

A Study of School Sport Ecological Metaphor Generation

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Abstract

Ecological metaphor as a cognitive approach with a unique embedded world,the expansion of the universal mapping characteristics of its cognitive scope is obviously enhanced,It can provide new growth momentum for the manifestation of the school sport contemporary connotation and spiritual essence. Based on the ecological metaphor theory, documentary method, logical reasoning method,the study of the school sports ecological knowledge is curated,to characterize the spiritual unity, positive correlation and rational functionality of the school sports ecological metaphorical cognitive paradigm, the ecological logic of "education within""inter-education""education together" in school sports is included,the three-dimensional core elements of "sports character- orientation literacy""health behavior-subject literacy""sports ability-practical literacy"are applied, to stimulate the ecological metaphor tension of flourishing branches and leaves,strong trunk and root system development, The school sports ecological cognitive ability is brought into the causal law of the expanded "nature-like view"order. The study found that the value elements generated by a rigorous ecological metaphor theory have more explanatory power in practice, and that these value elements demonstrate the co-cognitive ontology of recognition in a significant value way in the school sport field.

Keywords: Ecological metaphor; ecology; metaphor; school sports

Introduction

Since the 1970s, researchers have paid increasing attention to the study of metaphor. As a cognitive tool for thinking, metaphor has become an indispensable way for human beings to understand the world. Research on metaphor can be traced back more than 2000 years to Aristotle's view of genus to species, species to genus, species to species and from analogical metaphor (Janko R,1987). Since the 1960s, linguists have achieved fruitful results in the study of metaphor in cognitive and functional linguistic aspects. Lakoff G and Johnson M (2008) argue that

metaphor is a mental conceptualization of cognitive thinking that is not limited to language. Since then, the cognitive power of metaphor has been manifested and emphasized. Nowadays, researchers have reached a consensus that metaphor is a fundamental way of thinking about humans to conceptualize and perceive the external world and has become a fundamental part of rational discourse (Niu, Hongbao & Zhao Baoming, 2021). In recent years, with the frequent emergence and deterioration of ecological crises, the ecological worldview, as a new paradigm for scientific research, has provided new concepts of understanding and fundamental followings, objectively promoting the continuous growth of research on the association between metaphor and ecology. Bay, D et al., (2003) conducted a systematic study of the relationship between metaphor and ecology, emphasizing the convergent function of metaphor and ecology. The study of the integration of metaphor and ecology enlightens to involve a specific topic metaphor- ecological metaphor. Eco-metaphor involves the interdisciplinary study of metaphor and ecology and is a body of related concepts for analogical cognition based on ecological thinking, and is an important tool for mental-imaginative cognition from the source domain to the target domain. As a powerful cognitive tool that has been conceptualized, the ecological metaphor is applied to the logical self-reference of "education within" "inter-education" "education together" ecological dimensions of school sports, It becomes a paradigm shift in the cognitive philosophy of the logical evolution of the school sports "nature-like view", and provides a valuable reference for the interpretation of the ecological elements of school sports and the exploration of ecological rationality.

一、Intrinsic righteousness: the interaction between school sports and ecological metaphor

(一) contingency relationships: the spiritual unity of school sports and ecological metaphor

School sport is a multidisciplinary integrated disciplinary complex, covering the natural and social attributes of human beings, about involving natural sciences, social sciences, and humanities research in a variety of fields of very different nature (Fang Qianhua et al., 2017). When it comes to the natural, social and humanistic nature of school sports, its spiritual essence is often attributed to the social nature of students' core literacy development, while the elements that support the development of sociality are inner social norms and outer social adaptation, which can be understood as: social ethics and social ecology. The ethical spirit and ecological emotions of school sport broaden the scope of analysis and examination of relationships, environments and conditions, and can fundamentally reveal the inner-contractual laws of school sport between humans and nature, humans and society and humans and themselves. Secondly, ecological

metaphors are derived from the basic elements or basic structures of ecology and metaphor. Ecology follows ecological ethical norms, metaphorical dependence on humanistic social logic, the existence of a de facto ethical ethos and social sensibility in the ecological metaphor reveals the unity of the inherent spirit of school sport and the ecological metaphor. Exploring the spiritual fit between school sports and ecological metaphors, the constant pursuit of metaphysical representation of the subject, It is fundamentally a rational philosophy driven by the development of the times and the reality-oriented as well as the value position reached by both and its own meaning historical determination.

(二) necessity relationship:the positive correlation of school sports and ecological metaphor

Hong Kong Scholar Law N et al.,(2011)suggests that the advantage of using ecological metaphors lies in their interdisciplinary nature and their ability to encompass all aspects.This approach is needed for research on the use of ecological metaphors and pedagogical innovations in educational systems.British Scholar Nerantzi C(2016) asserts that ecological metaphors are the habitat in which we think, act, learn and become identities.Some domestic scholars believe that the combination of education and ecological metaphors has become a new growth point for educational theory, and ecological metaphors are important for promoting the expansion of educational theory and practice development.It can be seen that the multi-layered implication of education and ecological metaphors make the conception of ecological metaphors associated with school sports more and more inevitable.In terms of relevance, first of all, the internal kinetic energy of the operation of ecological metaphors is fluid rather than static.Just like a sports competition is not simply composed of discrete entities, but involves a synergistic association between all the associated participants, the rational pursuit of different value associations achieves the logical relevance of ecological metaphors.Constructed in the same resilient way, school sport is a body of interests composed of educational institutions (schools,authorities),participants(teachers,students, parents) and other stakeholders (social organizations, researchers, etc.), and also includes disciplinary associations they form with different disciplines (politics,law,art, etc.). School sports and ecological metaphor are in fact rational correlates of different value factors such as synergy, interest, discipline and these correlates are conditioned by common management rules accepted by the participants,whose common management rules never exclude evolution and change. Secondly, Bourdieu,P et al.,(1992) argue that the field of sport as described by the metaphor does not operate in an overly mechanistic manner and provides a function-list and structuralist paradigm for the description of Kinesiology offers a compelling alternative. School sport is essentially a

matter of transforming the functional structure and value proposition of a series of natural, social and human relations. The ecological metaphor can be strengthened by the development of functional structures when addressing the differences in school sport values revealed by different and often mutually transforming value propositions, when the ecological metaphor shows a different view of the interrelatedness of value propositions. Thus, the use of ecological metaphors to articulate multiple approaches to the value proposition of school sport can produce different value manifestations and is indisputably progressive. The ecological metaphor does not reject the interrelated nature of any progressive value proposition, it is a positive correlation, positive correlation provides a historical imperative for the construction of innovation in school sport.

(三) the relationship of actuality: the rational functionality of school sports and ecological metaphor

The positive correlation between school sport and ecological metaphor can be interpreted as an educational, social and ecological phenomenon. For this reason, rational functionality of the school sport and ecological metaphor is expressed mainly in education, social and ecological expressions. First, educational expression. Sports teachers or coaches stimulate student debate and discussion of ecological metaphor and the use of sport-or game-specific insights in training and athletic expression, It can be used to help students explore ideas, alternative explanations and enable them to see imaginative parallels between ecological metaphors and athletic outcomes, helping to generalize and disperse ideas during the implementation of sports teaching and training. Second, social expression. Because of the competitive nature of school sports, the use of ecological metaphor by sports teachers or coaches, expressed from a holistic, interrelated and sustainable perspective, as well as from a resource-based competitive strategy perspective, can enhance students' ability to cope with the complexities of competitive play in a socially competitive context and facilitate the development of the thinking skills needed for strategic thinking. Again, ecological expression. Wikipedia defines eco as meaning environmentally friendly. Thus, ecological expression of the school sport and ecology metaphor is that humans live in harmony with nature, with society and with themselves. Some scholars point out that "educational development must conform to the important features of ecological civilization in the current era"(Yu Congzhou, 2018). Therefore, the essence of the ecological expression of school sport is actually a specific reference to the social ecology of the time. Due to the existence of de facto ethical spirit and social emotion in the ecological metaphor, ecological expressions of school sports and ecological metaphor actually intersect in ecological spirituality, social norms and emotional adaptation.

二、Theoretical base source:the generative logic of the school sports ecological metaphor

(一) the theoretical generation of school sports ecological metaphor

The ecological metaphor of school sports is based on the Conceptual Metaphor Theory (CMT) and Conceptual Blending Theory (CBT) value paradigm (Sun Yi,2019), which maps the self-referential source domain of school sport's multiple value propositions to the target domain of the "nature-like" paradigm, In a cognitive sense, the ecognitive holism, relevance and sustainability are maintained. The ecological metaphor of school sport based on the association of pedagogy, ecology and metaphor can be regarded as an important theoretical branch of educational ecology, and it rightly belongs to the value category of educational ecology theory.

At the present stage, the effective path for the development of educational ecology theory is the integration of "five education".As a guideline for deepening education reform in China in the new era, the integration of "five education" aims to achieve comprehensive development of moral education, intellectual education, sports, aesthetic education and labor education through "fusion" (Liu DengHuan and Li Hua,2020). Structured "five education" integration connotes "education within" "inter-education" "education together" educational ecological spatio-temporal logic, paradigmatic dyadic logical construction and structural demystification of school sport ecological metaphor.

1.the ecology of "education within":the structure of ecological positioning and ecological mechanism

To interpret the logical generation of the ecology within education, the first step is to make an ecological orientation.The "five education" integration structure is divided into a physical level dominated by sports at the bottom, a practical level attributed to labor education at the middle, and a three-dimensional cognitive level of moral, intellectual and aesthetic education at the top (Sang,1991). Sport belongs to the physiological dimension of human practice and rational cognition, and is the root of the values necessary for the higher order, and fundamental sport plays an important role in supporting the ecology within education. Second, a complete ecology within sport education requires mechanisms such as educational philosophy, training goals and knowledge systems. Ji Liu (2022) suggests that "core literacy is the starting point of compulsory education sports and health curriculum." Based on the importance of core literacy, the objectives of the education concept of "moral education" "health first" and "lifelong sports ability" are firmly established in school sports,to standardize the value chain of the training objectives of school sports, such as knowledge,skills,physical fitness,safety and health,etc, Promote the ontological transformation

of the knowledge system of school sports in terms of its intrinsic properties, connotation structure, internal functions and implicit forms, to strengthen the structural educational ecology of the subjective requirements, practical knowledge and orientation goals of school sports.

2.the ecology of "inter-educational":the relevance of effects ecology and synergies ecology

Inter-education ecology refers to the interconnectedness of the "Five Education".Between"five education" "intellectual education-moral education" "aesthetic education-moral education" "labor education-moral education" "labor education-intellectual education" "labor and sports education" are strongly correlated, and the correlation between" sports-moral education" "sports-intellectual education" "aesthetic education-intellectual education" "aesthetic education-sports" "labor education and aesthetic education" is weak, The correlations among the "five education" are not indistinguishable (Liu,DengHun et al.,2020). There are strong and weak inter-educational linkages, which are related to the different ways in which inter-educational practices are directed and organized. The broader the scope of the social practice to which inter-education refers, the more compatible it will be, and the easier it will be to relate and integrate with other education; and vice versa.The inter-educational ecology that is less relevant is sports and aesthetic education, therefore, the most difficult to shake the inter-education ecology of sports among the"five education" ecologies is the"sports+" effect ecology, The "sports+"effect ecology is the pain point of "five education" integration, and also the difficult point of inter-education ecology construction.The correlation between "sports and labor education" is strongly related, and the "sports+ labor education+" synergistic ecological mechanism in the inter-educational ecology can be promoted as a priority. In order to avoid the erroneous tendency of average force of inter-educational ecology, we should pay attention to the effective dissipation of the"sports+"effect ecology and hold the priority of "sports+ labor education+" synergistic ecology, which will promote the effective development of inter-education ecology with half the effort.

3.the ecology of"education together":the interdisciplinarity of "sports+" effect ecology and the "human-mirror" ecology

Education together ecology mainly refers to cross-domain integration. Cross-domain integration emphasizes problem-driven,disciplinary integration,goal-oriented and cross-domain sharing using modules, projects and themes to break down disciplinary boundaries and knowledge barriers.The "sports +" effect ecology is the closest to the cross-domain integration of the education together mode, is the basic path of the education together ecology. In addition, sports embodies figurative abilities, intellectual education pursues abstract meanings,

and aesthetic education expresses imaginative representations, and the combination of the three forms the "human-mirror" ecology of "sports+intellectual education+aesthetic education"(Du Yaxing, et al.,2021). The "human-mirror" ecology highlights sports-led interdisciplinary cognitive and affective grasp, students are guided to design, implement and revise deeper thinking around the problem to achieve an effective connection between sport and intellectual experience and aesthetic practice. Driven by both problem solving and goal guidance, based on the "sports+effect ecology and the "sports+intellectual education+aesthetic education""human-mirror" ecology, integrating the knowledge elements of sports, intellectual education, aesthetic education, advanced socialist culture, excellent Chinese traditional culture, life health, safety and other educational contents across domains, construct thoughtful, contemporary and cross-disciplinary curriculum systems, classroom formats and evaluation systems. In practice, it pays attention to the combination of physical education and mental education, sports and health, professionalism and quality, strengthening the interconnection between disciplines and interactive application in practice, so that students can "learn" with content, "practice" with guarantee, "achieve" with goals and "quality" with standards. The integration is the only way to develop the education together ecology, and it is also a fruitful and innovative way to surpass the existing ecology of education.

(二) the logical generation of school sports ecological metaphor

1. the logical starting point of the school sports ecological metaphor

In the germination phase of an ecosystem, there is first the self-establishment of ecological bodies, then the gradual establishment of populations on a spontaneous and conscious basis, and the gradual construction of a perfect ecosystem by multiple populations (Zhe Zhang, 2021). Based on the fundamental properties of the "natural ecosystem" (the "natural view") and "social ecosystem" (the "social view"), the ecological metaphorical logic of school sports begins with the "natural view" and "social view" as a matter of course. The duality of the "natural" and "social" perspectives inevitably makes the study of the ecological metaphor of school sports take into account both the natural and social sciences. At the beginning of the ecosystem, the logical starting point of the ecological metaphor of school sports, the "natural view", was dominant and the "social view" was subordinate. With the construction of ecological populations, different ecological bodies gradually construct the ecosystem, The logical laws and intrinsic factors among ecological bodies start to play a role, resulting in the accelerated construction and formation of the ecosystem, when the logical starting point of the ecological metaphor of school sports gradually becomes "social view". As the ecosystem continues to improve and mature, both the "natural view" and the "social view" play a regulating role to varying

degrees, and the ultimate evolution of a harmonious ecosystem tends to be a "natural view" with self-regulating functions and stable internal relationships, at this point, the logical starting point of the school sports ecological metaphor is both the "natural view" and the "social view", which is referred to here as the "nature-like ecosystem" of the school sports ecological metaphor (the "nature-like view").

2.the logical elements of the school sports ecological metaphor

At the beginning of the ecosystem, the logical starting point of the school sports ecological metaphor is the "natural view", whose logical elements mainly include water,fertilizer,soil,air,minerals, microorganisms, etc. The above substances gradually form a closed loop of metabolic cycle and eventually form an ecosystem.With the gradual construction of the ecosystem, the logical starting point of the ecological metaphor of school sports tends to be "social view", whose logical elements mainly cover policy,resources,management,regulation,etc.Through policy-driven, resource rationing, organizational management, mechanism regulation,etc., the ecosystem is accelerated to build.With the improvement of the ecosystem, the logical starting point of the ecological metaphor of school sports gradually becomes "nature-like view", at which time the logical elements mainly involve ecological interaction,ecological position compe- tition,subject-object symbiosis,manifesting physical diversity, community effect,superiority and inferiority and relative stability, forming selfre- gulation,self-accumulation,self-development and the ability of adaptive evolution and benign development. In terms of ecological logic, the ecological metaphor of school sports is compatible with natural ecology, social ecology and "nature-like ecology", and possesses the logic of ecological mapping construction of transtemporal meaningful cognition.

3.the logical evolution of the school sports ecological metaphor

Ecosystems use the food chain to capture energy, which is then transformed into organic matter to be transferred between ecosystems and ecological communities, and ecosystems use energy flow to achieve metabolism and ecological reproduction.While energy flows, abiotic materials participate in the ecological cycle, which follows the law of conservation of matter and is used by ecological bodies and communities and then returned to the environment.Energy flow and material cycling in ecosystems directly affect the survival and development, survival and decline of ecological bodies (Zhe Zhang,2021). In practice, school athletes help students to acquire core literacy, and students achieve increased value for the students and the group through energy flow and material circulation between teachers and students. In addition, information reception, processing, transmission and regulation among ecological bodies, realize the function of information transfer between the ecological community

inside and inside, and between inside and outside. Information transfer can improve the relationship regulation and behavior change among ecological bodies, forming a healthy ecological development posture that tends to avoid harm. Energy flow, material circulation and information transfer build the dynamic evolutionary logic of the school sports ecosystem. The intrinsic efficacy and extrinsic orientation of the ecosystem are important conditions for the continuous benign evolution of the ecological body. The school sports ecosystem that occupies a dominant position in terms of resources, environment and policies has the inherent quality of constantly improving its self-ecological advantage, with the ability to achieve improved student functioning and the evolution of effectiveness, better student self-regulation can in turn empower the school sport ecosystem with the potential for sustainable development. Based on analogous cognitive properties of ecosystems and ecological metaphors, the school sports ecosystem evolutionary logic full elements matching school sports ecological metaphor.

三、The practice progression: the core elements of school sports ecological metaphor

The premise of the ecological metaphor for school sports is to find an ecological mapping of meaning in all metaphors and in the conceptualization of thinking. In April 2022, the Ministry of Education of the People's Republic of China's Physical Education and Health Curriculum Standards for Compulsory Education proposed that "the compulsory education sports and health curriculum takes core literacy as its outline; core literacy mainly refers to sports character, healthy behavior and sports ability." The core elements of sports and health curriculum core literacy and school sports ecological metaphor both follow the "human logic" based on human-centered logic and educational development, and the core literacy has the meaning of ecological mapping. Theoretically, the core literacy status of the sports and health curriculum fits perfectly with the requirements of the school sports ecological metaphor the core elements.

(一) the school sports ecological metaphor elements of sports character

Establishing moral values and educating people is the fundamental task of education. The essence of school sports is education, and the essence of education is not the transmission of knowledge and skills, but the cultivation of people; without moral education as the foundation, sports is the avant-garde of violence (Ji Liu, 2022). Sports character can be understood as the pursuit of values and the ethical fit of sports relationships that follow the norms of human sports behavior. It takes the lead in the medium of moral education in school sports, transcends the elaboration of sports values itself, and plays a value precursor role in the cultivation of students' core qualities.

1.the school sports ecological metaphor for sports character"education within" ecology

School sports ecology metaphor for sports character education within ecology mainly originates from three elements of sports ethics, sports-manship and sports character, which are derived from the sports ethics category of integrity and self-discipline, fair competition, compliance with rules, respect for referees, respect for opponents and team spirit, and so on ; The sportsmanship category of courage and tenacity, struggle, perseve- rance and physical fitness; the ecological knowledge system of sound mind, emotional regulation,self-esteem and self-confidence,civilized manners and correct values in the context of sports character (Ministry of Education of the People's Republic of China,2022).The system interacts with each other and is closely connected, the development of this system is unified in the construction of sports character education within ecology. The school sports ecological metaphor based on the value theory of "establishing moral values and educating people" is a synergy of the sports character education within ecology, which cultivates students to have correct values, consciously abide by the rules of the game, adhere to the spirit of fairness, challenge themselves, dare to surpass themselves, and show the "high" level of sports morality, "good" sports spirit and "positive" sports character orientation.

2.the school sports ecological metaphor for sports character "inter-education" ecology

The inter-education ecological mechanism of"sports+labor education+ " synergistic ecology can be promoted as a priority.First, the synergistic ecology of "sports+labor education+"is transformed into a synergistic ecology of "sports character+labor character+",To create practical situations that are conducive to the synergistic ecology of "sports character+labor character+",students can experience the development of character through hard work and perseverance in sports activities and labor practices. Secondly,the"sports character+labor character+"moral education, "sports character+labor character+"intellectual education,"sports character +labor character +" aesthetic education will be carried out in cooperation, the establishment of "inter-education sports character class".Since the main route for moral education to carry out inter-education sports and moral lessons is "ideological and political curriculum",daily moral education, etc.,the main way for intellectual education to carry out inter-education sports and moral lessons is "ideological and political curriculum" "curricular ideology and politics",etc. Aesthetic education is organized in the way of inter-education sports and moral lessons, such as "ideological and political curriculum""four beauties" education. The main forms of inter-education sports moral education are "curriculum ideology and politics",the spirit of model workers and craftsmanship,etc. Therefore, it

is important to organically integrate sports ethics,sports spirit,sports character,the spirit of model workers,craftsmanship and other synergistic ecological elements into physical education and health classes,daily moral education,"four beauties"education, "ideological and political courses" and "curriculum ideology and politics".Realize the combination of physical education and health class,daily moral education,"four beauties" education,"curriculum ideology and politics" "ideology and politics course" five explicit and implicit,circular evolution , The new form of school sports ecological metaphor of sports Character inter-education ecology that drives the basic logic of "inter-education sports character courses".

3.the school sports ecological metaphor for sports character"education together" ecology

The ecology of "sports+" effect corresponds to the curriculum logic of "sports character+" effect ecology. "sports+intellectual education+aesthetic education" "human-mirror" ecology corresponds to the logic of the curriculum "sports character+curriculum ideology and politics+ ideology and politics curriculum+'four beauty' education" "human-mirror" ecology.To implement the sports character education together ecology as the goal-oriented, the establishment of "sports character+" effect ecology and "sports character+curriculum ideology and politics+ideology and politics curriculum+ 'four beauty' education " "human-mirror" ecology is the leading interdisciplinary curriculum grasp , promote the construction of "education together sports character curriculum". The inter-education sports character course and education together sports character course is combined,This is the "greater sports character course". As a whole- curriculum education concept, the understanding of the connotation of the "big sports character curriculum" should be shifted from"the entity of specific curriculum construction"to"the concept of in-depth thinking and grasping"; the exploration of elements should be expanded from "a single sports character"to"synergistic ecology + effect ecology + 'human-mirror' ecological sports character".The main body of exploration has changed from "single teacher"to"teacher-faculty-school"; the object of exploration has progressed from "single course"to"big sports character curriculum". The big sports character curriculum promotes the development of curriculum construction from "embedding" to "integration",the transformation of teaching methods from "indoctrination" to "implicit penetration", and the realization of a new pattern of school sports ecological metaphor sports character education together ecological under the framework of "big sports character curriculum".

(二) the school sports ecological metaphor elements of healthy behavior

General Secretary Xi Jinping emphasized at the 2018 National Education Conference that "the concept of health-first education should be established." Adhering to the concept of "health first" education is the essential attribute of school sports and healthy sportsmen (Ji Liu, 2020). Health behavior is the conscious practice of sports by students to acquire healthy physical and psycho-emotional well-being based on their sports skills and interests (Ji Liu, 2022). Health behavior carries the external form of "health first", follows the knowledge of the concept of "health first" education, and is the active role of the internal source of school sports. Health behavior adapts to the "health first" educational philosophy and logical self-consistency of school sports.

1. the school sports ecological metaphor for health behavior "education within" ecology

School sports ecological metaphor for health behavior education within ecology mainly includes four elements of physical exercise awareness and habits, health knowledge and skills acquisition and application, emotional regulation and environmental adaptation; On this basis, the knowledge system of educating students to develop a good awareness of sports and physical exercise, physical exercise habits, eating and resting rules, guiding students to consciously take care of personal hygiene, pay attention to weight control, stay away from undesirable hobbies, learn to reduce fatigue, develop a firm awareness of safety, prevent sports injuries, and maintain the ability to "inhibit-strengthen-maintain-awaken" good emotion regulation, etc., which regulate the value baseband of the school sports ecological metaphor health behavior education within ecology (Ministry of Education of the People's Republic of China, 2022). Based on the "health first" ontology, students are guided to actively participate in sports in and out of school, to master health and safety knowledge and skills, to improve their emotional control ability, to adapt to the external environment, and to gradually form a healthy and safe school sports ecology metaphor for healthy behavior education within Ecology.

2. the school sports ecological metaphor for health behavior "inter-education" ecology

"Sports+labor education+" synergistic ecology is a priority to promote ecology. Synchronizing the "sports+labor education+" synergistic ecology into a "sports(health behavior)+labor education(health behavior) +" synergistic ecology, At the same time, it will continue to develop "sports (healthy behavior)+labor education (healthy behavior)+"moral education, "sports(healthy behavior)+labor education (healthy behavior)+" intellectual education, "sports(healthy behavior)+labor education(healthy behavior) +" aesthetic education, and build a coherent "inter-education 'community' ". The curriculum logic for the implementation of "inter-education' community" in moral education is daily health, mental health education, " curriculum health", etc.; the

curriculum logic for "inter-education 'community'" in intellectual education is health education, "curriculum health", etc.; the curriculum logic for "inter-education 'community'" in aesthetic education is "curriculum health" "health" and "beauty", health aesthetics, etc.; the curriculum logic for "inter-education 'community'" in labor education (health behavior) is labor norms, labor safety, occupational disease prevention, etc. Therefore, the elements of health behaviors such as sports and exercise awareness and habits, health knowledge and skills acquisition and application, emotion regulation, environmental adaptation, labor norms, labor safety, occupational disease prevention, etc. are infiltrated into the curriculum of sports and health, daily health, mental health education, health education and "curriculum health" "health" and "beauty", health aesthetics, etc., to shape a new thinking of school sports ecological metaphor health behaviors inter-education ecology under the mechanism of "inter-educational 'community'".

3. the school sports ecological metaphor for health behavior "education together" ecology

The "sports+" effect ecology corresponds to the curriculum logic of "sports and health curriculum+" effect ecology, "sports+intellectual education+aesthetic education" "human-mirror" ecology corresponding to the logic of the curriculum is "sports and health curriculum+health education+curriculum health+ 'health' and 'beauty'+ health aesthetics" "human-mirror" ecology, create a "community of education together" led by the effects ecology and the "human-situation" ecology. Led by the concept of "whole-person, whole process and all-round education", the "community of People" of school, enterprise, family, government and society, which is led by the party, led by party members, linked from top to bottom, combined with specialization and school-enterprise linkage, home-school co-education, government support and social participation, is built respectively. The "community of inter-education" "community of education together", and "community of people" is combined into a "community of education", presenting a holistic, systematic and actionable school sports ecological metaphor for health behavioral education together ecology. The key to the ecology of healthy behavior education together is the "four links": course content reconstruction link, a teaching design link, teaching implementation link and course evaluation link. The difficulty is in the course content reconstruction session, the focus is in the instructional design session, the pain point is in the instructional implementation session, and the key is in the course evaluation session. To this end, the content of the curriculum is reconstructed from "disciplinary logic" to "action logic", and the teaching design is transformed from "knowledge learning" to "strategy learning". The implementation of teaching is changed from "teacher teaching" to "learner action", the evaluation of the curriculum changes from "result evaluation" to "process and result" "qualitative and

quantitative" "relative and absolute", a new order of school sports ecological metaphor of health behavior education together ecology in the "community of education" logic of action.

(三) the school sports ecological metaphor elements of sports ability

Sports ability means the comprehensive ability that students demonstrate in the process of sports, combined with the definition of core literacy, sports ability corresponds to key competencies (Ji Liu, 2022). Sports ability is the first and foremost task and key element in the cultivation of core literacy in school sports, highlighting the characteristics and key perceptions of the goal of "lifelong sports ability" in school sports. Sports ability effectively feeds the development of sports character and healthy behaviors, which are a key part of the closed loop of physical education core literacy development in schools.

1. the school sports ecological metaphor for sports ability "education within" ecology

The school sports ecological metaphor for sports ability education within ecology mainly contains three elements: physical fitness status, sports cognition and technical and tactical use, sports demonstration or competition; from which the knowledge system of basic sports skills, physical fitness and special sports skills mastery and use is expanded (Ministry of Education of the People's Republic of China, 2022). The sports ability education within ecology connotes the goal theory of the students

"lifelong sports ability" evolution law, and the internal goal is that students actively participate in learning and practicing sports, are familiar with the basics, basic principles and rules of sports, master the general knowledge and skills of physical exercises, can improve the subjective initiative of physical fitness and form the adaptation of physical environment, and develop the habit of "learning, practicing and using" physical fitness. The external goals are to learn sports knowledge and techniques and tactics, to enjoy participating in the use of structured sports skills, to participate in refereeing using the rules of the game, to be good at game analysis and evaluation, to use knowledge and skills to analyze problems encountered in sports, and to motivate students to move and live in sports and health classes, showing a positive attitude and good sports ability.

2. the school sports ecological metaphor for sports ability "inter-education" ecology

Based on the priority of the "sports + labor education +" synergistic ecology, the "sports + labor education +" synergistic ecology is synchronized to "sports (sports ability) + labor education (sports ability) +" synergistic ecology, thus emphasizing the effective development of the synergistic ecology around sports ability. The "sports (sports ability)

+ labor education (sports ability) + "moral education, "sports(sports ability) + labor education (sports ability) + " intellectual education, " sports (sports ability) + labor education (sports ability) + " aesthetic education is carried out in the same order, The "inter-education sensory integration course" is constructed. Due to the main form of inter-education sensory integration course for moral education is "curricular sports", and the main way of inter-education sensory integration course for intellectual education is "curricular sports", daily sports, and so on. Aesthetic education is the main way to carry out inter-education sensory integration course, such as "curricular sports" "health" and "beauty", sports aesthetics, etc. The main pathway for the integration of inter-education sensory integration course in labor education (sports ability) is labor ability, etc. Therefore, the integration of physical fitness, sports cognition and technical and tactical use, sports presentation and labor ability into the sports and health curriculum, daily exercise, sports aesthetics and "curriculum sports" "health" and "beauty" curriculum, To present a new manifestation of the school sports ecological metaphor sports ability inter-education ecology based on the "inter-education sensory integration course" action specification.

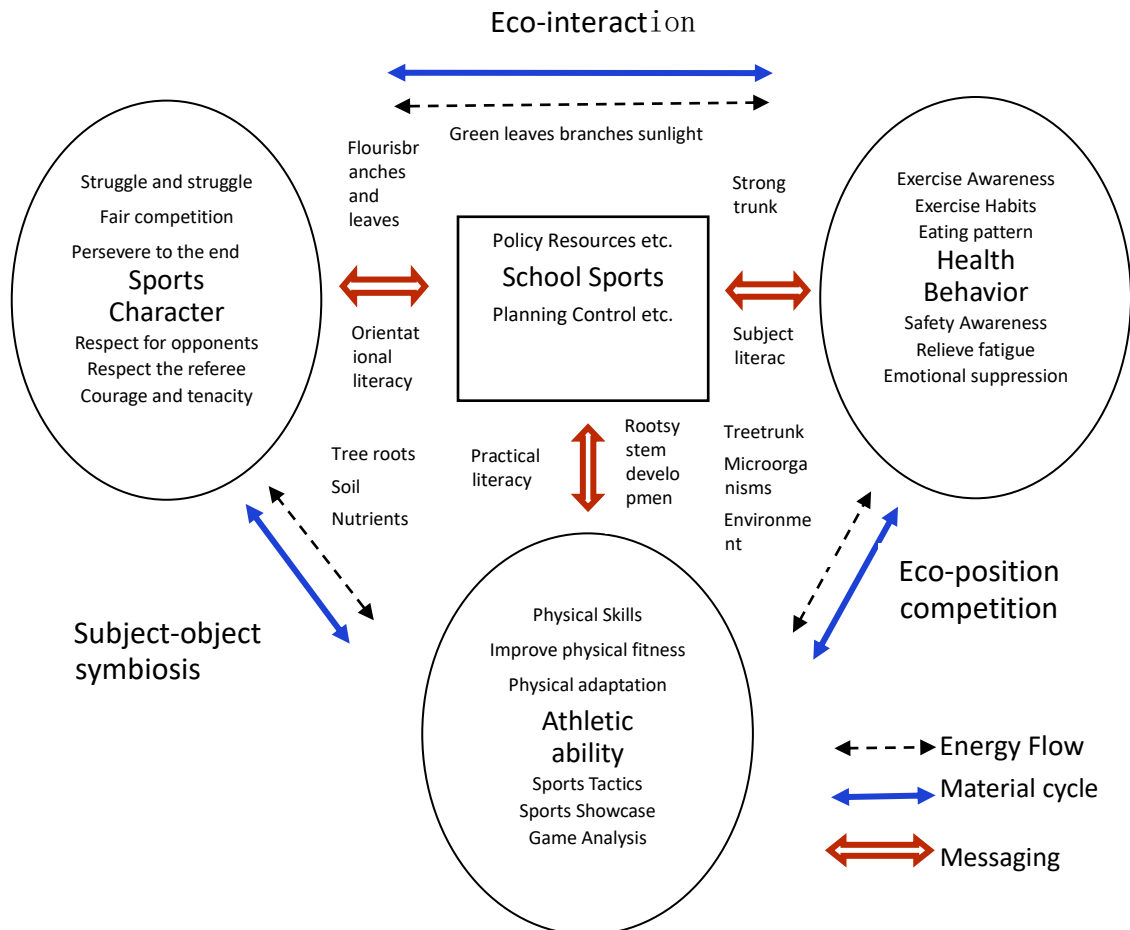
3. the school sports ecological metaphor for sports ability "education together" ecology

The "sports+" effect ecology corresponds to the curriculum logic of "sports and health curriculum+" effect ecology, "sports+intellectual education+aesthetic education" "human-mirror" ecology corresponds to the curriculum logic of "sports and health curriculum+curriculum sports+daily sports+"health" and "beauty"+sports aesthetics""human-mirror" ecology, To establish the "education together sensory integration course" that is practical guided by the effect ecology and the "human-mirror" ecology. sports ability, as the main thread of the upper and lower levels of school sports, the "inter-education sensory integration course" and the "education together sensory integration course" are combined into the "sensory integration course," to establish a school sports ecological metaphor for sports ability education together ecology of "sensory integration course" symbiosis and "before+during+after school" all-in-one application. The so-called sensory integration refers to the importance of integration of physical ability and skills, integration of learning and practice and demonstration, integration of inviting in and going out, integration of "first class" and "second class", integration of professional classes and quality classes, etc. The sensory integration emphasizes the "unity" of elemental fit and spiritual fusion. All-in-one application refers to the "learning practice application" of the skills and physical abilities required for students to structure their sports; Students can not only practice their knowledge and skills in a structured way, but also living knowledge and skills in classroom, community and club contexts, all-in-one application emphasizes the "use of one" in the

learning and practice of knowledge and application of practice. Thus, the "unity" of the Sensory Integration and the "use of one" of the all-in-one application the two theoretical bodies "used together", The new face of the school sports ecological metaphor for sports ability "education together" ecology based on the logical specification of "symbiosis" and "all-in-one application".

In summary, sports character possesses the orientationality and value theory of the development logic of the core elements of the school sports ecological metaphor. The orientationality is related to the ecological metaphor of "orientational literacy-flourishing branches and leaves", which reflects the directional over-testing of the educational self-awareness of school sports "establishing moral values and educating people". The value theory emphasizes the "relational orientation"; the psychological orientation of "flourishing branches and leaves" is to shade the sky and vibrancy, which corresponds to the target domain of green leaves, branches and sunlight, and is mapped as "green leaves-the sports character 'education within' ecology" "branches-the sports character 'inter-education' ecology" and "sunlight-the sports character 'education together' ecology". Health behavior representations the subjectivity and ontology of the value logic of the school sports ecological metaphor core elements. Subjectivity derives from the ecological metaphor of "subject literacy-strong trunk", which exhibits the subject attainment of the educational self-reflection of "health first" in school sports. Ontology means "discrete entity"; "strong trunk is sturdy" psychologically discrete as tree trunk like dragon, towering into the clouds, corresponding to the target domain as tree trunk, microorganism, environment, meaning association as "tree trunk-health behavior 'education within' ecology" "microorganism-health behavior 'inter-education' ecology" "environment-health behavior 'education together' ecology". Sports ability to empowerment practicality and goal theory of the core elements of empirical logic of the school sports ecological metaphor. Practical awareness "practical literacy-root system development" ecological metaphor, It highlights the practice roots of school sports "lifelong sports ability" educational self-contradiction. The goal theory meaning "structural clarity"; the psychological structure of "root system developed" is a tree with deep roots and a gnarled dragon, which corresponds to the target domain of roots, soil and nutrients, and is mapped as "root-sports ability 'education within' ecology" "soil-sports ability 'inter-education' ecology" and "nutrient-sports ability 'education together' ecology". In a nutshell, the core element of the school sports ecological metaphor is the symbiotic "ecological source-one" relationship, In this regard, to generate the unity of the school sports ecological metaphor "co-phase source one" as showed in Figure 1.

Figure 1. School sports are ecological metaphor "co-phase source one" unity, Value interpretation: the school sports ecological metaphor academic rhyme



The concept of ecological metaphor has not been dominantly defined so far (Yayan Wu, 2010). Here, the ecological metaphor is defined as the effective integration of the ecological ethical spirit and the cognitive metaphor theory based on the interconnectedness of human beings with nature, society and themselves, the philosophical thinking of sequential approach of the associated body overall condition plays of among the value elements, shaping a rational unity of the "nature-like" paradigm. Ecological metaphors are divided into value ecological metaphor, ontological ecological metaphor and goal ecological metaphor. The value-ecology metaphor is a structural mapping of the image schematic of the psychospatial domain of the non-spatial abstract domain using the relational orientation as the source domain. Thus enabling to talk and think about the non-spatial domain from a psychospatial perspective. The ontological ecological metaphor is a way of perceiving the experience of being material and nature as discrete

entities, and the events, emotions and thoughts of human internal and external interactions as entities, empowering entity cognition as the ontological basis. The goal ecological metaphor is the use of a highly structured and clearly delineated source domain to ecologically map another conceptual goal domain involving greater refinement and complexity. The prerequisite for the realization of the ecological metaphor as a unity of ecognitive interactions is the search for a mapped meaningful existence, a value catered to the deeper ecological aspirations of school sports.

(二) expanding cognitive paradigm: the value face of school sports ecological metaphor for universal cognitive characteristics

Understanding of ecological metaphor begins with the correction of the properties of the ontology and metaphor, and then the matching process of the metaphorical structure projected onto the ontology, which can be understood as an important logical paradigm for the expression of ecological value connotation. Cross-domain and cross-cultural differences in metaphorical value systems often lead to alienating understandings of ecological metaphors and consequently to different value judgments (Kövecses Z, 2020). Despite the conceptual, domain and structural complexities involved in understanding and using ecological metaphors, when dealing with school sport's own cultural elements and symbolic forms, ecological metaphor have the universal mapping characteristic of the concept of alienation, namely, the advantage of an expanded epistemology that not only incorporates symbolic forms such as sports, language, literature and art into cognitive thinking, but more importantly, correlates human cognitive metaphorical abilities with the quality of value judgments, which leads to different value facets of human cognitive abilities. Indeed, these expanded metaphorical cognitive theories have important implications for understanding more specific educational approaches to school sports, with particular implications for the re-exploration of school sports policy and practice.

(三) beyonding cognitive sphere: the value continuing of cognitive metaphor theory

Grady, J et al., (1999) pointed out that the cognitive metaphor theory is based on the fact that the basic psychological experience of common human exhibits cross-domain and cross-cultural trends of change. Ecological metaphors are holistic, associative and sustainable in nature, can illuminate sensory meanings across domains and cultures, can revisit unchallenged research assumptions and logical categories, and are adept at synthesizing familiar cognitive elements into a new associative whole. The ecological metaphor maps ecological rationality to different domains through cognitive properties, bringing new enlightenment to the field of school sports research. Sports is critically associated with different value judgments arising from a different source or target

domains in metaphorical cultures(Boers F,2003). The ecological metaphor of school sports encourages a new cognitive approach to rethinking one's own values, focusing on new meanings of value judgments and crucial new concepts, reflecting on past embodied experiences and perceptual understandings, and relearning the mutual appreciation of values between conceptual activities and mental-intentional cognition. Therefore, school sports ecological metaphor is based on adequate metaphorical normativity combined with historical embodied experience and abstract rational expression to achieve cognitive transcendence, essentially, it is the value continues of cognitive metaphor theory.

Conclusion

School sports ecological metaphor is a refinement and advance-ment of the mainstream metaphorical study of "subject-environment" in the rough line mapping, it reflects purity in terms of spiritual unity, positive correlation and rational functionality. In terms of logical starting point, the ecological metaphor brings school sports into the "nature-like view" imaginary sequence, broadening the horizon and changing the perception of the creation of the school sports ecological spirit.

The school sports ecological metaphor presents a big tree of the sky with "flourishing branches and leaves-sports character" "strong trunk- health behavior" "root system development-Sports ability", which is based on the "sports" and has the same origin as the "sports".It can be seen that the value elements generated by a rigorous ecological metaphor theory have more explanatory power in practice, moreover, that these value elements demonstrate the value ontology of re-perception in an important value way in the field of school sports.The ecological metaphor of school sports is no longer an empirical existence, but an ecological unity of "the outer and inner is one" "theoretical bodies used together"" and "co-phase source one".

The philosophical intent of the school sports ecological metaphor is to transform less accessible concepts in the cognitive process into more accessible domains, providing a clearer logic of thought for the smooth transition from concrete concepts to abstract concepts, a more dynamic metaphorical representation of the ecological body.The expansion of the universal mapping characteristics of the metaphorical cognitive ecological sphere has increased significantly and has become a new value formula for the school sports cognitive demands. In addition,this particular domain specific cognitive metaphorical status of the sport ecological metaphor has not been sufficiently elucidated, as the research progresses, the "sport metaphorology" will surely emerge.

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