Language Learning and Its Impact on the Brain: Connecting Language Learning with the Mind Through Content-Based Instruction

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Abstract: *Cognitive sciences are discovering many things that educators have always intuitively known about language learning. However, the important point is actively using this new information to improve both student learning and current teaching practices. The implications of neuroscience for educational reform regarding second language (L2) learning can clearly be seen in the following categories: brain structures and the corpus callosum; neuronal development and the parts of the brain dedicated to language; the Brain Plasticity Theory and Language Mapping; memory and the Information Processing Model; and of course, developing and utilizing a brain-compatible language curriculum that is meaningfully integrated into the basic content areas covered in all grade levels PreK–12. This article describes a recent study designed to address relationships between the corpus callosum and bilingual capacity, and provides recommendations to language teachers regarding brain-based learning through content-based language teaching.*

Key words: *brain compatible, brain structures, content-based language learning, corpus callosum, neuroscience*

Language: *Relevant to all languages*

Introduction

The 1990s marked the "Decade of the Brain," when researchers actively began to study and disseminate new information that could help us to understand how the brain functions. Since then, thousands of new discoveries continue to be reported on a daily basis, especially given the advancement of technology that allows researchers to look inside the brain, examine its physical structure, and monitor the constant activity taking place. Studying how the brain functions through the course of thinking and understanding can provide valuable insight into the learning process. Many researchers predict that the brain research findings highlighted

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