

量命題を部品とした算数単位文章題組立作問学習 ソフト「モンサクン」の小学校全学年での試験的利用

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Experimental Use of Arithmetic Unit Word Problem Posing Software: MONSAKUN in All Grades in an Elementary School

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MONSAKUN is a software of learning by problem-posing for arithmetic unit word problems. In this paper, results of an experimental use of MONSAKUN of addition and subtraction in all grades and classes in a public elementary school are reported. The contributions of this report are (1) successful use of MONSAKUN for addition and subtraction in all grades and classes in a public elementary school, and (2) obtaining data suggesting use value in upper grades classes. Although MONSAKUN has been used in a few elementary schools so far, its use was for part of grades or classes in the schools. Because the use of MONSAKUN in all grades and classes in a public elementary school is the first case, this report is novel and useful for developing practice of MONSAKUN. Regarding (2), previous studies have mentioned that the arithmetic unit word problems of addition and subtraction are mastered by the third grade. The result of this use shows that problem posing of the arithmetic unit word problems of addition and subtraction is not easy even 5th or 6th grade students. It suggests that some of the students in 5th or 6th grade don't have enough "relational understanding" that required in problem-posing in MONSAKUN although they have enough "instructional understanding" that required in problem-solving tests. As the next step of this experimental use, we plan to use MONSAKUN in usual classes in the same school.

キーワード：作問学習，算数文章題，三量命題モデル，全学年利用

1. はじめに

筆者らはこれまでに作問学習用の算数文章題組立ソフト「モンサクン」を設計・開発し、授業内での利用も行っている⁽¹⁾⁽²⁾。モンサクンは、1回の四則演算で解ける文章題（単位文章題と呼ぶ）を対象とし

ており、和差の文章題を対象としたモンサクン和差、乗除を対象としたモンサクン乗除、モンサクン和差に部分全体図の操作演習を組み合わせたもの、モンサクン和差に作問課題変更演習を組み合わせたもの、などが開発されている。今回の試験的利用では、同一公立小学校の全学年全クラス（計21クラス、607名）に

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