



Retrieving Kanji Character from Memory in a Child with Learning Difficulty

Shigeji OBA, Koichi HAISHI
Joetsu University of Education / Niigata JAPAN

Abstract:

The present study examined kanji errors in handwriting of a child with learning difficulty and introduced a progress report of educational intervention. The child was a fifth grader, and he did not show the delay of the intellectual development but showed the difficulty that was specific for the writing learning of kanji. Therefore we analyzed the error types to be seen in the writing result of two kinds of tests. The result showed that he recalled some homophonic kanji characters and then chose one that the meaning was incorrect. Therefore we suggested the kanji search strategy to him and observed the change of kanji writing.

Introduction:

The Japanese writing system is composed of two syllabic scripts, called hiragana and katakana, and thousands of kanji. Hiragana and katakana consist of only 46 characters, respectively. On the other hand, the number of kanji, which elementary school and junior high school students have to study, reaches approximately 1,000. The essential nature of kanji is to convey both meaning and sound, while each alphabetic symbol represents a phoneme. The difficulty of learning kanji is that there are a large number of homophonic characters (that sound the same but mean differently). That is, incorrect usage of kanji would fail to transmit ideas. Japanese children with learning difficulties frequently show a problem in the production of correct kanji character. However, the effective intervention for children with difficulty in kanji writing has not been established so far.

Purpose:

In this study, we introduce a progress report of educational intervention for a child with difficulty in kanji writing. The purpose of this study was to clarify the background of difficulty in the production of kanji from the analyses of errors in his writings and the effective way to reduce writing difficulty.

Methods:

The case was referred to our institution when he was in the fifth grade of the mainstream school. He demonstrated severe difficulty in kanji writing. LDI-R (Ueno et al., 2008) was conducted and learning disability was suspected. The results of K-ABC and DTVP did not indicate that he has a remarkable delay of the development. Two types of test for kanji writing were carried out at the end of the fifth grade.

1. Summary test of the kanji in a school (test A): This test consists of fifty questions of kanji writings. Errors observed in writings were analyzed.
2. Kanji screening test for fourth grader (test B) (Uno et al., 2006): There were 20 kanji readings and 32 kanji writings in this screening test. Errors in the answers were analyzed.
3. Based on the results of tests A and B, we set up a hypothesis about the educational intervention to improve kanji writing. For about 11 months after the assessment above mentioned, the total of 10 sessions of educational intervention were conducted once a month.

Japanese writing system

一郎 は ヤンキース の 野球選手 です。

a b c b a b

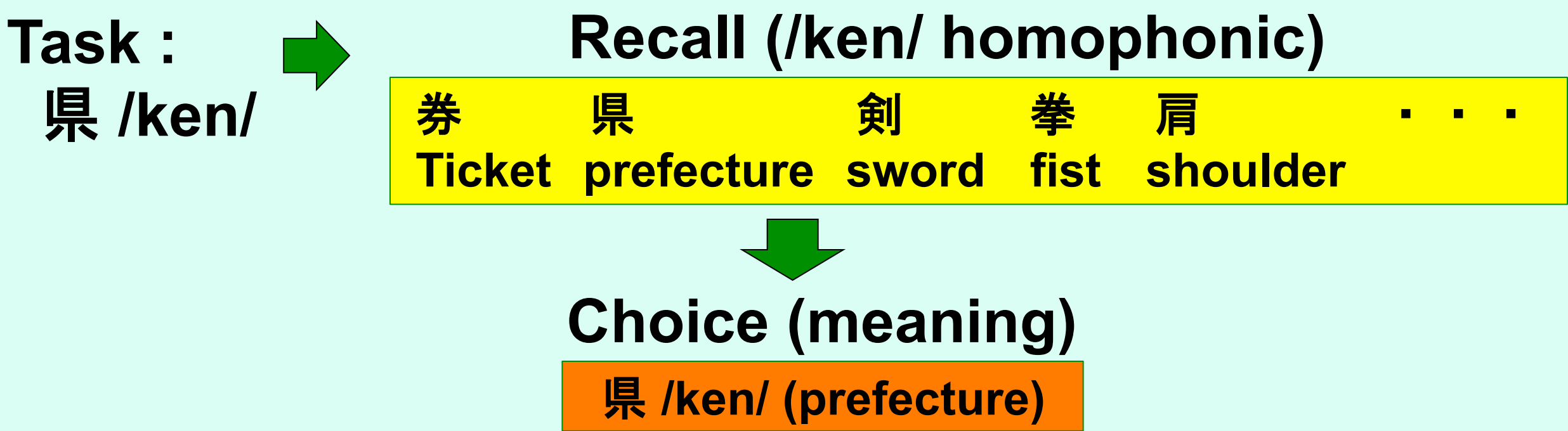
(Ichiro is a baseball player of Yankees.)

	a: kanji	b: hiragana	c: katakana
(example)	一郎	いちろう	イチロー
	/ichi ro/	/ic hi ro/	/I chi ro/

Examples of related character error

Task	Written kanji
姉 (older sister) → 妹 (younger sister)	
教室 (classroom) → 教育 (education)	
兄弟 (brothers) → 兄子 (older brother and child)	

Search strategy



Results:

1. The percentage of correct writing in test A was 6.0% (3/50 characters). The details of 47 incorrect answers were 1) 35 of no answer, 2) 9 of homophonic character, 3) 2 of incorrect character in the word with a related meaning (related character), and 4) 1 of unidentifiable character.
2. In test B, the percentage of correct reading was 90.0% (18/20 words). However, that of correct writing was 56.3% (18/32 characters). The details of 14 incorrect writings were 1) 5 of no answer, 2) 5 of related character, 3) 2 of partial mistake in writing, 4) 1 of collapse in construction of the character, and 5) 1 of partial completion. In addition, he often realized that his answer was incorrect when he wrote a wrong character.
3. As mentioned above, much of the incorrect answer was occupied by synonymous character and related character. Therefore, we suggested that he should recall some homophonic kanji characters at first, and then choose an appropriate kanji from them in accord with a meaning of writing word. As a result, the strategy suggested in the session was utilized on the confirmation test carried out at the end of each session even in the early intervention period, although the active presentation of the search strategy was necessary. However, the necessity gradually decreased and he came to mention the strategy voluntarily from the eighth session.

Conclusions:

1. People who want to write a Japanese word have to learn the search strategy in which some homophonic kanji characters are listed at first and one character with the appropriate meaning is chosen afterwards from those listed.
2. There is a memory search problem in the background of the error of Japanese kanji writing.
3. For the child in this case report with learning difficulty of kanji character, the intentional presentation of the above-mentioned search strategy was necessary for the improvement of the skill to write a Japanese word.