

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

Ziwei Liu*

Dalian Art College, Dalian, 116600, China

*Corresponding author: liuziwei519@sina.com

Abstract: With the introduction of the idea of core literacy, the aim of college basketball teaching evaluation has shifted from assessing skills to fostering literacy. The old evaluation model is too narrow; it only covers the two main categories of technology-oriented and body-oriented methods and fails to consider all aspects of the overall educational value of basketball, such as sports cognition, healthy living and sportsmanship. Given that there are many deficiencies in the current evaluation system for health literacy, we propose a three-dimensional index system based on the three links of hierarchical construction of motor ability, behavioural translation of health behaviour and situational representation of sports ethics. Generally speaking, an evaluation system has been established, a model of assessment that includes formative and summative evaluations has been designed, and links have been made between the results of the assessment and adjustments in teaching. The purpose of this paper is to build a college basketball teaching evaluation system in line with the educational goals of core literacy, and thus provide a reference for theoretical enrichment and structural optimisation of physical education teaching evaluation.

Keywords: core literacy, college basketball teaching, teaching evaluation system, evaluation dimensions, operation mechanism

Introduction

The purposes of the assessment of teaching in college basketball are to find problems in students' learning, develop all kinds of literacy abilities, and revise teaching plans. It is a good and suitable way to improve the quality of physical education teaching. The traditional assessment system has focused on the standardisation of technology and physical fitness indicators for a long time, and although it can measure skills and physical fitness, it does not fully reflect students' growth in terms of tactical cognition, cooperative coordination, the formation of sports habits and the internalization of sports character; thus, there is a structural mismatch between the assessment and the educational goals of core literacy. The construction of the college basketball teaching evaluation system based on core literacy is the topic of this paper. According to the classification and analysis of the development of evaluation models, this paper will provide reasons for the reform of the current evaluation system. Based on the above, an evaluation index system for the three dimensions of motor ability, health behaviour and sports ethics has been built, corresponding evaluation structures and operating modes have been designed, and thus theoretical support has been provided for the construction and systematic optimisation of college basketball teaching evaluation.

1. A Theoretical Study of College Basketball Teaching Evaluation in the Context of Core Literacy

1.1 Historical Development and Problems in the College Basketball Teaching Evaluation Paradigm

Changes in the teaching evaluation system for college basketball have kept up with the development of technology and changes in student fitness, and now it focuses on the all-around ability of students. The first evaluation system aimed to standardise sports skills, so it divided up all the various movements and used standardised tests to assess students' basketball abilities. The former mode of teaching has paid too much attention to the mechanics of skills and ignored students' judgment and adaptation in actual games. Then, the physical-fitness-oriented evaluation model added indicators of physical function to the list of assessment items to compensate for the lack of focus on health

promotion in the previous technical evaluation. However, the above type of assessment is still at the level of collecting biological data and does not cover the deeper educational value of basketball as a cultural practice and social carrier^[1].

The Structure of the current evaluation system does not meet the aims we wish to achieve in teaching. The logic of both the technology-based and the physical-fitness-based evaluations has left the students in a passive reception mode, and the purpose of the evaluation has been reduced to external norm assessment rather than being integrated with teaching. Both models have reduced the number of evaluation indices to some extent. Although there are technical indices and physical fitness data, they do not show how much students have improved in terms of cooperation, tactical thinking, situation adaptation and sportsmanship. More importantly, the current evaluation does not consider the generation process of students' core literacy and sets evaluation nodes only at the end of a unit or a semester; thus, the link between assessment and teaching is weak. Therefore, the evaluation information cannot be used to modify teaching in an effective way, and an operation mode is formed in which evaluation and teaching are separate.

1.2 The Ontological Inquiry of Core Literacy in Basketball Teaching Evaluation

The introduction of core literacy has changed the ontology of college basketball teaching evaluation. Core literacy refers to one's general ability to use knowledge, skills and other attributes in various situations. Given that it is all-encompassing, assessment should no longer be based on a single-skill test but rather on how well students' cognition, behaviour and emotion work together in basketball. Basketball is a very good sport because it needs fast thinking in an open area, cooperation among players according to their positions, and knowledge of the rules. Based on the above, the evaluation of basketball teaching should not only be a simple observation of students' technical skills but also explore how students' sports cognition is developing, how their healthy-living habits have changed, and what ethical values they exhibit in practice.

Ontologically speaking, with the goal of improving basic literacy, the method of evaluating basketball teaching has changed from 'assessment of learning' to 'assessment for learning'. Evaluation is no longer to be conducted at the end of the teaching; rather, it is a set of values and information that is constantly involved in all parts of the teaching process. The object of assessment is no longer a fixed stock of skills but dynamic literacy construction; it refers to the gradual improvement of students' motor skills, the continuous cultivation of good habits, and the progressive assimilation of sportsmanship during basketball class hours. The ontological turn will re-establish the symbiosis of evaluation and teaching; thus, evaluation will be used to understand the progress of students' learning and guide teaching and learning activities so that students can independently construct knowledge rather than have it presented to them.

1.3 Logical Foundation and Basic Conflicts in the Reconstruction of Evaluation Systems

The reasons for rebuilding the evaluation system are that the three types of core literacy are closely related and have different characteristics in basketball. The realisation of the motor ability dimension in basketball teaching can be shown by the hierarchy of technical mastery, the situational nature of tactical application, and the stability of game performance; therefore, the evaluation indicators should cover all levels from basic skills to complex game performance. Based on the translation of the health behaviour dimension in the context of basketball, continuous participation in sports, the ability to avoid sports risks and a healthy lifestyle foundation are required; thus, the evaluation should be able to reflect students' behaviour in extracurricular autonomous exercise, sports injury prevention and application of scientific training methods. The alignment of the sports ethics dimension and basketball can be observed in the consciousness of rule compliance, the effectiveness of teamwork, resilience in the face of adversity, and a sense of responsibility for one's role. The training of these characters should be based on real game conditions and cooperative activities^[2].

Some of the main problems in the reconstruction of the evaluation system need to be solved. There is a conflict between quantitative evaluation and qualitative evaluation; that is to say, the technical indices are not comparable, and the circumstances of ethical behaviour also differ. Only the quantitative indices will not provide a complete picture of the development of students' literacy; at the same time, too much dependence on qualitative descriptions will reduce the objectivity of the evaluation standards. The problem of process evaluation and outcome evaluation is the problem of when to evaluate. If the frequency of process evaluation is too high, there will be an abundance of evaluation data and a decline

in teaching efficiency; at the same time, if there is no process evaluation, diagnosis and feedback will be impossible. The conflict between unified standards and individual differences is that, as a sport, basketball needs to meet technical norms but also consider the different goals of students in terms of physical fitness, athletic foundation and learning style. How to add differentiated assessment paths to a single assessment system will need to be decided in the reconstruction of this system.

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 the evaluation indicators for the motor ability dimension is hierarchical and progressive; that is to say, it covers basic skills and complex situations. The first is the standardisation of special techniques for the movement structure and execution quality of basic skills in basketball, such as passing, catching, dribbling, shooting, moving and defending. At this time, the focus of evaluation is on whether students have learned the technical skills and can use them reliably; at the same time, it is conducted by combining technical scores and standard-referenced tests. The intermediate indicators will be to determine how well students can apply tactical awareness in actual situations, such as in their coordination during offensive tactical cooperation, the rationality of defensive tactical positioning, and their comprehension and response to changes in tactics. At this time, the goal of assessment is to learn how students apply what they have learned and think in real-life scenarios; it is not to find specific shortcomings in skills^[3].

The top-level indicators are general assessments of motor skills that cover the overall appearance of the application of technology and tactical execution in a confrontational situation in a game. At this time, the indices of evaluation are technical stability, tactical flexibility, control over the speed of the game, decision-making under pressure in game situations, and particular attention is also paid to the combined effect of motor skills in actual basketball scenarios. The general idea of the above hierarchy is to build a chain of learning by gradually accumulating individual skill points; as students improve in all aspects, their overall ability in technical skills, tactical thinking and game operation can be tracked continuously through assessment, and differentiated evaluation criteria will be set to guide students at all times in their studies.

2.2 Behavioral Translation of Evaluation Indicators for the Health Behavior Dimension

The construction of evaluation indicators for the health behaviour dimension should change the abstract intention of behaviour into concrete expressions of behaviour. The indicator of the level of initiative in sports participation is how actively students engage in teaching basketball; it includes the extent of preparation behaviour before class, the frequency of participation in in-class practice, and the number and duration of involvement in extracurricular autonomous basketball activities. Record and analyse the observations and statistics of this behaviour to determine the actual situation of the students' health behaviour development. The index of sports risk avoidance and protection ability indicates how well students have learned to prevent sports injuries in their studies, such as whether they can perform warm-up exercises properly, reasonably choose sports equipment, know their own exercise limits, and take precautions against injury. The above indicators can affect people's health behaviour^[4].

Another index of the degree of good behaviour is the regularity and scientific basis of exercise habits. The index of autonomous exercise behaviour is the frequency with which students engage in sports without external motivation; it covers how often they play basketball in their free time, what kind of exercise content they choose, and their own self-regulation ability. The index of sports nutrition and recovery behaviour indicates how well students know about and use scientific training principles, such as why they drink water and take supplements before and after exercise, and what relaxation and recovery methods they use after training. Behavioural translation is to change abstract health behaviour into concrete units of behaviour that can be observed, recorded and evaluated in the teaching environment; thus, it is possible to make the cultivation process of health literacy more operational and traceable in evaluation.

2.3 Situational Representation of Evaluation Indicators for the Sports Ethics Dimension

The construction of evaluation indicators for the dimension of sports ethics should be based on the

actual conditions of basketball and include ethical content in all aspects of behaviour in sports. The index of the degree of rule adherence and fair play shows students' learning of the rules and their behaviour in basketball teaching activities, such as how well they know the game rules, how they act when there are disputes over officiating, their attitude towards referees' decisions, and their ability to self-regulate in confrontational situations. Basketball has many rules, and now students are applying what they have learned about these rules in their behaviour during practice. Indices of teamwork and role responsibility focus on behaviour in light of the high-cooperation demands of basketball, such as awareness of off-ball movement and screening during offensive cooperation, defence and communication behaviour in defensive collaboration, fulfilment of duties according to one's position in the team, and supportive behaviour towards the team after making a mistake^[5].

Indices of adversity coping and emotion regulation are expressions of sports ethics in the high-pressure and confrontational environment of basketball. The set of indices is about students' behaviour in the face of stress at different times, such as when they are behind in scores, face negative comments from teachers, make mistakes, how they manage their emotions under pressure, continue to study despite difficulties, motivate their teammates, and interact respectfully with opponents. The index of responsibility-taking and awareness of respect shows students' behaviour in the pursuit of team goals and the common good, such as their discipline during training and games, their awareness of taking on assigned team roles, and respectful behaviour towards opponents, referees and coaches. The basis for the foundation of situational representation is to change the expression of sports ethics from abstract values to specific, observable and judgeable behavioural manifestations in the context of basketball teaching, so that the assessment of ethics can be based on behavioural evidence obtained from actual sports situations.

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

3.1 Organise an assessment institution with many parties

The restructuring of the evaluation system will have multiple subjects and collaborations; that is to say, we will move away from the old model of single-subject evaluation by teachers alone and build a multi-subject evaluation network that includes teachers, students, peers and oneself. Teachers in this structure will be responsible for the functions of professional diagnosis and criterion reference; they will carry out evaluations of the standardisation of technical movement, judge tactical awareness, and make all-round assessments of students' general academic ability. The two criteria for evaluation are professional ability and teaching experience; they will be used as the basis for assessment. Students can assess themselves and learn from this in turn. Based on the above methods, through the viewing of technical video recordings, analysis of game performance, writing learning logs, etc., students can make self-reflections on their own motor skill abilities, changes in learning interest, and the process of literacy development. The above kinds of tests can help students be more self-aware and learn independently.

Another structure for the group of subjects is peer assessment. It is convenient for students to communicate with and observe each other's behaviour during basketball teaching activities; thus, they can mutually evaluate the performance of roles in cooperative games, conduct behaviour observations in game situations, and learn from daily training. Another advantage of peer assessment is that it can observe the subtle interactions and behaviour of students in small groups that teachers may not be able to notice; thus, it provides teachers with more opportunities to learn about students' learning. Cooperation among many parties can be observed in the cross-validation and mutual calibration of evaluation data. Teacher evaluation provides the foundation for peer assessment and self-assessment, and both peer assessment and self-assessment are also kinds of teacher evaluation. All of the evaluation results of the subjects are used to form a system of mutual verification and correction during the evaluation to improve the reliability and validity of the evaluation results^[6].

3.2 Design of an Integrated Model for Formative and Summative Assessment

Together, the models of formative assessment and summative assessment offer different times and serve different purposes for evaluation. Formative assessments will be carried out at all times in all parts of the basketball teaching, and various methods such as in-class recording, skill portfolios, stage-based tests, contextualized task assessments, etc., will be used to collect dynamic data on the

development of students' motor skills, how they learn good health habits, and their current state of sportsmanship. The purpose of the above evaluation form is to collect data on how well students are learning, and then adjust teaching methods and provide individualised support accordingly. The collection frequency and time of the nodes are in line with the development logic of the basketball teaching content, and this flow of evaluation data is consistent with the teaching process.

Summative assessment aims to present a comprehensive picture of a student's development in all areas by covering the three parts: motor skills, health consciousness and sportsmanship, at the end of a semester or learning unit. The principal contents of the combined model are the data and weights for formative assessment and summative assessment. Learning path data from formative assessments can be used as rich material for summative assessments, and the results of the summative assessments can be combined and cross-referenced with the stage-based judgments made in the formative assessments. The combination of the two is not merely the superposition of data; rather, it is the construction of a logical sequence of temporal association so that the trajectory of ability development, the curve of behaviour formation, and the developmental nodes of character recorded in formative assessments are all integrated in summative assessment to form 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

Not all of the feedback in the evaluation results will be in the form of scores or grades; instead, all kinds of users will have different channels for providing feedback. The feedback output for students is in the form of skill diagnosis reports, and these reports indicate the level of achievement in the indicators at each level of the motor ability dimension, the behavioral performance characteristics of the health behaviour dimension, and the situational performance descriptions of the sports ethics dimension. It can show how the students' literacy development has changed over time and what the general level of literacy in their class is at that time. Feedback for teachers will be combined with an analysis of the overall evaluation data at the class level and individual student evaluation profiles to show the distribution characteristics of students in different dimensions, group trends in ability development, and identification information of typical types of learning difficulties, and this data will then be used to adjust teaching strategies.

The teaching improvement link mechanism is to transmit the results of the evaluation for teachers' decision-making and, based on this evaluation data, revise teaching plans. Based on the results of the skill diagnosis feedback, we will modify the content and mode of basketball teaching in class time. Based on the results of the evaluation data, if the students' performance in tactical awareness is weak, the teaching plan will be adjusted to increase the number of situational tactical drills. According to the assessment results of the health behaviour dimension, we will change the form of classroom organisation. If the index of participation in sports initiatives by students is decreasing, we can add task-oriented problems and group competitions to increase the number of participants. The evaluation data of the sports ethics dimension will be used to guide class management and situation creation. According to the indices of adversity coping and emotion regulation, if the students have general problems in confrontational situations, adaptive training content under pressure conditions will be added to the teaching plan. Therefore, the links in this chain will ensure that the assessment is no longer about evaluating teaching, but rather about motivating teachers to continually improve their own teaching.

Conclusion

Systematic theoretical reconstruction of the college basketball teaching evaluation system from the perspective of core literacy has been carried out in this paper. Based on the above analysis, it has been determined that the foundation for reforming the assessment system is the strong integration of the three aspects of core literacy and the features of basketball. A three-dimensional index system has been developed to gauge the extent of motor skill development, the transfer effect of healthy behaviour, and the situational application of sports ethics, and working modes for coordinating the participation of all parties, as well as formative and summative evaluations and links among assessments and teaching, have also been established. The new idea is to move away from external tests based on standards and build an internal, dynamic system in the course of teaching; thus, the concept will be changed from "assessment of learning" to "assessment for learning". Further research can be carried out to study the

distribution of weights and quantification methods for evaluation indicators at all levels in various dimensions, develop supporting evaluation tools and data collection methods, and test and optimise the operability and effectiveness of this system in basketball teaching at all levels of colleges and universities.

References

- [1] Yu, S. B. (2025). *The mechanism and practical path of digital intelligence technology empowering college basketball teaching*. *Contemporary Sports Technology*, 15(04), 49-52.
- [2] Yang, T. (2024). *Research on the construction of the teaching evaluation index system for basketball specialized courses in physical education majors in Henan universities under the OBE concept*. Master's thesis, Henan University.
- [3] Gu, B. Q. (2024). *Research on the construction of the ideological and political teaching evaluation index system for basketball specialized courses in physical education majors in Jiangxi normal universities*. Master's thesis, Jiangxi Normal University.
- [4] Lian, X. Y. (2023). *Research on the basketball teaching evaluation system from the perspective of big data*. *Sports Vision*, (16), 102-104.
- [5] Liu, X. C. (2021). *Research on the construction of the teaching evaluation index system for basketball specialized courses in Jiangsu university physical education majors based on core literacy*. Master's thesis, Nanjing Normal University.
- [6] Zhang, Y. (2020). *Analysis of the reform ideas of college basketball teaching under the new situation*. *Youth Sports*, (10), 120-121.