

論文報告 Paper Presentation

## 小學分級字彙之探討與建議

### Chinese Characters Suitable for Elementary School Children to Learn: Which and When

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A Chinese character can be described by a set of characteristics, including stroke number, orthographic structure (e.g. ‘記’ has a horizontal structure vs. ‘隻’ has a vertical structure), symmetry (e.g. ‘開’ has a symmetrical orientation vs. ‘劉’ has a asymmetrical orientation), number of multiple-character words it is included as a morpheme (e.g. ‘角’ appears in the words ‘角色’, ‘角逐’, ‘角落’ etc.), whether or not it is a phonetic (e.g. ‘交’ and ‘跤’ have the same pronunciation) ort radical, number of neighbors, frequency of appearance in a certain character corpus, and frequency of usage by children in composition etc.. It was accepted since Wang’s work that a character with certain characteristics should, or can, be taught earlier than other characters.

According to the Ministry of Education of the Republic of China, an elementary school graduate should learn about 2700 characters. Although the characters and when they should be taught to the children were published in 2008, the ground work of this line of research was conducted by Wang (1930), Hu (1935) and others in the 1930s according to Ai (1955). As far as we know, there was not any research that systematically studied Chinese characters’ characteristics mentioned above, and use the research results as a basis to select the characters for children to learn. This research was designed to collect the information pertinent to these characteristics for a set of characters, and to find a guiding principle for the decision that whether or not a character should be taught in elementary school and which grade it could be taught.

In order to achieve the goals, the information concerning the characteristics mentioned above for about 6000 characters were collected using two methods. The first was to collect information relevant to this research from literature. For example, the frequency of a character used in newspaper was obtained from Academia Sinica Balanced Corpus of Modern Chinese, and the frequency of a character’s usage in children books was from the Characters Used in Children Books Research Report. The second method to collect the information was to compute or conduct studies by the researchers of this research. The software C-CAT was used to compute a character’s stroke number, orthographic structure, role as phonetic and radical, number of neighbors etc.. The writings of 2911 school children in composition classes were collected. The number of different characters used by the children, and the total frequency that a character used by them, and the earliest grade that a character was used were collected.

Finally, in order to make the information useful in determining whether or not a

character should be taught to elementary school children, a group of elementary school teachers was asked to provide their opinions concerning the importance of the characteristics discussed above in selecting characters for children to learn. Based on this research's results, the researchers selected a group of characters which could be taught to elementary school children, and suggested when was the earliest grade that they could be taught.

The characters will be available online at the following website:

<http://crl.psy.ntu.edu.tw/>.

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