

Presentation

**NEEDS ANALYSIS OF MOVEMENT-BASED
EDUCATIONAL GAMES
FOR VOCABULARY DEVELOPMENT AMONG
ELEMENTARY SCHOOL STUDENTS**

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The Problem

Children learn best in motion — but classrooms keep them still.

1

Rote memorization fails young learners

Conventional drills lead to weak vocabulary retention and hurt reading comprehension later on.

2

Digital tools ignore the body

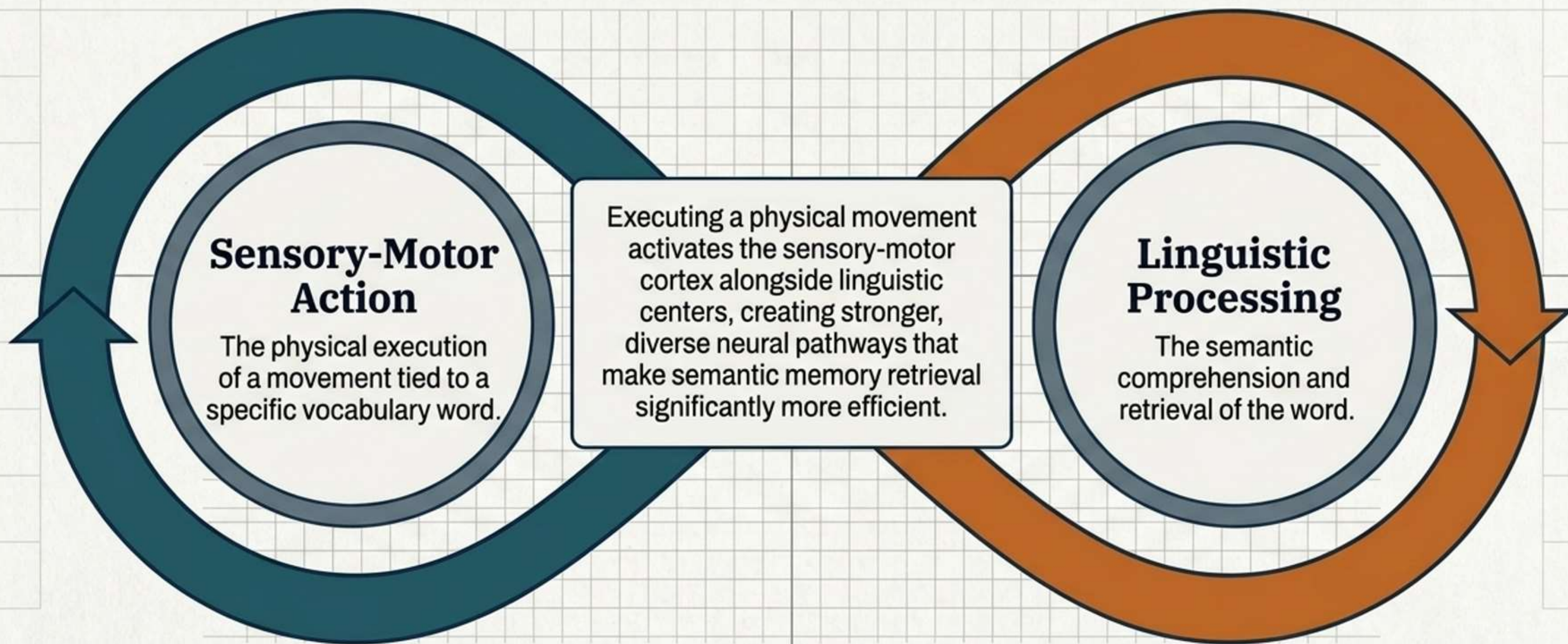
Most language apps keep children sedentary, contradicting their natural drive to move and play.

3

No structured kinesthetic curriculum

Teachers lack ready-made, movement-based digital materials built specifically for vocabulary teaching.

The Dual-Coding Neural Loop



GAME-BASED INSTRUCTION

★ MAKING LEARNING ACTIVE, FUN, AND MEMORABLE! ★

Games turn new vocabulary into actions, sounds, and experiences so students understand better and remember longer. ♡

EXAMPLE ACTIVITY

In a listening & action game like "Simon Says", the teacher gives instructions with vocabulary. Students listen and do the action only when the teacher says "Simon says...".



HOW IT WORKS

1. HEAR



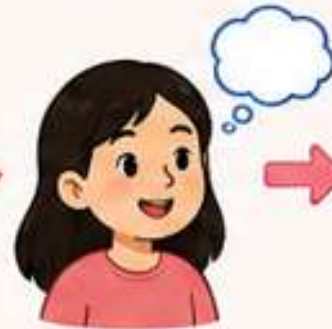
Students listen to the word or instruction.

2. MOVE



Students do the action (kinesthetic response).

3. THINK



Students connect the word with meaning.

4. REMEMBER



The brain stores the word through multiple pathways.

BRAIN IN ACTION

Auditory Cortex
Hears the words (sound input)

Motor Cortex
Controls body movements (kinesthetic response)

Hippocampus
Stores and organizes new vocabulary into memory

Prefrontal Cortex
Focuses attention, makes decisions (when to act) and solves problems

When students **listen**, **move**, and **think** together, more parts of the brain work together, creating stronger and longer-lasting memories.

WHY IT HELPS



Improves memory retention through repetition and meaningful actions.



Increases engagement and motivation.



Deepens understanding of vocabulary in real contexts.



Builds confidence through success in play.

INTEGRATING AUDIO, KINESTHETIC, AND BRAIN MECHANISM

AUDIO (LISTENING)



- Students hear clear words and instructions.
- Helps the brain recognize and process the sounds of language.



KINESTHETIC (MOVING)



- Students use their bodies to act out the words.
- Movement helps connect the word with meaning in the brain.



BRAIN MECHANISM



- Multiple brain areas are activated at once.
- Stronger connections make words easier to remember and use.



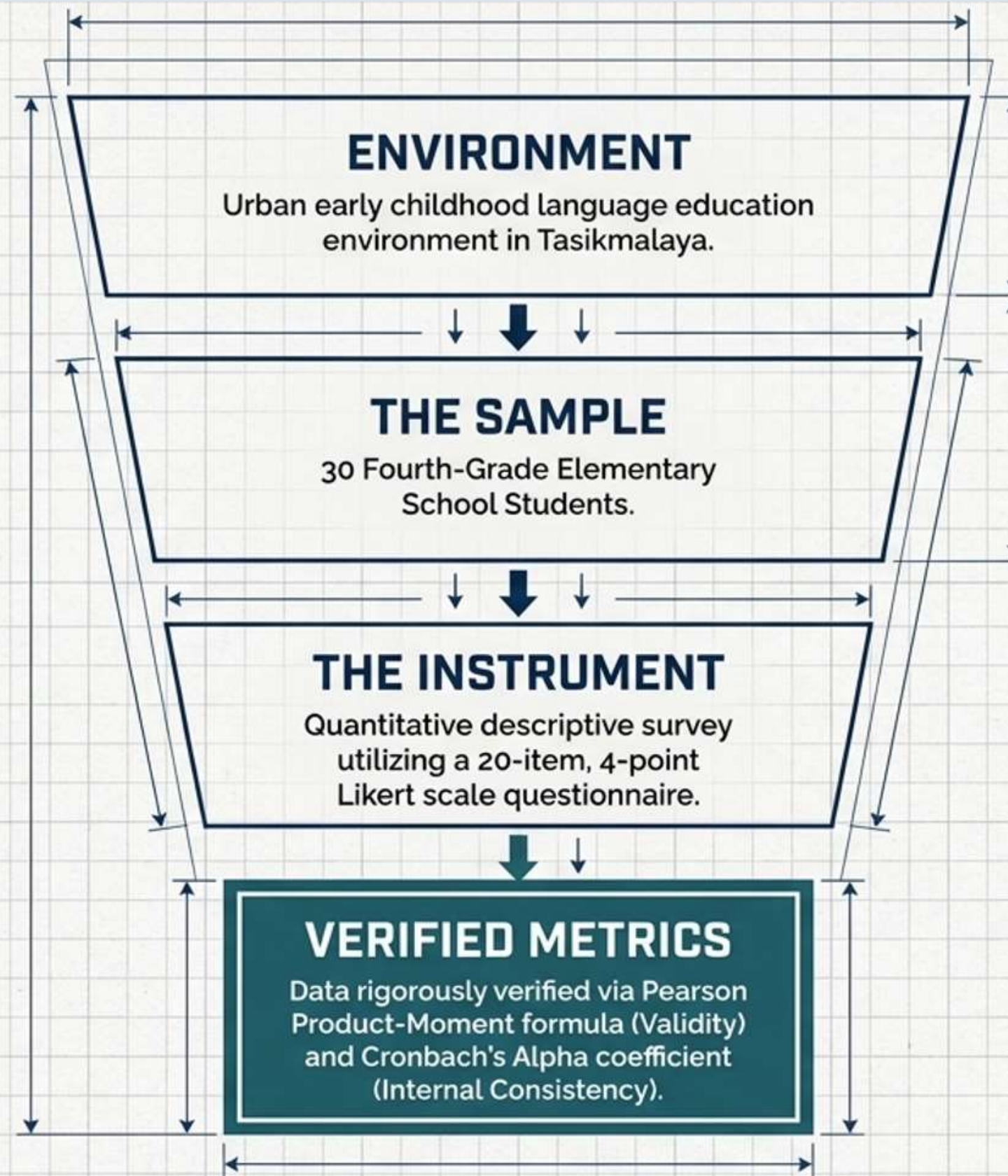
THE RESULT



- ✓ Stronger Memory
- ✓ Better Vocabulary
- ✓ Active Learners
- ✓ More Fun in Learning!

Methodology

A quantitative descriptive survey capturing an authentic snapshot of student needs.



The Four Indicators of Need

01

Learning Style & Kinesthetic Interest

Student tendency toward physical play.

02

Conceptual Learning Difficulties

Specific obstacles in understanding and memorizing English vocabulary.

03

Facility Readiness

Baseline availability of supporting learning media for execution.

04

Implementation Expectations

Explicit student desire for interactive, movement-based instruction.

Overall Finding

**Students are highly in need
of movement-based learning**

86.5%

Cumulative need percentage across all 20 questionnaire items
(Overall average score: 519 out of a possible 600)

NEED CATEGORY SCALE

76–100%

High

51–75%

Moderate

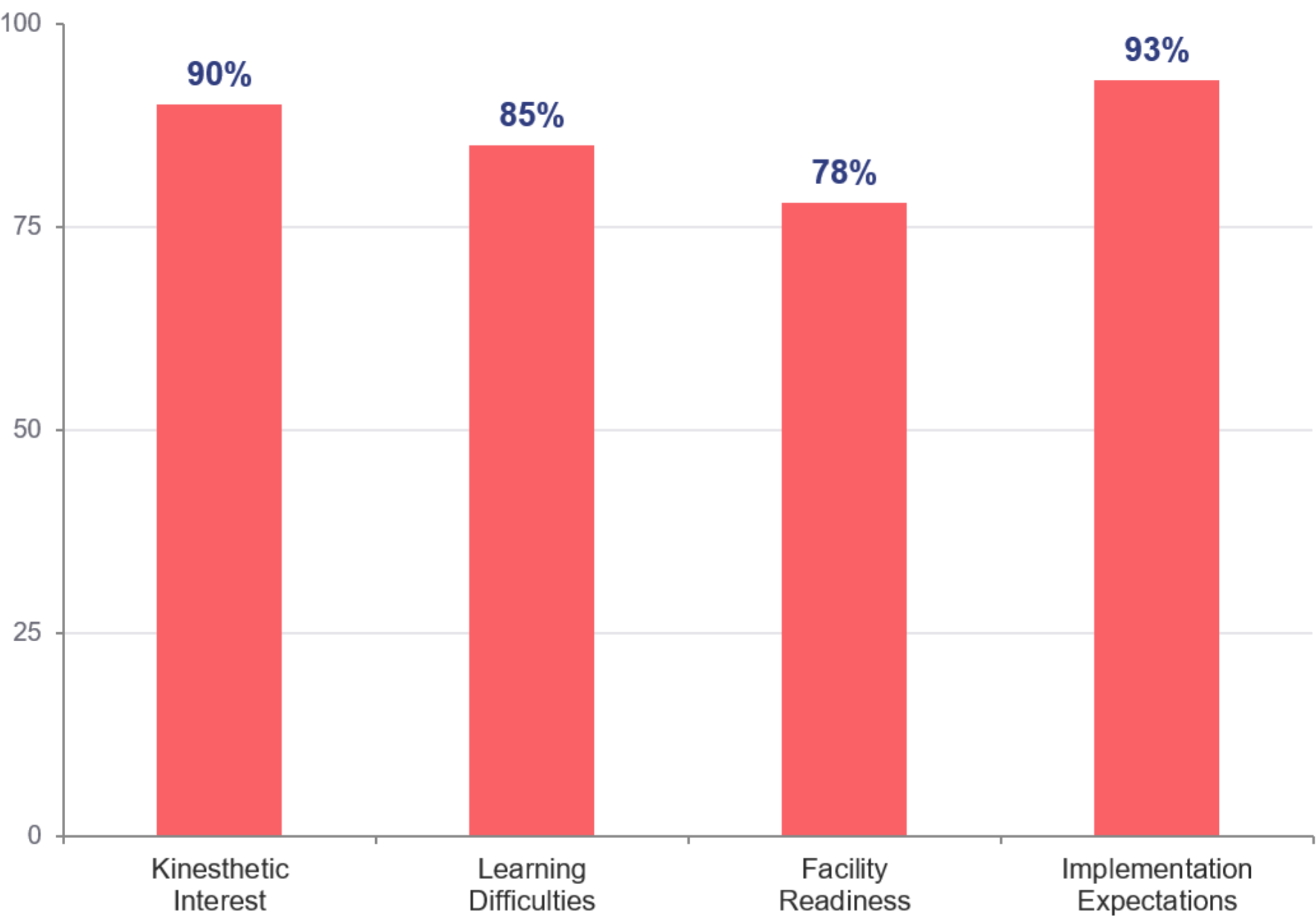
≤50%

Low

The study's 86.5% result places it firmly in the “High” / highly-in-need category.

Results by Indicator

All four need indicators scored in the High category (76–100%).



RAW SCORES

Kinesthetic Interest 540 / 600	90%
Learning Difficulties 510 / 600	85%
Facility Readiness 468 / 600	78%
Implementation Expectations 558 / 600	93%

Conclusion

There is an urgent, evidence-backed demand to move away from sedentary, desk-bound teaching toward movement-based educational games for English vocabulary development.



Natural fit

Kinesthetic play matches young learners' developmental needs far better than desk-bound drills.



Ready environment

Schools already have adequate institutional and facility readiness to support active methods.



Dual benefit

A structured, game-based kinetic framework can boost vocabulary retention and physical health together.

Phase 1 Imperatives: Curriculum & Environment

Immediate, practical steps to embed physical movement directly into the core language curriculum without requiring prohibitive budgets.

1.

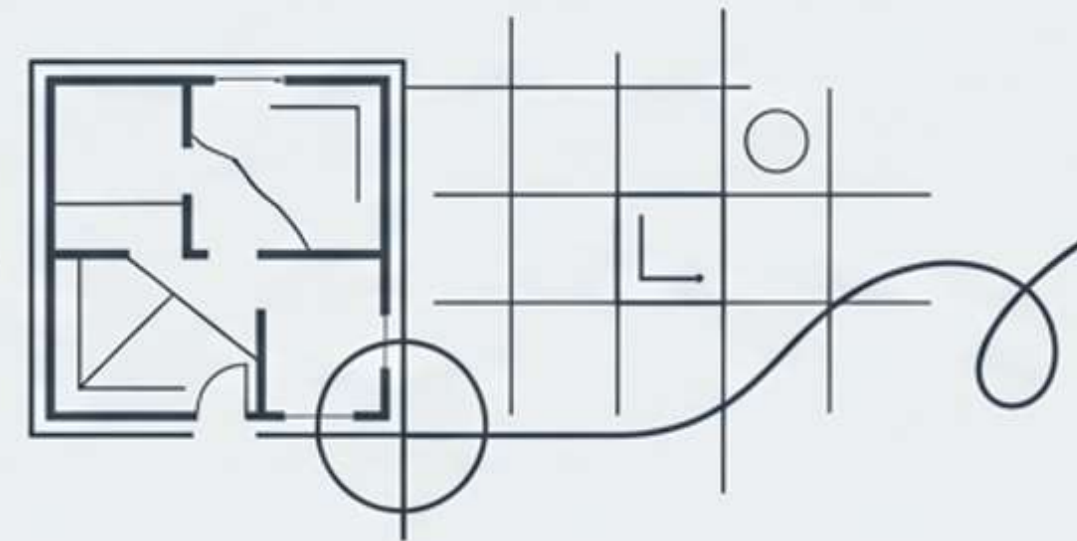


Restructure Lesson Plans

Integrate kinesthetic activities for young learners.

Shift away from desk-bound drills. Introduce simple instructions and vocabulary targets through active physical responses. Allow students to map language meaning directly onto bodily movements.

2.



Deploy Low-Cost Movement Games

Maximize existing school facilities.

Educational movement games do not require expensive or advanced technology. Utilize creative spatial management and simple tools to transform open classroom spaces into safe, dynamic language play environments.

Phase 2 Imperatives: Systemic Support & Scaling

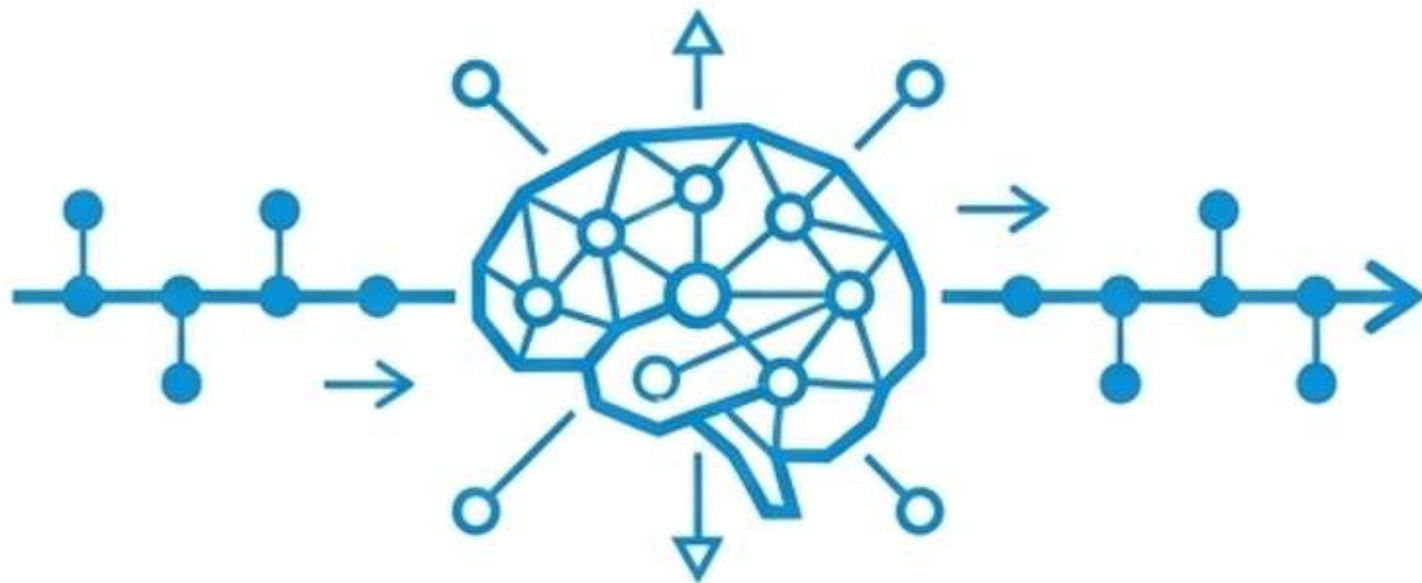
To ensure long-term efficacy, educators must be equipped with active pedagogy management skills, supported by ongoing empirical validation.



3. Professional Teacher Training

Stakeholders must organize specialized workshops on movement-based learning principles.

Goal: Equip primary teachers with practical classroom management skills to guide energetic physical play while maintaining rigorous academic focus.



4. Longitudinal Empirical Research

Move beyond basic needs assessment. Future research must investigate the long-term impacts of kinetic games on deep conceptual mastery, memory retention over extended periods, and experimental group comparisons.

The image features a light beige background with decorative floral and leaf patterns in the corners. The top-left and bottom-right corners have large, stylized leaves in shades of orange and red, with some leaves having black outlines. The bottom-left corner has a dark brown circular shape with a leaf pattern. The top-right corner has a white circular shape with a leaf pattern. The text "THANK You" is centered in a dark green, serif font.

THANK
You