

Endogenous Attributions of Picture-Book Reading in the Early Childhood Education:

Their Implications for Teachers' Professional Development and Children's Learning

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Abstract

Fostering communicative competence of children has been one of the most important and urgent issues of school education in Japan. In the rapidly changing age of the 21st century, often dubbed as 'the age of globalization', communicative competence has been said to be one of essential skills for effective collaborative learning in school education and profound life-long learning worldwide (Dumont et al., 2010). This paper considers fostering children's communicative competence in Japanese, the language used in the early childhood education forward. This paper reports on preliminary results of our longitudinal observational studies on the picture book reading in one-year old groups in the early childhood education. We discuss some consequences of a distinctive nursery policy of picture book reading and its implications for teachers' professional development and children's learning. In particular, nursery school practices which value endogenous attributions of picture book reading were considered. This type of nursery practice or policy is not only effective from self-regulated learning, but it also motivates teachers rich linguistic inputs and teachers' scaffolding and un-scaffolding in class, resulting in children's

active learning through child-oriented interactions. We also found that teachers observing endogenous attributions of picture-book reading tended to talk more to young children to ease them emotionally in the situations that children could be nervous about new activities or had negative emotional experiences from previous events. We conclude this paper by discussing how both children and teachers could benefit from endogenous attributions of nursery practices.

Keywords: Communicative competence, Endogenous attribution of picture book reading, Early childhood education, Professional development

Introduction

Communicative Competence in Collaborative Learning in the 21st Century

In the 21st century, we need collaborative learning and life-long learning to keep up with our rapidly changing world (Dumont, H. et al., 2010). Communicative competence is becoming more important since it is essential for collaborative learning and life-long learning, which involve people from different generations, different educational and cultural backgrounds.

Why, then, are we focusing on the early childhood education in this study? Impact of early childhood education on child development and Japan's social changes. Recent trends of the increasing demand for the female labor force and realization of work-life balance have accelerated the number of infants entering nursery schools rather than family care and starting preschool at the age of 3. More and more children spend longer in nursery schools from early in infancy. At the same time, more and more teachers are needed in the Japanese early childhood education, especially those for infant care and

younger children. Therefore, it is of great interest to look at good practices and consider their influences of early childhood education on children's development.

Definition and Ways of Fostering Communicative Competence in School Education

For the definition of communicative competence in school education, we assume two basic components of communicative competence defined by Mori (2004). They are, namely, (a) children's ability to understand what others are saying as well as how they are feeling and (b) to express themselves actively & effectively.

There are also two ways to foster children's communicative competence in the early childhood education (Curriculum Guideline by Ministry of Education, 2009, Education Report by Hamamatsu City Board of Education, 2013, 2014).

(1) a. Everyday routines

e.g., Time for 'Reflections' in group or class; picture book reading in nursery school

b. Occasional events with children from different school types

e.g., Special events with people or children outside schools, Seasonal events such as school excursions.

Fostering Active Listening and Learning in Infancy

One of the important components of communicative competence expected to foster during infancy is 'active listening'. It is mentioned in the curriculum guidelines (Nursery School by the Japanese Labor & Welfare Ministry; Preschool and Primary School by the Ministry of Education and Science). But specific teaching or caring methods and materials are not described in detail and they are up to each teacher in each classroom. This seems to cause diversity/nonuniformity in early childhood education.

This paper is organized as follows: First, we point out some current issues of children's communicative competence in Japanese education, relating the importance of picture-book reading to the development of preliterate children's listening to learn.

Our qualitative research focused on a particular nursery policy carried out as a part of the early childhood education in Hamamatsu, Shizuoka Prefecture located in central Japan. In this preliminary report, we briefly introduce some of the important consequences of endogenous attributions of picture-book reading from one-year olds in nursery school settings.

Research on Picture-Book Reading Research: A Brief Review

Research on Picture-Book Reading at Home and in the Early Childhood Education

Research on picture-book reading can be of two types: one is picture-book reading at home such as a parent-child dyad (Ninio, 1983, Akita, 1997, Sénéchal et al., 1995, Sugai, 2012), and the other is the one in a group such as in the early childhood education including nursery schools (Whitehurst et al., 1994, Fletcher et al., 2005, Sugimoto, 2015). Picture-book reading at home is mainly done between a parent and a child(ren), the parent reads it, but the child often takes the initiative in pace and their communication. On the other hand, the dynamics of picture-book reading in group can be determined by various factors such as (a) relationships between teacher-child, child-child, (b) the quality of the teachers' linguistic input, and (c) the levels of children's language development (Mashburn, A. J. et al., 2008).

Picture-book reading is often utilized as a means of language interventions for children from a low socio-economic status (SES) in the U.S. Previous studies have reported that children from low SES families benefited highest gains from shared book reading. On the other hand, the 'Dialogic Reading' method (Zevenbergen, A. A. et al., 2003), which consists of a set of techniques for adult readers to improve the quality of the

reading, is beneficial not just for children from low SES but also those from the middle or higher SES. These studies mainly targeted on children of age 3 or older and equivocally emphasize the importance of the picture-book reading setting. That is, it is good in a small group of children, but it is the most preferred in the adult-child dyad. In such intervention-based reading, adults are encouraged to ask ‘open-ended questions’ rather than closed questions during picture-book reading and try to give a child ample time to respond to the adult’s questions.

Besides picture-book reading research aiming for language intervention, research on picture book reading in group of typically developing children younger than 3 years old is very few worldwide (Fletcher et al., 2005, Terada & Muto, 2000, Sugimoto, 2015a). In Japan, we have good reasons to do this line of research on younger children. First, the number of children growing up in nursery schools from infancy is increasing nationwide. Infants and toddlers stay as long as 8 hours in nursery means they are likely to have heavy influence of the environment they spend during the day. Second, there is currently a severe shortage of highly experienced professionals in the early childhood education, from nursery to preschool. Under the recent national administrative reforms, nursery schools and preschools, which are systematically distinct and have different nursery or educational tradition, have started to merge, creating the third type of the early childhood education, *kodomo-en*. These recent dramatic changes in the ‘early childhood education’ are expected to cause some positive and negative effects on children and teachers of the early childhood education. Now we need to identify and support good nursery and educational practices to be succeeded and further developed. This is why we target one-year-old classes in nursery.

Endogenous/Exogenous Attributions of Picture-Book Reading

Akita (1997) discusses picture-book reading within a context of later reading and

literacy development and introduces parents' endogenous and exogenous attributions of picture-book reading. Endogenous attributions focus on the processes of reading (for children, it is listening) activity itself such as enjoying the story and one's imaginary word. Exogenous attributions, on the other hand, concern the outcomes or products obtained from the same activity such as acquiring orthographic knowledge and vocabulary growth. So in endogenous attributions, the processes are the goal of an activity and similar to intrinsic motivation; exogenous attributions focus on extrinsically motivated goals and the outcomes are the goal.

In this study, we are interested in a nursery policy (practices) of endogenous attributions of picture-book reading: nursery or educational practices that value the reading process more than its outcomes. We also look at how picture-book reading activities are introduced in each class. We regard teachers' use of nursery rhymes as an introduction to reading as 'exogenous attributions of nursery rhymes'. This study focuses rather on endogenous attributions of picture-book reading: It is a nursery policy or practice that teachers not relying on exogenous attributions of nursery rhymes can make a difference.

Picture-Book Reading as Everyday Routines

Traditionally, Japanese nursery school teachers use nursery rhymes before picture-book reading in Japanese nursery schools (Yumae, 2015, Sugimoto, 2015b). According to the previous survey (Yumae, 2015), even experienced nursery school teachers (40 years of job experience in nursery) do use nursery rhymes when children are restless and teachers want to get their attention. Teachers also use nursery rhymes right before reading books when they have children wait for another quietly. Therefore, nursery rhymes are widely used as an introduction to picture-book reading by teachers. This is rare in picture-book reading at home (p.c. with parents and teachers from public nursery schools in Hamamatsu).

The Nursery Rhyme Effect (Sugimoto 2015b)

Young children, especially those of and toddlers, react well to music and rhythms. Children are seemingly easy to learn words with musical rhythms. Nursery school teachers in general use nursery rhymes as an introduction to picture book reading to get attention of children, calm them down, and make them sit still. This is called the nursery rhyme effect. The nursery rhyme effect can be seen as a kind of positive mood induction and the conditioning of children's internal state and behavior through nursery rhymes. It can be seen as a type of extrinsic motivation (Deci & Ryan, 1987). Nursery teachers use this technique to make children calm down, become quiet, and listen to their teachers. Previous studies on the picture book reading revealed that they use it when their caring children are restless, noisy, are hard to pay attention to their teachers. This technique is shared by experienced nursery teachers (Yumae, 2015, Sugimoto, 2015b). Some primary school teachers do use it before story telling in classroom to avoid the first-grader problem (*p.c.*).

However, there are several negative aspects of using the nursery rhyme effect. That is, as nursery school teachers and primary school teachers pointed out (*p.c.*), children who are conditioned by the nursery rhyme effect become passively ready to listen to the teacher during the picture-book reading. These children are likely to have difficulty paying attention to or listening carefully to the teacher after entering elementary schools. Thus, it is preferable if children can get themselves ready to listen to their teacher without the conditioning them by the nursery rhyme effects.

In nursery schools whose teachers use the nursery rhyme effect, they start reading the book right after the nursery rhyme ends. The teachers do not give children a chance to talk about something just happened in their group activity.

In our preliminary study, we have found that the use or non-use of nursery rhyme

effect differentiate teacher-child interaction in reading activity. That is, teachers using the nursery rhyme effect do.

Picture-Book Reading in One-Year Olds

Purposes

The present study aimed to explore the role of picture-book reading in one-year olds in nursery schools. We selected a nursery school that has a distinctive nursery policy of picture-book reading and conducted a qualitative study for 6 months. We compared our data with previous study and consider some educational and practical consequences and implications for the early childhood education in Japan.

Our research questions are the following. (1) How do different nursery policies manifest in picture-book reading in one-year-old classes? (2) How do children develop their ability of interacting with one another in picture-book reading? (3) What do children convey or communicate with one another through sharing picture books?

Method

This fieldwork research was based on participatory observation. The author visited two nursery schools with a nursery policy of endogenous attribution of reading and collected data for 6 months from August 2014 through January 2015. We video-taped picture-book reading in 2 one-year-old groups. Both groups were videotaped in the morning from 10 am: The morning group sessions and teacher-child interactions, focusing on picture-book reading activities.

Table 1 Participants of the study: Groups A & B (as of August 2nd, 2014)

	Group A	Group B
Number of children (female)	9 (4)	6 (2)
Mean age in month	22.7mo. (SD: 3.52)	22.17 (SD: 2.79)
Age range in month	16-27	17-25
Job experience of the teacher in charge of the group	7 yrs. and 4 mo.	4 mo.

From the video recording, teachers' talks were all transcribed into Japanese. We measured the length of the teacher's talk in each group before picture book reading and the length of reading itself. We also analyzed videotaped teachers' talks in terms of topics, styles of talk (interactive or not, and/or structured or not), and the number and topics of books read each session observed. We then analyzed videotaped children's reactions and verbal responses in group and divided them into linguistic and paralinguistic ones (Sugai, 2012).

Results

The average length of time each teacher's talk before picture book reading and that of reading in each group were given in Table 2. On average, both teachers talked about for one minute, which roughly corresponds to one book for children of this age. There is no significant difference between two teachers though their working experience as a nursery teacher was different.

Table 2

	Group A	Group B
Length of time of teacher's talk before reading	62.7 sec. (SD: 42.87) Range: 20-102 sec.	63.0 sec. (SD: 48.78) Range: 20-107 sec.
Teacher's style of talk	Structured	Unstructured
Use of emotion words	Moderate	Frequent
Picture book reading time*	252 sec.	213 sec.
Number of books read	2.83 (SD: 0.9)	2.0 (SD: 0)
Talk and reading in second	314.9 (5'14.9')	276.0 (4'36')

We obtained 32 sessions that were analyzable. As far as the number of books read is concerned, Group A was read 2.83 books on average while Group B was always read 2 books ($A > B$, $p < .01$). Teacher B constantly read 2 book in each session while Teacher A, who was more experienced in nursery than Teacher B, usually read 3 books in the morning session but occasionally read two books due to tight schedule such as occasional events, etc. Since both groups were read two or more books in each morning session, we have obtained interesting observations from children's interactions.

Children's development of communication within a group

We have divided the 6-month period of the observation into two parts and analyzed developmental changes in interactions between teacher-child, child-child, etc. as well as verbal and nonverbal behaviors, following Sénéchal et al. (1995). We have found that in the first period (August to October), children did not get engaged in child-child interactions verbally; rather they were eager to interact with their teacher verbally as well as nonverbally in one to one fashion before reading and during picture-book reading. However, in the second half of the observation period (from November, 2014 to January, 2015), children talked more to other children (child-child interaction) and

teachers talked less: When a child asked a question, both teachers in different group waited until other children responded (un-scaffolding).

Although both teachers' linguistic inputs were natural and rich in grammatical structure, they often tended to continue in a very long sentence by combining them with a word-final particle '...ne,...ne,'. Transcribed sentences produced by the teachers were not equally analyzable in terms of mean length of utterances (MLU).

Discussion

The nursery school policy of not using the nursery rhyme effect could lead to two major communicative outcomes: It promotes (a) teacher's linguistic input and (b) children's interaction with others.

The 'no nursery rhyme effect' policy inevitably forces teachers' linguistic input. Teachers practicing this type of nursery neither start with nursery rhymes before reading nor just start reading a picture book to young children. Rather they carefully talk to the children in group every time before reading books. Thus, natural linguistic input is always guaranteed, which is not possible under teachers relying on the nursery rhyme effects. In contrast, teachers using the nursery rhyme effect are not inclined to talk before reading. After enjoying nursery rhymes, children are ready to listen to their teachers, and so the teacher soon start reading a book without any linguistic input before the children get restless or lose their attention.

Figure 1. Picture book reading in one-year-old class



Sex Differences in Preferences for Books and Implications for Children's Learning

We conducted the microanalysis of the videotaped interaction between children and teacher and among children (Beebe 2014). Teachers read at least two books a morning in group. The books varied in topics. Boys and girls clearly differed in their preference for types of books. That is, boys preferred and reacted verbally as well as nonverbally to books regarding vehicles and large animals. On the other hand, girls showed no reaction to those books but reacted to books about mother-child interaction, and interpersonal relationship.

Children's Self-Assertion within a Group

In the second half of the observation period, children became more interactive and tried to share their preference for books with others during picture-book reading given in (3).

(3) Episode 1: Children's interaction and self-assertions during reading in Group B (in December, 2014)

The teacher brought two picture-books with her and was about to start reading in a one-year-olds' class. Two boys, Boy A (27 mo. of age) and Boy B (29 mo.) are good friends and usually sit next to each other in picture book reading. When the teacher opened a book and became ready to read a book, Boy A pointed at the book and said to his neighbor boy B, "kore suki" (=I love this (book)!). But boy B looked at the picture book and said nothing. Boy A looked into boy B's face and repeated twice, "isshodane!" (=You do, too, right?). Boy B was preoccupied with the picture book and just nodded without turning his face to boy A. They shared their feelings during the picture book reading both verbally and nonverbally. They expressed their feelings in their own expressions that they loved the story and were excited about listening to

it.

(Translated from Japanese)

Use of the Nursery Rhyme Effects and Teacher-Child/Child-Child Interactions

Sugimoto (to appear) observed two different types of teachers: two teachers, teachers A & B, do not use the nursery rhyme effect while the other one, teacher C, uses it whenever she thinks it is necessary.

Teachers using the nursery rhyme effects do not give any linguistic input before reading picture books. This is because teachers want to start reading once children become quiet and pay attention to the teachers. They may think that children may start talking or get interested in something else if the teachers talk to children. On the other hand, teachers B and C cannot use the nursery rhyme effects must talk to children. Younger children can respond well to the topics immediate to them. So the teachers must think and choose topics carefully so that they can create interactions.

(4) Episode 2: Picture-book reading in Group A (December, 2015)

The teacher was reading a book called ‘kingyo-ga nigeta’ (=The golden fish ran away!). This book was one of the most popular books among children and so was read many times until two months ago. It had been a while since the teacher read the book. As the teacher continued to read, Girl A asked a question about the picture of the book.

A: pointing the picture of the book while looking at the teacher

A: ‘sore naani? (=what is that?)

A: nee...sore naani? (=hey, what’s that?)

(no one answered. Boy B showing a gesture of unlocking the door and said,)

B: sore-wa....kagi. (=that’s a key)

A: (With smiling) kagi!

C: kagi! kagi!

In this episode, Girl A started asking a question. It appeared that she asked the teacher the question, but the teacher did not answer, neither was everyone else. So she repeated the same question and Boy B, who was sitting behind her, tried to answer her question. In the beginning, he did not come up with the right word 'kagi (=key)', so he tried to express his image in his gesture of unlocking the door. Finally he could tell the word and Girl A was delighted on her face and repeated the word. Girl B sitting next to her also repeated the word twice. This interaction was observed in the second half of the observation period. By that time, children had become capable of communicating verbally with other peers. As the teacher's scaffolding in children's communication started to disappear (un-scaffolding), children started to help with one another in group. Their communication style had changed from teacher-child interactions to child-child interactions. This qualitative change in communication styles and strategies was caused by both the teacher and children.

Attributions of Picture-Book Reading in Group

Considering picture-book reading in one-year-old groups is concerned, we can have a revised list of endogenous/exogenous attributions of picture-book reading in group as in Table 3. There both endogenous and exogenous attributions of picture-book reading in group are added to the original ones in Akita (1997).

First, from the cognitive point of view, children can enjoy sounds of words in reading (endogenous) and children can recognize differences between them and others. Through interacting with others, listening to others saying, children may discover individual differences in knowledge, preferences, and so on, which are

Interpersonal aspects of endogenous attributions of reading are

Through picture-books children share their feelings with other children and enjoy interacting with them freely, which are seen as endogenous attributions of reading in group. As a result of these experiences, they seem to develop their active listening ability and learn self-assertions in group.

Emotional experiences through picture-book reading are added to physiological and endogenous attributions of picture-book reading. The children in both groups understood injuries, pains and treatments in the story about heavily injured boy. They even showed some empathy for the injured main character of the story and encouraged him. In this way, picture-book reading in group can benefit from more interpersonal endogenous attributions such as interacting with others and active listening, compared to picture-book reading in dyad at home.

Table 3

	Cognitive	Interpersonal	Physiological
A. Endogenous attributions (Process- oriented)	1. To enjoy one's imaginary world. 2. <u>To enjoy sounds of words</u>	1. Parent-child skin ship and communication. 2. <u>To Experience empathy.</u> 3. <u>To enjoy interacting with others.</u> 4. <u>Active listening.</u>	1. To calm down. 2. <u>Various emotional experiences</u>
B. Exogenous attributions (Product- oriented)	1. Vocabulary growth 2. Enhance reading comprehension 3. <u>To recognize differences with others</u>	1. Learn orthography. 2. Share vocabulary in group. 3. <u>Self-assertion</u>	To fall asleep.

*The underlined items are newly added for group reading.

Conclusion

We have seen nursery practices with respect to endogenous/exogenous attributions. Nursery practices valuing endogenous picture-book reading without the nursery rhyme effect promoted teachers' natural linguistic inputs which correspond to one book in length and volume of vocabulary. In this type of nursery practices, both an experienced teacher and an unexperienced teacher had no significant difference in linguistic inputs. They both used many emotional words in their talk. They also talked longer when children may have negative emotional states.

As for Limitations of this research, we must admit that our research was mainly observation videotaped the picture-book reading session. We have not collected reference data to compare how teachers and children communicate in a dyadic fashion.

For future research, we must take into a consideration of children's personality and behaviors in group. Some children are very interactive and responsive while some

others are reserved and quiet in group. We still study how those children react and enjoy and feel about picture-book reading.

Notes

This working paper is reproduced from [<http://www.schoolexcellence.p.u-tokyo.ac.jp/cms/wp-content/uploads/2015/07/Y-wp05.pdf>].

This research was supported in part by a grant, Youth Scholar Training Program from Center for Excellence in School Education, Graduate School of Education, The University of Tokyo.

References

- Akita, K. (1997). *Dokusho-no Hattatsu-katei: Dokusho-ni kakawaru ninchiteki youinn/shakaitekiyouin-no shinrigakutekikentou* (=The developmental process of reading: Psychological considerations of cognitive and social factors related to reading). Tokyo: Kazama Shobo.
- Akita, K. & Daiichihino Group eds. (2013). *Cooperation among Nursery, Preschool and Elementary School: Challenges of Growing Community*. Gyosei.
- Akita, K. & Muto, T. (1996). Why do mothers read picture-books to their children?: Mothers' conceptions and their setting environment on reading. *Journal of Educational Psychology*, 44, 109-120.
- Deci, E.L., & Ryan, R.M. (1987). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Dumont, H. et al. (2010). *The nature of learning: Using research to inspire practice*. OECD.
- Eisenberg, N. et al. (2013). Relations of self-regulatory/control capacities to maladjustment, social competence, and emotionality. In Hoyle, R. (ed.), *Handbook of Personality and Self-Regulation*. UK.: Wiley Blackwell.
- Fujie, Y. et al. (eds) (2015). *Nijuu isseiki-no Manabi-wo Tsukuru* (=Creating Learning in the 21st Century). Kyoto: Kitaouji Shoboo.
- Hamamatsu City Board of Education. (2014). *The Second Education Plan Reports of Hamamatsu City*. Hamamatsu, Japan.
- Hamamatsu City Board of Education. (2013). *The third general education plan of Hamamatsu*. Hamamatsu, Japan.
- Hamamatsu City Board of Education. (2011). *Hamamatsu City Public School Self-evaluation Reports*. Hamamatsu, Japan.

- Hamamatsu City Board of Education. (2012). *Hamamatsu City Public School Self-evaluation Reports*.
- Hamamatsu City Board of Education. (2013). *Hamamatsu City Public School Self-evaluation Reports*.
- Habermas, Jurgen (2008). Towards a theory of communicative competence. *Inquiry*, 13, 360-375.
- Hindman, A. et al. (2008). Untangling the effects of shared book reading: Multiple factors and their associations with preschool literacy outcomes. *Early Childhood Research Quarterly*, 23, 330-350.
- Hoshino, T. (2015). Quasi-experimental design and causal inferences. Talk presented at the 26th annual meeting of the Society of Developmental Psychology.
- Kawano, J. (2009). *The process of communication and language development: a practical study*. Keisuishsha.
- Kodama, T. (2004). Teasobi, yubiasobi. In Morikami & Kashiwame (eds.), *Handbook of the early childhood care and education* (p86), Minerva-shobo.
- Mashburn, A. J., et al. (2008). Measures of classroom quality in prekindergarten and children's development of academic, language, and social skills. *Child Development*, 79, 3, 732-742.
- McInnes, K. et al. (2013). The nature of adult-child interaction in the early years classroom: Implications for children's perceptions of play and subsequent learning behavior. *European Early Childhood Education Research Journal*, 21, 2, 268-282.
- Mitsui, M. (2009). Nursery rhymes. In Nakatsubo (ed.), *Jidobunka-ga hiraku yutakana hoikujissen*. Hoikushuppansha.
- Mori, T. (2004). Learning instruction fostering self-expression. In Akita (ed.), *Fostering children's communication*. Kyoshokukenshu October Special Issues.

- Ninio, A. (1980). Picture-book reading in mother-infant
- Nozawa, S. (2011). The Development of toddlers' self-assertion strategies with peers.
The Japanese Journal of Developmental Psychology, 22, 1, 22-32.
- Sénéchal, M., Cornell, E. H., & Broda, L. S. (1995). Age-related differences in the organization of parent-infant interactions during picture-book reading. *Early Childhood Research Quarterly*, 10, 317-337.
- Shinpo, M. (2001). *Challenging the first-grader problem*. Meiji Tosho.
- Siraj-Blatchford, I. et al. (2007) Creativity, Communication and Collaboration: The Identification of Pedagogic Progression in Sustained Shared Thinking. *Asia-Pacific Journal of Research in Early Childhood Education*, 1, 2.
- Siraj-Blatchford, I. et al. (2007). Developing the Foundation Phase for 3-7 year-olds in Wales, *Welsh Journal of Education*, 14, 1, 43-68 (26)
- Sugimoto, T. (2015). Picture book reading and dynamics of children's learning: Active listening and collaborative learning of one-year olds in nursery schools. *Proceedings of the 68th meeting of the Society of Early Childhood Care and Education in Japan*. Nagoya, Japan.
- Sugimoto, T. (to appear). The nursery rhyme effect: Nursery school teachers' unquestioned tradition and its temporary and long-term effects on children's self-regulated learning.
- Sugimoto, T. et al. (in preparation). Issues of children's communicative competence and cooperation among schools in the culturally diversified school districts: The role of early childhood education. Unpublished ms. University of Tokyo.
- Takahashi, Y. (2015). On longitudinal studies of developmental outcomes.
A talk presented at the 26th annual meeting of Developmental Psychological Society of Japan.

- Terada, K. & Muto, T. (2000). Nursery school teachers' thinking and behavior in picture-book reading in two-year-old classes. *The Proceeding of the Japan Society of Research on Early Childhood Care and Education*, 304-305.
- Whitehurst, G. et al. (1994). A picture book reading intervention in day care and home for children from low-income families. *Developmental Psychology*, 30, 5, 679-689.
- Yumae, H. (2015). *Current issues in children's language learning environment*. Unpublished Bachelor's Thesis. University of Hamamatsu.
- Zevenbergen, A. A., Whitehurst, G. J., & Zevenbergen, J. A. (2003). Effects of a shared-reading intervention on the inclusion of evaluative devices in narratives of children from low-income families. *Journal of Applied Developmental Psychology*, 24, 1-15.