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The Effects of Flipped Classroom on Basketball Learning: A Systematic Review

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ADMINISTRATIVE INFORMATION

Support - No support.

Review Stage at time of this submission - Data analysis.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 21 April 2025 and was last updated on 21 April 2025.

INTRODUCTION

Review question / Objective To investigate the effects of the flipped classroom on basketball learning.

Condition being studied There are several reviews that investigated the effects of flipped classroom on physical education, but no review has specifically examined flipped learning in basketball teaching.

METHODS

Participant or population Basketball learning.

Intervention Flipped Classroom.

Comparator Traditional teaching method.

Study designs to be included RCT, nRCT.

Eligibility criteria 1. Studies involving learners at any educational stage (e.g., primary, secondary, university) where basketball is a primary context of instruction.2. The study must implement a flipped classroom model (FCM), where instructional content is delivered before class (e.g., online videos, readings) and class time is used for interactive, skill-based learning in basketball.3. Studies must include a control group that underwent a traditional teaching method (face-to-face) (e.g., lecture-based or coach-centred instruction without pre-class learning components).4. Empirical and peer-reviewed journal articles5. Studies must report at least one of the following outcomes related to basketball learning or teaching effectiveness:(1) Cognitive outcomes (e.g., game understanding, tactical awareness, decision-making).(2) Skill development (e.g., dribbling, shooting, passing, defence).(3) Physical performance (e.g., agility, endurance, reaction time).(4) Motivational and psychological outcomes (e.g., engagement, self-efficacy, confidence, intrinsic motivation).(5) Pedagogical effectiveness (e.g., student-centred learning, instructor perceptions, instructional efficiency).6. Studies written in English.

Information sources Web of Science, Scopus, PubMed, and EBSCOhost, google scholar.

Main outcome(s) (1) population characteristics (sex, educational level, major); (2) instrument; (3) study design; (4) intervention; (5) comparison; (6) flipped classroom stages; (7) course characteristics; (8) measurement; (9) outcome.

Quality assessment / Risk of bias analysis The 14-item"Qualsyst" was used.

Strategy of data synthesis The extracted data were analyzed following the guidelines of the Centre for Reviews and Dissemination.

Subgroup analysis NA.

Sensitivity analysis NA.

Language restriction English.

Country(ies) involved China.

Keywords blended learning; flipping; learning outcome; motivation; engagement.

Contributions of each author

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