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Framework to Refashion Existing Drill Materials to Support Japanese Language Learners: Enhancement of Meaningful Practice with Motivation, Inputting, and Outputting

Akiko KAI[ab*], Junko NEMOTO[c], Ryuichi MATSUBA[a], Yoshiko GODA[a] & Katsuaki SUZUKI[a]
[a]*Graduate School of Instructional Systems, Kumamoto University, Japan*
[b]*University of Tsukuba, Japan* [c]*Ehime University, Japan*
*akai@st.gsis.kumamoto-u.ac.jp

Abstract: We are planning to develop a framework to refashion existing Japanese grammar drill materials because most existing materials lack strategies to make learning meaningful. Our new framework, called "injapa!+", allows learners to engage in meaningful learning, meaning that they can imagine the situation in which the grammar is used before doing a drill, and have an opportunity to produce a phrase using the grammar with self-monitoring. This paper presents an overview of "injapa!+".

Keywords: Self-directed Japanese Learning, Meaningful Practice, Motivation, Output

1. Introduction

1.1 Research Background

According to the 2012 Survey of Overseas Organizations Involved in Japanese-Language Education, there are about 4 million Japanese language learners in the world (The Japan Foundation 2013). With the development of advanced communications technology, those learners can easily gain access to a lot of learning resources without leaving their country. However, in the field of asynchronous, self-led e-learning, there are still not many learning environments that enable beginning students of Japanese to systematically learn about Japanese grammar.

In many beginners' courses, a structural syllabus is used as the basis for designing a complete language course. The structural syllabus consists of a list of grammatical items, usually arranged in the order in which they are to be taught (Ellis 1993). Many well-known Japanese textbooks have adopted the structural syllabus. In the beginners' classes, teachers first make an effort to pique learners' interest by laying out some situations in which the target grammatical structures can be used. After that, teachers present the target grammatical items, explain its meaning and usage, offer pattern practice to establish the memory of learners, and make learners do the communicative tasks.

Kai (2011) has surveyed current existing e-learning materials for beginning students of Japanese (31 sites found in the database "NIHONGO e-NA" (http://nihongo-e-na.com/)). Most of them seemed to have been developed as offline classroom supplements. The sites are largely limited to providing grammatical explanations and drills only. There are 18 sites with drill materials and 20 sites that have grammatical explanations. Eight sites use different situations or topics to illuminate grammar, but no site offers situations that each learner might find interesting (lack of personalizing). In addition to that, no sites were found that gave learners the opportunity to speak or write phrases using the grammar taught (lack of language output). This means that most existing drill materials are not designed to motivate students, and don't offer any opportunity to speak or write because teachers have instructed those activities normally.

1.2 The Purpose of This Study

In this paper, we propose a framework we call "injapa!+" to refashion existing drill materials so that learners can practice more meaningfully. For the purposes of this paper, the term "refashion" is used to refer to changing the structure of learning from grammar-based mechanical drills into interest-based, contextualized learning.

This framework has two main functions: a personal attention-getter and speaking/writing opportunities. The goal of this research is to develop the framework and clarify its effect on learners.

2. Related Research

2.1 Literature Review of SLA

As already mentioned in chapter 1.1, most existing drill materials are not designed to motivate students, and don't offer any opportunity to speak or write. Is it the ideal learning environment for language acquisition? In this chapter, we consider the appropriateness of existing drill materials.

The effect of adopting output activity and showing relevancy has been widely studied in the field of second language acquisition (SLA). Swain (1985) states that language acquisition and/or learning may occur through producing language, either spoken or written. Swain pointed the three major functions of output in SLA, which are 1) the noticing function (getting learners to recognize their linguistic weaknesses), 2) the hypothesis-testing function (allowing learners to test their own language skills), and 3) the metalinguistic function (helping learners think more deeply about language). Many language teachers and researchers now back up Swain's idea; however, few free, self-led e-learning sites offer output activities such as writing and conversation, because in the Japanese language there is still no reliable auto-correcting system.

As regards motivation, Krashen (1982) proposes that certain emotions, such as low motivation, anxiety, self-doubt, and boredom, interfere with the process of acquiring a second language (the affective filter hypothesis). Dorney (2001) also recommends that teachers try to promote students' awareness of the instrumental values associated with the knowledge of a learner in order to make the curriculum and the teaching materials relevant to students and increase motivation. But the existing drill-centered materials hardly make learners recall the situations in which they might use the new grammatical structures they are acquiring. Attention must be directed toward determining which topics or situations are relevant to each learner.

These arguments suggest that learning with relevancy and output activities will enhance language acquisition, however, since there are no tools that support relevancy and output activities in an asynchronous self-led e-learning environment, how relevancy and output activities enhance language acquisition is not cleared. It is worth investigating how to make learners perceive the value of the learning material.

2.2 Idea and Related Studies

2.2.1 Idea

Developing materials that include motivation, input, and output takes a lot of time. However, we thought it would be possible to do this relatively quickly if we utilized existing input materials and added short functions only. With the new framework, a simple drill can be refashioned into a series of meaningful practice exercises. As far as we know, no frameworks like this currently exist; therefore, they might be worth developing.

2.2.2 Related Studies ("injapa!" and "Output!")

We have developed two language-learning tools: a tool to motivate learners (named "injapa!") and a tool for outputting practice (named "Output!").

"injapa!" helps guide learners to existing drills. It allows learners to choose a learning target from authentic situations, not from grammatical items (Kai et al., 2012). This tool is expected to give learners a sense of purpose that helps them understand the reason for learning Japanese grammar. Our preliminary results show that all participants (n=6) preferred learning Japanese using this tool rather than doing drills only. In interviews, users gave affirmative feedback such as, "It is fun, like playing a game" and "I can imagine the situation easily". "Output!" aims to give learners an opportunity to engage in output (speaking or writing) and self/peer-monitoring (Kai, et al. 2014).

These two tools are developed independently, therefore do not support a series of learning. If we can develop a framework that includes these two functions together as "injapa! +", learners can acquire grammar after understanding its relevance and having an opportunity to use it. We believe this will lead to more "meaningful practice" in language learning.

3. Research Plan

3.1 Research Question

The research questions of this study are: 1) Does the "injapa!+" framework increase learners' motivation and Japanese proficiency? 2) Does learning using this framework make learners feel that their learning is more meaningful? 3) What type of learners prefer this kind of learning style? and 4) What are the optimum control parameters?

3.2 System Design of "injapa!+"

In this section, the system design of "injapa!+" is described. "injapa!+" is a framework to refashion existing drill materials so that learners can practice grammar more meaningfully. This system allows learners to choose a learning target from authentic, real-life situation rather than from grammatical items. It also gives learners an opportunity to self-monitor their learning. Table 1 shows the learning flow using "injapa!+". For example, a learner will receive three topics relevant to his/her interest first (1). When he/she chooses a topic like "asking telephone number", then grammatical learning materials connected to the topic are shown. After learning these materials (2), he/she is asked to answer the question about the topic (3). He/she can self-check the correctness of the answer with grammatical checklist shown, and share what he/she said with other learners to know variations in usage (4).

Table 1: The Leaning Flow Using "injapa!+"

Learning Phase	Displayed Content	Learner's Activities
1. Goal Setting	・ (interest survey) ・ Three endorsers of situation-based tasks.	・ Determine a goal ・ Imagine Japanese speaking situation ・ Notice gaps between L2 and learner's Interlanguage ・ Raise consciousness about grammar
2. Input Activity	・ Pattern drill practice (third-party site)	・ Develop an explicit understanding of how a grammatical structure works
3. Output Activity	・ A question and answer form (both oral / written answers acceptable)	・ Answer the question using learned grammar ・ Have an opportunity to use grammar
4. Self-Monit oring	・ Checklist of usage ・ Answers made by other learners	・ Adopt self-monitoring and self-correction strategy ・ Know variations in usage

"injapa!+" is a member-only website and is only available in Google Chrome (https://www.google.com/chrome/). "injapa!+" has two main functions that encompass the existing drill materials. We briefly describe each function.

3.2.1 Situation Recommend System as Personal Attention Getter

The situation recommend system is used before users start learning input materials. The system lets learners choose a learning target not from grammatical items, but from authentic situations. The administrator of "injapa!+" first registers each URL of existing grammar drills to "injapa!+". Then, the

administrator picks some grammar items up, makes a sentence, sets a situation in which the sentence seems to be needed, prepares an endorser, and registers all the information to "injapa!" as a "Quest" in advance. The learner is first directed to reply a questionnaire about his or her field of interest. Then, from registered quests, three quests are chosen automatically as order adapting to the interest and learning stage, and the endorsers of the quests are shown. When a learner chooses a quest from the possible options, s/he is guided to the drill site after the situation and the task are explained.

3.2.2 Speaking/ Writing Practice System to Offer Outputting Opportunity

The output practice system will be used after learners finish each drill. The system gives learners an opportunity of outputting and self-monitoring.

After learners finish a drill, a question is displayed. Learners answer the question using the grammar they learned by talking through a microphone or typing. When clicking the "submit" button, a checklist is shown that reviews what the learner said or wrote (Self-monitoring 1). After self-reviewing, the learners' answer will be posted. Then answers given by past learners will be listed. Learners are to review again if the sentence they produced was correct (Self-monitoring 2).

3.3 Features

Two key features of "injapa!+" are its easiness to set up and its versatility. Learning support staff can set up a learning course through a browser. All they have to prepare are the lists of URLs of drills, and ideas for outputting situations. Knowledge of computer programming is not necessary. Staff can set any type and any size of learning materials (even a PDF can be used). They can also control the learning order by setting prerequisites for each drill.

4. Expected Contributions of this Research

With the "injapa!+" framework, learners are expected to be able to follow the process of what we call "meaningful learning" by themselves, meaning that they can imagine the situation in which the grammar is used before doing a drill, produce a phrase using the grammar with self-monitoring after the drill, and share it with other learners. We are planning to complete the development of "injapa!+" by the winter of 2014, and conduct a survey on learners' experience with it in the spring of 2015. A detailed data of the effeteness of "injapa!+" will be gathered and presented in a future paper.

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