $r = .26$, $p < .01$.

Discussion

The results of this study showed that the tutors, as well as the tutees, actively participated in the verbal exchanges permitted by the tutoring sessions generated through the implementation of the program "From Child to Child." As demonstrated in previous studies that were mostly performed with university students and adult tutors, the active role the tutor and the tutee assume, can, to a great extent, account for their learning (Chi, 1996; Chi, Roy & Hausmann, 2007; Chi, Soler, Jeong, Fausmann, 2001; Graesser & Person, 1994).

In the recorded exchanges, the 12 and 13-year-old children that participated as tutors utilize a variety of conversational moves: they regulate the participation of the younger children while they read stories, play games, and do exercises designed to promote the learning of the writing system; they repair communication when they identify problems in mutual comprehension; they provide or request information from the younger children that expands on the books or on information that the younger child has already provided; they model the performance that they desire from the younger children during the performance of the activities; they provide the answers when the younger children can not provide them themselves; and they provide feedback on the young children's performance, evaluating them in ways that are both implicit and explicit.

The younger children also actively participated during the sessions. On occasion, they tried to regulate for themselves the sequence of the activities and games, they responded verbally and non-verbally to the tutors' interventions, and they initiated exchanges that were, for the most part, connected with the topic of the stories, the activities, and the tutoring session.

After a year of participating together in the tutoring program, the tutors and the tutees increased the extent to which they played an active role during the sessions by increasing

their participation in the performance of the activities. Indeed, the results of the quantitative longitudinal analysis demonstrated an increase between the tutoring sessions that took place at the beginning of the year and the sessions that took place at the end of the year in all of the conversational moves that the tutors utilize to promote the learning of the younger children, and in the answers and initiations connected with the activities and the tutoring sessions.

In this sense, the results seems to demonstrate that progressively, throughout the year, the tutoring sessions are increasingly constituted in a pedagogical, cognitive, and social context in which the tutee can take greater control over the process of learning, and the tutor can resolve problems of comprehension, and perform the necessary actions in order to correct errors. This is demonstrated by the significantly increase recorded in some of the tutor and tutees' conversational moves.

For example, it is relevant to point out the increase in the repair moves through which the tutors respond to problems in mutual comprehension. These problems are the result of the young children's difficulty in understanding the precise vocabulary, the stories, and the instructions in the games and exercises. This increase demonstrates that at the end of the year the tutors are able to a greater extent to monitor the reasoning displayed in their exchanges with the younger children, and intervene when they observe a difficulty.

As demonstrated by other researchers (Graesser & Person, 1994), the one-to-one interaction that characterizes the tutoring sessions provides greater opportunities than interactions in a traditional class for the tutor to identify difficulties in mutual comprehension and repair the communication. It constitutes a scaffold for the understanding and learning of the younger child.

These interventions that structure the search for a precise word, offering or requesting alternative or appropriate words, as well as the

appropriate interpretation of the events and their relation to the stories; that explain the relation between concepts, clarify or integrate information; that provide or request examples, all make it possible to construct and display shared reasoning in conversation. It is precisely this co-construction that generates the tutees' reasoned interventions, which certain previous studies have demonstrated to be connected to learning (Chi, 1996, 2001; Fawcett & Garton, 2005; Graesser & Person, 1994).

The increase in repair moves demonstrate that the process through which the tutor tries to reach a greater level of inter-subjectivity and mutual understanding with the tutee develops their increasing ability to monitor the conversation as well as the tutee's learning. As demonstrated by Roscoe and Chi (2004), the tutors can learn by means of explaining and monitoring. These metacognitive skills are associated with the process of reading comprehension and can therefore benefit the tutors as well as the tutees (Cain, Oakhill, & Bryant, 2004).

The increased monitoring performed by the tutor with respect to the younger child's learning activity is also made clear by the significant increase in feedback moves that the tutor performs. These moves, which imply recognition of the young child's intervention, entail an evaluative component that is of importance for their performance (Tarplee, 2010). As demonstrated by Tudge (1992), it is the conjunction of thought in collaboration across the conversation and the obtainment of feedback that to a great extent promotes learning.

The tutor's appropriate consideration of the tutee's performance permits the tutor to perform contributory moves that expand upon the information or that try to, by means of suggestions, hints, or signs, help the small child provide the information (Tarplee, 2010).

The results obtained from the longitudinal analysis demonstrate a significant increase at

the end of the year in the quantity of contributions that constitute an expansion of the children's emissions. At the same time, the tutors' reduced the quantity of contributory moves in which they give the answer themselves that should be given by the small child. In this way, more experience tutoring leads to diminishment of moves that hinders tutee's learning, according to other research (Cazden, 1988).

In keeping with the pattern of longitudinal variation in the intervention of the tutors, characterized by the significant increase in the repair, feedback and expanding moves, the results of the analysis of the younger children's moves demonstrates significant variation in the verbal responses that they produce during the tutoring sessions. As demonstrated by Chi, Siler, Jeong, Yamahuchi & Hausmann (2001) and Chi, Roy & Hausmann (2007), a great part of the efficacy of the tutoring does not only reside in the actions of the tutors, but also in the actions of the tutees. Indeed, in the process of responding to the tutors' interventions, the younger children elaborate explanations and their understanding of the texts that they read, of the meaning of words, and of the functions and organization of the writing system. In this way, the younger children make progress in the literacy process.

Moreover, the results demonstrate a significant correlation between the repair, feedback and expansion moves by the tutor and the verbal responses of the younger children. As indicated by Chi, Roy & Hausmann (2007), the tutors' intervention led the tutees to elaborate a response that, in turn, shapes the following intervention by the tutor, who gives feedback and/or expands upon the young child's response and thus follows the sequence of the development of knowledge. In this way, a "zone of potential development" (Vygotsky, 1964) that enables learning is created in the interaction.

The pattern of conversational moves

characteristic of the tutoring sessions, in which

the tutor recovers, expands and amplifies the tutee's interventions, constitute precisely the condition of possibility for the co-construction of knowledge in social interaction (Nelson, 1996, 2007). It is not simply the presence of a more capable partner or the mere communication between the participants in the dyad, but this shared process of constructing knowledge that generates individual learning opportunities during the tutoring sessions (Chi, Roy & Hausmann, 2007).

The active process of the co-construction of knowledge about writing that was observed in the interactions between the tutors and tutees can in part be understood by taking into account that these tutoring sessions construct mediation structures (Cole & Engeström, 2007) that recover and capitalize on forms of interaction that are characteristic of the environment of the urban-marginalized populations. Indeed, the interactions between children of different ages, more frequent and important in these populations than in middle income urban populations (Arrúe, Stein, & Rosemberg, 2012; Stein, & Rosemberg, 2012a), shape the base of the system of activity (Cole, 1999; Cole & Engeström, 2007) through which the experiences of the children with regard to reading and writing are mediated. In this way, "a sociocultural anchor" to literacy is strategically generated. In the activity system the modality characteristic of children's daily interactions in their community is utilized in order to promote literacy.

Note

1. This research was supported by the CARE Foundation, Germany; CONICET, Argentina; SECyT, Argentina

References

- Álvarez, A. (1990). Diseño cultural: Una aproximación ecológica a la educación desde el paradigma histórico-cultural. *Infancia y Aprendizaje*, 51-52, 41-78.
- Arrúe, J.E., Stein, A., & Rosemberg, J. R. (2012). Las situaciones de alfabetización temprana en el hogar de dos grupos sociales de Argentina. *Revista de Psicología de la Pontificia Universidad Católica Argentina*, 8(16), 25-44.
- Beals, D. (1997). Sources of support for learning words in conversation: evidence from mealtimes. *Journal Child Language*, 24(3), 673-694. doi: 10.1017/S0305000997003267
- Beals, D. & Tabors, P. (1995). Arboretum, bureaucratic and carbohydrates: Preschoolers' Exposure to Rare Vocabulary at Home. *First Language*, 15, 57-76.
- Berliner, D. & Casanova, U. (1986). How to make cross-age tutoring work. *Instructor*, 95(9), 14-15.
- Borzone, A. M.; Rosemberg, C.R.; Diuk, B.; Silvestri, A. & Plana, D. (2004). *Niños y maestros por el camino de la alfabetización*. Buenos Aires: Red de Apoyo Escolar.
- Bruner, J. (1977). Early social interaction and language development. In H. R. Schaffer (Ed.) *Studies in mother - child interaction* (pp. 271-289). Londres: Academic Press.
- Bruner, J. (1986). *El habla del niño*. Barcelona: Paidós.
- Bus, A. G. & van Ijzendoorn, M. H. & Pellegrini, A. D. (1995). Joint book Reading makes success in learning to read: A meta-analysis on intergenerational transmission of literacy. *Review of Educational Research*, 65, 1-21. doi: 10.3102/00346543065001001
- Cain, K.; Oakhill, J & Bryant, P. (2004). Children's reading comprehension ability: concurrent prediction by working memory, verbal ability, and component skills. *Journal of Educational Psychology*, 96(1), 31-42. doi: 10.1037/0022-0663.96.1.31
- Casanova, U. (1988). Peer tutoring: A new look at a popular practice. *Instructor*, 97(5), 14-15.
- Cazden, C. B. (1988). *Classroom discourse. The language of teaching and learning*. Londres: Routledge & Kegan Paul.
- Chi, M.T.H; Siler, S.A.; Jeong, H.; Yamauchi, T.; Hausmann, R. (2001). Learning from human tutoring. *Cognitive Science*, 25, 475 -533. doi: 10.1016/S0364-0213(01)00044-1
- Chi, M.T.H. (1996). Constructing self-explanations and scaffolded explanations in tutoring. *Applied Cognitive Psychology*, 10, S33-S49. doi: 10.1002/(SICI)1099-0720(199611)10:7<33::AID-ACP436>3.3.CO;2-5
- Chi, M. T. H. & Roy, M. (2010). How adaptive is an expert human tutor? ITS, Part I, *Lecture Notes in Computer Science*, 6094, 401-412. doi: 10.1007/978-3-642-13388-6_44
- Chi, M.T.H., Roy, M. & Hausmann, R. G. (2008). Observing tutorial dialogues collaboratively: Insights about human tutoring effectiveness from vicarious learning. *Cognitive Science*, 32(2), 301-341. doi: 10.1080/03640210701863396
- Cole, M. & Engeström, Y. (2007). Cultural-historical approaches to designing for development. In J. Valsiner & A. Rosa (eds.) *The Cambridge Handbook of Sociocultural Psychology* (484-507). New York: Cambridge University Press.
- Cole, M. (1999). *Psicología Cultural*. Madrid: Morata.
- Craig, H. K. & Washington, J. A. (2006). Recent research on the language and literacy skills of African American students in the early years. In D. K. Dickinson & S. B. Neuman (Eds.) *Handbook of Early Literacy Research, Vol. 2* (pp. 163-172). New York: The Guilford Press.
- Ellis, S., & Rogoff, B. (1982). The strategies and efficacy of child versus adult teacher. *Child Development*, 53, 730-755. doi: 10.2307/1129386
- Fawcett, L. M., & Garton, A. F. (2005). The effect of peer collaboration on children's problem-solving ability. *British Journal of Educational Psychology*, 75(Part 2), 157-169. doi: 10.1348/000709904X23411
- Forman E. A. & McPhail, J. (1993). Vygotskian perspective on children's collaborative problem-solving activities. In E. A. Forman, N. Minick, & C. A. Stone (Eds.) *Contexts for learning: Sociocultural dynamics in children's development* (pp. 213-229). New York: Oxford University Press.
- Gardner, H. & Forrester, M. (2010). *Analyzing Interactions in Childhood*. Oxford: Wiley-Blackwell.
- Gauvain, M. & Rogoff, B. (1989). Collaborative problem solving and children's planning skills. *Developmental Psychology*, 25, 139-151. doi: 10.1037//0012-1649.25.1.139

- Goodwin, C. (2000). Action and embodiment within situated human interaction. *Journal of pragmatics*, 32(11), 1489-1522. doi: 10.1016/S0378-2166(99)00096-X
- Goodwin, C. (2007). Participation, stance and affect in the organization of activities. *Discourse & Society*, 18(1), 53-73. doi: 10.1177/0957926507069457
- Goodwin, C. & Heritage, J. (1990) Conversation analysis. *Annual Review of Anthropology*, 19, 283-307. doi: 10.1146/annurev.anthro.19.1.283
- Graesser, A. & Person, N. (1994). Question asking during tutoring. *American Educational Research Journal*, 31(1), 104-137. doi: 10.3102/00028312031001104
- Greenwood, C.; Carta, J.J & Hall, R.V. (1998). The use of peer tutoring strategies in classroom management and educational instruction. *School Psychology Review*, 17(2), 258-275.
- Gumperz, J. (1982). The linguistic bases of communicative competence. In D. Tannen (Ed.) *Analyzing discourse: text and talk* (pp. 323-334). Washington: Georgetown University Press.
- Gumperz, J. (1984). Communicative competence revisited. In D. Schiffrin (Ed.) *Meaning, form and use in context: Linguistics applications* (pp. 278-289). Washington: Georgetown University Press.
- Hasbrouck, J. & Tindal, G. (2006). Oral reading fluency norms: a valuable assessment tool for reading teachers. *The Reading Teacher*, 59(7), 636-644. doi: 10.1598/RT.59.7.3
- Hudson, R.; Lane, H. & Pullen, P. (2005). Reading fluency assessment and instruction: what, why, and how? *International Reading Association*, 58(8), 702-714. doi: 10.1598/RT.58.8.1
- Juel, C. (1996). Learning to learn from effective tutors. In L. Schauble & R. Glaser (Eds.), *Innovations in learning: New environments for education* (49-74). Mahwah, NJ: Erlbaum.
- Kermani, H. & Moallem, M. (1997). Cross-age tutoring: Exploring features and processes of peer mediated learning. *Dialogue From the Field*, 4(3), 453-485.
- King, A., Staffieri, A., & Adelgais, A. (1998). Mutual peer tutoring: Effects of structuring tutorial interaction to scaffold peer learning. *Journal of Educational Psychology*, 90(1), 134-152. doi: 10.1037//0022-0663.90.1.134
- Kronqvist, E. (2008). Challenges in the qualitative analysis of peer counselling. Explorations of young children's learning. In G. L. Huber (Ed.) *Qualitative Approaches in the Field of Psychology* (pp. 11-32). Berlin: Center Qualitative Psychology.
- Lacasa, P. & Herranz, P. (1989). Contexto y aprendizaje: el papel de la interacción en diferentes tipos de tareas. *Infancia y Aprendizaje*, 45, 50-70
- Leland, C. & Fitzpatrick, R. (1993). Cross-age interaction builds enthusiasm for reading and writing. *The reading teacher*, 47 (4), 292-301.
- Macbeth, D. (2004). The relevance of repair for classroom correction. *Language in Society*, 33, 703-736. doi: 10.1017/S0047404504045038
- McCabe, A., Bailey, A., & Melzi, G. (2008). *Spanish-Language Narration and Literacy. Culture Cognition and Emotion*. New York: Cambridge University Press.
- MINEDUC (2006) Ministry of Education in Argentina, National Direction of Information and Evaluation of Educational Quality, <http://diniece.me.gov.ar/>.
- MINEDUC (2009) Ministry of Education in Argentina, National Direction of Information and Evaluation of Educational Quality, <http://diniece.me.gov.ar/>.
- Morrow, L. M. & Temlock-Fields, J. (2004). Use of Literature in the Home and at School. In B. H. Wasik (Ed.) *Handbook of Family Literacy* (83-100). NJ: Erlbaum.
- Nelson, K. (1996). *Language in cognitive development*. Cambridge: Cambridge University Press.
- Nelson, K. (2007). *Young Minds in Social Worlds. Experience, meaning and memory*. Cambridge: Harvard University Press.
- Nelson, K. (2010). Developmental narratives of the experiencing child. *Child Developmental Perspectives*, 4(1), 42-47. doi: 10.1111/j.1750-8606.2009.00116.x
- Nettles, M. T. & Perna, L. W. (1997). *The African American Education data book: Vol. II. Preschool through high school*. Ann Arbor, MI: Frederick D. Patterson Research Institute of College Fund/UNCF.
- Palincsar, A., & Brown, A. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction*, 1(2), 117-175.
- Recrut, M. D. (1994). Peer and cross age tutoring: The lessons of research. *Journal of Reading*, 37(5), 356-362.
- Rogoff, B. (1993). *Aprendices del pensamiento*. Barcelona: Paidós.
- Rogoff, B., Moore, L., Najafi, B., Dexter, A., Correa-Chavez, & M., Solis, J. (2007). Children's development of

- cultural repertoires through participation in everyday routines. In J.E. Grusec & P. D. Hastings (Eds.) *Handbook of Socialization: Theory and Research* (pp. 490-515). New York: The Guilford Press.
- Roscoe, R. D. & Chi, M. T. H. (2008). Tutor learning: The role of explaining and responding to questions. *Instructional Science*, 36, 321-350. doi: 10.1007/s11251-007-9034-5
- Roscoe, R.D. & Chi, M. (2004). The influence of the tutee in learning by peer tutoring. In K. Forbus, D. Gentner, y T. Regier (Eds.), *Proceedings the 26th Annual Meeting of the Cognitive Science Society* (pp. 1179-1184). Chicago: Erlbaum.
- Rosemberg, C. R. & Alam, F (2009-ongoing). *De niño a niño: unprograma de niños tutores en alfabetización [From child to child: a tutor-child literacy program]*. Intervention Program in schools and community centers Financial aid: Fundación Care (Alemania) – Fundación Save the Children (Argentina) – CONICET (Argentina) – SECyT (Argentina).
- Rosemberg, C. R. & Borzone, A. M (2005). Programa 'Oscarcito. Desarrollo lingüístico y cognitivo de niños en contextos de pobreza' ['Oscarcito program. Linguistic and Cognitive development of children living in Poverty']. R. (2005). Funding: Care (Germany), CONICET, SECyT.
- Rosemberg, C. R. & Borzone, A.M. (2008). Serie de libros infantiles "En la Casa de Oscarcito". Fundación Care (Germany), Fundación Arcor (Argentina)
- Rosemberg, C. R., Stein A. & Alam, F. (2013). At Home and at School: Bridging Literacy to Children from Poor Rural or Marginalized Urban Communities. In H. Kathy, T. Cremin, B. Comber & L. Moll (Eds.) *International Handbook of Research on Children's Literacy, Learning and Culture* (pp. 67-82). Oxford: Wiley Blackwell.
- Rosemberg, C. R., Stein, A. & Borzone, A.M. (2011) Lexical input to young children from extremely poor communities in Argentina. Effects of a home literacy program. *Journal of Research in Childhood Education*, 9(1), 36-52.
- Rosemberg, C. R., & Silva, M. L. (2009). Teacher-Children Interaction and Concept Development in Kindergarten. *Discourse Processes*, 46(6), 572-591. doi: 10.1080/01638530902959588
- Schegloff, A. (2000). When others initiate repair. *Applied Linguistics* 21/2, 205-243. doi: 10.1093/applin/21.2.205
- Schegloff, A.; Jefferson, G. & Sacks, H.E. (1977). The preference for self-correction in the organization of repair in conversation. *Language*, 53(2), 361-382. doi: 10.2307/413107
- Schegloff, E. (1992). Repair after next turn: The last structurally provided defence on intersubjectivity in conversation. *American Journal of Sociology*, 97, 1295-1345. doi: 10.1086/229903
- Schegloff, E.A. (1979). The relevance of repair to syntax-for conversation. In T. Givon (Ed.) *Syntax and semantics 12: Discourse and syntax* (pp. 261-288). New York: Academic Press.
- Schrader, B. & Valus A. (1990). Disabled learners as able teachers: a cross-age tutoring project. *Academic Therapy*. 25, 589-597. doi: 10.1177/105345129002500505
- Sénechal, M., Lefevre, J. A., Hudson, E. & Lawson, E. P. (1996). Knowledge of storybooks as a predictor of young children's vocabulary. *Journal of Educational Psychology*, 88, 520-536. doi: 10.1037//0022-0663.88.3.520
- Sinclair, J.M. & Coulthard, R.M. (1975). *Towards and analysis of discourse. The English used by teachers and pupils*. Oxford: Oxford University Press.
- Sindell, J. (2009). *Conversation Analysis. Comparative Perspectives*. Cambridge: Cambridge University Press.
- Snow, C. E., & Ninio, A. (1986). The contracts of literacy: What children learn from learning to read books. In W. H. Teale & E. Sulzby (Eds.) *Emergent literacy: Writing and reading* (pp. 116-138). Norwood, NJ: Ablex.
- Snow, C. E.; Porche, M. V.; Tabors, P. O. & Harris, S. S. (2007). *Is Literacy Enough? Pathways to Academic Success for Adolescents*. Illinois: Brookes.
- Statistics of the City Government of Buenos Aires (2009) <http://www.estadistica.buenosaires.gob.ar/>
- Stein, A., & Rosemberg, C. R. (2012a). Alfabetización temprana en poblaciones urbano marginadas. La familia como contexto de oportunidades. *Revista IRICE Nueva Época*, 23, 9-22.
- Stein, A., & Rosemberg, C. R. (2012b). Redes de colaboración en situaciones de alfabetización familiar con niños pequeños. Un estudio en poblaciones urbano marginadas de Argentina. *Interdisciplinaria*, 29(1). 95-108.

- Tarplee, C. (2010) Nextturn and intersubjectivity in children's language acquisition. In H. Gardner & M. Forrester, (Eds.) *Analyzing Interactions in Childhood* (pp. 3-22). Oxford: Wiley-Blackwell.
- Taylor, D. (1983). Family Literacy. Young children learning to read and write. Exeter, NH: Heineman.
- Tomasello, M. (2003) *Constructing a Language: A Usage-Based Theory of Language Acquisition*. Massachusetts: Harvard University Press.
- Topping, K. J., & Bryce, A. (2004). Cross-age peer tutoring of reading and thinking: Influence on thinking skills. *Educational Psychology*, 24, 595-621. doi: 10.1080/0144341042000262935
- Tudge, J. R. H.; Wintehhoff, P.A. & Hogan, D. M (1996).The cognitive consequences of collaborative problem solving with and without feedback. *Child development*, 67, 2892-2909. doi: 10.2307/1131758
- Tudge, J.R.H. (1992). Processes and consequences of peer collaboration: A Vygotskian analysis. *Child Development*, 63, 1364-1379. doi: 10.2307/1131562
- Tusón, A. (1995). *Análisis de la conversación*. Barcelona: Ariel.
- Verba, M. (1998). Tutoring between young children: How symmetry can modify asymmetrical interactions. *International Journal of Behavioural Development*, 22 (1), 195-216. doi: 10.1080/016502598384577
- Vygotsky, L. (1978). *Eldesarrollo de los procesos psicológicos superiores*. México: Grijalbo.
- Weizman, Z. & Snow, C. (2001). Lexical input as related to children's vocabulary acquisition: Effects of sophisticated exposure and support for meaning. *Developmental Psychology*, 37, 2, 265-279.
- Wertsch, I. (1998). *La mente en acción*. Buenos Aires: Aique.

About the Author(s)

Celia Renata Rosemberg , PhD, is a researcher at the National Council of Scientific and Technical Research at Argentina, and a professor at the University of Buenos Aires. She conducts research projects in the field of early literacy, family literacy and language development and social interaction.

Florencia Alam received a BA in Linguistics from the University of Buenos Aires (UBA). In 2011 she completed a Master in Discourse Analysis (UBA). She is currently finishing her Phd studies in Education with a scholarship from The National Council of Scientific and Technical Research at Argentina (CONICET). Her research is focused on the study of language and interaction between children.

Alejandra Stein, PhD, is a researcher at the National Council of Scientific and Technical Research at Argentina, and an assistant professor at the University of Buenos Aires. Her research interests focus on early literacy, family literacy and the development of narrative discourse.