

## **Nobinobi Yomikaki: Teaching Materials for Japanese Reading and Writing Based on 21st Century Skills**

**Frida Philiyanti\*, Cut Erra Rismorlita**

**Department of Japanese Language Education, Faculty of Languages and Arts, Universitas Negeri Jakarta**

**\*Corresponding author email: [fridaphiliyanti@unj.ac.id](mailto:fridaphiliyanti@unj.ac.id)**

**Submitted: 2 July 2023, Reviewed: 17 July 2023, Edited: 8 August 2023, Accepted: 24 August 2023**

=====

### **Abstract**

*This study aims to determine the use of "Nobinobi Yomikaki" teaching materials developed as teaching materials for beginner level reading and writing courses towards the formation of 21st century skills in elementary level students. This is based on the needs for reading and writing teaching materials for first semester students, especially students who have never studied Japanese at all. Efforts to form 21st century skills are the focus as well as the basis for developing teaching materials because the demands of students to be able to survive and perform in the digital world, especially after the Covid-19 pandemic, realize how important non-technical skills are as technical skills. The research method uses a mixed approach, quantitative and qualitative. The quantitative approach was used to measure reading speed, which is a basic literacy skill, while the qualitative approach was used to describe the results of observations of how the use of this teaching material on the formation of 21st century skills. The research population is the 2022 batch of students in the Japanese Language Education Study Program at Universitas Negeri Jakarta, with a sample of 24 people, namely students who have never studied Japanese at all. Based on the study, it is known that the structure of teaching materials supports the development of 21st century skills, namely the ability to think critically, creatively, communicatively, collaboratively, and succeeds in fostering positive character so that in this digital era students are ready to become part of global citizens or digital citizens. And as the impact of these skills development, through the activities that force students to communicate their ideas both orally and in writing, their Japanese reading and writing skills also improved.*

**Keywords: teaching materials; Japanese reading and writing; 21st century skill**

## **INTRODUCTION**

Research on the development of 21st century skills-based basic level Japanese reading teaching materials is still rarely carried out. The skills in question are non- technical skills as a support for the expertise that students have mastered to be able to survive in the world in the digital era which is characterized by the rapid development of technology and information. One of the ways is to strengthen students' mentality and improve soft skills by increasing learning experiences in language and educational competence courses needed in accordance with the development of modern society (Rismorlita et al., 2021). Specifically, the skills that are the concentration in this research are four core skills, namely 1) critical thinking, 2) creative, 3) communicative, 4) collaborative. As quoted from Trilling and Fadel that students' view of the world twenty years from now is "More work in diverse teams spanning languages, cultures, geographies, and time zones." (Trilling & Fadel, 2009). This can be interpreted how big the role of foreign language education is today as a provision to play a role in this ever-changing life. This is also reinforced by the fact that one of the main subjects that play an important role in developing 21st century skills is World Languages, in addition to social studies, English, mathematics, science, geography, and arts (Cogan & Drew, 2010). It is said that in order to face the challenges of the 21st century in the areas of economy and security, the education system must pay attention to awareness of foreign cultures and languages.

In practice in the classroom, concrete efforts are needed to improve the quality of foreign language learning. This research focuses on developing the quality of foreign language learning by developing teaching materials for language skills, namely reading and writing. Reading and writing skills in the Japanese Language Education Study Program, Faculty of Language and Arts, State University of Jakarta have been taught since the first semester, integrated with

listening skills, speaking, and grammar lessons. And as a development research, of course, there are fundamental stages that must be carried out, namely 1) the preliminary study stage to find out what needs are needed in the development so that the results are right on target, 2) the evaluation and revision stages of the product design developed so that the results are valid, and 3) the production stage after the product is used.

This research is based on previous research on teaching material development, beginner-level Japanese reading research, and research on 21st century skills. As a development research, this research is the result of previous research (multi-years research). This research began with dissertation research entitled "Beginner Japanese Reading Learning Model Through Contextual Approach" which produced a reflective learning model with F.R.I.D.A reading stages, namely Focus-Read-Inquire-Discuss-Assess (Philiyanti, 2020a). After the learning model has been tested for effectiveness, it is continued with the development of the model in the form of teaching materials which are currently being developed. It began with a needs analysis which found that the skills most needed by entry-level students in reading lessons are metacognition, critical thinking, and digital literacy skills (Philiyanti & Rismorlita, 2021a). Based on these needs, teaching materials were developed which have been proven to be feasible by user lecturers in terms of content, evaluation, and presentation (Philiyanti & Rismorlita, 2021b).

Existing research on Japanese reading teaching materials at the elementary level has concentrated on extensive reading studies that are basically not core reading or teaching materials (Leung, 2002; Nakano, 2016; Savana & Pradana, 2021). Watanabe and Ueda (2016) conducted research to find out what elements are needed by beginning readers. The results of the research are in the form of supporting teaching materials that can increase interest in reading. It is known that there are two important components in developing reading

teaching materials for beginning readers, namely motivation to be active and pleasure when reading (Watanabe & Ueda, 2016).

Therefore, based on the previous studies above, this research was conducted, and as it is known that research that specifically focuses on the development of Japanese reading teaching materials at the elementary level, especially related to 21st century skills, is still minimal.

Based on a survey conducted on seven tertiary institutions in Greater Jakarta, namely the University of Indonesia (UI), National University (Unas), Darma Persada University (Unsada), Pakuan University (Unpak), Muhammadiyah University Prof. Dr. Hamka (Uhamka), STBA JIA and STBA LIA, it is known that universities that carry out learning to read Japanese (Dokkai) specifically in semester one are STBA LIA and Unsada. While the UI provides Dokkai material that does not stand alone but is integrated with the Japanese language course as a whole. Four out of seven universities in Jabodetabek do not teach Dokkai or reading skills at the beginner level. Based on the results of discussions with each lecturer regarding the reasons, as explained in the background section, there was a concern that students were not ready. The limited ability of letters and vocabulary is the main reason. In addition, there is no systematic reading learning model applied, it still adapts to lecture conditions both in terms of reading themes and available time (Philiyanti, 2020a). For this reason, the teaching materials developed in this study will be tested through experimental methods on beginner level or first semester students. It is hoped that the results of the trial can describe more deeply the use of teaching materials to improve reading and writing skills which also accommodate the formation of 21st century skills.

## **THEORETICAL REVIEW**

### ***IMPLEMENTATION OF 21<sup>ST</sup> CENTURY SKILLS IN TEACHING***

Innovative learning of the 21st century has characteristics that lead to interactive, holistic, integrative, scientific, contextual, thematic, effective, collaborative, and learner-centered learning, so that in its implementation by applying learning models/methods oriented to these characteristics (Muhali, 2019). Stehle and Peters-Burton further found that in lesson plans, communication and collaboration are core 21st century skills that facilitate knowledge construction and real-world problem solving, while student self-regulation creates efficiencies that result in better knowledge construction and solving real-world problems (Stehle & Peters-Burton, 2019).

Masukawa differentiates the type of teaching for primary and secondary levels in an effort to improve 21st century skills of goal achievement, and goal setting (Masukawa, 2019). In detail, Masukawa explains that for primary level classes, learning is focused on achieving learning targets and is student-centered (目標到達型・教授中心型). As for the intermediate level class, the learning is focused on self-determining the learning target and remains student-centered (目標創型・学習者中心型). In the classroom implementation practice, Masukawa further explains the clear framework between primary and secondary level.

### 1. Creativity

According to Masukawa, creativity is the skill of discovering new things, creating things and services that have not been thought of, and being able to solve difficult problems. However, for primary grades, creativity is the activity of exploring and discussing new things that have not been learned according to the teacher's instructions.

### 2. Communication

The main issue in communication is not communication as a goal but communication as a medium to deepen understanding of learning materials. In primary level classes, communication is focused on discussing matters related to achieving learning targets. Whereas in the intermediate class, communication is focused on creating new learning targets.

### 3. Collaboration

The focus is on how learning outcomes and quality are achieved through collaborative group work. In elementary classrooms, collaboration tends to be used to collect each other's work to produce a final product. Whereas in intermediate classes, collaboration is used to exchange information and complement each other in the creation of new knowledge or information.

### 4. Critical Thinking

Critical thinking is one of the most important aspects of 21st century learning. It is very influential in the development of the reflective nature of learners and can improve the metacognitive side which underlies the formation of other skills, including creativity, communication, and collaboration.

In addition to the four skills researched by Masukawa, there are actually two other skills needed to exist in the 21st century, namely Character and Citizenship (Fullan & Scott, 2014). According to Masukawa, the world is not run by geniuses, but by reliable people. Therefore, these last two skills are important to pay attention to.

### 5. Character

It refers to the quality of life that is essential for being resilient, industrious, resistant and reliable.

## 6. Citizenships

It includes the ability to think like a global citizen, considering global issues based on a depth of understanding of diverse values with a genuine interest in engaging with others to solve complex problems that impact human and environmental sustainability.

In education, what is meant by citizenship in this context is the ability of students as digital citizens. With the digital world getting closer to students, the greater the opportunity for students to interact with other cultures, foreigners. Therefore, it is important for students to have a positive and active character in order to interact harmoniously with the outside world.

### **METHOD**

This research is a development research with a mixed approach, namely quantitative and qualitative. The quantitative approach is used to measure reading speed which is a basic literacy skill, and the qualitative approach is used to describe the results of observations to see how 21st century skills can be improved through the developed teaching materials.

The research population was first semester students in the 2022/2023 academic year, totaling 74 people. While the sample in the effectiveness test was selected only for students who had not studied Japanese at the high school / vocational level so that the results obtained were purely the result of the learning process of reading and writing using the teaching materials developed, namely the book "Nobinobi Yomikaki". The sample consisted of 24 students.

The effectiveness of this book was tested through a reading speed test of beginner level students. The formula for measuring reading speed is to divide the number of words by the duration required to read in minutes.

While the instrument used to determine how the use of the book "Nobinobi Yomikaki" in honing 21st century skills is an observation sheet in accordance with the indicators of each skill listed in the 21st century skills assessment rubric (Instruction, n.d.).

## **RESULTS AND DISCUSSIONS**

From the results of the needs analysis, the results of the assessment by experts and user lecturers, teaching materials were developed with the following structure:

Book Title: のびのび読み書き (Nobinobi Yomikaki)

Systematics:

1. Foreword
2. Book Specialties
3. Hiragana Katakana List
4. Content, which consists of
  - a. Focus
  - b. Let's Read (よみましょう)
  - c. Let's Find Out (しらべましょう)
  - d. Let's Discuss (はなしあいましょう)
  - e. Let's Write (かきましょう)
  - f. Assessment

The contents of the teaching materials follow the stages of the F.R.I.D.A beginner level reading learning model (Philiyanti, 2020b), namely Focus-Read-Inquire-Discuss-Assess, with an additional writing stage as a result of output skills. Implications of learning models/methods that are carried out in accordance with the characteristics of innovative learning in the 21st century (Muhali, 2019).



The teaching materials have been used five times since September 9, 2022. And from the results of observations during use, it is known that the use of teaching materials has a major impact on the development of 21st century skills of entry-level students, namely first semester students of Batch 2022, academic year 2022/2023.

In order to measure the effectiveness of the "Nobinobi Yomikaki" book, two types of tests were conducted, namely the reading speed test and the literacy test. The following are the results of the reading speed test before and after the "Nobinobi Yomikaki" book was used.

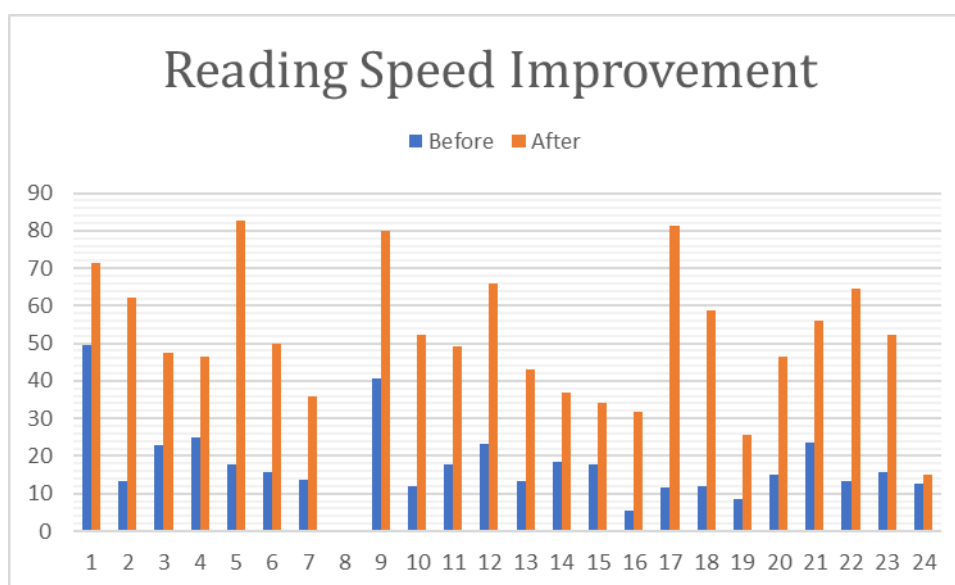


Figure 1. Results of Reading Speed Improvement

From figure 1, it can be seen that there was an increase in reading speed from 17.44 words per minute to 49.55 words per minute. Or an increase of 184.1%.

This research mainly focuses on the development of the 4C 21st century skills of critical thinking, creativity, collaboration and communication. However, other 21st century skills such as digital literacy and metacognition were also developed following the main skills.

The improvement of critical thinking skills can be seen in the observation results which found that students can use the type of reasoning that is appropriate to the situation such as brainstorming with other learners when doing group activities, this was found in the sub-chapter はなしあいましょう or Let's Discuss. Students can also critically reflect on their learning experiences and processes, this is helped by the provision of a self-reflection column (じこひょうか) in the textbook のびのび読み書き which allows students to describe what they have learned and what they have not mastered.

In addition, students are also involved in making judgments and making decisions as well as being able to analyze evidence, arguments, and different points of view. This can be seen because there are illustrations that can be interpreted variously, students also have different points of view but students are able to give good responses and are able to make decisions about the meaning of the illustrations. In the textbook のびのび読み書き in chapter 3 sub chapter ウォーミングアップ or Warming Up, there is a picture of a glass filled with a dark colored drink, students also have a variety of views including some who say it is coke (soft drink) some say that it is tea. However, students were able to respond well to these different views and make the decision that both were correct.

In the sub-chapter よみましよう or Let's Read, there were students who effectively identified and asked questions that clarified new points of view. This is because the のびのび読み書き textbook provides Japanese discourse in which sometimes has vocabulary or even sentence patterns that have never been learned by level 1 students. In the field when students read discourse they find the conjunctions や and と, this triggers their critical thinking skills when they have to translate them into Indonesian because they have never been studied before so that questions from students to lecturers are created to get clarity about the conjunctions や and と.

The improvement of creativity skills can be seen in the observation results which found that in the のびのび読み書き textbook there is a sub-chapter リフレクション or initial reflection where students are asked to write down the vocabulary they already know. Specifically, in chapter 1 of the textbook のびのび読み書き, students are asked to write 3 names of foreigners using katakana. This triggered new ideas from the students and different views on writing among the learners. Then in the sub-chapter かきましよう or Let's Write students were asked to write sentences or short discourses using the Japanese they had learned, this also triggered students to find out new vocabulary that they did not know to complete their writing. Students also respond to a mistake or failure as part of learning.

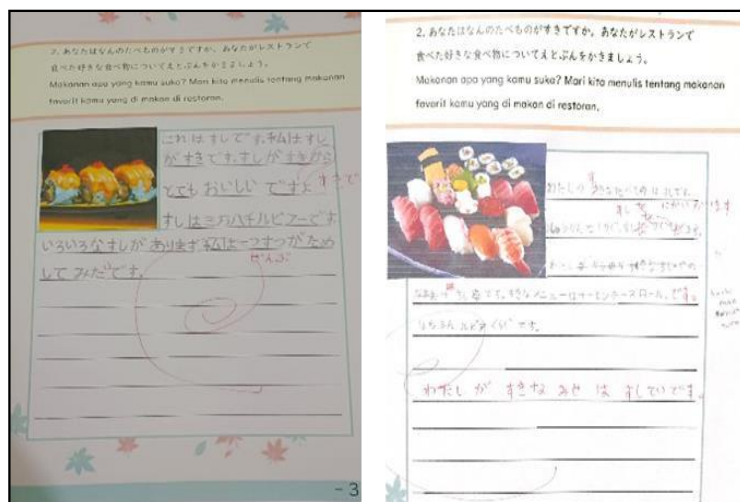


Figure 2. Creativity Skills in Student Writing Output

The improvement of collaboration skills can be seen in learning with the implementation of Dokusaku I (のびのび読み書き) textbook, there are several subchapters that focus on collaboration activities. In the Yomimashou (よみましよう) or Let's Read subchapter, after students are asked to read the text silently, they are asked by the lecturer to find out the meaning by discussing with their friends, then after that they describe what they get from the collaboration. Then in the Hanashiaimashou (はなしあいましよう) sub-

chapter, students will collaborate with their classmates (not just the one next to them) to discuss and find out the answers to the questions in Japanese about the reading text in the Yomimashou (よみましよう) or Let's Read sub-chapter. At the first Face-to-Face Meeting, students still seemed shy and reluctant to work with other friends, only limited to their benchmates. However, during the second and third Face-to-Face Meetings, students actively discussed and collaborated to answer the questions with other friends. Some of them made a group and divided the tasks to answer questions that would later be discussed and become their answers. Even though they have divided the task of answering one question each, students still discuss the answers to ensure that the answers can be accounted for. During the discussion, they seemed to compromise and respect different opinions, which ultimately led to one answer.



Figure 3. Critical Thinking and Collaboration Skills during Discussion

The improvement of communication skills seen in the results of the observation of Dokusaku I learning with the implementation of the Dokusaku I textbook (のびのび読み書き) is the formation of student communication skills both directly and indirectly. The direct communication skills that are formed are students' skills in presenting in front of the class, asking and answering questions, and giving feedback. In the Dokusaku I textbook (のびの

び読み書き), there is a Warming Up subchapter (ウォーミングアップ) in which students fill in some questions related to the material to be learned in the chapter. After students fill in the questions, the lecturer asks about the answers, and students will answer orally to the lecturer. Then there is also the Shirabemashou (しらべましょう) or Let's Find Out sub chapter, in this sub chapter students are asked to find out letters and vocabulary that they do not know the meaning or have not seen before, then students are asked to find the meaning of the kanji or vocabulary through a digital dictionary while discussing with friends sitting next to them. At this stage, students seemed proactive in helping each other and discussing the exact meaning of the kanji or vocabulary, by discussing and looking up the meaning of the word with more than one digital dictionary, they became more confident in the answers they got. In the Yomimashou (よみましょう) or Let's Read sub- chapter, there is an activity where students are asked to read and discuss the meaning of the reading with a friend in the next seat. There is also Hanashiamashou (はなしあいましょう) or Let's Discuss. In this subchapter, students discuss to find out the meaning and answer the questions in the book and in accordance with the reading embedded before the subchapter. Students discuss not only with the friend sitting next to them, but also with other friends, to at least interpret the questions in Japanese. After the students discussed, the lecturer asked about the answers, and the students actively answered orally, even students seemed enthusiastic to be chosen to answer the question.

Whereas in indirect communication skills observed are the skills of reading aloud and writing in front of the class. In the Rifurekushon (リフレクション) or Initial Reflection subchapter, there is an activity to write vocabulary that is the student's background knowledge or related to the previous chapter material. Students are asked to write the vocabulary in a book, then communicate it to the rest of the class by writing it on the blackboard in turn.

This is a form of indirect communication that is formed from the existence of the sub chapter. Then in the sub chapter Yomimashou (よみましよう) or Let's Read, in this sub chapter there is an activity where students must read aloud the reading text in turn, then describe the meaning of each sentence read. This shows the formation of indirect communication skills, namely between one individual to the group (all friends in the class). In the Shirabemashou (しらべましよう) sub-chapter, there are also indirect communication skills, namely when students finish finding out the meaning of vocabulary and kanji, they are asked to communicate it to friends by writing it on the blackboard in front of the class.



Figure 4. Communication skills

As shown in the reading speed result graph (figure 1), students' improvement varied. Some students stand out for their speed in recognizing the letters hiragana and katakana so that they can read fluently. This is understandable because students' abilities are not the same. However, from the observation, all students showed improvement in non- technical skills or soft skills that are most needed in the 21st century.

## **CONCLUSION**

The improvement in Japanese reading and writing is not solely due to students' hard skill effort. Still, it is also the impact of critical thinking skill,

creativity, collaborative work, and activities that lead students to be able to communicate their thoughts both orally and in writing. The activities that are systematically designed through the developed teaching materials "Nobinobi Yomikaki" are proven to form students with a personality that is tolerant, sincere, able to work together, and reliable according to the character needed in the 21st century according to Fullan and Scott [11]. With readings set in Japanese culture, students also understand cultural differences. They are ready to be part of the digital world which refers to digital citizens in citizenship skill. The improvement in reading and writing Japanese is not solely due to students' hard skill efforts. However, it is also the impact of critical thinking skills, creativity, collaborative work, and activities that direct students to be able to communicate their thoughts both orally and in writing. Activities designed systematically through teaching materials developed by "Nobinobi Yomikaki" are proven to form students with tolerant, sincere, cooperative and reliable personalities according to the characters needed in the 21st century according to Fullan and Scott [11]. With readings based on Japanese culture, students also understand cultural differences. They are ready to be part of the digital world which refers to digital citizens in citizenship skills.

Future research might look at how each critical, creative, communicative, and collaborative thinking skill is formed through the "Nobinobi Yomikaki" teaching materials. In addition, future studies can also find out what learning methods can be used through the "Nobinobi Yomikaki" teaching materials.

## **REFERENCES**

- Cogan, D., & Drew. (2010, February). 21st Century Skills Making Student Achievement Public in the Digital Age. *ELearn Magazine*.  
<https://doi.org/10.1145/1719292.1730970>
- Fullan, M., & Scott, G. (2014). *Education Plus*.

- Instruction, W. O. of S. of P. (n.d.). *21st century skills standards rubric*.
- Leung, C. (2002). Extensive reading and language learning: A diary study of a beginning learner of Japanese. *Reading in a Foreign Language*, 14(1), 16.
- Masukawa, H. (2019). *21世紀型スキルのための授業づくり (1)*.  
<https://mirainomanabi.up-edu.com/column/theme03/1384/>
- Muhali, M. (2019). Pembelajaran Inovatif Abad Ke-21. *Jurnal Penelitian Dan Pengkajian Ilmu Pendidikan: E-Saintika*, 3(2), 25.  
<https://doi.org/10.36312/e-saintika.v3i2.126>
- Nakano, T. (2016). Extensive Reading for Second Language Learners of Japanese in Higher Education: Graded Readers and Beyond. *The Reading Matrix: An International Online Journal*, 16(1), 126–139.
- Philiyanti, F. (2020a). *Model Pembelajaran Membaca Kontekstual Bahasa Jepang (Dokkai) Tingkat Pemula*. State University of Jakarta.
- Philiyanti, F. (2020b). *Model Pembelajaran Membaca Kontekstual Bahasa Jepang (Dokkai) Tingkat Pemula [State University of Jakarta]*.
- Philiyanti, F., & Rismorlita, C. E. (2021a). 21st Century Skills-Based Beginner Level Reading Teaching Materials: A Need Analysis Result. *Jurnal Taiyou*, 2(1), 54–76.
- Philiyanti, F., & Rismorlita, C. E. (2021b). Kelayakan Bahan Ajar Membaca Bahasa Jepang Tingkat Pemula Berbasis Keterampilan Abad 21. *Prosiding Seminar Nasional Bahasa, Sastra, Dan Seni 2021*, 1, 77–82.
- Rismorlita, C. E., Philiyanti, F., Prasetio, V. M., & Purnama, L. (2021). Relevansi Kebutuhan Stakeholder Terhadap Pengembangan Kurikulum Berbasis Keterampilan Abad 21. *KAGAMI Jurnal Pendidikan Dan Bahasa Jepang*, 12(2), 12–20.
- Savana, A. F., & Pradana, A. S. R. (2021). MAJIME: A Learning Media for Japanese Reading Comprehension. *Proceedings of the 4th International Conference on Sustainable Innovation 2020–Social, Humanity, and Education (ICoSIHESS 2020)*, 518(ICoSIHESS 2020), 419–426.  
<https://doi.org/10.2991/assehr.k.210120.155>
- Stehle, S. M., & Peters-Burton, E. E. (2019). Developing student 21st Century skills in selected exemplary inclusive STEM high schools. *International Journal of STEM Education*, 6(1). <https://doi.org/10.1186/s40594-019-0192-1>



Trilling, B., & Fadel, C. (2009). 21st Century Skills : Learning For Life in Our Times. In *21st Century Skills* (Issue Book). Jossey-Bass A Wiley Imprint.

Watanabe, T., & Ueda, M. (2016). Element for Pleasure Reading for Elementary Level Learners of Japanese. *Journal of Japanese Language Education Methods*, 22(3), 66–67.