



# The 4MAT<sup>®</sup> Research Guide

**Reviews of Literature on Individual Differences  
and Hemispheric Specialization  
and their Influence on Learning**

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# Mission & Theoretical Assumptions

The mission of the Department of Research at About Learning, Inc. is to validate the 4MAT System for Teaching, Learning and Leadership. In this light, the elucidation and verification of the theoretical assumptions of 4MAT as a model for maximizing human potential becomes a major goal of the About Learning, Inc. research effort. These theoretical assumptions, generally stated, include the following:

## Theoretical Assumptions

### Learning Types

- Individuals learn in different yet identifiable ways.
- These individual learning preferences, although clearly not related to aptitude, are significantly related to personal motivation and performance.
- Motivation and academic performance improve as individuals identify and use their natural learning style as well as practice and accommodate less preferred strategies.

### Hemisphericity

- Individuals have at their disposal two complementary methods for approaching and representing information and experience.
- Adequate engagement of both methods, described in the literature as Right and Left Hemispheric processing, results in deepened levels of personal understanding.
- Engagement of both hemispheres of the brain, usually defined as “Whole brain” learning has serious implications for designing instruction and understanding human learning.

### Teaching

- A demonstrable relationship exists between specific teacher behaviors and student performance.
- Learning and transfer are more appropriately encouraged when classroom events systematically incorporate attention to personal experience, reflection, conceptualization, practice, extension, refinement and integration using Right and Left Hemispheric representations.
- Multiple methods of instruction connected to personal meaning, including striving and self discovery, are related to higher levels of student performance.
- 4MAT is a practical pedagogy for teaching to “wholeness,” encouraging creativity and accounting for human diversity.

### Goals

The goals of the Department of Research include the following:

- To review and summarize all literature including dissertations, articles and research in the field, that include the 4MAT descriptor.
- To review and summarize prominent books and other studies related to the constructs which form the theoretical grounding for the 4MAT System.
- To conduct “Action Research” in the field aimed at illuminating and further validating the 4MAT System.
- To encourage and assist with dissertation research investigating the effects of 4MAT.

# Mission & Theoretical Assumptions

## Research Update

The information in this Research Guide is updated regularly. Please check the About Learning, Inc. website [www.aboutlearning.com](http://www.aboutlearning.com) for recent additions and articles. For a complete discussion of the 4MAT Model and the Natural Cycle of Teaching and Learning, please review Dr. McCarthy's texts, *About Learning*, (1996) and *About Teaching: 4MAT in the Classroom*, (2000).

The *4MAT Research Process Guide* is also available for use in planning research and evaluation. It presents an introduction to the research process with a focus on the evaluation of 4MAT implementation projects and the use of the 4MAT Model and instruments as variables in research designs. The Process Guide contains a collection of 20+ assessments and surveys for addressing the impact of the 4MAT Model on teachers, students and parents. You will find an overview of this material in Section 8.

## Instrument Research

All instruments used in About Learning, Inc. Training will be subjected to periodic review for construct and concurrent validity, reliability, career relationships and relationships to the specific outcome variables described earlier in this document.

Linda Lippitt, Ph.D  
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About Learning, Inc.

# Introduction and Contents

The doctoral dissertation abstracts and articles contained in this review of the literature are drawn from Dissertation Abstracts International (DAI), The Educational Resource Center (ERIC) System and “field research” conducted by the About Learning, Inc. Department of Research. **These studies are intended to provide for practitioners an overview of the research constructs that have been used to analyze and further validate the 4MAT System for Teaching, Learning and Leadership.**

ERIC: <http://www.ed.gov/EdRes/EdRed/ERIC.html>  
UMI Dissertation: 1-800-521-0600 <http://www.umi.com>,

Additionally, these studies are intended to encourage replication and new research on the 4MAT System. Anyone interested in conducting research on The 4MAT System is encouraged to contact Dr. Linda Lippitt, Director of Research for About Learning, Inc., 505-820-7143, [linda@aboutlearning.com](mailto:linda@aboutlearning.com).

It should be noted, that not all of the dissertation studies listed here were conducted in consultation with Dr. Bernice McCarthy or About Learning, Inc. research staff. In this light, inclusion in this document does not indicate that the study meets the standards of research established for About Learning research projects, nor does it mean that the findings are consistent with other studies of the same nature. Studies are selected for this review solely on the basis that they used the 4MAT System as one component of the research.

Studies are listed alphabetically by author.

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