Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

Development of Japanese Language Teaching Materials Based on Activity-Based Learning with A Communicative Language Teaching Approach for Vocational Training Participants

Rezki Fajriannoor[1], Robinson Situmorang[2] and Tuti Iriani[3]

Jakarta State University, Jakarta, Indonesia

Author Email : rezkifajriannoor_9901821013@mhs.unj.ac.id[1]
rsitumorang@unj.ac.id[2]
tutiiriani@unj.ac.id[3]

Abstract. This study examines how grammar-focused practices in vocational training institutes (LPKs) impair learners' communicative ability despite the Japanese Specified Skilled Worker (SSW) program. The study seeks to produce CLT-based activity-oriented Japanese teaching materials, assess their feasibility through expert validation, and test their effectiveness in improving speaking ability. This study's focus on LPK trainees as apprenticeship prospects and authentic, interactive assignments to improve communicative speaking abilities is innovative. This study was motivated by students' low communicative engagement in Japanese language practice and the need for materials that show communicative activities at vocational training institutes. Analyze, Design, Develop, Implement, and Evaluate comprise the ADDIE development model. The CLT technique was used to create and develop the instructional materials, emphasizing structural, quasi-communicative, functional communication, and social interaction learning activities. Learning media, Japanese language, and learning design professionals examined the instructional materials for viability. We then evaluated with interviews and questionnaires. The pretest-posttest findings of 17 LPK Kokorono Siji students were used to test effectiveness using N-Gain testing. The Japanese teaching materials were "feasible" according to the feasibility test results, which averaged 2.83 (learning media), 3.60 (material), and 3.22 (learning design). The average N-Gain score of 0.45 (moderate criteria) indicated that the teaching materials improved learning outcomes. This proves the instructional materials are successful for occupational Japanese language acquisition. The findings show that activity-based Japanese teaching materials using a CLT method for trainees at this vocational training institution are practicable in content, media, and learning design and improve communicative skills. Thus, vocational training institutions can incorporate these instructional materials into Japanese language learning.

Keywords: Communicative Language Teaching, ADDIE, Teaching Materials, CLT, Japanese Language, LPK.

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

1 Introduction

Along with the close relationship between the Indonesian and Japanese governments, which have long established excellent cooperation, particularly in placing apprentices in Japan, there are also greater opportunities to work in Japan. In fact, as one of the solutions to the aging population and labor shortage currently faced by Japan, since April 1, 2019, Japan has opened a program called Specified Skilled Worker (SSW), which is a visa/residence permit status for foreign nationals in Japan to be able to work in Japanese companies with the same rights and obligations as Japanese workers [3]. This has encouraged many government and private institutions in Indonesia to also contribute to filling the labor needs in Japan by establishing job training institutions (LPK) to prepare Indonesians who are interested in working in Japan. According to data from the Directorate General of Vocational Education and Training of the Ministry of Manpower, as of 2023, there are 319 institutions that have been licensed as Sending Organizations (SO), which prepare their students to work in Japan through apprenticeship programs or SSW.

In Japanese language learning in various institutions, there are still several problems, such as the lack of opportunities to use Japanese in class, the lack of opportunities to communicate with native speakers, learners feeling unconfident in speaking Japanese, and very limited vocabulary, so that learners are always unable to speak fluently in Japanese [17]. In addition, the frequency of Japanese language use is relatively low due to several factors, including a lack of mastery of the learning material or an incomplete understanding of the learning material, low learner interest in reading Japanese language materials or literacy, and a lack of motivation among learners to use Japanese for fear of making mistakes [11]. Furthermore, it is not only issues related to learning that cause difficulties in speaking Japanese, but several other factors also influence learners, such as confusion when expressing ideas or thoughts to the interlocutor, lack of confidence, fear of making mistakes and embarrassment, unable to respond to questions from the other party in Japanese properly, and problems related to learners who are unable to listen to the topics presented by the other party and lack of understanding of the topics of conversation [15]. This is reinforced by field observations conducted by researchers when visiting various LPKs during the period 2022 to 2025 and several research results in recent years that describe the conditions of Japanese language learning at LPKs, where several facts were found, including:

1. Passive learning is often found, requiring learners to listen to the teacher's explanations without doing many activities with their friends in class.
2. The Japanese language training schedule is intense. Learners are required to attend classes for 5-6 hours per day from Monday to Friday every week for approximately 4-5 months, so they need good concentration and physical strength due to the very intense study schedule.
3. After classes end, learners return to their dormitories or respective residences. In the evenings, they complete assignments given by their teachers, review lessons, and prepare for lessons independently.
4. In order to be able to go to work in Japan, at the end of the training period, students are required to have at least a basic level of Japanese language

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

proficiency, as evidenced by passing a Japanese language proficiency test such as the *Japanese Language Proficiency Test* (JLPT) N4 or *the Japan Foundation Test for Basic Japanese* (JFT-Basic) A2 in terms of language, and passing a work skills test in accordance with the field of work they wish to do in Japan.

5. The students come from different backgrounds and have varying levels of comprehension, as well as a lack of confidence in speaking and the demand to master Japanese quickly in a short period of time [2].
6. Japanese language learning in several LPKs still uses the GTM *(grammar translation method), direct method,* and audiolingual method with *drill*, question and answer, and assignment strategies. Grammar-Translation Method, characterized by practices such as text translation, rote memorization of vocabulary, and the explicit instruction of grammatical rules. Despite its prevalence, scholars have criticized the method for its limited capacity to foster oral and aural proficiency, thereby constraining learners' development of communicative competence [12].
7. Therefore, Japanese language learning in LPKs needs to be made more varied so that learners' interest in learning Japanese increases and a pleasant atmosphere can be created in the classroom [8][14].
8. Learners experience difficulties in memorizing kanji, writing kanji, and the rules of writing. Then there are obstacles in communicating directly and spontaneously with Japanese people, and the difficulty in memorizing and distinguishing vocabulary that has the same pronunciation and meaning [1].
9. Many Japanese language courses at vocational training centers use the textbook *Minna no Nihongo*. According to the results of a study by Sari, D. S. [13], in terms of content and presentation, *Minna no Nihongo* has more dense material that emphasizes grammar rather than a communicative approach.

This condition of Japanese language learning reinforces the argument that learners in vocational training institutions need communicative Japanese language learning support to improve their communication skills. The dense class schedule that focuses on mastering grammar certainly does not provide many opportunities for learners to engage in communicative speaking activities that can practice all the Japanese language material they learn in class, so additional material is needed that focuses on communicative activities that they can also learn independently.

Following the initial analysis, the researcher conducted a needs assessment by distributing a questionnaire to the participants. The instrument consisted of 23 items addressing Japanese language proficiency, Japanese language learning experiences, and the perceived need for instructional materials to support Japanese language learning activities. In addition, the questionnaire provided participants with the opportunity to articulate their motivations for studying Japanese, the challenges or difficulties encountered during the learning process, and other reflections related to their learning experiences.

A total of 29 learners from the N3 class at LPK Kokorono Siji completed the questionnaire. A summary of selected questions and the corresponding results is presented in Table 1.

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

Table 1. Summary of Questionnaire Results

No.	Question	Response	Result
1	Is mastering Japanese important to you?	"Very Important"	93.1% (27 participants)
		"Important"	6.9% (2 participants)
2	Do you enjoy learning Japanese?	"Enjoy very much"	72.4% (21 participants)
		"Enjoy"	27.6% (8 participants)
3	Which Japanese language skill do you most wish to master?	"Speaking"	51.7% (15 participants)
		"Writing"	20.7% (6 participants)
		"Reading"	17.2% (5 participants)
		"Listening"	10.3% (3 participants)
4	How would you evaluate your own Japanese speaking ability?	"Good"	65.5% (19 participants)
		"Not good"	31% (9 participants)
		"Very poor"	3.4% (1 participant)
5	How important are learning media in supporting your learning process?	"Very Important"	93.1% (27 participants)
		"Important"	6.9% (2 participants)
6	What is your opinion regarding the development of basic-level Japanese learning activity materials as an alternative medium to support communicative Japanese language learning?	"Strongly Agree"	69% (20 participants)
		"Agree"	31% (9 participants)
7	Are you interested in participating in learning activities that employ basic-level Japanese learning activity materials as an alternative medium to support	"Strongly Agree"	62.1% (18 participants)

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

	communicative Japanese language learning?		
		"Agree"	37.9% (11 participants)

The questionnaire results indicate that speaking skills were identified as the most desired competency among learners. However, it is noteworthy that 10 out of 29 respondents assessed their Japanese speaking ability as either "Not Good" or "Very Poor." This finding underscores the importance of speaking proficiency, particularly for learners at LPK, given their future prospects of working and residing in Japan.

These conditions highlight the urgent need for teaching materials that foster communicative competence. Apprenticeship and SSW candidates are expected not only to pass proficiency tests (JLPT N4 or JFT-Basic A2) but also to function effectively in real workplace communication. Grammar-focused instruction alone does not equip learners with the confidence and fluency required for daily interactions in Japan. There are various approaches to teaching language, one of which is Communicative Language Teaching (CLT), which is an approach that emphasizes interaction as a means and the ultimate goal of learning. in this case, to improve learners' communicative competence in listening, speaking, reading, writing, nonverbal interaction, and all components of communicative competence (Brown in Cloudia Ho, Y.-Y. [5]). This goal is in line with Nunan's opinion in Hien, L. T. N [7], which outlines five main characteristics of approaches in language learning, namely:

1. Focusing on learning to communicate in the target language.
2. Using authentic texts in learning activities.
3. Provide opportunities for learners to develop their language and learning processes.
4. Encouraging personal experiences as an important element of classroom activities.
5. Trying to connect classroom tasks with activities outside the classroom.

Learning a language is most effective when learners have more opportunities to express themselves and use the language in real conversations. Traditional methods that emphasize grammar and translation do not seem to create a spontaneous environment for learners. CLT, as a breakthrough from these traditional methods, is an innovative language teaching approach that encourages and motivates learners to use their general knowledge and linguistic knowledge to complete real tasks such as conversations, negotiations, persuasion, decision-making, etc [7]. This is reinforced by Thompson in [7] that CLT is an alternative to traditional teaching methods such as GTM (Grammar Translation Method) because it involves meaningful communication and requires communicative input and output. When learning with traditional methods, learners may be proficient in grammar and vocabulary, but they lack confidence in communicating with native speakers because they rarely have the opportunity to use their language knowledge in real conversations [7].

This study uses the CLT (Communicative Language Teaching) approach to develop Japanese language learning activities that are packaged into Japanese language teaching materials. These activity-based Japanese language teaching materials will guide learners to carry out various learning activities using Japanese actively. This Japanese

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

teaching material will be used in Japanese learning at LPKs with the target of learners at the basic level as a complement to the learning itself and also a complement to the main teaching material. This study introduces several innovations compared to previous studies:

1. Target learners: Basic-level LPK trainees preparing for apprenticeships or SSW programs, rather than formal school students.
2. Activity-based CLT design: Teaching materials structured around communicative activities (structural, quasi-communicative, functional, and social interaction tasks) that simulate real-life situations such as shopping, dining, traveling, and workplace routines.
3. Focus on speaking competence: Prioritizing oral communication skills as the primary outcome, addressing learners' most urgent need for workplace readiness.

Accordingly, the objectives of this study are to develop CLT-based Japanese teaching materials for LPK trainees, to assess the feasibility of these materials through expert validation, and to evaluate their effectiveness in improving learners' communicative competence. By integrating CLT principles into activity-based materials, this study seeks to provide practical support for LPKs in enhancing learners' readiness for life and work in Japan.

2 Research Method

This research was conducted using a *research and development* approach, which is a research method used to produce a specific product and test its effectiveness [16]. The development model used was based on the ADDIE instructional design model by Branch, R.M. [4] with the research objective of producing or developing a product, in this case in the form of physical teaching materials for basic Japanese language learning based on learning activities using the CLT (Communicative Language Teaching) approach for training participants at a job training institution. The ADDIE model provides a product-oriented instructional design framework that serves as a reference for generating effective teaching materials, ensuring that each stage of development is implemented in a clear and systematic manner. The development of the teaching materials in this study followed the ADDIE instructional design model, which consists of five systematic stages: *Analyze, Design, Develop, Implement,* and *Evaluate*.

In the **Analyze stage**, the researchers examined learners' Japanese language proficiency by analyzing data from the apprenticeship preparation class at LPK Kokorono Siji. Questionnaires were distributed to learners to gather information about their experiences and challenges in learning Japanese. In addition, interviews with instructors were conducted to obtain their assessments of learning outcomes and teaching practices. Instructional objectives and subordinate skills were analyzed, followed by discussions with instructors to refine these objectives. Learner characteristics and the broader learning context were also explored through interviews, observations, and questionnaires.

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

The **Design stage** involved formulating specific instructional objectives that learners needed to achieve in order to meet general learning goals. A competency map was created to guide the structure of the materials, and a draft design of the teaching materials was prepared.

During the **Develop stage**, research instruments were constructed to collect data for feasibility testing and pilot trials. Assessment instruments, including pre-tests and post-tests, were developed to measure learner performance against the instructional objectives. Instructional strategies were designed based on the principles of Communicative Language Teaching (CLT), and learning activities were created to reflect authentic communicative tasks. A prototype of the teaching materials was then produced in printed form.

The **Implement stage**, encompassing expert review, one-to-one evaluation, small group evaluation, and field trials. Feasibility testing was conducted with media, subject matter, and instructional design experts. One-to-one evaluations were carried out through in-depth interviews with three learners regarding the prototype materials. Meetings with the Japanese language teaching team at LPK Kokorono Siji were held to discuss implementation strategies. Small group evaluations were conducted with nine learners in independent learning situations, while field trials involved 17 learners supported by instructors, focusing on Topic 2 of the materials.

Finally, in the **Evaluate stage**, data from interviews, questionnaires, and pre-test/post-test results were analyzed. The N-gain score was calculated to determine the effectiveness of the materials. Based on these findings, final revisions were made to address identified weaknesses, with the aim of improving the overall quality and applicability of the teaching materials.

The test subjects in this study were 29 learners from the N3 level preparatory class for apprenticeships in Japan conducted by LPK Kokorono Siji. The learners involved as test subjects in this study were divided into several groups. The learners who were interviewed in depth about the teaching materials consisted of 3 learners, 9 learners who participated in the independent trial of the teaching materials without the help of a teacher, and 17 learners who participated in the trial of the teaching materials with a teacher, all of whom were learners from the N3 level class. The research was conducted at LPK Kokorono Siji, located at Jalan Sudamanik no. 43, Komplek Sarang Walet, Pasar Lama, Cilenggang, Serpong, 15310. The research lasted for 2 weeks during July 2025. The reason for choosing this research location was the perceived need for the development of basic Japanese teaching materials based on learning activities using the CLT approach to improve the learning outcomes of learners who are taking preparatory classes for apprenticeships, based on the results of a preliminary questionnaire.

This study involved subject matter experts, learning design experts, and learning media experts as subjects. Expert reviews were categorized into evaluations conducted by subject matter experts, instructional design experts, and learning media experts. Corrections, feedback, and suggestions from these experts served as the basis for revising the teaching materials. Furthermore, this process ensured that the developed activity-based Japanese language teaching materials employing the CLT approach could be tested for feasibility. In detail, the subject matter experts, instructional design experts, and learning media experts involved in this study are presented as follows.

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

Table 2. List of Experts in the Feasibility Test

Expert Name	Position & Institution	Role
Dwi Puspitosari, S.Pd., M.A.	Lecturer, Japanese Language Study Program, Universitas Negeri Semarang	Subject Matter Expert
Yudha Made Putra, S.Pd.	Deputy Coordinator of Japanese Language Teachers, LPK Kokorono Siji	Media Expert
Imam Fitri Rahmadi, Ph.D.	Lecturer, Educational Technology Program, Universitas Negeri Jakarta	Instructional Design Expert

The data collection techniques used included observation, interviews, questionnaires, and tests. Observation and interviews were used to explore information about problems in Japanese language learning at LPK Kokorono Siji. Meanwhile, questionnaires were used to obtain data in the form of input and assessments from experts, students, and teachers. Tests were used to measure student learning outcomes after they used basic Japanese teaching materials based on learning activities with a CLT approach. The instruments used in data collection were questionnaires and test questions. Details of the instrument grid are shown in the Table 3.

Table 3. Details of Instrument Grid

Expert	Indicator
Learning Design Expert	1. Accuracy of learning objective formulation. 2. Clarity of learning achievement criteria related to the material discussed. 3. Suitability of the material to learner characteristics. 4. Ease of understanding the material. 5. Clarity in providing examples. 6. Availability of a variety of exercises in line with the material. 7. Consistency between learning objectives and exercises. 8. Clarity of instructions for completing exercises contained in the module. 9. Accuracy in assigning exercises. 10. Availability of contextual examples in applying skills or knowledge acquired. 11. Learning is not centered solely on theoretical exposition, but on task-based activities that reflect real-life situations. 12. The learning process encourages students through direct experience and active practice. 13. Sufficient exposure to material that reflects its real-world applications in daily life or the workplace world. 14. Learning has qualities that support deep and applicable understanding deep and practical understanding for students.

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

	15. Learning is based on cooperation and collaboration between learners. 16. Learning using an approach that emphasizes the natural forms of language that emerge during communication activities. 17. Providing feedback on mistakes made by students in learning, with the aim of helping them understand and correct those mistakes. 18. Learning does not only depend on cognitive aspects (knowledge, understanding, and thinking skills) but is also greatly influenced by affective aspects—for example, emotions, attitudes, motivation, and student self-confidence.
Learning Material Experts	1. The quality of the material contained in the module. 2. The attractiveness of the material contained in the module. 3. The relevance of the module material to previous learning. 4. The suitability of the material to the topic in the module. 5. Ease of understanding the material. 6. The suitability of the difficulty level of the material to the characteristics of the learners. 7. The sequence of the material (from easiest to most difficult). 8. The scope of the material presentation to achieve the learning objectives. 9. The suitability of the content of the material with the learning objectives to be achieved. 10. Clarity of material delivery. 11. Clarity in providing examples. 12. Sequence of exercises in accordance with the material (from easiest to most difficult). 13. Clarity of the instructions for completing the exercises contained in the module. 14. The quality of the exercises contained in the module. 15. Accuracy of exercises in line with learning objectives. 16. Availability of self-assessment of learning objectives. 17. Availability of feedback that can motivate students. 18. Availability of contextual examples in applying the skills or knowledge acquired. 19. The quality of the summaries included in the module. 20. Completeness of the summaries.
Learning Media Expert	1. Ease of module layout for learning. 2. Ease of use of the module. 3. Completeness of the module identity. 4. Clarity of the title of the topic presented in the module. 5. Clarity of instructions for using the module.

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

6. Clarity of instructions in each section of the module.
7. Suitability of module components.
8. Appropriateness of language to the characteristics of the module users.
9. The suitability of the illustrations with the material.
10. Suitability of videos with the material.
11. Accuracy of the module background color selection.
12. Appropriateness of Indonesian font selection.
13. Appropriateness of Japanese font selection.
14. Appropriateness of Japanese font size selection.
15. Appropriateness of Indonesian font size selection.
16. Clarity of multimedia displays supporting the material.
17. Attractiveness of illustrations in the module.
18. Appropriateness of cover design with the topics presented in the module.
19. Consistency of layout display.
20. Clarity of examples provided.
21. Ease of access to the QR code function in the module.
22. Print quality of the module.
23. Accuracy of the module size.
24. Paper quality of the module.

The data analysis techniques used in this study include qualitative and quantitative descriptive analysis. Qualitative descriptive analysis was applied to evaluate the input provided on basic Japanese teaching materials based on learning activities using the CLT approach. Meanwhile, quantitative descriptive analysis was used to examine the scores given by experts and students who had used the learning materials. Qualitative data was obtained through interviews and observations, while quantitative data was collected from media assessments, questionnaires, and pre-test and post-test results, which were then analyzed further.

3 Results and Discussion

Results

This study aims to produce basic Japanese language teaching materials based on learning activities using the CLT (Communicative Language Teaching) approach for training participants in job training institutions. This study was conducted using a research and development approach, which is a research method used to produce a specific product and test its effectiveness [16]. The development model used was based on the ADDIE instructional design model by Branch, R.M. [4].

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

The first stage was the *Analyze* stage. The results of the analysis of the data on the abilities of students in the Internship Preparation Class, Level N3, LPK Kokorono Siji, through the data on the answers to the Level 3 NAT Test Simulation Questions Session 2 are presented in Table 4.

Table 4. Results of the Analysis of Student Ability Data on Answers to the Second Session of Level 3 NAT Test Simulation Questions

Assessment Section	Percentage of Correct Answers
Language Knowledge (Vocabulary, Grammar)	56.51% (approximately 19 questions out of a total of 35 questions)
Reading Comprehension	59.69% (approximately 23 questions out of a total of 39 questions)
Listening	56.35% (approximately 15 questions out of a total of 28 questions)

Furthermore, based on the results of this analysis, and needs assessment summary as mentioned in Table 1 before, shows that speaking skills are important, especially for learners at LPK, considering that they will work and live in Japan in the future. In addition, the researchers also conducted informal interviews with two Japanese language teachers from the N3 class at LPK Kokorono Siji. The interviews revealed that, in general, the students were enthusiastic about conversation and vocabulary materials directly related to everyday life in Japan. They preferred communicative teaching methods based on work activity simulations. The main motivation of the learners is to prepare for working in Japan and to improve their language skills so that they are ready to face life in Japan. Most learners show a preference for visual learning (pictures and video simulations). Therefore, these are often included in the delivery of material through PPT.

The second stage is the *Design* stage. At this stage, instructional objectives and learning activities are formulated. The first thing the researcher did before formulating the instructional objectives was to identify the SKKNI Japanese Language standards compiled by the Ministry of Manpower in 2022. From this reference, the researcher determined various competency units that would form the basis for formulating instructional objectives. After formulating general and specific instructional objectives, they were then put into a table to make it easier for the researcher to compile proposed topics that would form the basis for determining what kind of learning activities would be developed. Next, the researcher developed learning activities for this teaching material by referring to the competency units in the Indonesian National Work Competency Standards (SKKNI) for the Education Category, Main Group of Education, Japanese Language Field, officially issued by the Ministry of Manpower of the Republic of Indonesia Number 238 of 2022. The researchers integrated each competency unit from the Japanese language SKKNI with the Japanese language material found in the *Minna no Nihongo* 1 book and the Japanese language activity categories. From this, they determined which parts of the SKKNI competency units were covered in the material in the book, so that they could come up with ideas for learning activities using the CLT approach.

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

Detailed of learning activities design development in instructional materials is presented in Table 5.

Table 5. Detailed Table of Learning Activity Design Development Learning Activities in Instructional Materials

No	Title of Topic in Teaching Materials	CLT-Based Learning Activities
1	私と皆さん*Watashi to Minasan* (Me and Them)	*Structural activities:* • Confirming Katakana Characters • Greetings in Japanese • Self-introduction expressions *Quasi-communicative activities:* • Write your name and country/city of origin using Katakana letters. *Functional communication activities:* • Introducing oneself in small groups *Social interaction activities:* • Introduce yourself in a large group and chat freely.
2	住んでいるところ *Sunde iru tokoro* (Where I live)	*Structural activities:* • Vocabulary related to where you live • Sentence patterns • Adjectives to Describe Characteristics of Objects • Numerals in Japanese *Quasi-communicative activities:* • Expressing the names of household items in Japanese, along with their quantity and condition. *Functional communication activities:* • Creating and composing sentences to introduce a room in Japanese. *Social interaction activities:* • Introducing a room and the items in it by stating their quantity and condition using a picture or photo, and asking and answering questions with friends about it.
3	私のこと *Watashi no Koto* (About Me)	*Structural activities:* • Vocabulary related to oneself • Vocabulary related to place of origin • Sentence patterns

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

		Quasi-communicative activities: • Grouping vocabulary and sentences according to their categories. *Functional communication activities:* • Describing aspects related to oneself and one's place of origin in Japanese. *Social interaction activities:* • Introducing information about oneself and one's region of origin to others using Japanese.
4	日本での生活*Nihon de no Seikatsu* (Life in Japan)	*Structural activities:* • Vocabulary related to time • Vocabulary related to time expressions • Vocabulary related to daily activities • Sentence patterns *Quasi-communicative activities:* • Observing, matching illustrations, and completing Japanese sentences related to daily activities. *Functional communication activities:* • Describing and explaining daily routines from waking up to going back to sleep in Japanese. *Social interaction activities:* • Talking about various things related to one's daily life and asking and answering questions about those things with others using Japanese.
5	旅行に行きたい！ *Ryokou ni ikitai!* (I want to go on a trip!)	*Structural activities:* • Vocabulary related to travel • Related expressions • Sentence patterns *Quasi-communicative activities:* • Observe illustrations of train lines in Tokyo and listen to audio recordings to answer questions. *Functional communication activities:* • Observing a map of Ueno Park, deciding on a place to visit, and practicing speaking while thinking about directions to get there. *Social interaction activities:*

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

		• Asking and answering questions about how to get to Ueno Park with friends using Japanese.
6	買い物 *Kaimono* (Shopping)	*Structural activities:* • Vocabulary related to shopping • Pointing words • Colors • Related expressions • Sentence patterns *Quasi-communicative activities:* • Observing floor illustrations in shopping centers and estimating which floor to go to if you want to buy something. *Functional communication activities:* • Thinking about how to use Japanese when you want to buy an item, including the type of item and its price. *Social interaction activities:* • Discussing what you want to buy and asking questions while shopping in Japanese.
7	おいしい日本料理を食べに行きます *Oishii Nihon Ryouri o tabeni ikimasu* (Going to eat delicious Japanese cuisine)	*Structural activities:* • Vocabulary related to shopping • Related expressions • Sentence patterns *Quasi-communicative activities:* • Observing photos of food, guessing the names of foods and stating their quantities in Japanese. *Functional communication activities:* • Observing illustration or situation and estimating Japanese sentences used in the context of dining with friends at a Japanese restaurant. *Social interaction activities:* • Discussing the choice of dining location and placing food orders in Japanese.

The third stage is the *Develop* stage. At this stage, the initial draft of the teaching materials is developed, reviewed by experts, and revised. Based on the teaching material development plan presented in the previous section, the researcher developed a draft of the learning activities to be included in the teaching materials. Next, a feasibility test was conducted by experts, divided into reviews by subject matter experts, learning

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

design experts, and learning media experts. Corrections, input, and suggestions from these experts were used as guidelines in revising the teaching materials. In addition, this was done so that the feasibility of the developed basic Japanese teaching materials based on learning activities with a CLT approach could be tested. In detail, the results of the feasibility test by the subject matter experts, learning design experts, and learning media experts involved in this study are presented in Table 6.

Table 6. Results of Expert Assessment in Feasibility Testing

No	Expert Evaluation	Average	Standard Deviation	Category
1	Learning Design Expert	3.22	0.78	Feasible
2	Media Specialist	2.83	0.37	Feasible
3.	Subject Matter Expert	3.60	0.49	Feasible

In this study, the suitability of teaching materials is determined by a minimum score in the "Feasible" category. Based on the analysis of the experts' assessments above, namely in terms of learning design, media, and material, the CLT-based elementary Japanese teaching materials developed are considered "Feasible" for use in trials. Subsequently, revisions were made to the teaching materials, focusing on several points based on input from the experts. The revisions made are presented in Table 7.

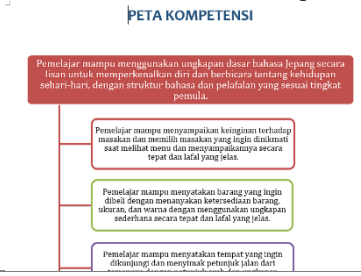
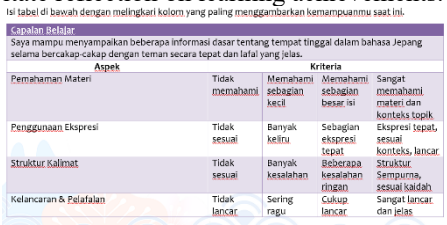
Table 7. Details of Input and Revisions to Teaching Materials

No	Expert Input or Comment	Revisions to Teaching Materials
Related to Material		
1	The writing of きたか may use Kanji as well, because the word 来ました also appears below using Kanji. Then, is it necessary to include "Japan" in the translation, considering that the Japanese does not include 日本 (just for consideration).	Complete the sentence いつきたか Itsu kitaka by writing the Kanji character 来た and adding the explanation 日本 to clarify the context. • 日本にいつ来たか Nihon ni Itsu kitaka (Kapan tiba di Jepang)
2	In the Japanese column, examples could be provided for each number so that language instructors at LPK can be stimulated to provide other, broader examples. For example, section 1. Information About the Region of Origin: 出身はスラバヤです。東ジャワにあります。などなど	Add examples to the Japanese language column in the section "Information About Your Hometown" Topic 3. **Bahasa Jepang** **Contoh :** ７月に日本に来ました。しゅっしんは　スラバヤです。東ジャ ワにあります。日本語はLPK Kokorono Siji で勉強しました。dan sebagainya

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

3	In this conversation example, only one option is provided *(jaa..ii desu)*? To avoid misinterpretation of meaning, it would be helpful to add an explanation of which expression indicates that the customer is buying and which expression indicates that the customer is not buying. じゃ、お願いします。	Add a sentence to request only the available sizes/colors. (Jika tidak menginginkannya) じゃ、いいです。*Ja, ii desu.* (Meminta ukuran/warna yang ada) M サイズでお願いします。*M-saizu de onegai shimasu.*
4	Need to strengthen the final evaluation with an explicit rubric or assessment criteria (proposed rubric attached separately).	Addition of a self-assessment table at the end of the topic section. **A. Penilaian Diri** Isi tabel di bawah dengan melingkari kolom yang paling menggambarkan kemampuanmu saat ini. **Capaian Belajar** Saya mampu menyebutkan nama dan asal kota/negara dalam bahasa Jepang saat perkenalan diri dengan tepat dan lafal yang jelas. **Aspek** / **Kriteria** Pemahaman Materi — Tidak memahami / Memahami sebagian kecil / Memahami sebagian besar isi / Sangat memahami materi dan konteks topik Penggunaan Ekspresi — Tidak sesuai / Banyak keliru / Sebagian ekspresi tepat / Ekspresi tepat, sesuai konteks, lancar Struktur Kalimat — Tidak sesuai / Banyak kesalahan / Beberapa kesalahan ringan / Struktur Sempurna, sesuai kaidah Kelancaran & Pelafalan — Tidak lancar / Sering ragu / Cukup lancar / Sangat lancar dan jelas
Related to Media		
5	Supporting videos should be placed after point F. Assignments to help students understand the content of the videos.	Move the "Supporting Video Material" section before the "Information and Tips on Life in Japan" section.
6	The alarm clock image needs to be replaced with a wall clock, and the carpet image needs to be replaced with an image that is easier for students to understand.	Replacing illustrations/images to make them easier to understand.  
7	Change the cover design to suit the age range of adult learners.	

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

Related to Learning Design		
8	A competency map should be included at the beginning of the teaching materials.	Addition of a competency map 
9	As a self-feedback system, provide answers/rubrics for exercises/assignments to facilitate reflection on learning achievements.	Addition of a self-feedback system to facilitate reflection on learning achievements. 

The final stage is the *Implement* and *Evaluate* stage. At this stage, individual trials, small group trials, large group trials, and evaluations are conducted. Individual trials are conducted through interactive interviews with each learner so that researchers can study the shortcomings of the teaching materials and the reasons for them. Next, in the small group test, the researcher distributed questionnaires to learners to find out their attitudes towards the teaching materials. Next, in the large group test or field evaluation, the researcher conducted it in the N3 LPK Kokorono Siji class, which consisted of 17 learners. In practice, this large group trial used teaching materials from Topic 2 entitled "住んでいるところ *Sunde iru tokoro* (Where I Live)". This topic was selected together with the LPK Kokorono Siji Teaching Team because it was closest to the students' daily lives, as the learners were familiar with their current place of residence in the dormitory. After learning using teaching materials with the instructor, an evaluation was conducted by comparing the results of the initial test (pre-test) and the final test (post-test). The detailed results of the learners' initial and final tests conducted in this evaluation are presented in Table 8.

Table 8. Learner Pre-test and Post-test Results

Name (in abbreviation)	Student Number	Pre-test Score (0 to 20)	Post-test Score (0 to 20)
BH	GI-426	4	10
RT	GK-457	6	12
SW	GI-421	8	14

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

TA	GI-419	10	16
VNM	GK-416	12	16
WHNL	GI-411	14	18
VM	GK-422	10	16
WO	GI-453	6	12
AK	GI-391	8	14
RM	GK-406	4	10
MP	GK-434	10	16
HA	GK-401	12	18
MAP	GK-418	14	20
N	GK-309	6	12
LR	GK-452	8	14
MFH	GI-392	12	18
NS	GK-350	10	16

The data obtained from the initial test (pre-test) and the final test (post-test) were used to evaluate the effectiveness of the developed teaching materials. The analysis was conducted by calculating the average N-Gain score, which represents the improvement in learners' understanding or achievement after participating in a particular learning experience or intervention. The N-Gain score provides an approximate measure of the effectiveness of a treatment or instructional program in enhancing conceptual understanding. Therefore, the N-Gain score serves as an indicator of the effectiveness of these activity-based Japanese language teaching materials. Once the N-Gain value is obtained, it is interpreted based on Hake's N-Gain [6] classification as follows.

1. ($g \geq 0.7$): High effectiveness
2. ($0.7 > g \geq 0.3$): Moderate effectiveness
3. ($g < 0.3$): Low effectiveness

Data analysis was conducted by measuring the *N-Gain of average* [6] with the following results as presented in Table 9.

Table 9. Results of *N-Gain* Value Analysis and Classification

Name (in abbreviation)	**Student No.**	***N-Gain* Score**	**Classification**
BH	GI-426	0.375	Moderate
RT	GK-457	0.375	Moderate
SW	GI-421	0.5	Moderate
TA	GI-419	0.5	Moderate
VNM	GK-416	0.333	Moderate
WHNL	GI-411	0.333	Moderate
VM	GK-422	0.5	Moderate
WO	GI-453	0.375	Moderate
AK	GI-391	0.5	Moderate
RM	GK-406	0.375	Moderate

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

MP	GK-434	0.5	Moderate
HA	GK-401	0.5	Moderate
MAP	GK-418	0.5	Moderate
N	GK-309	0.375	Moderate
LR	GK-452	0.5	Moderate
MFH	GI-392	0.5	Moderate
NS	GK-350	0.5	Moderate

In addition to analyzing the *N-Gain* scores from the *pre-test* and *post-test* results, the teaching team at LPK Kokorono Siji also conducted a short oral test to determine the extent of improvement in the learners' speaking skills on this topic. The teachers provided assessments based on the assessment rubric, with the following results as presented in Table 10.

Table 10. Conclusion of the Analysis of Students' Speaking Skills Through Presentations Using an Assessment Rubric

Category	**Average**
Fluency	20.29
Vocabulary	20
Grammar	20.29
Pronunciation	19.12
Total Points (in percentage)	79.7%

Discussion

This development research successfully produced Japanese language teaching materials based on learning activities using the Communicative Language Teaching (CLT) approach for training participants in vocational training institutions. The final product was developed through the five stages of the ADDIE model—Analyze, Design, Develop, Implement, and Evaluate. Through this systematic process, the product is expected to meet the needs of learners at LPK and address problems related to the lack of communicative Japanese language skills.

1. Learner Needs and Characteristics. The results of the needs analysis showed that respondents (n=29), who were N3 Japanese language learners at LPK Kokorono Siji, were only able to answer 56.51% of the questions in the "Language Knowledge" section, 59.69% in the "Reading" section, and 56.35% in the "Listening" section of the NAT Test Level 3 simulation. Questionnaire data further revealed that 31% of learners rated their Japanese proficiency as "Not good" and 3.4% as "Very poor." Moreover, 51.7% of learners identified "Speaking" as the skill they most wanted to master. These findings

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

confirm the urgent need for learning activities that strengthen communicative competence. From the analysis of learner characteristics, it was found that N3 class learners had completed *Minna no Nihongo* 1 & 2 and mastered basic Japanese at the N5 level. Learners preferred communicative and simulation-based activities over long, one-way explanations, and their motivation was primarily driven by the desire to work and live in Japan. Most learners were high school or vocational school graduates with diverse academic abilities, and they showed a preference for visual learning styles, including illustrated materials and videos.

2. Feasibility of the Materials. After formulating instructional objectives and designing learning activities, an initial draft of the teaching materials was created and evaluated by subject matter experts, instructional design experts, and media experts. Based on their assessments, the materials were declared "feasible," with average scores of 3.60 (subject matter), 3.22 (instructional design), and 2.83 (media). Revisions were made according to expert feedback before implementation.

3. CLT-Based Activity Design. The learning activities were designed with reference to Littlewood's [9] communicative framework, consisting of structural activities, quasi-communicative activities, functional communication activities, and social interaction activities. These activities were contextualized with everyday topics relevant to learners' future lives in Japan, such as shopping, dining, traveling, and workplace routines. This design ensured that learners practiced Japanese in authentic, meaningful contexts rather than through grammar drills alone.

4. Implementation and Effectiveness Implementation was carried out in three stages: one-to-one trials, small group trials, and large group trials. Evaluation through interviews, questionnaires, and pre-test/post-test results indicated positive learner responses. Learners rated the materials as "Very suitable" in terms of attractiveness, ease of use, communicative stimulation, and motivation. The N-Gain analysis showed a moderate increase (average score 0.45) in learners' understanding and achievement, confirming the effectiveness of the materials in improving communicative competence.

5. Alignment with Previous Studies and Novelty. These findings are consistent with previous studies [7][10], which reported that learners view CLT positively because it emphasizes communicative output and provides opportunities to develop speaking skills. However, this study contributes novelty by focusing specifically on LPK trainees preparing for apprenticeships and SSW programs, integrating CLT principles into activity-based modules, and prioritizing speaking competence as the primary learning outcome.

6. Practical Implications. The moderate effectiveness of the materials suggests that while CLT-based activities improve communicative competence, further refinement is needed. For LPKs, the materials can be integrated into intensive schedules by allocating specific sessions for communicative practice alongside grammar instruction. Teachers are encouraged to adopt role-play, workplace simulations, and multimedia resources to foster engagement. Curriculum developers should design flexible modules that balance

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

grammar mastery with communicative practice, considering learners' diverse backgrounds.

7. Limitations and Future Directions. This study was conducted with a limited sample size at a single LPK, which may affect generalizability. Future research should involve larger and more diverse groups of trainees, extend the duration of implementation, and examine the long-term impact of CLT-based materials on workplace communication. Further exploration of digital tools and online platforms could also enhance communicative learning beyond the classroom.

4 Conclusion

This study has produced Japanese language teaching materials based on learning activities using the CLT (Communicative Language Teaching) approach for training participants at vocational training institutions. The teaching materials were deemed suitable based on expert assessment, namely in terms of learning design (3.28), media (2.83), and material (3.60). The improvement in learners' communicative abilities was demonstrated by an increase in the "Moderate" criterion score, with an average N-gain value of 0.45 on *the pre-test* and *post-test*. This was also demonstrated by the learners through presentations and assessed by the instructor using an assessment rubric. Thus, the use of these teaching materials generally has the potential to support the improvement of learners' communicative Japanese language abilities. However, this study has limitations because the evaluation of the effectiveness of teaching materials was only carried out on a limited scale, namely only on the learning outcomes of Topic 2 "*Sunde iru tokoro"* (Where I Live) due to time and resource constraints, so it did not cover an evaluation of broader learning outcomes.

The study concludes that CLT-based activity-oriented materials are feasible and moderately effective in enhancing communicative competence of LPK trainees. For practical implementation, LPKs should integrate communicative tasks into intensive schedules, while teachers are encouraged to adopt role-play and workplace simulations to foster authentic interaction. Curriculum developers should consider learner diversity and provide flexible modules that balance grammar mastery with communicative practice.

References

1. Adinda, S. A. (2021). Japanese Language Learning Strategies at LPK SO YLPKPKB (Brother Training Center) Cianjur and Obstacles to Using Japanese in Internship Life in Japan. Retrieved from https://repository.widyatama.ac.id/items/e0cc2a98-d09a-4d4d-a31a-e87e5f239d73
2. Astina, I. K. W., Hermawan, G. S., & Mardani, D. M. S. (2019). Profile of Japanese Language Learning Strategies at LPK Terakoya Bali. *Undiksha Japanese Language Education Journal*, *5*(3), 324. https://doi.org/10.23887/jpbj.v5i3.21457

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

3. Binapenta & PKK (2021). Indonesia-Japan Discuss Migrant Worker Placement and Apprenticeship Programs. Retrieved from https://kemnaker.go.id/news/detail/indonesia-jepang-bahas-penempatan-pekerja-migran-dan-program-pemagangan
4. Branch, R. M. (2009). *Instructional Design: The ADDIE Approach*. Springer US. https://doi.org/10.1007/978-0-387-09506-6
5. Cloudia Ho, Y.-Y. (2020). Communicative language teaching and English as a foreign language undergraduates' communicative competence in Tourism English. *Journal of Hospitality, Leisure, Sport & Tourism Education*, *27*, 100271. https://doi.org/10.1016/j.jhlste.2020.100271
6. Hake, R. R. (1998). Interactive-engagement versus traditional methods: A six-thousand-student survey of mechanics test data for introductory physics courses. *American Journal of Physics*, *66*(1), 64–74. https://doi.org/10.1119/1.18809
7. Hien, L. T. N. (2021). Communicative Language Teaching in Teaching ESL for University Students. *Journal of English Language Teaching and Applied Linguistics*, *3*(6), 49–57. https://doi.org/10.32996/jeltal.2021.3.6.7
8. Krisnawa, K. B. (2023). Japanese Language Learning at the Babaking Course Training and Education Institution (LKP). *Indonesian Student Research Journal*, *3*(1), 1-10. Retrieved from https://www.jurnal.stkipahsingaraja.ac.id/index.php/jpmi/article/view/441
9. Littlewood, W. (1981). *Communicative language teaching.* Cambridge: Cambridge University Press.
10. MAhmed, E., & Abdalrahman, I. (2017). The Effect of Using Communicative Language Teaching on EFL Learners' Speaking Skill. *European Academic Research*, *5*(6), 2769-2791. Retrieved from https://www.researchgate.net/profile/Amin-Ahmed-5/publication/359134271_The_Effect_of_Using_Communicative_language_Teaching_on_EFL_Learner's_Speaking_skill/links/6229bdd09f7b3246341d4a13/The-Effect-of-Using-Communicative-language-Teaching-on-EFL-Learners-Speaking-skill.pdf
11. Pradiptya, A. W., Sadyana, I. W., & Hermawan, G. S. (2020). Frequency of Japanese Language Use by Students in the Japanese Language Education Program at Undiksha. *Journal of Japanese Language Education at Undiksha,* 6*(*1). http://dx.doi.org/10.23887/jpbj.v6i1.23489
12. Richards, J. C., & Rodgers, T. S. (2001). *Approaches and Methods in Language Teaching*. Cambridge University Press. https://doi.org/10.1017/CBO9780511667305
13. Sari, D. S. (2020). Comparison between Minna no Nihongo I and Marugoto A1 Rikai Textbooks. (Thesis), Semarang State University. Retrieved from https://lib.unnes.ac.id/42749/
14. Sari, N. L. M., Sadyana, I. W., & Suartini, N. N. (2021). Japanese Language Learning at the Bulan Palapa Vocational Training Center (LPK) in Landih Bangli Village. *Journal of Japanese Language Education Undiksha,* 7*(*1), 42. https://doi.org/10.23887/jpbj.v7i1.31854
15. Setiawati, N., Nur Wijayanti, R., & Fitri Asih, N. S. (2021). The Effectiveness of the Know Want Learned (KWL) Strategy in Improving Japanese Speaking Skills.

Journal of Science and Education (JSE)
Vol 6, Issue 2, March 2026, Pages 1221-1243
ISSN: 2745-5351 (Media Online)
DOI: https://doi.org/10.58905/jse.v6i2.721

Chi'e: Journal of Japanese Learning and Teaching, 9*(*1), 10–22. https://doi.org/10.15294/chie.v9i1.42274
16. Sugiyono. (2008). *Educational Research Methods: Quantitative, Qualitative, and R&D Approaches*. Bandung: Alfabeta.
17. Sutedi, D. (2017). The Dynamics of Japanese Language Education Development in Indonesia and Its Problems. In *Proceedings of the International Seminar on the Dynamics of Japanese Language Development in Indonesia* (pp. 7-13). Retrieved from http://repository.umy.ac.id/handle/123456789/16274

