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# Study on the relationship between presentation of related word and the quantity of knowledge in personal divergent thinking support system

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The purpose of this article is to clarify the relationship with the effective hint for personal quantity of knowledge and divergent thinking. The study on divergent thinking support tool using the creation technique such as the brainstorming methods is directed as a study on groupware to support group work. Furthermore, various systems supporting by the letter information with the function to show related terms as a method of the support in the study are developed. By previous works, the researcher showed a result that a fluent hint is effective by the study on divergent thinking support tool supporting by the letter information. A group is effective in total, but it is expected that effective hints for every individual are different by personal quantity of knowledge of the agenda. However, it is not studied quantity of knowledge and the relationship with an effective hint. Therefore we paid attention to the hint function of the divergent thinking support tool.

We divided an examinee in half to investigate it whether there was a relationship between an effective hint and the knowledge quantity of individual. And I gave only one group information before an experiment and supposed that one group held the knowledge for the problem. And we investigated whether the difference occurred to the degree of association of the effective hint by a presence

of knowledge from 2 systems that the degree of association of the shown hint is different by an experiment.

After considering it, as for the quantity of the idea, the possibility with the difference was suggested by having knowledge or not in an effective degree of association.

At the quality of the idea, as for the fluency of the idea, a difference appeared in the system which was effective in the group which there was knowledge in and a knowledgeless group. It was suggested by having knowledge or not that there was a difference in an effective degree of association. Because the effective systems of the group which showed information were scattered as for the flexibility of the idea, I was not able to find a difference in having knowledge or not. The originality of the idea turned out reverse to the group which gave information in the group which I did not give. Therefore, it was suggested by having knowledge or not that there was a difference in an effective degree of association, too. Thus, it was suggested that there were some kind of associations between quantity of knowledge and the degree of association of an effective word.

In this study, we were not able to clarify quantity of knowledge and the concrete relations of an effective hint. There is a problem of the measurement procedure of the quantity of personal concrete knowledge and precision of the hint. However, the divergent thinking support tool that a hint to demand from every user is shown by detailed inspection may be built. And we can have the expectation that the groupware evolves more.