

Research on the Reconstruction of the College Basketball Teaching Evaluation System from the Perspective of Core Literacy

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Abstract: *The introduction of the core literacy concept imposes an ontological turn requirement on college basketball teaching evaluation, shifting from skill testing to literacy generation. The traditional evaluation paradigm, confined to the single dimensions of technology-centered and physical fitness-centered approaches, struggles to respond to the comprehensive educational value of basketball in terms of sports cognition, health behavior, and sports ethics. On the basis of clarifying the historical evolution and structural limitations of the evaluation paradigm, this study establishes a three-dimensional evaluation index system centered on the hierarchical construction of motor ability, the behavioral translation of health behavior, and the situational representation of sports ethics. Furthermore, this study constructs an evaluation structure featuring multi-subject collaboration, an evaluation model integrating formative and summative assessments, and a linkage mechanism between evaluation results and teaching improvement. This research aims to form a college basketball teaching evaluation system that matches the educational goals of core literacy, thereby providing a reference for the theoretical deepening and structural optimization of physical education teaching evaluation.*

Keywords: *core literacy; college basketball teaching; teaching evaluation system; evaluation dimensions; operational mechanism*

Introduction

College basketball teaching evaluation bears multiple functions, including diagnosing the learning process, guiding the development of literacy, and optimizing teaching decisions. Its scientific nature and appropriateness directly affect the quality and effectiveness of physical education teaching. Although the traditional evaluation system has long taken technical standardization and physical fitness indicators as its core references and possesses operability in skill measurement and physical fitness assessment, it fails to fully capture students' developmental status in terms of tactical cognition, cooperative coordination, sports habit formation, and internalization of sports character, thereby forming a structural mismatch between the evaluation and the educational goals of core literacy. This study focuses on the reconstruction of the college basketball teaching evaluation system from the perspective of core literacy. By sorting out the evolution of evaluation paradigms and analyzing their limitations, this study clarifies the logical basis for the reconstruction of the evaluation system. On this basis, it constructs an evaluation indicator system covering three dimensions—motor ability, health behavior, and sports ethics—and designs the corresponding evaluation structure and operational mechanism, in order to provide theoretical support for the theoretical construction and systematic optimization of college basketball teaching evaluation.

1. A Theoretical Examination of College Basketball Teaching Evaluation Under the Guidance of Core Literacy

1.1 The Historical Evolution and Limitations of the College Basketball Teaching Evaluation Paradigm

The evolution of the college basketball teaching evaluation paradigm presents a progressive trajectory from a technology-centered approach to a physical fitness-centered approach, and then to a focus on comprehensive abilities. The early evaluation system took the standardization of sports techniques as its core criterion, measuring students' mastery of basketball skills through decomposed

movement scoring and standard-based testing. This paradigm narrowed basketball teaching down to the mechanical repetition of technical movements, neglecting students' decision-making ability and adaptive performance in real-game situations. Subsequently, the physical fitness-oriented evaluation paradigm incorporated physical function indicators into the evaluation scope, attempting to compensate for the lack of attention to health promotion in purely technical evaluation. However, this type of evaluation still remained at the level of biological data collection and failed to touch upon the deeper educational value of basketball as a cultural practice and social carrier^[1].

The structural limitation of the existing evaluation paradigm lies in the misalignment between the evaluation objectives and the essence of teaching. Both the technology-based and physical fitness-based evaluation logics place students in a passive receiving position, turning evaluation into an externally imposed standard test rather than an organic component of the teaching process. In terms of evaluation dimensions, both paradigms exhibit an obvious tendency toward simplification. Although technical indicators and physical fitness data can be quantified, they fail to capture students' authentic developmental status in areas such as cooperation, tactical understanding, situational adaptability, and sports character. More critically, the existing evaluation lacks attention to the generative process of students' core literacy, setting evaluation nodes at the end of a unit or semester, which severs the intrinsic connection between evaluation and the learning process. As a result, evaluation information cannot effectively feed back into teaching adjustments, forming an operational pattern in which evaluation and teaching are alienated from each other.

1.2 The Ontological Inquiry of Core Literacy into Basketball Teaching Evaluation

The introduction of core literacy raises an ontological re-examination of college basketball teaching evaluation. Core literacy emphasizes an individual's comprehensive ability to mobilize knowledge, skills, and attitudes in complex situations. Its integrative characteristic requires that evaluation no longer be satisfied with single-dimensional skill testing, but rather focus on the synergistic development of students' cognition, behavior, and emotion in basketball contexts. The uniqueness of basketball lies in its instant decision-making in open sport situations, cooperative collaboration under role division, and behavioral norms constrained by rules. These characteristics determine that basketball teaching evaluation must go beyond the surface measurement of technical proficiency and delve into the constructive process of students' sports cognition, the trajectory of health behavior formation, and the embodied manifestation of sports ethics.

Examined from an ontological perspective, basketball teaching evaluation under the vision of core literacy completes a paradigm shift from “assessment of learning” to “assessment for learning.” Evaluation is no longer regarded as an independent stage after the conclusion of teaching, but rather as a value judgment and information feedback system embedded throughout the entire teaching process. The object of evaluation shifts from static skill stock to dynamic literacy generation, focusing on students' progressive development of motor ability, continuous formation of health behavior, and gradual internalization of sports ethics during the basketball teaching process. This ontological turn re-establishes the symbiotic relationship between evaluation and teaching, making evaluation an intrinsic element for diagnosing the learning process, optimizing teaching strategies, and promoting students' self-cognitive construction, rather than an additional procedure external to teaching activities.

1.3 The Logical Basis and Core Tensions of Evaluation System Reconstruction

The logical basis for the reconstruction of the evaluation system is established in the deep coupling between the three dimensions of core literacy and the characteristics of basketball. The concretization of the motor ability dimension in basketball teaching is manifested as the hierarchy of technical mastery, the situational nature of tactical application, and the stability of game performance, which determines that the evaluation indicators need to cover a multi-level structure ranging from basic skills to complex game performance. The translation of the health behavior dimension into the basketball context points to the continuity of sports participation, the ability to avoid sports risks, and the level of healthy lifestyle formation, requiring that the evaluation be able to capture students' behavioral performances in extracurricular autonomous exercise, sports injury prevention, and the application of scientific training methods. The alignment between the sports ethics dimension and basketball is shown in the consciousness of rule compliance, the effectiveness of teamwork, the resilience in coping with adversity, and the sense of responsibility in fulfilling roles. The cultivation of these characters needs to be evaluated in real game situations and cooperative tasks^[2].

Several core tensions need to be addressed during the reconstruction process of the evaluation system. The tension between quantitative evaluation and qualitative evaluation is manifested as the contradiction between the comparability of technical indicators and the contextual nature of ethical behaviors. Relying solely on quantitative indicators makes it difficult to fully present the overall picture of students' literacy development, whereas over-reliance on qualitative descriptions may weaken the objectivity standards of evaluation. The tension between process evaluation and outcome evaluation concerns the timing arrangement of evaluation. Excessively strong process evaluation may lead to redundant evaluation information and reduced teaching efficiency, while neglecting process evaluation makes it difficult to achieve diagnostic and feedback functions. The tension between unified standards and individual differences stems from the fact that basketball, as a sport, requires both adherence to technical norms and respect for objective differences in students' physical conditions, athletic foundations, and learning styles. How to embed differentiated evaluation paths within a unified evaluation framework becomes an issue that must be addressed in the system reconstruction.

2. Dimensional Deconstruction and Element Anchoring in the Reconstruction of the College Basketball Teaching Evaluation System

2.1 Hierarchical Construction of Evaluation Indicators for the Motor Ability Dimension

The construction of evaluation indicators for the motor ability dimension follows a hierarchical and progressive logic from basic skills to complex situational performance. The underlying indicators focus on the standardization of specialized techniques, covering the movement structure and execution quality of basic skills in basketball, such as passing, receiving, dribbling, shooting, moving, and defending. Evaluation at this level concerns students' mastery and application stability of technical movements, and it collects data through a combination of technical scoring and standard-based testing. The intermediate-level indicators target the ability to apply tactical awareness, including the coordination of offensive tactical cooperation, the rationality of defensive tactical positioning, and the ability to understand and execute tactical changes. Evaluation at this level breaks through the isolated detection of single technical points and shifts toward the assessment of students' tactical cognition and real-time decision-making ability^[3].

The top-level indicators are positioned as integrative evaluation of motor performance, focusing on the comprehensive presentation of technical application and tactical execution in confrontational game situations. These evaluation indicators at this level cover technical stability, tactical adaptability, rhythm control ability, and decision-making quality in critical situations during game participation, emphasizing the integrated output of motor ability in authentic basketball contexts. The internal logic of this hierarchical construction lies in transforming motor ability from discrete skill points into a continuous chain of literacy development, enabling the evaluation to capture the process of students' ability progression from technical mastery to tactical application and then to game performance, while simultaneously providing differentiated evaluation reference standards for students at different learning stages.

2.2 Behavioral Translation of Evaluation Indicators for the Health Behavior Dimension

The construction of evaluation indicators for the health behavior dimension needs to complete the translation process from abstract behavioral intention to concrete behavioral representation. The indicator of sports participation initiative focuses on the degree of students' behavioral engagement in the basketball teaching context, including the completeness of pre-class preparation behaviors, the density of participation in classroom practice sessions, and the frequency and duration of participation in extracurricular autonomous basketball activities. Through the recording and statistical analysis of these observable behaviors, this indicator reflects the actual state of students' health behavior formation. The indicator of sports risk avoidance and protection ability points to students' mastery and application of knowledge regarding sports injury prevention, covering the standardization of warm-up activities, the rationality of sports equipment selection, the awareness of self-monitoring of exercise load, and recovery behaviors after injuries. These indicators transform health knowledge into evaluable behavioral performances^[4].

The continuity and scientific level of exercise habits constitute another important group of indicators for health behavior evaluation. The indicator of autonomous exercise behavior focuses on students' persistence in sports participation under conditions without external supervision, including the

frequency of basketball practice during spare time, the arrangement of exercise content, and self-management ability. The indicator of sports nutrition and recovery behavior evaluates students' understanding and implementation of scientific training principles, covering the rationality of hydration and nutritional supplementation before and after exercise, as well as the application of relaxation and recovery methods after training. The core of behavioral translation lies in transforming health behaviors from abstract concepts into specific behavioral units that can be collected, recorded, and judged within the teaching context, thereby endowing the cultivation process of health literacy with operability and traceability in evaluation.

2.3 Situational Representation of Evaluation Indicators for the Sports Ethics Dimension

The construction of evaluation indicators for the sports ethics dimension needs to anchor the specific situational characteristics of basketball and embed ethical elements into specific behavioral fields of sports. The indicators of rule compliance and fair play point to students' rule cognition and behavioral performance in basketball teaching activities, covering the degree of understanding of game rules, behavioral reactions in cases of officiating disputes, attitudes toward referees' decisions, and the ability to exercise self-restraint in confrontational situations. Relying on the highly rule-governed nature of basketball, these indicators transform abstract rule awareness into behavioral judgments in specific contexts. The indicators of teamwork and role responsibility focus on behavioral performance under the strong cooperative characteristics of basketball, including awareness of off-ball movement and screening in offensive cooperation, help defense and communication behaviors in defensive collaboration, the fulfillment of duties based on team role positioning, and team-supportive behaviors in the face of mistakes^[5].

The indicators of adversity coping and emotion regulation represent the embodied manifestation of sports ethics in high-intensity confrontational situations of basketball. This group of indicators focuses on students' behavioral reactions under pressure situations such as being behind in score, facing unfavorable calls, and making personal mistakes, covering the stability of emotional control, the degree of sustained effort in adversity, encouraging behaviors toward teammates, and respectful behaviors toward opponents. The indicators of responsibility taking and awareness of respect point to students' behavioral expressions regarding team goals and collective interests, including attendance discipline in training and games, the consciousness of undertaking assigned team roles, and respectful behaviors toward opponents, referees, and coaches. The core of situational representation lies in transforming sports ethics from abstract value statements into observable and judgeable specific behavioral indicators within the basketball teaching context, thereby establishing the evaluation of ethics on the basis of behavioral evidence from real sports situations.

3. Paths and Operational Mechanisms for the Reconstruction of the College Basketball Teaching Evaluation System

3.1 Restructuring the Evaluation Structure with Multi-Subject Collaboration

The restructuring of the evaluation structure with multi-subject collaboration aims to break through the single pattern in traditional evaluation where teachers serve as the sole evaluators, and to construct a multi-subject evaluation network that includes teachers, students, peers, and the self. Teachers in this structure assume the functions of professional diagnosis and criterion referencing, and they are responsible for the evaluation of technical movement standardization, the judgment of tactical awareness, and the comprehensive assessment of overall academic performance. Their evaluation is based on professional competence and teaching experience, constituting a benchmark reference within the evaluation system. Students participate in the evaluation process in the form of self-assessment. Through methods such as reviewing technical video recordings, reflecting on game performance, and writing learning logs, students make reflective judgments on their own mastery of motor skills, state of learning engagement, and process of literacy development. This form of evaluation helps to enhance students' metacognitive abilities and learning autonomy.

Peer evaluation serves a contextual supplementary function within the multi-subject structure. It takes advantage of the frequent interaction and close observation among students during basketball teaching activities, enabling mutual evaluation of role fulfillment in collaborative cooperation, behavioral performance in game situations, and participation attitudes in daily training. The advantage of peer evaluation lies in its ability to capture micro-interactive situations and behavioral details in peer

interactions that are difficult for teacher observation to reach, thereby forming an information source complementary to teacher evaluation. The collaborative relationship among multiple subjects is reflected in the cross-validation and mutual calibration of evaluation information. Teacher evaluation provides a reference framework for peer evaluation and self-evaluation, while peer evaluation and self-evaluation supplement teacher evaluation with contextual information. The evaluation results from each subject form an operational relationship of mutual verification and correction within the evaluation system, jointly enhancing the reliability and validity of evaluation conclusions^[6].

3.2 Design of an Integrated Model of Formative and Summative Evaluation

The integrated model of formative and summative evaluation constructs a continuum in evaluation timing and a complementary structure in function. Formative evaluation is embedded in each unit and class session of basketball teaching, and it adopts various forms such as classroom performance records, skill portfolios, stage-based tests, and contextualized task evaluations to collect dynamic data on students' developmental trajectories of motor ability, the process of health behavior formation, and the state of sports ethics performance. The functional positioning of this evaluation form lies in providing diagnostic information about the learning process, serving as a basis for teaching adjustments and learning interventions. Its collection frequency and time nodes match the progressive logic of basketball teaching content, forming an evaluation data flow that operates synchronously with the teaching process.

Summative evaluation assumes the function of comprehensive judgment in the integrated model, providing a holistic assessment of students' literacy development levels across the three dimensions of motor ability, health behavior, and sports ethics at the end of a semester or teaching unit. The core of the integrated model lies in the data integration and weight allocation between formative evaluation and summative evaluation. The learning trajectory data accumulated through formative evaluation provide sufficient evidential support for summative evaluation, while the results of summative evaluation synthesize and confirm the stage-based judgments of formative evaluation. The integration between the two is not a simple data superposition, but rather the establishment of a logical chain of temporal association, so that the progression trajectory of ability, the curve of behavior formation, and the developmental nodes of character recorded in formative evaluation are integrally presented in summative evaluation, forming a complete chain of evaluation evidence from process to outcome.

3.3 The Multidimensional Feedback of Evaluation Results and the Linkage Mechanism with Teaching Improvement

The multidimensional feedback mechanism of evaluation results breaks through the limitation of traditional evaluation that uses scores or grades as the sole output form, and it constructs a differentiated feedback structure for different users. The feedback output for students takes the form of skill diagnosis reports, presenting the achievement status of indicators at each level of the motor ability dimension, the behavioral performance characteristics of the health behavior dimension, and the situational performance descriptions of the sports ethics dimension. It also provides longitudinal comparisons of literacy development trajectories and cross-sectional class reference information, enabling students to clearly identify their own learning progress and areas for improvement. The feedback output for teachers is integrated into class-level overall evaluation data analysis and individual student evaluation profiles, presenting the distribution characteristics of students across dimensions, group trends in ability development, and identification information of typical learning difficulty types, thereby providing data support for teaching strategy adjustments.

The teaching improvement linkage mechanism realizes the transformation channel from evaluation results to teaching decisions, embedding evaluation information into the dynamic adjustment process of teaching design. Skill diagnosis feedback provides a basis for the selection of basketball teaching content and the allocation of class hours. When evaluation data show that students generally perform poorly at the tactical awareness level, teaching strategies accordingly increase the proportion of situational tactical drills. The evaluation results of the health behavior dimension are used to guide the optimization of classroom organization forms. If students show a declining trend in the indicator of sports participation initiative, teaching arrangements can add task-driven exercises and group competition formats to increase participation density. The evaluation information of the sports ethics dimension provides a reference for classroom management and situation creation. When the indicators of adversity coping and emotion regulation reveal that students have general difficulties in confrontational situations, adaptive training content under pressure situations can be added to the

teaching design. This linkage mechanism ensures that evaluation is no longer detached from teaching, but rather becomes an endogenous driving force for the continuous optimization of teaching.

Conclusion

This study has conducted a systematic theoretical reconstruction of the college basketball teaching evaluation system from the perspective of core literacy. The study clarifies that the logical basis for the reconstruction of the evaluation system lies in the deep coupling between the three dimensions of core literacy and the characteristics of basketball. It constructs a three-dimensional evaluation indicator system featuring the hierarchical structuring of motor ability, the behavioral translation of health behavior, and the situational representation of sports ethics, and it forms an operational mechanism characterized by multi-subject collaboration, the integration of formative and summative evaluation, and the linkage between evaluation and teaching. This reconstruction transforms evaluation from an external standard test of teaching into an endogenous dynamic system embedded throughout the entire teaching process, realizing a paradigm shift from “assessment of learning” to “assessment for learning.” Subsequent research can further explore the weight allocation and quantification methods of evaluation indicators in each dimension, develop supporting evaluation tools and data collection techniques, and test and optimize the operability and effectiveness of the system in basketball teaching contexts at different levels of colleges and universities.

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