Many of the learning activities that children are engaged with in the classroom, whether related to reading, mathematics, science, or other areas of the curriculum, impose quite considerable burdens on working memory. Activities often require the child to hold in mind some information (for example, a sentence to be written down) while doing something that for them is mentally challenging (such as spelling the individual words in the sentence). These are the kinds of activities on which children with poor working memory struggle with most, and often fail to complete them properly because they have lost from working memory the crucial information needed to guide their actions. As a result, the children may not get the learning benefit of successfully completing an activity, and this slows down their rates of learning.

Understanding working memory – a classroom guide, Gathercole and Alloway, 2007 – see below

#1: WORKING MEMORY AND INSTRUCTION

WORKING MEMORY: MEMORY THAT INVOLVES STORING, FOCUSING ATTENTION ON, AND MANIPULATING INFORMATION FOR A RELATIVELY SHORT PERIOD OF TIME (SUCH AS A FEW SECONDS)

INSTRUCTION: THE TRANSFER OF LEARNING FROM ONE PERSON TO ANOTHER

THE ISSUE

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THE EVIDENCE BASED RESOURCES

CLASSROOM GUIDE
UNDERSTANDING WORKING MEMORY: A CLASSROOM GUIDE

LINKED PODCAST
WORKING MEMORY WHAT IT IS, WHY IT’S IMPORTANT FOR TEACHERS TO KNOW ABOUT IT AND HOW AN UNDERSTANDING OF WORKING MEMORY CAN INFORM THE WAY TEACHERS TEACH

LINKED ARTICLE
COGNITIVE LOAD THEORY AND ITS APPLICATION IN THE CLASSROOM (REFERENCING WORKING MEMORY)

CONNECTING TO RELATED RESOURCE

LINKED PAPER
ROSENSHINE’S PRINCIPLES OF INSTRUCTION

LINKED ELEMENTS OF ROSENSHINE’S PRINCIPLES
#2 INTRODUCING NEW MATERIAL IN SMALL CHUNKS – EXTENDS TO BREAKING DOWN COMPLEX TASKS BY PROVIDING MODELS (#4) AND SCAFFOLDS (#8)