Enhancing English Language Learning at Senior Secondary Level Through Brain

Abstract

This article explores the integration of Brain Gym exercises into the teaching of English Language at the senior secondary level. Drawing on principles of embodied cognition and recent empirical studies, the paper argues that movement-based learning strategies significantly enhance concentration, memory, and language retention. The author's classroom experience is supplemented by performance data, including a 100% board examination pass rate, supporting the pedagogical value of Brain Gym as a neuro-educational tool.

Keywords: Brain Gym, English Language Teaching, Neuro-Education, Senior Secondary, Embodied Cognition, Language Acquisition

1. Introduction

The contemporary classroom demands more than content delivery; it requires teaching methods that activate learners cognitively and emotionally. In this context, Brain Gym, a movement-based intervention grounded in neuro-educational research, has emerged as a practical tool for enhancing attention, reducing anxiety, and improving learning outcomes. This paper examines the use of Brain Gym within senior secondary English language instruction, aiming to bridge physical readiness with academic performance.

2. Theoretical Framework

Brain Gym aligns with the principles of embodied cognition, which suggest that cognitive processes are deeply rooted in the body's interactions with the world. The enactment effect further supports the idea that learning is strengthened through physical movement. These theories provide a foundational basis for integrating movement into language instruction.

3. Literature Review

Multiple studies affirm the cognitive benefits of Brain Gym. Pratiwi & Pratama (2020) reported a significant increase in concentration among elementary students using Brain Gym (mean scores from 13.63 to 21.00, $p = 0.000$). Herawati et al. (2024) found that nursing students who practiced Brain Gym showed a rise in high-level concentration from 33% to 74% ($p < 0.001$). Similarly, Manjula & Selvam (2024) demonstrated that Brain Gym significantly improved attention, memory, and alertness in adults aged 35–45.

4. Methodology

In a senior secondary English classroom, Brain Gym was implemented for 5–10 minutes daily over one academic session. Exercises included cross crawls, lazy 8s, and hook-ups. These activities were incorporated before grammar lessons, literary analysis, and writing tasks. Observational data, student feedback, and board exam results were used to evaluate effectiveness.

5. Findings

- A 100% pass rate was achieved in the board examination for English Language, with several students securing distinctions.
- Students reported increased concentration, reduced stress, and improved comprehension.
- Teachers observed more active participation and greater task persistence during lessons.

6. Discussion

Brain Gym enhanced cognitive readiness, providing a kinesthetic entry point into complex tasks such as text analysis and structured writing. The strategy proved inclusive, benefiting visual, auditory, and kinesthetic learners. Movement breaks also contributed to emotional regulation and classroom harmony.

7. Conclusion

The integration of Brain Gym into English language instruction demonstrates measurable benefits in academic performance and learner engagement. Given its alignment with cognitive science and inclusivity principles, Brain Gym merits wider adoption in senior secondary pedagogy.

References

- Pratiwi, A., & Pratama, R. (2020). The Effectiveness of Brain Gym on Concentration of Elementary Students. *Scientific Journal of Health Science*, 55(1), 63–72.
- Herawati, S. R., et al. (2024). Brain Gym Improves Concentration Among Nursing Students. *Journal of Cognitive Nursing*, 9(2), 23–30.
- Manjula, R., & Selvam, S. (2024). Impact of Brain Gym on Cognitive Functions in Adults. *International Journal of Cognitive Science*, 6(1), 45–53.
- Jensen, E. (2005). *Teaching with the Brain in Mind*. ASCD.
- Lakoff, G., & Johnson, M. (1999). *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought*. Basic Books.

Author Note

Correspondence concerning this article should be addressed to [SUNEETA SINGH], [GHS MANSOORWAL DONA], [SUNEETAMAHI123@GMAIL.COM].