

## REVIEW ARTICLE

# Entry and path to cross-field labor education

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All productive, living, or service activities involving intellectual and physical effort and affecting the quality of survival and development that can be classified as labor is multiplied or cross-field in character. After several separations and combinations of labor activities, scholastic education, science, and technology in the course of human development are the foothold and breakthrough for labor education to re-realize integration in multiple fields or cross-fields in the new era. The purpose of labor education is not only to enable students to integrate theory with practice and creative labor but also to stimulate students' pursuit of moral, intellectual, physical, and aesthetic knowledge, especially scientific and cultural knowledge. Labor education should explore the educational value of modern labor, integrate it into educational activities, and bridge the fields of education, labor, and technology for comprehensive integration. Understanding the different meanings of seductiveness in labor education in various fields and the means of achieving the integration of labor and seductiveness are necessary.

**Key words:** labor education, labor-oriented, education nature, cross-fields

**INTRODUCTION**

"Education must be combined with productive labor" is an important aspect of Marx's theory of the all-round development of man. The combination of productive labor and education "is not only a way to increase social production, but also the only way to create a well-rounded human being".<sup>[1]</sup> "The goal of bridging the gap between mental and physical work is finally achieved through the literacy of everyone and at the same time the full familiarity of everyone with the production process."<sup>[2]</sup> The essence and ultimate purpose of combining education with productive labor is to train workers to adapt to modern production theoretically and practically and to train members of society to adapt to modern life through various forms of education. Ever since the classic proposition of "combining education and productive labor" was proposed, the form of labor

has undergone significant changes. Scientifically grasping the richness of form and the meaning of "labor" in labor education in the new era is a premise for comprehensively understanding labor. Accurately understanding and scientifically developing the classic proposition of combining education with productive labor is the basis for the scientific implementation of labor education. The integration of labor and education through teaching labor education from the perspectives of different fields will make people more comfortable with present and future challenges.

**RE-UNDERSTANDING LABOR EDUCATION IN DIFFERENT FIELDS**

Labor is a basic social practice tool unique to human beings, a process that creates spiritual and material wealth, and a reliable means of survival that allows

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individuals seeking a better life to turn possibility into reality. Labor is also an essential means of promoting social prosperity and national strength. Labor education should be a significant part of modern education, but modern education is neither integrated with productive labor as ancient labor education was, nor separated from productive labor, for instance, some 20th century educations or ancient school educations.<sup>[3]</sup> Since modern education is built on the development of modern science, it is the intermediary connecting modern science and production activities that realizes the mutual promotion of modern science and human modernization. To allow children and adolescents to easily adapt to modern production in the future by the integration of labor education into the entire school period and process through the indispensable production of teaching and participation in productive labor and other service labor, educating students in general labor knowledge and skills and cultivating labor's psychological qualities and love for labor are necessary. The integration of modern science and human modernization at a higher level effectively reinforces both. For example, in an intelligent agricultural technology course offered by a school, students not only obtain advanced knowledge of agricultural science but also master the operation and maintenance skills of modern agricultural machinery through hands-on practice, realizing an ideal combination of science, technology, and agriculture.

### **Labor in transformed time and space**

In the usual academic context and life scenarios, labor refers to "the activity of human beings to create material or spiritual wealth, or specifically manual labor".<sup>[4]</sup> This definition of labor is consistent with the definition of labor by *the Labor Curriculum Standards for Compulsory Education (2022 Edition)*: "the process of creating material or spiritual wealth, and is a basic social practice unique to human beings".<sup>[5]</sup> In daily life, people are accustomed to understanding that physical activities such as manual work, housework, and industrial and agricultural production are labor, while intellectual activities such as obtaining knowledge are placed outside of the scope of labor. The Ministry of Education proposed what was termed "three-love education", which taught a "love of learning, love of labor, and love of the motherland".<sup>[6]</sup> Juxtaposing a love of learning with a love of labor meant that learning activities were not categorized as labor. There is also a more comprehensive understanding of labor; for instance, Babansky believed that the activities of teachers and students in the teaching process are human labor activities.<sup>[7]</sup> Scholars such as Sukhomlinsky also viewed learning as a labor activity. He noted that "the mental work of the student is an active mental activity, and if this attribute is lost, learning loses the nature of labor".<sup>[8]</sup> In addition to manual labor, modern

labor includes digital and intellectual activities, such as software development, research, and the work of creative industries, all of which are increasingly vital in today's knowledge-based economy. Similarly, in countries such as the United Kingdom and the United States, housework, homework, and schoolwork all have the root word "work" and all belong to the category of labor work.

Undoubtedly, hard study is a type of positive labor that requires a significant, long-term consumption of mental and physical strength and is embedded in the spiritual core of struggle, which is essential for cultivating the spirit of labor and tempering the quality of will. However, learning activities are neither equivalent to nor a substitute for other forms of labor. Just as the combination of education and productive labor is not the integration of the two independent processes of education and productive labor, it is even less a return to the primitive state before their separation, or to labor. This does not mean that production is education or labor is learning; that school is a factory, or a factory is a school; that a scholastic education is separated from scientific education; or that scientific education must be weakened to strengthen productive labor.<sup>[3]</sup> Rather, the combination of education and productive labor aims to deeply comprehend the field and cross-field nature of labor education through a theoretical discussion of labor. Students' labor activities inside and outside school include daily life labor, productive labor, and service labor, as well as other forms of labor combined with reading and study, literature, art, music, painting, physical exercise, and travel. All of these are combined with the treasures of human civilization and spiritual wealth.<sup>[9]</sup> In short, labor is a social practice that uses both mental and physical strength to create material and spiritual wealth.

Zhu's assertion that "modern science cannot be used without the combination of hands and brains" has penetrating power in time and space.<sup>[10]</sup> Understanding labor as physical labor and ignoring its mental nature or only emphasizing mental power and ignoring the positive significance of trunk and limb coordination to labor is indicative of a narrowing and misreading of the concept of labor. Any type of mental work requires a certain amount of physical exertion, and any physical work requires a certain amount of mental support. Technology and social development have promoted a change in labor forms, with labor becoming increasingly intelligent and even digital. Therefore, one must recognize and understand labor from the perspective of comprehensiveness and development and as "all practical activities that include human beings to create and transform the world".<sup>[11]</sup> The amount of physical exertion or "sweating" can no longer be used as the

criterion for judging labor activities.

We should pay attention to the physical attributes of labor from the perspective of fields and cross-fields and to the significant fact that the form of labor is closely related to the development level of social productive forces and its constant evolution. In this era of classical Marxist writers, the inheritance of professional society must overcome the flaws of the apprenticeship system to meet the needs of socialized large-scale production, and education must be combined with the modern mechanical industry, as represented by steam engines. With improved modern production and scientific development, the living standards of working people and education for all have continuously improved. Moreover, vocational education, higher education, and lifelong education are developing side by side. In an era of informatization and intelligentization, new forms of labor, such as scientific and technological labor, intelligent labor, and network labor, have been continuously created. The emergence of new forms of labor does not necessarily mean the extinction of traditional labor; indeed, "certain complex and creative manual labor has always existed".<sup>[12]</sup> However, social development and scientific and technological progress mean that traditional human work is withdrawn. Productive labor, service labor, and life labor will become increasingly automated and intelligent, labor requirements for physical strength and flexibility will gradually be reduced, and the knowledge and intelligence dimensions that affect labor skills and comprehensive labor quality will be increasingly important. Indisputably, human labor will appear in more abundant fields, and human beings will continue to be liberated from heavy physical labor. As people devote more time to learning and the age at which citizens begin to participate in remunerated productive labor and alternate between education and productive labor continues to shift, the question of how labor education can contribute to the progress of the integration of education and productive labor is an omnipresent and always new issue.

### **The coherent purpose of labor in different fields**

Purposefulness is the motivation for human social behavior.<sup>[13]</sup> Labor is a social practice that meets the purpose of human beings, whether it is productive labor, service labor, daily life labor, or another form of labor, all of which indicate a certain purpose. In ancient societies, human labor was only for survival; thus, obtaining food to survive was the fundamental purpose of labor. Currently, human societal development has overcome the embarrassing situation of a lack of materials and evolved from an era when human beings had to engage in productive labor since childhood. Humans have shifted from basic material life needs to

higher needs of truth, goodness, beauty, and the pursuit of individuality and freedom.<sup>[14]</sup> In modern social life, the purpose of human labor is not limited to the creation of material wealth, and spiritual production has become increasingly important.

Since labor is a social practice with a purpose, labor without a purpose is meaningless and difficult to sustain. Labor creates material wealth to sustain individuals for survival and promote societal development and spiritual wealth to empower people and meet higher needs and aspirations for a better life. Through the creation of material and spiritual wealth, human beings can fully realize their life purpose.<sup>[15]</sup> Indeed, the purpose of life "can only be realistically set in labor".<sup>[16]</sup> Labor education significantly impacts enhancing social benefits and promoting economic development. For example, through the cultivation of practical skills and professionalism, labor education helps workers improve their competitiveness in employment, thus effectively alleviating unemployment. It also helps them adapt to changes in market demand and reduces unemployment caused by skill mismatches. Without labor, ensuring survival and achieving life's purposes is difficult. Thus, creative labor is a prerequisite for the existence and continuation of people and society. In school, students, being realistic, concrete, and practical people, also have a clear purpose in their labor education, and "purposeful labor or activity itself is one of the simple elements of the labor process".<sup>[17]</sup>

The purpose of labor education is not merely to accomplish a certain educational and teaching task. On March 20, 2020, the *Central Committee of the Communist Party of China and the State Council issued Opinions on Comprehensively Strengthening Labor Education in Universities, Primary, and Secondary Schools in the New Era* (hereinafter referred to as "Opinions"), which promoted the widespread implementation of labor education at schools of all types and levels. Along with morality, intelligence, physical fitness, and beauty, labor education has become important educational content for promoting the well-rounded development of students.

### **The purpose of labor education affected by different fields**

The combination of education with productive labor, science education, labor education, comprehensive technical education, vocational education, continuing education, and lifelong education (collectively referred to as pan labor education) points to different areas that complement each other but neither oppose nor replace each other. The reason pan labor education exists is that labor education and its purpose are field dependent. Modern education is the result of the secondary separation of labor, and the integration of education and

productive labor cannot simply be understood as introducing productive labor into schools. However, the appropriate participation of the educated in productive labor and other service labor is conducive to cultivating their ideological and moral character of respecting and loving labor and working people and helping them master labor skills. Introducing an appropriate amount of physical labor and productive labor into schools is necessary so that the educated can be regulated and tempered. It should be noted that education is now based on science and technology. Accordingly, pan labor education can only be implemented on the basis of science and technology education.

Field dependence is involved in labor education program design. How to organically link and reasonably differentiate labor activities from technical education, scientific experiments, and other activities involving the use of hands and brains, how to make "sweating" labor activities take on a richer appearance, and how to effectively integrate the evolving forms of labor into labor education are all issues that must be actively considered and seriously resolved in labor education. Students must obtain systematic scientific and technological knowledge and simultaneously "purposefully and systematically participate in daily life labor, productive labor, and service labor, and experience hands-on practice and sweat-inducing exercise to sharpen their strong will".<sup>[18]</sup>

Various schools in China have labor education programs. Primary and secondary schools offer independent labor courses, and universities have corresponding labor practices. Undoubtedly, the modern implementation of various labor activities in the name of labor education does play a positive role in helping students by, for example, experiencing labor activity, improving their individual personality, and alleviating the stress of learning. However, the real meaning of the word "labor" in the term "labor education" will significantly jeopardize school teaching activities if it is understood merely as physical labor. Labor activities in school will then lack consistency, especially since exploring the educational significance of labor education in depth is hard work. If labor is regarded as physical labor alone or limited to traditional physical labor in practicing school labor education in the new era, it may repeat the same mistakes and delay scientific, technological, and societal progress. The previously mentioned view does not mean denying the educational role of old forms of labor or traditional manual labor. Rather, it means hoping that school labor education will not be satisfied with, or even remain at, the level of students' participation in the old forms of labor activities. This kind of labor education is like "forcing an individual with modern transportation facilities to give up the advanced means of transportation, and trying to pick up

a hundred pounds of heavy burdens and walk dozens of kilometers on foot". What the author previously mentioned was not an attempt to deny the value of traditional manual labor in instilling a hard-work spirit and endurance in students. "Hard work" is not mandatory for individual growth through labor activities. Ignoring the new forms of labor and unilaterally defining labor as traditional manual labor or in other old forms, and accordingly educating a new generation, are contrary to the laws of labor evolution and dangerous to student labor innovation.

Field dependence in labor education activities. The purpose of labor education is to enable students to attain educational achievements that cannot easily be fulfilled by other forms of education. In other words, the aim of labor education is educational labor, not labor proficiency or skills. Labor education focuses on labor in education. It aims to help students understand labor, stimulate labor enthusiasm, feel the creative process of labor, and experience the joy of labor through labor practice. It is no exaggeration to say that human beings can only develop through creative labor and the use of knowledge and skills. Labor education encompasses creative labor with both hands and brains, "attracting young men and women to make spiritual growth and perfection".<sup>[19]</sup> In the field of scholastic education, if the labor activities stipulated in the teaching plan are only passively completed, and the students are not allowed to feel the inner happiness of labor spiritually, labor education can easily be treated passively and carelessly. If students can understand creativity in labor activities from a social perspective, then this kind of labor may greatly enrich educational values. If students can sense the importance of creatively implicating knowledge and formatting skills through labor activities, labor will transcend the barrier of "working as (the) mechanical operation (of) the walking dead" and be full of spiritual fun.<sup>[20]</sup>

Whitehead once stated that spiritual happiness often takes two forms: creative and relaxed happiness.<sup>[21]</sup> The happiness of creation and relaxation is not mutually exclusive and can be unified through practical concrete activities. Forms of labor, such as scientific experiments and handicrafts, can be transformed into creative labor in schools. These kinds of activities allow students to feel joyful when engaging in labor activities and material creation, thus giving them a break from stressful, monotonous book study. If labor education ignores the inherent purpose of specific labor activities or overemphasizes ideological education, it can easily become a formalized activity that deviates from the essential characteristics of human labor and becomes a painful game that forces students and even their parents and teachers to punch cards to play and passively and painfully cope with. It will make labor education fall into

a vicious circle in which there is neither creative experience nor educational gain.

## THE DIFFERING SEDUCTIVENESS OF LABOR EDUCATION ACROSS FIELDS

Labor education is essential for implementing the fundamental task of promoting the overall development of students. To scientifically implement the worth of labor education, differentiating labor education from comprehensive technical education or vocational education is necessary. A comprehensive technical education enforces the basic science and management principles of modern production and satisfies the basic production skill requirements in educational programs. Labor education pays attention to students' experiences of happiness and other emotions during the labor process and to the acquisition of the labor ability needed for survival and development. However, labor education practice cannot make productive labor, service labor, and life labor the basic components of campus labor life. Labor education requires that schools integrate the spirit and value of life labor, productive labor, and service labor into labor education through a reasonable design of forms of labor education. Doing so will cultivate a correct labor outlook and habits in students, develop their labor ability, and instill in them a love of labor and working people.

### *The real meaning of labor education in various fields*

The emergence of scholastic education in ancient times was the first separation of education from productive labor. The second separation was of modern education from productive labor, and the integration of education with productive labor through modern science, an inevitable trend in the historical development of modern society.<sup>[3]</sup> Since machines have replaced hand tools, workers in production processes increasingly need to spend more time mastering scientific knowledge. Since productive labor is mainly based on scientific knowledge rather than direct production experience and labor skills, the "modern mechanical industry separates science from labor as an independent productive capacity".<sup>[22]</sup> Modern education is the result of the second separation of education from productive labor. The relationship between modern education and productive labor is neither integrated with productive labor, as in ancient laborer education, nor is it completely divorced from productive labor, as in ancient scholastic education. They are both independent and inextricably linked. Modern production is based on modern science; consequently, proficiency in modern science requires extensive specialized study that separates it from

productive labor. Modern science has become the primary content of modern education. Thus, modern education has become the link between modern production and science. The separation of science from production and education from labor are both manifestations of social progress. Inevitably, re-realizing the integration of science with production and education with science is necessary for the rapid development of modern production, science, and education.

The separation of science from production and education from productive labor continues. The more science and modern production develops, the deeper, broader, and more systematic the scientific knowledge that workers engaging in production are required to be proficient in (as a group) becomes. Simultaneously, the requirements for production activities for the development of human intelligence become higher and cannot be realized by production activities alone. This inevitably requires extending the length and adding new levels of education for all. The years that children and adolescents spend before becoming real producers will be longer. Accordingly, two problems have emerged. The first is the contradiction between the infinite growth of knowledge and relatively limited. The increase in the time required for schooling has become increasingly prominent. The second is the dilemma of how to effectively implement labor education that combines education with labor or productive labor. If the combination of education and productive labor based on modern science and the integration of modern science and production caused by the intermediary role of education can effectively "materialize" science for the producers and the objects of labor through productive labor, it will lead to the further integration and development of science and production and promote societal progress.

Effectively coordinating two closely related but independent processes in modern education and productive labor is difficult. From a global perspective, many primary and secondary schools establish labor education in the curriculum, or more precisely, labor courses, such as courses in design and technology in the United Kingdom, handicrafts or labor in Germany, crafts in Russia, and life or family sciences in Japan. The United States also has state work classes. A common feature of labor education worldwide is enabling students to acquire labor skills.<sup>[23]</sup> That is, global labor education is a pragmatic technical education that aims to prepare students for their careers and lives. "The demands of life are too varied to allow schools to adopt such specialized training."<sup>[24]</sup> How to realize the integration of labor and education in school and the real world is a significant theoretical and practical issue related to labor education.

As early as 1981, China clearly stipulated that "labor technology courses should be (established) in middle schools".<sup>[25]</sup> With the implementation of curriculum reform in basic education, the *Outline of Basic Education Curriculum Reform (Trial) (2001)* stipulated that "comprehensive practical activities are (to be established) from primary school to high school as required course(s), and the (content should) mainly include information technology education, research-based learning, community service and social practice, and labor technical education".<sup>[26]</sup> Technical labor education, information technology education, research-based learning, community service, and social practice are all practical activities. The original intention of these reforms was to allow labor education to adapt to new requirements in social development and reform; however, this adaptive measure weakened labor education by being too generalized. It also ignored the moral values of labor education or "hindered the full recognition of the ontological value of labor education".<sup>[27]</sup>

To have labor education play a more effective role, *China's Regular High School Curriculum Plan (2017 Edition)* and *Compulsory Education Curriculum Plan (2022 Edition)* both established labor courses in parallel with technical education and comprehensive practical activity courses as basic courses stipulated by the state. Although there are differences among labor education, technical education, and comprehensive practical activities, and each one has corresponding curriculum standards, this division separates labor from technology and comprehensive practice, ignoring the unity of labor- and education-oriented quality in labor education and only treating labor education as students leaving the classroom or school gates to participate in or observe socially productive labor or complete certain forms of housework, volunteer service activities, or other forms of courses according to regulations.

This kind of labor education fails to include the clear purpose of labor; thus, the meaning behind such an education is unclear. This kind of labor activity makes it difficult for students to obtain real labor training and to experience joy from labor work, and it may lead to students' negative understanding of life, productivity, and service labor. It also reinforces the opposition between mental and physical labor in students' minds. Therefore, labor education should transcend the old understanding of the excessive pursuit of moral education or attention to manual labor alone and help students deeply understand the productivity and creativity of labor so that students can achieve a better understanding of labor skills and wisdom contained in life, productive, and service labor to cultivate active feelings about labor work, the labor process, and working people. Moreover, digital and intellectual labor

can be integrated into the modern education system through project-based learning and research-based courses. In this context, students' creativity, teamwork skills, and sense of social responsibility are fostered, and a solid foundation for professional development and social life can be established.

### **Avoiding misunderstandings in labor education**

As important educational content, whether the goal of labor education is the formation of students' labor values or the cultivation of students' labor ability and habits, its implementation is inseparable from the organization and selection of labor activities. Successful labor education should be a type of education-combined labor or labor combined with education. Any ignorance of the educational nature of labor or the labor-related nature of education can easily make labor education a mere formality. Modern practices of labor education should include the following.

#### *Vigilance against the separation of education and labor in labor education*

Like other forms of education, labor education should cover the entire practice process, and one of its aims is to promote the overall harmonious development of students. As a field practice, labor education should reflect the nature of education but not ignore labor. According to Dewey, education "is growth, and education has no purpose outside of itself".<sup>[28]</sup> Since labor education is accomplished through actual labor, its character must reflect that of labor. The negativity toward labor in labor education is not conducive to helping students understand labor and its creativity, which can easily lead to the loss of a reliable practical platform for labor education and the educational nature of labor education, thus making labor education a tree without roots.

The Opinions set specific goals based on three aspects of education: ideological understanding, emotional attitude, and ability and habits.<sup>[29]</sup> The Opinions closely follow the requirements of the fundamental task of "cultivating virtue and cultivating talent" and embody the moral, or ideological, purpose of labor education. However, this kind of ideological education, which runs through the labor process, should strive to end the tendency of "reducing the activity itself to a tool means".<sup>[30]</sup> Avoiding the drawbacks of labor education practice becoming a mere formality or weakening its comprehensive educational value is necessary. This understanding is not an attempt to deny the ideological value of labor education but to emphasize the ontological purpose of labor or labor education as well as the overall role of this ontological purpose in promoting the value of labor education. Furthermore, we must also note that due to orientation differences in

ideological and educational values in various labor activities, ideological and political values inevitably differ in profundity or comprehensiveness.

As a type of education, labor education should balance an education-oriented nature with a labor-oriented nature and should not turn labor into slogans or even punishment. Punishment is an aversive stimulus to which an organism is subjected and a training procedure in which "an aversive event occurs immediately after the occurrence of a certain behavior, leading to a decrease (in the) rate of occurrence to the behavior".<sup>[31]</sup> Once labor becomes an aversive stimulus to individual or collective students, what they experience in labor education will only be dirtiness and tiredness without joy and harvests. In this case, labor education will inevitably transform into an activity that causes physical suffering and externally reinforces feelings of being "dirty, tired, and poor" in students, strengthening their psychological contempt for labor.<sup>[32]</sup> Students will no longer regard labor as a virtue.

#### *A real understanding of labor education in different fields*

The Opinions asserted that all types of schools must build a labor education system that reflects the characteristics of the new era. In other words, labor education should keep pace with the requirements for social development and the changes in forms of labor in terms of content selection and practice optimization.

First, "integrating education with productive labor", a Marxist theory for ensuring the overall development of humankind, must evolve to suit the times. Any theory "is a product of history, which has...different form and content in different times".<sup>[33]</sup> Since children's participation in social production for the sake of livelihood has become a common phenomenon, some European countries have combined children's labor with education to ensure that these children can obtain intellectual, physical, and technological education to meet the needs of large-scale industrial production and scientific and technological development. Marx saw it as the germ of a future education that would guarantee the overall development of all people and noted that the education of future generations of workers determines the future of the working class.<sup>[34]</sup> This idea of "integrating school education with labor work" aimed to ensure that young people received enough education to promote social production and achieve all-round individual development. In the new era, with the continuous improvement of productive forces and the increasing abundance of social material supply, the integration of education and productive labor urgently needs to be understood as the integration of education and modern productive labor, rather than mechanically

understood as allowing students to participate in productive labor or engage in traditional manual labor. Both the theory and practice of labor education must rationally discard the traditional understanding of the integration of education and labor.

Second, labor education cannot ignore that "the modern labor form presents a state of continuous iteration...integration of the old with the new, and (the) coexistence of diversified powders".<sup>[13]</sup> As social development is constantly changing labor patterns and people's lifestyles, it is becoming increasingly clear that the time and energy that people spend on labor work are gradually decreasing, and traditional manual labor is being replaced by intelligent or intellectual labor. Labor education must end the misguided cultivation of students' labor skills and spirit through traditional manual labor practices and avoid training a "martial arts" labor force. Labor education should not be evaluated based on old forms of labor, and young people's labor level should not be judged by old standards in the new era to avoid labor education becoming "weakened in schools, softened in families, and diluted in society". Only when labor education is considered from the perspective of development and its new characteristics are emphasized in social practice can we truly demonstrate modernity and the forward-looking nature of labor education.

#### *General-purpose labor education in different fields*

Labor education aims to comprehensively improve the overall quality of students and develop them by balancing "hands and brains". For example, in courses on planting, students learn about the required conditions by observing seed germination and combine this knowledge with that gained from observing and conceiving the designs of breeding boxes. These learning activities allow the students to think and work together. Labor education requires the intervention of specific labor skills and technology education and a firm understanding that the ultimate goal of labor education is to develop labor competencies that students need to survive and thrive. This kind of labor education is general purpose because it does not provide students with skills for or expertise in specific occupations. In short, the labor education that students receive in the non-vocational stage, like any other education, "does not prepare (them) for a specific occupation, but rather (allows them to acquire) knowledge, experience, or lessons that may come in handy in the future and that will enable them to be better prepared for occupations that they will choose in (the) future",<sup>[35]</sup> so as to be truly prepared for future work and life.

"General purpose" does not mean all-powerful. It has two meanings: one refers to the comprehensive

educational function of labor education to integrate morality, intelligence, physical fitness and aesthetics, and the other refers to the basic ability and literacy required for students' success and development. The general purpose of labor education cannot simply be understood as encouraging a diversity of labor, but should be considered as an organic combination of labor activities and basic courses in science, culture, art, and sports to promote students' comprehensive and harmonious development. The Opinions recommended that compulsory courses in labor education and other courses in schools should put labor education into effect organically at all levels.<sup>[36]</sup> For example, through participation in community service labor, such as environmental protection activities, students can develop a sense of social responsibility and civic awareness, and in handicraft courses, students make artwork that enhances their aesthetic ability and allows them to experience the creation of beauty through labor.

Labor education aims to introduce students to practical but creative labor. Labor education can also stimulate students' moral, intellectual, physical, and aesthetic development and their pursuit of scientific and cultural knowledge in particular. Dewey provided this example: a child wanted to boil an egg and was only told to boil an egg in water for three minutes and take it out, which had no educational meaning.<sup>[37]</sup> The integration of labor and education in different fields is an important criterion for distinguishing labor education from family or social labor activities. For instance, environmental education is incorporated into activities in which students take turns engaging in hygiene or duty, symmetry knowledge is reminded when learning to fold clothes, and biological knowledge is furthered through the cultivation of plants and the raising of animals. These kinds of labor education can allow students to experience the unique joy of labor and truly mobilize students' physical, mental, emotional, and aesthetic participation.<sup>[38]</sup> They exemplified the comprehensive educational value of labor education. The more labor education can give full play to the educational functions of morality, intelligence, physical development, and aesthetics, the more it can stimulate the internal needs of students to develop moral, intellectual, physical, and aesthetic comprehensive literacy.

Labor education ignoring its "general-purpose" approach can easily lead to blindness in the selection of labor activities in schools so that labor education will either evolve into skill training or labor activities lacking educational quality. Thus, labor education will fall into a superficial, de-educative state. Highly praised labor activities, such as tofu workshops in primary and secondary schools and rice planting, will devalue labor education if they are not organically integrated with the

four other kinds of education in the basic curriculum. If labor activities are only regarded as a means of adjusting to school life or a relaxing way to experience cultural learning, students cannot experience the contribution of coordinated mental and physical energy required for real labor. Then, labor education will fail to establish a solid learning foundation for future careers and daily life, and it will be impossible to effectively cultivate children's love of labor. In a sense, this kind of labor education becomes a "waste of children's life in school fields and a waste of children's social life as a result of inappropriate and abnormal preparation in school".<sup>[39]</sup>

## INTEGRATION WITH LABOR AND EDUCATION

Labor education is essentially a practical activity or process upon which labor and education are dependent. The labor aspect of labor education is mainly based on the basic need of human beings to engage in labor activities and their constant innovation of labor methodologies, and its educational character is mainly based on students, the main body of practice, needing to realize all-around development through and from labor activities "to build up morality, increase intelligence, strengthen the physique, and cultivate beauty". The integration of labor and education can make labor education effectively debunk the misunderstanding that students can simply participate in life, productive labor, and service labor. It will prevent labor education from involving labor without education or being formalized or even entertained. Labor education should also build a bridge between theory and practice. For example, by organizing field trips, project-based learning, and hands-on workshops, students can deepen their understanding and enhance their learning experience through operation so that they can actively apply scientific knowledge and effectively develop their intellects through labor education to become workers and builders with solid cultural literacy and strong innovative practical abilities, and in this way, nurture a culture of love, admiration, and respect for labor work.

### ***Project-based labor education: a field practice integrating labor with education***

The practical nature of labor determined by labor education must cultivate students' practical abilities. Liu and Fu proposed that human practical ability contains "four basic constituents: practical motivation, general practical ability, specialized practical ability, and situational practical ability".<sup>[40]</sup> If labor education only allows students to participate mechanically in simple labor, and labor activities are scattered across different fields without a united purpose, these activities may become a burden for students, which could easily induce emotional resistance and other negative psychological

moods. Professor Yu of Beijing Normal University raised the embarrassing question of how many tasks such as "sweeping (the) floor", "washing dishes", "picking apples", or other labor tasks should be completed to cultivate the concept of "love of labor?"<sup>[41]</sup>

Project-based labor is a prevalent form of modern creative labor. It possesses a clear labor purpose and problem scenario and has played an irreplaceable role in the cultivation of students' practical labor ability. Since project-based labor involves a series of tasks, such as conceptualization, development, design, production, quality assessment, process improvement, and the submission of results, it requires people to fully develop their brains by making continuous efforts to solve problems. Programs such as road construction, product research, and development are commonly used as project-based labor. Simple work includes cleaning classrooms and schoolyards, providing temporary voluntary services, and sharing household chores. Simple labor can help cultivate certain labor qualities, develop certain abilities, and foster certain feelings of service; however, it lacks lasting and systematic labor exercises<sup>[42]</sup> and has a limited effect on the overall development of human beings. In addition, the implementation of labor education through simple labor often makes it difficult for students to encounter unavoidable setbacks in the process of real labor, which will create the illusion that "as long as you work hard, you will be able to go smoothly".

The implementation of labor education through project-based labor has a clear creative purpose and requires a continuous labor process. For example, the cultivation of fruits and vegetables on campus farms run by some schools involves a continuous labor process that integrates planning, seed selection, planting, fertilizing, weeding, pest control, harvesting, and even sales. Cultivation through the realization of project-based labor education requires teamwork, participation in the entire process, continuous payment, serious summary, and the integration of subject knowledge. This kind of labor education is holistic and comprehensive. Emphasizing the unique value of project-based labor does not deny creativity or the continuity of individual labor. Indeed, people in ordinary positions have developed extraordinary perseverance or have shown exceptional performance. However, common sense indicates that project-based labor lasts longer and that this kind of labor education better promotes the unity of mental and physical strength and is more sustainable and profound so that students truly appreciate the creative labor process. "The creative nature of labor activity is revealed to the child only when he is engaged in the kind of long-lasting labor that requires frequent thinking and taking care about it."<sup>[43]</sup> The deep involvement of students in the project-based labor process requires

knowledge obtained from various disciplines to discover, think, and creatively solve problems. The cumulative thinking and effort involved in project-based labor education help hone students' quality and enhance their internal drive to pursue scientific and cultural knowledge. Labor education through project-based labor also allows students to manage real problems, thus inspiring them to actively participate. When students consciously apply scientific and cultural knowledge to project-based labor, their learning imagination, labor creativity, practical life experience, and other qualities are enhanced, their understanding of labor is more objective, and their labor experience is deeper and more real.

### ***Routine labor activities: a general field for integrating labor with education***

The Opinions clarifies that "the implementation of labor education needs to rely on curriculum and must be guaranteed for a certain period of time".<sup>[31]</sup> However, labor education activities during school hours are usually limited to simple collective labor. These activities last for a short time, making it difficult for students to develop labor habits. Thus, conducting extracurricular and daily labor education outside of school is necessary.

First, cultivating young people's basic working abilities and habits requires the daily implementation of labor education. The Opinions clearly indicate that, through labor education, students will form good labor habits and be equipped with the basic labor abilities needed for survival and development. The basic labor ability needed for survival is a primary-level ability that can be acquired in daily life. Daily labor education is intended to teach basic labor skills through real-life labor scenarios for cultivation, avoiding the formalization of in-school labor education and the excessive use of limited school hours and allowing students to quickly acquire the basic labor skills needed for survival in real life.

Unlike the development of the basic labor skills required for students' survival, the formation of good labor habits requires daily labor education. Having students develop good habits in childhood, such as a love of labor, was originally intended to prepare them for social adaptation. If labor education begins with the purpose of ideological or moral education and attempts to reverse the bad habits of young people, such as low labor consciousness and failure to value the fruits of labor through classroom labor education, it may make it formalized, or it may evolve into formalism. Once labor education is formalized, its role in cultivating labor habits will vanish. Once the focus of labor education is on correcting behavior rather than on developing good habits, the training is pathological.<sup>[44]</sup> As the saying goes, "Once good behavior naturally formed earlier, good habit

becomes nature". The formation of good labor habits must gradually be stabilized through continuous training in daily life to become automatic behavioral patterns. Stable labor habits must be developed through continuous practice in daily life or study and cannot be achieved overnight. Therefore, daily labor education is beneficial, if not essential. Daily labor education can be implemented in both in- and out-of-school settings. In school, all teachers and students can participate in diverse labor activities to create a positive labor atmosphere. Outside school, the active support of the family and society provides students with many opportunities for labor practice, thus realizing double the educational effect with half the effort.

Second, the concept of formation of labor requires personal knowledge from daily life. The Opinions noted that through labor education, students should establish the concept that "labor is glorious, noble, greatest, and beautiful". Guiding students to establish the correct concept of labor is a significant aspect of labor education in the new era. Correct concepts of labor are a prerequisite and cornerstone for developing labor ability, stimulating labor spirit, and forming labor habits.<sup>[45]</sup> The labor concept is a kind of value judgment and psychological cognition constrained by subjective understanding. The establishment of correct labor concepts is based on concrete labor life and practice and cannot be attained only by preaching because "human cognition is not a priori logical ability, but a contextual process of continuous evolutionary development".<sup>[46]</sup> Although contexts can be created, daily life contexts have a natural authenticity that plays an important role in specific educational and pedagogical goals that are difficult to reach, with contexts holding artificial power. For example, a group of students found their teacher straightening small trees on campus after a heavy rain, and they took the initiative to help straighten the saplings despite the mud on the trees. They could easily have forgotten the mud on their hands when engaged in the activity. Students' daily life in the labor field "transforms (the) abstract knowledge of labor into vivid experience"<sup>[34]</sup> and naturally allows them to experience the joy of labor through labor activity. Thus, they learn that labor is glorious, noble, great, and beautiful.

### ***Implicit labor education: a cultural field in which labor and education are integrated***

As a required course in schools, labor education has been prescribed class hours and out-of-school time requirements. This institutional design positively impacts the function of labor education. However, most schools only educate students on labor through the labor curriculum, ignoring the development and use of hidden labor education resources. Hidden labor curriculum resources have an imperceptible effect, which is an

important, practical way of promoting labor education.

First, the general-purpose nature of labor education requires that labor education be "organically integrated into knowledge and moral education, and implemented implicitly in all other forms of education".<sup>[47]</sup> Ideally, labor education or labor activity is a creative social practice in which students make comprehensive use of moral, intellectual, physical, and aesthetic knowledge, especially scientific and cultural knowledge. Therefore, it is an effective way to combine education and teaching with productive labor, to allow students to combine theory with practice, and to apply, test, and deepen theory in the field of labor practice. In the process of labor, people must use scientific knowledge, intelligence, even physical strength, and there must be a penetration and guidance of aesthetics and values. The formation of labor ability and literacy must be intertwined with various educational and teaching activities because "detached from the moral, intellectual, physical, and aesthetic education, labor education in isolation is meaningful only to a limited extent".<sup>[58]</sup> Schools must include labor education content and ideological and scientific penetration into the whole of educational practice to form an implicit labor education curriculum. This implicit labor education curriculum helps establish a meaningful connection between real life and what they have learned and better prepare students for their future lives.

Second, hidden labor education should be actively developed in schools. The labor attitude and behavior of all school staff is an important power that cannot be ignored in labor education and has a vital impact on the construction of the school's labor education culture and work as a model in labor education. Once a good labor culture is formed in school, it will have an infectious "body effect" on students. However, it is regrettable that people on campus easily find tables and chairs in bad condition and broken ground here and there. These familiar phenomena reflect the school work group's labor awareness and that labor effectiveness is in unfavorable condition. The poor labor practices of school work groups will inevitably weaken the demonstrative nature of labor education, making people feel that labor education is ineffective in terms of words and deeds. When labor consciousness is lacking, and the resulting behavior of school staff is not in favorable conditions, students cannot easily attain valuable labor education resources and achieve a harmonious labor culture, bad labor education comes alive in the school field.

Third, schools should create a positive environment for the promotion of labor education to guide and develop students. To allow the environment to nurture a labor education culture, schools typically attach significance to

developing campus culture. On school campuses everywhere, one can see bulletin boards and blackboard posters concerning safety, fire, and patriotic education, as well as advertisements for various club activities, cultural evenings, and sports competitions designed to enrich school life and guide students' overall development. However, publicity reports on labor knowledge, model workers' deeds, inventions, and creations related to labor education are rare. To obtain information on campus culture development specific to labor education first-hand, the author once conducted an interview with a middle school and found that almost no students knew about the regular national commendation conferences for model and advanced workers, nor did they know much about model workers in our country and the typical figures emerging from major events, such as the anti-epidemic and disaster relief. This lack of knowledge shows that publicity and education, which are closely related to the cultivation of labor values and other important qualities, are still in a state of neglect or even indifference. Increasing and strengthening the content related to labor education in campus cultural construction is necessary to form a spirit of love and respect for labor work and root it in students' minds and souls.

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Peng YJ: Conceptualization, Writing—Original draft preparation. Pi SM: Conceptualization, Writing—Reviewing and Editing. Both authors have read and approved the final version.

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