

Talking about Artworks in English in Art Museums for Improving Japanese University Students' English Communication Skills and Beyond

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Abstract: *This paper presents an action research conducted with three university freshman students to examine possibilities of using art as topics in conversations modelling participant-driven museum talks for improving their English communication ability. The students visited art museums in Tokyo and talked about artworks together by sharing impressions, thoughts, and opinions with each other in informal conversations in English facilitated by the author as a facilitator. After the collected data was analysed qualitatively, the following prominent themes arose: the participants engaged in communication in English with peers actively in a fun way, improved their vocabulary, developed ideas by listening to the others, and expanded their perspectives by building up on the others'. The findings imply that talking about original artworks in English in art museums enhances participants' communication in English as well as collaborative learning and meaning-making that will prepares them for their future careers and experiences. This point is discussed in relation to the five C goals advocated by the American Council on the Teaching of Foreign Languages.*

Keywords: English communication, conversations about first-hand artworks, learning through art, gallery talks

1. Introduction

Japanese university students often have difficulty communicating in English while acknowledging its importance. Seemingly, most of them prefer skills such as listening, reading, and writing to communicative skills including conversations, discussions and presentations as their pre-university English classes normally focused on vocabulary building, grammar acquisition, reading comprehension and test preparation given in teacher lectures in Japanese. It is understandable that Japanese university students find teaching methodologies, such as the communicative language teaching (CLT) approach often used by native-speaking English teachers and in English for communication classes difficult (Shachter, 2018).

On the other hand, a huge emphasis has been on communicative English in Japan. English education now starts from grade three in most public elementary schools – two years earlier than until a few years ago – in accordance with the 2020 full-scale educational reform by the Ministry of Education, Culture, Sports, Science and to nurture students' English communication ability (MEXT, 2019).

Furthermore, in today's closely-knit global community in which people from different backgrounds interact easily with others both in person and on social media, having a good

command of language is a great advantage. In many countries where English is not widely used daily including Japan, there is an urge on English curricula that prepare students to be able to communicate in English fluently.

The common concern of freshman students in my university about English communication is either that they are not confident about their English communication ability or that they have not had sufficient training on it. As a facilitator of the participant-centered English conversation program, Let’s Talk Art!, at the National Museum of Modern Art, Tokyo, the author has acknowledged the effective roles such programs can play in encouraging communication among participants with different backgrounds, values, and perspectives. Participants view artworks together by exchanging impressions, thoughts, ideas and opinions freely in an informal conversation supported by a facilitator.

In this action research, three freshman students from one of the author’s university English classes visited art museums in Tokyo and had conversations in English about artworks modelling participant-centered museum talks. This study aims to explore possibilities of fostering students’ English communication ability by adopting museum gallery talks.

2. Background

In the school year of 2019, from April 2019 to March 2020, the author taught two English major freshman classes. Each class had about 20 beginner-level students whose estimated TOEFL iBT score would have been around 32. The author taught four-skill contents to each class twice a week using English as the main language of instruction with occasional use of Japanese for explaining grammar or something abstract or helping students who needed extra support.

As the author observed the students in these classes in the first two months, she often noticed that many of them hesitated to use English for communication in class. Speaking in English in front of the entire class seemed to be even more terrifying to them as they might have been worried about making mistakes or getting attention from peers. Some students responded in Japanese even when they were spoken to in English. In rare but worse cases, extremely nervous students did not even say a word. So communicative activities in English such as conversations, discussions and presentations in these classes often fell apart or did not go well.

The author conducted a survey with the students to ask about their English communication ability in June 2019. Table 1 displays the results of one question: What English skill(s) do you like? 30 students answered the question giving multiple choices. Some of the respondents also left comments on why communicating in English was difficult for them as shown in Table 2.

Table 1: Which English skill(s) do you like?

Skills	# of Students	Skills	# of Students
Presentations	3	Translation	8
Conversations	5	Writing	9
Discussions	7	Listening	12
Vocabulary	8	Reading	14

Table 2: Why is English communication difficult?

Reasons	# of Students
I cannot come up with ideas easily.	6
I do not have confidence.	6
I do not have enough vocabulary.	1
I have difficulty with grammar.	1
I have no such experiences.	1
I cannot respond quickly.	1

As the survey results indicate, these freshman students preferred passive skills such as reading and writing to those that require oral output and interaction with others. The author’s assumption was that sufficient training on generating ideas and increasing confidence, or lowering anxiety, would encourage them to use English for communication more.

Nowadays, many museums offer a variety of programs to visitors; one popular program is participant-driven gallery conversations. As mentioned earlier, the author is a facilitator of the cross-cultural art-appreciation program in English named Let’s Talk Art! at the National Museum of Modern Art, Tokyo. In this program, international participants get together for a one-hour conversation in which they talk about art exploring three works under a theme and discuss things found in the works, the Japanese culture, and the cultures of their own (MOMAT, 2019). It is always the program facilitators’ pleasure to see participants from different background engaging themselves in their conversation and interaction with peers by exchanging ideas in a relaxing atmosphere.

Inevitably, it was not long before the author started wondering about how such conversations and interaction often practiced in museums could possibly relate to or become remedies for her freshman students who were reluctant about actively communicating in English. Thus, the research question is: How would incorporating participant-centered conversations about artworks in English in art museums affect students’ English communication skills?

3. Literature Review

Japanese high school students are bound to test preparation and test taking, so they are expected to excel in English vocabulary, grammar and reading. Their communicative English competence is often considered as lesser importance. In fact, in the above-mentioned survey, 27 freshman students revealed that most of their English learning in high school was vocabulary building, grammar acquisition, reading texts, quizzes and tests. That is why the CLT approach is challenging to many Japanese university students as they are suddenly “placed in the communicative settings and acquire language knowledge and communicative competence through active participation and interaction; while teachers change from a knowledge-giver to an organizer, facilitator and researcher” (Ju, 2013, p. 1581). Shachter pointed that “this disconnect between what is tested and what is expected in the foreign EFL classroom environment can significantly lower students’ motivation to participate in communicative activities” (Shachter, 2018, p. 4).

In any society, communication plays an important role and it is essential in educational settings. According to Dewey, society exists by communication or rather in communication (Dewey, 1916/2012). As our global community is ever getting closely intertwined, people interact with each other beyond their immediate socio-cultural contexts. Thus, the importance of improving English communication skills must be recognized by Japanese university students as future global citizens and by educators of English.

Therefore, one of the educators' roles is to relate students' learning to their daily lives and their immediate community and beyond so that students will realize that what they learn in school is meaningful outside the school setting. Dewey (1938) insisted that classroom activities should be designed to be meaningful to students' actual lives and participation in the local and wider society and argued that the classroom should be considered as microcosms of the community in which learners work together to solve problems existing in the community. Consequently, Dewey (1938) advised educators to use things within the range of existing experience of students that have the potentiality of presenting new problems which will encourage further experience. For this reason, the author decided to apply communication practice modelling participant-centered conversations about artworks in art museums to improve her students' English communication skills as such activities are popular in real-life contexts.

One well-known approach of discussions of artworks, Visual Thinking Strategies (VTS), "uses art to teach visual literacy, thinking, and communication skills –listening and expressing oneself" (Yenawine & Housen, 2013, p.19) or "uses art to foster learners' capacities to observe, think, listen and communicate, and aims to develop communication skills" (Burnham & Kai-Kee, 2011 p.102). The facilitator guides a conversation by asking the three fixed questions: "What's going on in this picture? What do you see that makes you say that? What more can you find?" (Yenawine & Housen, 2013, p.25). However, VTS facilitators do not "provide any information, correct participants' misapprehensions, or adds comments of their own" (Burnham & Kai-Kee, 2011, p.102). Burnham and Kai-Kee (2011) pointed that "questions as open-ended as the three required by VTS seem designed to endanger open and 'democratic' conversation about an artwork" (p.104). So, in the conversations of this study, the participants were given relevant information about artworks and artists by the facilitator so that their communication and understanding of artworks would become as meaningful as possible and stimulate their intellectual curiosity.

One advantage of talking about artworks in art museums is that students learn in an authentic, real-life environment. The International Council of Museums (ICOM) defines that a museum is a place open to the public "for the purposes of education, study and enjoyment" (OECD/ICOM, 2018, p.13). Moreover, the most desirable museums are those that are used for educational purposes and are associated with life activities outside of the museum (Hein, 2004, p.419).

In addition, learners would learn in a non-threatening environment, give ideas freely, and work collaboratively with peers who have different perspectives and values. Krashen (1981) explained that the affective filter is an imaginary barrier which prevents learners from acquiring language. Learners are relaxed and motivated and use the language more by taking risks while their affective filter is down. Seemingly, artworks as conversation topics would lower students' affective filter and encourage them to talk in English. Berwald (1987) insisted that authentic materials contain current language and topics. It would probably allow students to come up with ideas as they engage themselves in conversations. Furthermore, according to Burnham and Kai-Kee (2011) participants make new discoveries and construct meaning together as they carry out conversations by comparing their own ideas with those of the peers and constantly transforming their perspective throughout the process of their conversations.

Any community is made up of people with different perspectives and capabilities. When people in a community work together, they must be aware of this. By learning in collaboration with peers, learners can reach out of their actual level of development to their potential level of

development (Vygotsky, 1978). This way of constructivist learning is meaningful and can be achieved in gallery talks in which people with different intelligences build up their learning on that of their peers. Through interacting with others, people talk about what they know from previous experiences, discuss what they see, hear and read in relation to these experiences (Fork and Dierking, 2000).

4. Methodology

Framework

To respond to the research question, the framework employed for this study is action research. Cohen and Manion argued that action research is concerned with identification and solution of problems in a specific context, and its aim is to improve the current state of affairs within the educational context in which the research is being carried out (cited in Nunan, 1992, p.18). Kemmis and McTaggart added that action research is carried out by practitioners (cited in Nunan 1992, p.17). This action research is conducted with the following three participants.

Participants

Three freshman students aged 18 or 19 from one of the author's four-skill English classes of the school year 2019 – one male and two female – participated in this study. A pseudonym is used for each participant. The male participant, Ko, decided to join the study, expecting to improve his creative thinking. Nozomi, one female, wanted to improve her English communication ability in a fun way. The other female, Wata, was simply interested in doing activities in art museums. None of the participants had frequently visited art museums. However, all of them showed moderate to high interest in talking about artworks in English in art museums.

The participants belonged to the lowest of the three English levels set by the university. Ko needed better English communication skills for his future goals of studying in a university in an English-speaking country and pursuing a career as an interpreter. Nozomi also needed a better command of communicative English as she wanted to work for an international airline after graduation. Wata dreamed of communicating with diverse people in English to share her passion for *manga* and online games with them. In a casual pre-study chat with the author, the participants voiced influential concerns about communicating in English that they: (1) were not able to respond quickly in English, (2) did not have enough English vocabulary, and (3) were not able to put what they wanted to say into English easily.

Data Collection

The data collection took place from October 2019 to January 2020. The participants and the author visited one art museum in Tokyo on a one-month basis totalling in four: the National Museum of Western Art, the National Museum of Modern Art, the Sumida Hokusai Museum and the Tokyo National Museum¹. At each visit, the participants talked about two or three artworks in English by freely exchanging ideas in a conversation facilitated by the author. They spent about 15 to 20 minutes on each artwork.

The author first introduced the theme of the day and had the participants have a warm-up small talk on it before viewing the first work of the day. For instance, at one museum, the theme was “social gathering” and the participants talked about birthday parties and dinner gatherings. After the warm-up, the participants proceeded to the artworks one by one. They first looked at each artwork alone and then shared impressions, ideas, and opinions with the others. The author supported their conversation by repeating/paraphrasing and linking participants' comments,

asking questions to deepen their conversation, and providing appropriate contextual information about the artwork and artist in appropriate timings by avoiding giving a lecture. The author observed the participants' conversations and interaction closely during the conversations.

The participants' conversations were voice-recorded and later transcribed by the author. The participants gave written feedback at the end of each visit. In addition, the author conducted a semi-structured group interview to ask them about their overall feedback about all the visits at the end of the data collection period.

Data Analysis

All the collected data was analysed qualitatively. There are four characteristics of qualitative research according to Merriam (1998): the researcher (1) is interested in understanding the meaning people have constructed (2) is the primary instrument for data collection and analysis (3) must get involved in fieldwork such as observation, and (4) employs an inductive research approach in which theory is built from observations and understandings gained in the data collection.

5. Findings

Tables 3 to 5 summarize the post-conversation feedback of the participants.

Table 3: Summary of Ko's post-conversation feedback
 Note +: good point(s); -: point(s) to improve.

Visit 1	+	-talked actively in a relaxing atmosphere. -was able to say what he wanted to about artworks.
	-	-needed to respond more with sentences. -wanted to be more assertive.
	Others	-had a new, fun experience.
Visit 2	+	-learned vocabulary from what the others said. -observed artworks well before speaking.
	-	-took too much time before saying something. -talked less than in the last visit.
	Others	-listened to the others and transformed own ideas.
Visit 3	+	-observed artworks well before speaking. -spoke from own imagination.
	-	-talked less toward the end.
	Others	-was impressed with a peer who did not give up conveying her ideas.
Visit 4	+	-noticed a subtle feature in the artworks and talked about it. -tried to explain what he wanted to say in different ways.
	-	-had hard time coming up with words and took time before speaking. -want to clarify what he wants to say more.
	Others	-The others talked based on their detailed observation and knowledge.

Table 4: Summary of Nozomi's post-conversation feedback

Visit 1	+	-talked actively and used own imagination.
	-	-learned vocabulary.
	Others	-needed more vocabulary.
Visit 2	+	-had a fun experience, but some artworks were difficult to talk about.
	-	-gained new perspectives by exchanging ideas with the others.
	Others	-talked actively and supported the others.
Visit 3	+	-tried to make longer comments.
	-	-needed more vocabulary
	Others	-enjoyed listening to the others' different ideas.

Visit 4	+	-talked actively and led some parts of the conversation. -tried to spoke with sentences.
	-	-should have explained what she wanted to say in different ways. -want to expand conversations and improve creative thinking.
	Others	-was impressed with the others' detailed observation and knowledge.

Table 5: Summary of Wata's post-conversation feedback

Visit 1	+	-talked actively and supported the others. -learned vocabulary and used own imagination.
	-	-needed more vocabulary and to talk from various perspectives. -wanted to respond to peers more.
	Others	-enjoyed appreciating art in a new, fun way.
Visit 2	+	-supported peers. -learned new vocabulary and used pre-learned vocabulary.
	-	-wanted to talk more actively.
	Others	-did not like the quiet atmosphere of the museum. -was impressed with a peer's knowledge.
Visit 3	+	-talked comfortably and had many ideas. -used new, difficult vocabulary and her grammar improved.
	-	-wanted to ask the others questions.
	Others	-had a more engaging conversation compared to the previous visits.
Visit 4	+	-talked with the vocabulary she learned before. -exchanged ideas with the others freely in a relaxing atmosphere.
	-	-did not pay attention to grammar because of the excitement about the artworks.
	Others	-We all encouraged each other to talk actively. -It was interesting to know how people think differently.

The prominent themes have been found in the summaries that the participants: (1) engaged themselves actively in communication in English in a new, comfortable way, (2) improved their vocabulary, (3) developed ideas by listening to the others, and (4) expanded their perspectives and knowledge by building up on the others'. The following excerpt from the transcribed conversation about “*Shimasoroi Onna Benkei*” (Figure 1) shows how the participants learned vocabulary together. It is then followed by a part of the semi-structured group interview in which the participants mentioned the themes (1), (3) and (4).

Figure 1: The Ukiyo-e print, *Shimasoroi Onna Benkei* by Kuniyoshi Utagawa



An example of collaborative vocabulary building

Note. N = Nozomi; W = Wata; F = Facilitator (Author).

- W: Sme... Ah... Smell! ...*Kagu* [a Japanese word meaning both furniture and to smell].
N: Furniture.
F: Yeah, furniture.
W: Furniture?
N: *Gomen, "kagu" te kono kagu ja nai none.* [Comment in Japanese: Sorry, you didn't mean furniture by saying "*kagu*," did you?]
W: Uh-huh. Take a sniff...?
F: Uh huh, to take a sniff. [Sniff-sniff]
W: Oh, yes, yes.
F: Nozomi, you're right too. There's some furniture [in this artwork] too.

A partial excerpt from the post-data-collection semi-structured group interview

- A: How do you think about talking about artworks in English in art museums?
W: It was fun to know how others think differently. Art allows viewers to think and talk freely about it.
K: Imagination. I tried to imagine why my peers said this and that.
N: To me, being in an art museum was a totally new experience. And I talked about artworks in English for the first time. Also, it was fun listening to different ideas and knowing how others view same things in different ways.
A: What are the skills you learned from this activity that are meaningful in your school or daily lives?
K: I have become a better listener. I realized that I had not really cared about what others said before. Now, I am learning by listening to others.
N: Yeah, you have your own ideas and also exchange ideas with others. Isn't it fun?
W: I think I am more assertive now.
N: I take part in a conversation in English more actively as I get ideas quickly now. Even in Krista's [a native-speaker English teacher] class, I can do so.
K: I agree. Ideas come out more naturally and quickly now.
N: Yeah, I thought I had to say something great or correct before, but now I'm relaxed and just say what I want to and see what happens.

6. Discussion

Talking about artworks in English in art museums is an effective approach to improve learners' English communication ability as it creates a positive learning atmosphere and helps improve their vocabulary. According to Burnham and Kai-Kee (2011), while participant-centered dialogue in museums not only encourages participants to talk freely about artworks, it leads to meaningful learning experiences such as working collaboratively and making meaning together with peers. In this sense, among these prominent themes, the latter two is noteworthy. The two themes pointed that the participants developed ideas by listening to the others and expanded their perspectives and knowledge by building up on the others'. The participants took responsibility of constructing their own learning together with peers, helping, inspiring, and motivating each other.

Significantly, these two influential skills nurture learners' capabilities to act as global citizens in their immediate and wider communities in the future. OECD has advocated the following key competencies for students to be successful in the future: "the ability to use a wide range of tools including physical and socio-cultural ones such as information technology and language

respectively, the ability to engage with people from different backgrounds, and the ability to manage their own lives in the broader social context and act autonomously” (OECD, 2005, p.5).

The practice modelling art museums’ participant-driven conversations about artworks was initially incorporated to improve the participants’ English communication ability. However, such practice greatly prepares students for their future roles in local and global communities. It was probably made possible as the practice took place in art museums, real-life contexts outside the classroom setting, and with authentic artworks as topics and learning resources. American Council on the Teaching of Foreign Languages (ACTFL)’ “five ‘C’ goal areas (Communication, Cultures, Connections, Comparisons, and Communities) stress the application of learning a language beyond the instructional setting” in their World-Readiness Standards for Learning Languages (ACTFL, p.1). “The goal is to prepare learners to apply the skills and understandings measured by the Standards to bring a global competence to their future careers and experiences” (ACTFL, p.2).

The participants of this study explored and related particularly to the Communication, Connections and Communities goal areas. The Communication goal area advocates that “learners will communicate effectively in more than one language in order to function in a variety of situations and for multiple purposes”; the Connections area that “learners will connect with other disciplines and acquire information and diverse perspectives in order to use the language to function in academic and career-related situations”; and the Communities area that “learners will communicate and interact with cultural competence in order to participate in multilingual communities at home and around the world” (ACTFL, p.1).

Table 6: ACTFL’s Communication, Connections, and Communities goal areas’ standards

Communication Goal Area’s Standards
<p>Interpersonal Communication Learners interact and negotiate meaning in spoken or written conversations to share information, reactions, feelings, and opinions.</p> <p>Interpretive Communication Learners understand, interpret, and analyze what is heard, read, or viewed on a variety of topics.</p> <p>Presentational Communication Learners present information, concepts, and ideas to inform, explain, persuade, and narrate on a variety of topics using appropriate media and adapting to various audiences of listeners, readers, or viewers.</p>
Connection Goal Area’s Standards
<p>Making Connections Learners build, reinforce, and expand their knowledge of other disciplines while using the language to develop critical thinking and to solve problems creatively.</p> <p>Acquiring Information and Diverse Perspectives Learners access and evaluate information and diverse perspectives that are available through the language and its cultures.</p>
Communities Goal Area’s Standards
<p>School and Global Communities Learners use the language both within and beyond the classroom to interact and collaborate in their community and the globalized world.</p> <p>Lifelong Learning Learners set goals and reflect on their progress in using languages for enjoyment, enrichment, and advancement.</p>

7. Conclusion

This study revealed that talking about artworks in art museums has a positive impact on nurturing learners' communicative English competence. For instance, it helped learners improve their vocabulary and develop ideas. More importantly, the study showed that the participants had meaningful learning opportunities that would prepare them for their future as global citizens through working collaboratively with the others (Burnham & Kai-Kee, 2011; OECD, 2005).

These learning opportunities are authentic as they are related to learners' actual lives and participation in their local and wider society and make use of materials within the range of their experiences (Dewey, 1938). However, in many cases, learners "feel so isolated and detached, with little sense of community" (Bartholomee, 2017, p.49), although the importance of learning languages outside the conventional setting has been advocated (ACTFL, n.d.).

To conclude, language educators should be more aware of the need of providing learners innovative learning opportunities so that they can acquire the ability to explore their world using the language that they are learning. Both learners and educators will get motivated by "new pursuits that are removed from the academic treadmill, that reward innovation" (Gardner, 2008, p.86). This study suggests one new such approach, but more research has to be carried out to examine its further validity and applicability to more diverse individuals.

Acknowledgement

I uploaded the copy of the *Shimasoroi Onna Benkei* print (Figure 1) under the official permission from Ajinomoto Foundation of Dietary Culture.

References

- American Council on the Teaching of Foreign Languages (ACTFL). *World-Readiness Standards for Learning Languages*. [PDF file]. Retrieved from <https://www.actfl.org/sites/default/files/publications/standards/World-ReadinessStandardsforLearningLanguages.pdf>
- Bartholomee, L. (2017). Beyond the classroom: Discover the transformational power of living curriculum. *Art education*, 117(3), 49-53.
- Berwald, J. P. (1987). Teaching foreign languages with realia and other authentic materials. ERIC Q&A. Washington D. C.: ERIC Clearinghouse on Languages and Linguistics. 1-6. (ERIC Document Reproduction Service No. ED 289367)
- Burnham, R. and Kai-Kee, E. (2011). *Teaching in the art museum: Interpretation as experience*. Los Angeles, CA: Getty Publications.
- Dewey, J. (1938). *Experience and education*. New York, NY: Macmillan.
- Dewey, J. (2012). *Democracy and education*. Hollywood, FL: Simon and Brown. (Original work published 1916).
- Fork, J. H. and Dierking, L. D. (2000). *Learning from museums: Visitor experiences and the making of meaning*. Lenham, MD: Altamira.
- Gardner, H. (2008). *Five minds for the future*. Boston, MA: Harvard Business Review Press.
- Hein, G. (2004). John Dewey and museum education. *Curator: The museum journal*, 47(4), 413-427.
- Ju, F. (2013). Communicative language teaching (CLT): A critical and comparative perspective. *Theory and Practice in Language Studies*, 3(9), 1579-1583.

- Krashen, S. D. (1981). *Principles and practice in second language acquisition*. England: Prentice Hall.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass Publishers.
- Ministry of Education, Culture Sports, Science and Technology (MEXT). (2019). English Education reform plan corresponding to globalization. Retrieved May 11, 2019, from <http://www.mext.go.jp>
- Nunan, D. (1992). *Research methods in language learning*. New York: Cambridge University Press.
- OECD. (2005). The definition and selection of key competencies: Executive summary: DeSeCo Project. Retrieved from <https://www.oecd.org/pisa/35070367.pdf>
- OECD/ICOM. (2018). Culture and local development: Maximizing the impact: Guide for local governments, communities and museums. Retrieved from <https://icom.museum/wp-content/uploads/2018/12/OECD-ICOM-GUIDE-MUSEUMS-AND-CITIES.pdf>
- Shachter, J. M., (2018). Tracking and quantifying Japanese English language learner speaking anxiety. *The Language Teacher*, 42(4), 3-7.
- The National Museum of Modern Art, Tokyo. (2019, March 14). *Let's Talk Art!: A cross-cultural art-appreciation program held in English* [Press release]. Retrieved from https://www.momat.go.jp/english/am/wp-content/uploads/sites/3/2019/04/LTA_pressrelease_momat-EN_190402.pdf
- Utagawa, Kuniyoshi. (1844). *Shimasoroi onna benkei* [Woodblock print]. Ajinomoto Foundation of Dietary Culture, Tokyo, Japan. <https://www.syokubunka.or.jp/gallery/nishikie/detail/post138.html>
- Vygotsky, L. S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.
- Yenawine, P. and Housen, A. (2013). *Visual thinking strategies: Using art to deepen learning across disciplines*. Cambridge, MA: Harvard Education Press.

ⁱ Some of the artworks observed and used in the data collection are available, for example: “Autumn Rain” by Gyokudo Kawai on <http://search.artmuseums.go.jp>, “Conversation” by Camille Pissarro on <http://collection.nmwa.go.jp> and “Pine Trees” by Tohaku Hasegawa on <https://www.tnm.jp>.