

# Adolescent core literacy cultivation and institutional framework development

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**Abstract:** The core literacy of adolescents is the starting point and the ultimate goal of education, serving as a touchstone for assessing the quality of talent and the level of education, and also as a guiding compass for the development, reform, and construction of education. Countries around the world attach great importance to the core literacy of adolescents, showing characteristics of macro cognitive consistency, diversified element selection, and specific operational aspects. To achieve the goals of core literacy for our country's adolescents, it is necessary to influence the attitudes, concepts, behavioral habits, and interactive relationships of participants and stakeholders in the educational process, including the government, schools, enterprises, families, and students. It is also necessary to improve the literacy monitoring mechanism, reform the educational examination system, transform the educational evaluation methods, improve the employer's employment orientation, optimize the social education environment, innovate the educational supply mode, and strive to build a modern educational system to create a good atmosphere for enhancing the core literacy of adolescents.

**Keywords:** Adolescents, Core Literacy, Institutional Environment

## 1. Introduction

Economic globalization, cultural diversity, and social informatization are developing in an unprecedented form and speed. A new round of technological revolution, industrial upgrading, and social change is on the verge of taking place. The modern emerging technologies such as the Internet, cloud computing, big data, intelligent robots, and 3D printing are comprehensively and deeply changing the way humans think, produce, live, and learn. International competition is becoming increasingly fierce, and the cultivation and contention of talent have become the focus, with human literacy becoming the core of attention. Talents shape the future, and education fulfills dreams. The kind of education and students we have today will determine the kind of talents, enterprises, and families we will have tomorrow. The transformation of education in the new era is imperative. The core literacy of individuals is both the starting point and the ultimate goal of education, a touchstone for assessing the quality of talent and the level of education, and also a guiding compass for the development, reform, and construction of education. The question of "what kind of people to cultivate" is equally important as "how to cultivate people." It is the quality and standards of people today that determine the direction and level of future human civilization development, and determine the national education reform and governance model. In the new background of economic and social development, focusing on the core literacy of individuals, taking the improvement of core literacy as the basic guidance, and taking institutional construction as the basic guarantee, to renew educational concepts, transform educational behaviors, and allocate educational resources, is both an urgent task and a long-term strategy.

## 2. Core literacy insights and human-centered teaching

As human society enters the 21st century, the knowledge economy centered on high and new technology has taken the dominant position. Compared with the past economic forms, the biggest difference of the modern economy lies in the fact that its prosperity does not directly depend on the quantity, scale, and increase of resources, capital, and material conditions, but directly relies on the accumulation and utilization

of knowledge and information, and even more on the core literacy of talents and the quality level of education. Countries around the world are facing a common issue: re-examine the essence of education and pay more attention to the core literacy of adolescents.

### **2.1. Consensus on the macro-cognition of core literacy**

The socialization process of individuals mainly consists of three stages: family, school, and society, among which education plays a pivotal role in the socialization process, with school education being the most fundamental and critical, irreplaceable by any other form of education. Looking back at the path of human civilization's development and the laws of educational development in various countries, establishing a scientific view of educational development, quality, and talent is all based on the core literacy of individuals as the standard of measurement. Globally, "education is the process of promoting the socialization of individuals," and the socialization process should be based on the comprehensive development of individuals, supported by core literacy, permeating the entire life and various life fields of individuals, which has long become an international consensus. In 1972, "Learning to Be: The World of Education Today and Tomorrow" advocated that the purpose of human development lies in the perfection of personality and comprehensive development, enabling individuals to adapt to various social roles and take on corresponding responsibilities; it proposed that "the goal of development is the complete realization of individuals," considering the so-called "complete person" to be someone who masters scientific methods, has a scientific spirit, has an exploratory spirit, actively engages in creative work, is willing to undertake social obligations, possesses civic virtues, and has fully developed physical, intellectual, emotional, and moral aspects. [1] In 1996, "Learning: The Treasure Within" proposed learning to know, learning to do, learning to be, and learning to live together. [2] In 2003, UNESCO's International Institute for Educational Planning also proposed "learning to change."

### **2.2. Diversity in the selection of core literacy elements**

The selection and system construction of core literacy elements for adolescents depend on the relationship between individuals and society, constrained by the fundamental driving force of social needs. The core literacy of Chinese adolescents has historical continuity and rich connotations. The selection of core literacy elements can be traced back to the ancient "Six Arts" of rites, music, charioteering, mathematics, calligraphy, and archery, which were the six basic subjects of official schools during the Western Zhou period and Confucius's private schools during the Spring and Autumn period, covering all aspects of comprehensive human development. After the founding of the People's Republic of China, the educational policy of "all-around development of morality, intelligence, physical fitness, and aesthetics" has always been an integral part of educational strategies and development plans at all stages. In 1995, Article 5 of Chapter 1 of the "Education Law of the People's Republic of China" established the basic elements of Chinese adolescents' core literacy in the form of law, stating that "education must serve the construction of socialist modernization and be combined with productive labor, cultivating well-rounded builders and successors of the socialist cause in morality, intelligence, physical fitness, and other aspects." Subsequently, the "Decision of the Central Committee of the Communist Party of China and the State Council on Deepening Educational Reform and Comprehensively Promoting Quality Education" in 1999 proposed that "to implement quality education, moral education, intellectual education, physical education, and aesthetic education must be organically unified in all aspects of educational activities." The "National Outline for Medium and Long-Term Education Reform and Development (2010-2020)" in 2010 proposed to "adhere to education serving the construction of socialist modernization and the people, combined with productive labor and social practice, and cultivate well-rounded builders and successors of socialism with moral, intellectual, physical, and aesthetic development." In January 2017, the "13th Five-Year Plan for the Development of National Education" focused on answering the two basic questions of education, "what kind of people to cultivate" and "how to cultivate them." It clearly proposed to fully implement the fundamental task of establishing morality and cultivating people, focusing on cultivating students' seven core literacies: improving students' ideological and moral standards, fostering students' spirit and ability for innovation and entrepreneurship, strengthening students' practical hands-on ability, shaping students' strong physique, improving students' cultural literacy, enhancing students' ecological civilization literacy, and

improving students' comprehensive national defense literacy. The core literacy elements of Chinese adolescents can be summarized as three qualities (ideological and political literacy, scientific and cultural literacy, physical and mental health literacy) and three cores (social responsibility, innovative spirit, practical ability), covering all aspects of moral literacy, scientific literacy, health literacy, artistic literacy, humanistic literacy, information literacy, and vocational literacy. These are both the standards set by the needs of social development for the cultivation of adolescents and the fundamental task of education.

The selection of core literacy elements abroad also reflects a characteristic of diversity. The Partnership for 21st Century Skills in the United States has established the "21st Century Skills Framework," identifying critical thinking, creative thinking, problem-solving skills, and information literacy. Australia has proposed ten comprehensive competencies including literacy, numeracy, information and communication technology capability, critical and creative thinking, ethical behavior, personal and social competence, and intercultural understanding, laying a solid foundation of knowledge, understanding, skills, and values for students' continued learning and adult life. The OECD's "Definition and Selection of Competencies: Theoretical Framework and Conceptual Foundations" (referred to as De Se Co) proposes a framework of key competencies composed of eight areas of ability: linguistic communication, basic competencies in mathematics, science, and technology, information and communication technology skills, competencies in learning to learn, interpersonal competencies, and civic and entrepreneurial competencies. Additionally, the OECD has developed PISA (Program for International Student Assessment), which assesses 15-year-old students' reading literacy, mathematical literacy, and scientific literacy through testing in these three main areas, to evaluate whether they have mastered the knowledge and skills required by society after completing compulsory education.

### 2.3. The concretization of core literacy at the operational level

Curriculums are the operational form and important means for many countries around the world to achieve the goals of core literacy, with each country constructing a curriculum system in accordance with its own national conditions and based on core literacy. The United States and Australia adopt an integrated model of core literacy research and curriculum system construction; Finland, based on international core literacy content and structural framework indicators, defines the core competencies and literacy content indicators within its national curriculum system, organizes and implements them to form a curriculum system; Japan and South Korea do not have separate regulations for core competencies and literacy systems, but the concept of core literacy governs the construction of the national curriculum system.

For a long time, China has attached great importance to the implementation of adolescents' core literacy in educational practice. In July 1994, the "State Council's Implementation Opinions on the Outline of China's Education Reform and Development" emphasized that basic education should focus on improving the ideological and moral standards, cultural and scientific knowledge, labor skills, and physical and psychological qualities of children and adolescents. It is necessary to deepen educational reforms to enable students to develop vividly and actively in morality, intelligence, and physical fitness, laying a solid foundation for future social integration and continued learning. In March 2014, the "Opinions on Comprehensively Deepening Curriculum Reform to Implement the Fundamental Task of Cultivating Morality and Talents" proposed to research and formulate a core literacy system and academic quality standards for student development. According to the growth laws of students and the needs of society for talents, the overall requirements for the comprehensive development of students in morality, intelligence, physical fitness, and aesthetics, and the relevant content of the core values of socialism should be concretized and refined, deeply answering the question of "what kind of people to cultivate and how to cultivate them." The Ministry of Education will organize research to propose a core literacy system for students at various stages, clarify the essential character and key abilities that students should possess to adapt to lifelong development and the needs of society, with an emphasis on personal cultivation, social care, and national sentiment, and pay more attention to independent development, cooperative participation, and innovative practice. Research and formulate academic quality standards for various subjects in primary and secondary schools and national standards for the teaching quality of related disciplines and professional categories in colleges and universities. According to the core literacy system, clarify the degree requirements that students should achieve after completing the learning content of different stages, grades,

and disciplines, guide teachers to accurately grasp the depth and breadth of teaching, and make the examination and evaluation more accurately reflect the requirements for talent training. Schools at all levels and of all types should start from the actual situation and characteristics of students, and implement the core literacy and academic quality requirements into the teaching of various subjects.

In 2016, the Ministry of Education commissioned Beijing Normal University to conduct a three-year study that proposed six key literacies for the development of Chinese students: cultural depth, scientific spirit, learning to learn, healthy living, responsibility, and practical innovation. The study proposed the main approaches to implementing these core literacies: First, through curriculum reform to implement, clarify the specific educational goals and tasks of each stage and subject, and strengthen the vertical connection and horizontal coordination of curricula across various stages and subjects. Second, through teaching practice to implement, guiding teachers to carry out these literacies in their daily teaching. Third, through educational evaluation to implement, establishing academic quality standards based on core literacies.

### **3. Developing core literacy in China's education**

The world of education is undergoing revolutionary changes today. Ensuring inclusive, equitable, and quality education, and promoting lifelong learning opportunities for all, has become the new goal of global educational development. The integration of education with economic and social development is becoming more closely linked, with a focus on the learner, an emphasis on capacity building, and the promotion of comprehensive human development. The concepts of universal learning, lifelong learning, and personalized learning are increasingly taking root in people's hearts. Educational models, forms, content, and learning methods are undergoing profound changes, and educational governance is characterized by multi-party cooperation and broad participation. Against the global backdrop, how can we build a cultivation model for the core literacy of adolescents with Chinese characteristics?

In January 2013, the "Opinions of the Ministry of Education on the Comprehensive Reform of the Education Sector in 2013" proposed to build consensus on reform and pay more attention to the interconnections between various levels and types of education, as well as the interplay of various educational elements. In January 2017, the State Council issued the "13th Five-Year Plan for the Development of National Education," which called for "establishing a people-centered development model." In summary, the mechanism for cultivating the core literacy of adolescents in China is mainly reflected in the "five coordinations": First, it involves coordinating various stages of education, including primary school, junior high school, high school, undergraduate and postgraduate programs (as well as vocational colleges). Further clarify the educational function positioning of each stage, sort out the educational goals of each stage, and ensure orderly progression and smooth transition. It is necessary to avoid the phenomena of content disconnection, intersection, and displacement in some subjects, fully reflecting the laws of education and talent cultivation. Second, it involves coordinating various subjects, especially moral education, language arts, history, physical education, and arts. Give full play to the unique educational advantages of humanities, further enhance the educational value of mathematics, science, and technology courses. At the same time, strengthen the cooperation between subjects, exert comprehensive educational functions, and continuously improve students' abilities to use knowledge comprehensively to solve practical problems. Third, it involves coordinating aspects such as curriculum standards, teaching materials, instruction, assessment, and examinations. Fully leverage the leading role of curriculum standards, and coordinate the reform of teaching material compilation, teaching implementation, evaluation methods, and examination questions to ensure effective cooperation and mutual promotion. Fourth, it involves coordinating the strengths of frontline teachers, administrative staff, teaching researchers, experts and scholars, and community members. Give full play to the advantages of each force, clarify the roles of each force in teaching and educating people, service guarantee, teaching guidance, research leadership, and participation in supervision. Around the educational goals, coordinate the forces to form a joint force for education. Fifth, it involves coordinating various platforms such as the classroom, campus, clubs, family, and society. Give full play to the main channel role of schools, strengthen the close connection of classroom teaching, campus cultural construction, and community organization activities, promote family-school cooperation, make full use of social resources, scientifically design and arrange activities inside and outside classes and schools, and create a coordinated and good educational environment.

#### **4. Designing core literacy systems for talent eco-growth**

To a certain extent, the history of the progress of human social civilization is the process of the evolution of social systems and their functional roles. The principle that institutions influence behavior remains unchanged throughout history. Starting from the core literacy, efforts are made to build a modern educational system that affects the attitudes, concepts, behavioral habits, and interactive relationships of participants and stakeholders in the educational process, such as the government, schools, enterprises, families, and students, to provide a favorable atmosphere for enhancing the core literacy of adolescents.

##### **4.1. Perfecting the literacy monitoring mechanism**

Talent standards guided by social needs promote literacy-oriented educational reform. To improve the socialization process and promote the comprehensive development of adolescents, it is necessary to construct an index system for adolescent core literacy, cultivating modern individuals who adapt to the needs of social development. A monitoring mechanism for the implementation of adolescent core literacy needs to be established, incorporated into the educational development plans at all stages, included in the 2030 plan for the modernization of Chinese education, and integrated into educational supervision and comprehensive evaluation. The indicators of core literacy need to be transformed into talent cultivation standards, embedded in the educational system framework, leading the development of educational planning, assessing students' learning outcomes, constructing talent growth paths, reviewing educational reform projects, and measuring the level of educational development.

##### **4.2. Reforming the educational examination system**

Breaking through the "single-plank bridge" of the college entrance examination and building a "multi-level bridge" for the diversified development of students is key to achieving the core literacy of adolescents. In September 2014, the State Council issued the "Implementation Opinions on Deepening the Reform of the Examination and Admission System"; subsequently, the Ministry of Education issued the "Implementation Opinions on the Academic Level Examination for General High Schools" and the "Opinions on Strengthening and Improving the Comprehensive Quality Evaluation of General High School Students," clearly proposing measures such as "full coverage of all subjects," "categorized examination," "no distinction between arts and sciences," "two opportunities," and "strict publicity." The Ministry of Education also made clear regulations on strengthening and improving the comprehensive quality evaluation of general high school students, with ideological character, academic level, physical and mental health, artistic literacy, and social practice all becoming part of the comprehensive quality evaluation content, entering the archives. At the same time, a strict publicity system should be implemented to spot-check the authenticity of the archival materials. In September 2016, the "Guiding Opinions of the Ministry of Education on Further Advancing the Reform of the Examination and Admission System for the High School Stage" proposed to further advance the reform of the examination and admission system for the high school stage (referred to as the middle school examination reform), and improve the comprehensive quality evaluation of students; the reform clearly requires pilot areas to use the comprehensive quality evaluation as a basis or reference for high school enrollment, allowing the "comprehensive quality evaluation," which was previously in a subordinate or reference position, to become the main role and truly play a role in high school enrollment. In terms of evaluation content, it is required to refine and improve the evaluation content and requirements in five aspects: ideological character, academic level, physical and mental health, artistic literacy, and social practice. In terms of evaluation focus, it emphasizes reflecting the comprehensive development and personality characteristics of students, and pays attention to the cultivation and outstanding performance of students' daily behavioral norms. In terms of evaluation procedures, it emphasizes the need to keep truthful records, publicize and review the factual materials used for enrollment, and establish a comprehensive quality evaluation file. In terms of the use of results, the principle of "who uses, who evaluates" is implemented, with high schools formulating specific methods according to their school characteristics, making the comprehensive quality evaluation truly effective in enrollment, and solving the problem of "only looking at scores."

### 4.3. Transforming the educational evaluation approach

To fully leverage the guiding role of educational evaluation in scientific education, the fundamental criteria for evaluating educational quality should be the promotion of comprehensive human development and adaptation to economic and social development. A comprehensive improvement of the educational evaluation systems at all levels and types is needed, focusing on assessing students' abilities to adapt to social development and lifelong growth, preventing the sole use of enrollment rates to assess schools and teachers, and avoiding the exclusive use of scores to evaluate students. There should be an exploration of open evaluations involving all stakeholders and an improvement of the mechanisms for publicizing evaluation results.

#### 4.3.1. *Enhancing basic education evaluation reform*

Looking to the future, it is essential to clarify the core literacies for student development at each educational stage, implement teaching evaluations based on these core literacies, and promote the comprehensive and sustainable development of students. A comprehensive indicator system for evaluating educational quality should be established, with students' character, academic achievements, physical and mental development levels, and the cultivation of interests and special skills as the main content for assessing the quality of school education. A monitoring mechanism for academic workload should be established to effectively reduce the excessive academic burden on primary and secondary school students.

#### 4.3.2. *Creating a vocational Ed. Evaluation system*

The main content of the evaluation should include the professional ethics, technical skill level, and employability and entrepreneurship abilities of learners, with an emphasis on strengthening the evaluation of internships and practical training. Support industry organizations in conducting assessments of talent cultivation quality in vocational schools, and improve the vocational education quality evaluation mechanism that involves schools, industries, enterprises, research institutions, and other social organizations. Refine the annual reporting system for vocational education quality.

#### 4.3.3. *Enhancing higher education talent assessment*

Implement national teaching quality standards and standardize the basic requirements for talent cultivation in professional fields, in line with the goal of cultivating college students who have ideals, aspirations, responsibilities, achievements, character, and cultivation. Encourage industry departments (associations) to set talent evaluation standards and promote the establishment of talent cultivation standards and evaluation methods for each major by higher education institutions. Adhere to the close integration of ideological and moral cultivation with cultural knowledge learning, innovative thinking and practical abilities, and comprehensive development with individual personality development. Maintain a combination of process-oriented and outcome-oriented evaluations for college students, strictly enforce course assessment standards and management, explore evaluation methods based on real-world tasks, and focus on assessing students' abilities to systematically analyze and solve problems using their knowledge.

### 4.4. Improving employer talent utilization orientation

Encourage enterprises and employers to conduct evaluations on the employment quality and satisfaction of graduates. Enhance the alignment of talent cultivation with industry needs. Accelerate changes to the current recruitment methods that "emphasize academic qualifications over capabilities," guiding students to solidly improve their literacy and leading education and schools to focus on quality education and students' practical abilities. Strictly implement employment entry systems to promote enterprises to raise the income levels of technical and skilled personnel. Improve the performance assessment systems of organizations, focusing not only on annual performance but also on the enhancement of talent literacy, continuing education, and development potential.

Establishing a talent forecasting, employment warning, and teaching reform information system, supported by big data, to form a docking, interaction, and dynamic adjustment mechanism between social needs and talent cultivation.

#### 4.5. Optimizing the social environment for educating people

Establish a comprehensive participation mechanism for collaborative education involving the government, schools, society, and families. First, implement the government's leading responsibilities, adhere to the correct guidance of public opinion, strengthen mainstream ideological discourse, innovate and improve online propaganda, grasp the laws of online communication, and fully utilize new media and new methods such as Weibo and WeChat. Provide adolescents with healthy, uplifting, and artistically charming spiritual products, guide society to establish correct views on education and talent, and create a positive public opinion environment. Second, promote enterprises, institutions, and communities to fulfill their educational responsibilities, make full use of various educational resources, actively participate in vocational education, training, and educational activities, and provide conditions and conveniences for students' internships, practical training, and social practice. Third, clarify the responsibilities of family education, strengthen parent education, popularize common sense of family education, guide parents to be the first teachers of students, and promote the development of adolescents' personality and mental health.

#### 4.6. Innovating the methods of educational provision

Vigorously develop private education and expand new forms of education. Social appeal and the acquisition of real skills are the lifelines of private education. Professional literacy, employability, and corporate welcome are the foundations on which private schools win their reputation. Private education can leverage its market-oriented, flexible, and efficient institutional advantages to focus on student quality and explore new models of school operation led by core literacy. Actively develop "Internet + Education" to promote the modernization of education with educational informatization, actively promote the integration and innovative development of information technology and education, and strive to build a networked, digital, personalized, and lifelong education system, creating a learning environment where everyone can learn everywhere and at all times. Based on students' information literacy, achieve a transformation in learning methods, educational methods, and school operation methods, to better adapt to students' actual needs, and promote the improvement of students' core literacy and comprehensive development.

Practice has shown that talent is the country's greatest resource, and education is the cornerstone of talent growth. Cultivating people with modern literacy to meet future social needs and to strengthen the foundation for the progress of future social civilization is a common choice of countries around the world. A new round of educational reform with the improvement of educational quality as its theme and the cultivation of students' literacy as its main line has just begun. The strength of the youth is the strength of the country. At this new historical starting point, we must seize the momentum, make achievements, and make new contributions to the healthy growth of Chinese adolescents, the development of global education, and the progress of human civilization.

### 5. Conclusion

As educational reforms continue to deepen, we stand at a new historical starting point. Facing the future, we must recognize that the core literacy of adolescents is the bridge connecting the past and the future, and it is the key to shaping the nation's future. Through continuous educational innovation and practical exploration, it is our responsibility to provide a more open, inclusive, and challenging learning environment for young people. Let us work together to create a social atmosphere conducive to the comprehensive development of adolescents, cultivating them to become talents who can adapt to future society and lead the trends of the times. As the ancients said, "It is better to teach a man to fish than to give him a fish," the essence of education lies in stimulating potential, guiding exploration, and shaping character, allowing every young person to roam in the ocean of knowledge and soar in the future sky.

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