

The Three-Dimensional Pathway of Labor Education in Shaping College Students' Career Calling

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Abstract

This study addresses the challenges in cultivating career calling through labor education in higher education by integrating Marxist labor value theory, Self-Determination Theory (SDT), and Social Cognitive Career Theory (SCCT) into a three-dimensional framework of 'value-motivation-environment.' Based on this framework, a tripartite pathway is proposed: (a) clarifying the Marxist value orientation in career calling; (b) catalyzing intrinsic motivation through motivation activation; and (c) enhancing practical capabilities through environmental empowerment. This approach systematically facilitates the development of career calling. The study offers significant theoretical support and practical insights for enhancing labor education effectiveness and fostering both career calling and moral education in higher education.

Keywords: Labor education, Career calling, Marxist Labor Value Theory, Self-Determination Theory (SDT), Social Cognitive Career Theory (SCCT)

1. Introduction

Labor education takes various forms across cultures and educational systems. In Western educational frameworks, labor education concepts and practices are often integrated into structures such as ‘work-based learning,’ ‘experiential education,’ and ‘career education.’ Its philosophical foundation leans towards pragmatism and instrumental rationality, aiming to cultivate students' career adaptability, problem-solving abilities, and innovative thinking through connections between schools and workplaces, thereby addressing labor market demands (Little & Brennan, 1996). In China, labor education is a formal course. The Ministry of Education of the People's Republic of China (2020) issued the *Guidelines on Labor Education for Primary, Secondary, and Higher Education*, emphasizing that labor education is an integral component of the national educational system aimed at fostering holistic development. This system encompasses moral education, intellectual education, physical education, aesthetic education, and labor education, collectively referred to as the ‘Five Education Goals.’ The purpose of labor education is to cultivate students' awareness of labor, develop their labor skills, and instill a strong work ethic. Specifically, Chinese labor education focuses on cultivating students' correct understanding, emotional engagement, and practical skills related to labor. From this perspective, the development of students' career competencies is inherently embedded within the curriculum of labor education (Xu, 2024; Yuan & Chen, 2025).

Career calling refers to a profound value pursuit within a specific profession. It is an intrinsic drive felt by individuals that transcends personal self-interest, motivating them to seek deep meaning and purpose within their professional roles, with a primary focus on serving society and promoting collective well-being (Dik & Duffy, 2009). Based on this, it can be concluded that career calling encompasses three core dimensions: transcendent purpose, meaning and identity, and an altruistic value orientation. These dimensions closely align with the core objectives of labor education, which aims to cultivate students' work ethic, social responsibility, and value recognition. Thus, labor education plays a crucial role in helping individuals deepen their understanding of the value of labor, which may serve as the essential foundation for the development of career calling. However, the current design of labor education curricula in universities tends to prioritize formalization, with insufficient emphasis on guiding students toward understanding career values (Chen, 2023; Wang, 2021). Student participation is often passive, making it difficult to effectively stimulate intrinsic motivation (Huang & Lin, 2023; Wang & Zhou, 2023). Moreover, the school-community collaboration mechanism remains underdeveloped, and the social support system is weak (Cao & Wan, 2023; Yang, 2025). These challenges hinder the ability of labor education to effectively address the critical task of fostering career calling in the context of contemporary educational and societal demands. Based on this, the present study takes college students' labor education as its starting point and aims to address the following two core questions: First, how can labor education, through the implementation of educational practices, effectively stimulate and enhance students' career calling? Second, how can an innovative, three-dimensional pathway, consisting of ‘value guidance, intrinsic motivation, and social support,’ be systematically constructed to overcome existing barriers and make labor education serve as a solid

foundation for cultivating students' career calling? Through exploring these questions, this study aims to provide new theoretical perspectives and practical frameworks for the development of college students' career calling, as well as offer insights for the deepening reform and effectiveness enhancement of labor education in higher education institutions.

2. Theoretical Foundations of Labor Education's Influence on Career Calling

Career calling goes beyond professional interest; it emphasizes an individual's recognition of the meaning of their profession and the pursuit of contributing to society (Dik & Duffy, 2009). Labor education, as an educational approach aimed at cultivating students' labor values, skills, and social responsibility (Liang, 2025; Zeng, 2025), offers a unique perspective on fostering career calling. Specifically, labor education helps students experience the meaning of labor through classroom learning and social practice activities. It facilitates the connection between individuals and society, enhances their sense of social responsibility, and promotes the development of their career calling.

To further understand how labor education promotes the formation of students' career calling, this study is based on the following theoretical framework for analysis.

Marx argued that labor is central to human self-realization and socialization, serving as the foundation for relationships between individuals and society (Marx, 2016). The Marxist labor value theory emphasizes that labor is the essential activity in human society, through which individuals not only create material wealth but also bear social responsibility (Li & Yang, 2025). In other words, labor is not merely a tool for survival, but also a means for individuals to realize their self-worth and fulfill their social responsibilities (Liang, 2025). This theory provides a macro-level perspective for this study, suggesting that labor education is not just a means of developing students' labor skills, but also a crucial avenue for helping students establish a correct view of labor and enhance their sense of social responsibility. Specifically, through labor education, students can understand the social significance of labor, recognize that labor not only brings material rewards to individuals but also contributes to society, thus achieving the unity of personal and social values through labor (Zeng, 2025).

However, as an external influencing factor, how can education promote the development of career calling at the individual level? Self-Determination Theory (SDT) highlights that when individuals' basic psychological needs for autonomy, competence, and relatedness are satisfied, they are more likely to engage in work more actively, thereby fostering a sense of career calling (Ryan & Deci, 2002). According to SDT, labor education can enhance students' career calling by providing opportunities for autonomy and practical engagement, which help students develop intrinsic motivation and strengthen their sense of professional purpose. Allan et al. (2016) found that work volition significantly contributes to the development of career calling by enhancing internal regulation and reducing negative motivation. Specifically, work volition is positively correlated with internal regulation and negatively correlated with amotivation, thereby increasing individuals' sense of meaning in their work. Therefore, SDT provides important psychological support for understanding the role of intrinsic motivation mechanisms in labor education, offering insights into how labor education can stimulate individuals' agency and further enhance their sense of career calling.

Moreover, the development of career calling is influenced not only by intrinsic motivation but also by critical social and environmental factors. Social Cognitive Career Theory (SCCT) emphasizes that career choices and development are shaped not only by self-efficacy and career goals but also by external social and environmental influences (Lent et al., 1994, 2002). Duffy and Dik (2009) point out that career development is influenced not only by internal factors such as personal motivation, interests, and abilities, but also significantly constrained by external life circumstances. For example, social class, economic status, family background, and other environmental conditions can all play a crucial role in shaping an individual's career choices, career development path, and the formation of their sense of career calling. Su et al. (2024a) emphasize that career exploration plays a key role in the development of career calling, with career decision-making self-efficacy serving as a mediating factor in this process. Specifically, factors such as social support, practical opportunities, and external incentives gained through social practice can enhance individuals' career decision-making self-efficacy, thereby further promoting the development of career calling. This provides theoretical guidance for improving labor education through practical teaching and creating platforms for students to explore their career calling.

In summary, the theoretical frameworks of Marxist labor values, SDT, SCCT provide a comprehensive perspective, helping us understand the mechanisms through which labor education fosters the development of career calling. Specifically, Marxist labor values provide the theoretical foundation for labor education and distinguish the relationship between labor, the individual, and society. SDT explains how labor education can stimulate students' career calling by focusing on internal factors, particularly intrinsic motivation. Meanwhile, SCCT incorporates social and environmental factors to illustrate how external support and interactions foster the development of career calling. By combining these three theoretical frameworks, we gain a deeper understanding of how labor education promotes career calling at both individual and societal levels in college students.

3. Literature Review

3.1 Labor Education

The core concept of labor education is to develop a sense of responsibility, skills, and civic literacy through practice. While this concept is manifested in various forms across different national educational systems, it is widely recognized and applied globally. For example, Germany's dual vocational education and training system alternates between school and enterprise learning, aiming to cultivate students' career identity and professional competencies (Fürstenau et al., 2014). The Service-Learning theory model in the United States emphasizes achieving specific learning objectives through organized community service, fostering students' sense of civic responsibility and social connection through structured reflection (Gray et al., 2000). In Nordic countries such as Finland, social participation and service are integrated into the national curriculum, with a focus on cultivating students' sense of civic duty, social responsibility, and practical innovation skills (Niemi, 2012). Overall, although these educational models differ in form, they all emphasize the promotion of students' holistic development through practical activities, aiming to

cultivate their sense of social responsibility and civic awareness.

In contrast, within the Chinese context, labor education research has developed into a systematic framework under the influence of unique policy drivers and theoretical traditions. The main research trends can be summarized into the following three aspects.

First, the research on the evolution of labor education policies and ideology. Domestic studies place significant emphasis on interpreting and tracing the origins of the top-level design of labor education. Scholars generally highlight that the fundamental characteristic of labor education in China lies in its theoretical foundation in Marxist ideas of the comprehensive development of individuals (Li & Yang, 2025; Zheng & Chen, 2024). Research closely follows national policy directions, from the establishment of labor education's core mission of 'moral education and talent cultivation' in the new era, to its systematic integration as a key component of the 'Five Education Goals.' This research thoroughly explains the strategic shift from focusing on 'skills acquisition' to emphasizing 'value shaping and holistic development' (Huang & Lin, 2023; Liang, 2025).

Second, the in-depth research on the connotations and goals of labor education. Moving beyond a singular focus on practical skill development, academic attention has increasingly shifted to the comprehensive educational goals of labor education. Studies indicate that labor education in the new era should focus on cultivating students' labor attitudes, labor skills, work ethics, and emotional connection to labor (Liang, 2025; Yuan & Chen, 2025). This signifies that labor education is viewed as a multidimensional construct, which not only fosters students' practical skills but also aims to cultivate their spirit of dedication, labor awareness, and the spirit of perseverance through hands-on labor experiences (Wang, 2021). In this process, 'society' serves as the intermediary to clarify the individual's understanding of the meaning of labor, the work ethic, and the value of labor (Zeng, 2025). Specifically, labor education needs to be closely aligned with students' needs and the times, deepening students' understanding of the social dimensions of labor values such as justice, fairness, and responsibility within real-world social contexts. This shift encourages students to look beyond labor products and individuals, instead recognizing the natural alignment between these elements and the core aspects of career calling—such as 'meaning recognition,' 'altruistic orientation,' and 'social value' (Dik & Duffy, 2009). This provides a theoretical foundation for the integration of labor education and career calling.

Third, strategies for implementing labor education. At the practical level, research focuses on translating the aforementioned concepts into action. Scholars argue that effective labor education must go beyond the classroom and integrate with society. This can be achieved through diverse pathways such as community service, professional internships, and project-based learning, allowing students to experience the social value of labor in real-world contexts, thereby enhancing their sense of career identity and social responsibility (Cao & Wan, 2023; Wang, 2021; Yang, 2025). However, some studies have also critically highlighted that current practices face significant challenges, such as the formalization of labor education, a misalignment with professional education and career development needs, and insufficient social support, all of which necessitate innovation and optimization (Chen, 2023; Huang &

Lin, 2023; Wang & Zhou, 2023).

In summary, domestic research has laid a solid policy and theoretical foundation for this field, clarifying the role of labor education in shaping values and cultivating career identity. However, existing studies have notable limitations. Most research still focuses on macro-level theoretical explanations or meso-level model construction, with a lack of refined theoretical explanations and empirical studies regarding the underlying mechanisms through which labor education influences career value pursuit. This gap in the research is the key area that this study aims to address.

3.2 Career Calling

Career calling refers to an individual's deep identification with the meaning of their work and their pursuit of social responsibility (Dik & Duffy, 2009). Career calling has a significant positive impact on work motivation, job satisfaction, and career commitment (Duffy et al., 2018). However, research on the antecedents of career calling remains insufficient (Su et al., 2024b).

The current influencing factors of career calling include several key psychological aspects. First, individual psychological factors play a significant role in the formation of career calling. Research shows that there is a positive relationship between an individual's career decision-making self-efficacy and career calling, and the process of exploring career calling is also influenced by the individual's personality traits (Su et al., 2024a). Allan et al. (2016) points out that intrinsic motivation is one of the key factors in the formation of career calling. The stronger an individual's intrinsic motivation, the greater their engagement with work and sense of career calling. Second, the development of career calling is also influenced by social factors. Social support, such as that from family, friends, and mentors, has a significant impact on an individual's career calling, particularly when facing professional challenges (Duffy et al., 2018). Moreover, work values are pivotal in shaping an individual's career calling. Research indicates that an individual's sense of career calling is deeply influenced by the values they associate with their work, such as the sense of achievement, social contribution, and personal fulfillment (Duffy & Dik, 2009; Wrzesniewski et al., 1997). In addition, different cultural backgrounds and social systems can influence an individual's recognition of career calling (Allan et al., 2016; Dik & Duffy, 2009). For instance, in cultures that emphasize collectivism, individuals tend to place greater importance on the social contribution of their work, which in turn fosters a stronger sense of career calling (Zhang et al., 2015).

In summary, although research on career calling has deepened over time, there remain significant gaps in the literature, particularly regarding how to cultivate students' career calling through educational practices across different educational backgrounds. While some studies suggest that teacher guidance and teaching practices play an important role in shaping individuals' career identity and calling (Ehrhardt & Ensher, 2021), systematic research on how curriculum frameworks can help students develop a sense of career calling is still relatively scarce.

3.3 The Impact of Labor Education on Career Calling in College Students

Since the Ministry of Education issued the implementation plan for labor education, significant progress has been made in the institutionalization of labor education in higher education institutions. Survey data shows that over 90% of regular universities have incorporated labor education into their talent development systems and have developed specific implementation plans (Chen, 2023). Driven by this policy, the integration of labor education and career calling has shown initial positive effects. However, deeper challenges have also emerged, restricting the full realization of its educational effectiveness.

3.3.1 Positive Effects of Labor Education on Career Calling in College Students

Existing research indicates that systematic labor education practices can positively shape college students' career calling through specific pathways. These effects can be broadly summarized in the following three aspects.

Firstly, in terms of value recognition, labor education strengthens college students' career identity and social contribution orientation. Through systematic theoretical learning in labor education courses and social practice, students are able to establish a connection between personal career goals and societal needs (Zheng & Chen, 2024). Research indicates that students participating in such courses gain a clearer understanding of the social value of their profession, and their recognition of the alignment between their career goals and societal needs is significantly enhanced (Xu, 2024). Secondly, in terms of competency development, labor education solidifies the practical foundation for fulfilling career calling. Through practical activities such as enterprise production and public service, labor education provides students with a platform to hone their professional skills (Yuan & Chen, 2025). Students participating in these activities show significant improvement in core competencies, such as teamwork and problem-solving, and these enhanced abilities are positively correlated with the development of career calling (Su et al., 2024a). Thirdly, in terms of behavioral feedback, labor education fosters social validation of career meaning. Society, as an intermediary in practice, not only provides a complex context for negotiating values but also serves as the ultimate space for the validation of meaning, allowing students to progress from establishing correct labor concepts to internalizing the labor ethos (Zeng, 2025). For instance, during social practice, positive feedback from service recipients, communities, or enterprises enables students to tangibly affirm the value and significance of their labor (Su et al., 2024b). In labor education practice, the validation mechanisms from the real world far outweigh any classroom-based assessments. These mechanisms encourage students to transform their career calling from an internal, potentially fluctuating belief into a stable self-recognition validated by society.

3.3.2 Limitations of Labor Education in Shaping Career Calling in College Students

Despite some progress, current practices still face multiple limitations in systematically cultivating career calling. First, the superficiality of value guidance makes it difficult to trigger a deep resonance with meaning. Labor education encounters issues at the value level, including vague content and goal alienation. On the one hand, the curriculum is often

disconnected from professional career scenarios and remains focused on basic manual labor, failing to address the core of meaning recognition in career calling (Chen, 2023; Zheng & Chen, 2024). On the other hand, the utilitarian and entertainment-oriented tendencies in practice diminish its overall educational value (Wang, 2021). Second, the lack of intrinsic motivation has hindered the effective stimulation of students' agency. This issue arises from the dual constraints of teaching methods and individual perceptions. Teaching methods are often overly simplistic, and the evaluation system is incomplete. Some students, influenced by societal ideologies, exhibit weak independent labor awareness and adopt a utilitarian attitude toward labor (Wang & Zhou, 2023). Furthermore, the lack of social collaboration and support in labor education contributes to its inefficiency. On campus, labor education suffers from being undervalued, with insufficient resources and low weight in the evaluation system (Huang & Lin, 2023). Externally, collaborative mechanisms among families, enterprises, and society remain underdeveloped, with discrepancies in the recognition of educational responsibilities among various stakeholders (Yang, 2025).

In summary, current practices confirm that labor education positively contributes to the cultivation of career calling through pathways such as value guidance, skill enhancement, and behavioral development. However, the systemic limitations across the three dimensions of 'value, motivation, and environment' hinder the full potential of labor education. This highlights the urgent need for an integrated, innovative pathway that bridges value internalization, motivation stimulation, and environmental empowerment, making labor education an effective platform for fostering career calling in college students. This is the central direction for further exploration in this study.

4. The Innovative Pathways for Labor Education to Promote Career Calling in College Students

4.1 Clarifying the Value Orientation for Career Calling Based on Marxism

4.1.1 The Marxist Labor Value Concept as the Foundation for the Value Orientation of Career Calling

Marxist labor values, starting from the fundamental view that 'labor is the essential activity of humans,' provide a solid foundation for cultivating career calling in college students. This theory profoundly reveals that labor is not only a practical process of creating material wealth, but also the fundamental means through which individuals reconcile self-worth with social value (Li & Yang, 2025). The core of labor education lies in cultivating labor values, which align with the development of an individual's career by integrating 'value orientation' and 'practical goals' (Xu, 2024). This labor value system, centered around the unity of self and social value, is the core essence of the 'altruistic orientation' and 'meaning recognition' in career calling (Dik & Duffy, 2009). Therefore, the purpose of using labor education to cultivate career calling in college students is to guide them from individual career planning to a higher dimension of fulfilling social responsibilities and promoting societal development.

Therefore, the core objective of labor education in cultivating career calling is clearly established: to systematically guide students in developing the correct labor cognition and

emotional attitudes, while realizing both personal and social value through labor. The highest expression of career calling is the inner unity achieved through specific professional practice, where personal talents are fully applied and social value is maximized. This provides a fundamental basis for the subsequent improvement of the educational system.

4.1.2 Practical Applications of Curriculum Design

To integrate Marxist labor values deeply into labor education and make them the core of students' career calling, curriculum design should go beyond mere skill transmission, focusing on value guidance, recognition, and internalization. In other words, the curriculum should not merely be the transmission of theoretical knowledge but should actively guide students in developing a career value system centered on social responsibility.

First, through theoretical elucidation, the foundation for value cognition is systematically established. By teaching core Marxist concepts such as labor's role in shaping the world, its influence on human development, and the unity of personal and social values, the curriculum enables students to engage deeply with these ideas. The goal is not to indoctrinate students with dogma, but to provide them with a comprehensive framework that helps them rationally grasp the historical and social significance of career calling. This, in turn, lays a solid ideological foundation for pursuing noble career ideals.

Second, through case-based teaching, the noble examples of labor values are made tangible. By integrating case studies that align with students' professional characteristics, the curriculum effectively showcases the spirit of model workers, craftsmanship, and the significant contributions made in everyday roles. These case studies serve as concrete examples of abstract values, fostering emotional engagement among students. Through the stories of role models, students can grasp the dignity of labor, the greatness of dedication, and the honor of their professions. In turn, this transforms external social value expectations into internal admiration and aspiration.

Third, through reflective practice, the internalization and elevation of value recognition are achieved. In all professional courses, social practices, and team collaboration projects, educators should consciously guide students in value orientation and goal enhancement. For example, in engineering training, the connection between craftsmanship and Made in China should be emphasized, while community service activities should encourage students to reflect on the social value of their actions. The core of this process is to help students shift from 'what was done' to 'why it was done,' using Marxist labor values as a framework for understanding that informs and elevates the spiritual dimension of all educational activities, ultimately guiding students to form professional ideals centered on serving society and contributing to the collective.

In conclusion, Marxist labor values, with their core theories on the nature of labor, value creation, and value realization, form the foundation for a value-centered approach to career calling, emphasizing social responsibility. Through curriculum design that combines theoretical exposition to build understanding, case-based teaching to inspire passion, and reflective practice to encourage internalization, these values are transformed into students'

intrinsic recognition, laying a solid foundation for the cultivation of career calling.

4.2 Student-Centered Approach to Stimulating Intrinsic Motivation for Career Calling

4.2.1 Self-Determination Theory as the Foundation for Stimulating Intrinsic Motivation for Career Calling

SDT provides the core psychological foundation for stimulating students' intrinsic motivation toward their career calling in labor education. The central premise of SDT is that high-quality, sustainable motivation stems from the systematic fulfillment of three basic psychological needs: Autonomy, Competence, and Relatedness. When these needs are satisfied, an individual's motivation shifts from external regulation to internalization, fostering the development of stable value orientations (Ryan & Deci, 2002).

This theory provides a clear framework for stimulating career calling in labor education by fulfilling students' psychological needs through labor experiences, facilitating the shift from passive participation in labor to active identification with the value of work (Li & Yang, 2025; Zeng, 2025). Specifically, the satisfaction of the need for autonomy activates students' willingness to explore their career calling, while the development of competence strengthens their confidence in pursuing this calling. The cultivation of relatedness deepens their social identification with their career calling. Together, these three needs form a cohesive chain: need satisfaction, motivation internalization, and calling identification, providing a solid psychological foundation for labor education design. This ensures that the stimulation of intrinsic motivation is in harmony with both individual psychological patterns and the goal of cultivating career calling.

4.2.2 Practical Applications of Curriculum Design

To apply the core principles of SDT in labor education practice, curriculum design must focus on fulfilling the three basic psychological needs—autonomy, competence, and relatedness—through a systematic approach, thereby stimulating students' intrinsic motivation for their career calling. The curriculum should no longer be viewed merely as a task arrangement, but as a psychological catalyst that guides students from labor experience to career identification.

First, by establishing a mechanism for students' autonomous selection, their motivation for career exploration is activated. This requires moving beyond the traditional uniform task distribution model and creating a diverse labor practice system that integrates both general and discipline-specific projects. General projects cover foundational areas such as environmental protection and community governance, while discipline-specific projects are aligned with students' academic backgrounds. For example, engineering students could design technical assistance for farmers, humanities students could engage in grassroots education support, and business students could develop rural e-commerce initiatives. As a result, students can choose their practical direction based on career interests and collaborate on planning the practice programs. This approach empowers students by linking their labor participation with their personal values and career exploration needs, guiding them to reflect on the connection between career interests and societal needs, thus stimulating intrinsic motivation to explore the deep professional meaning in their career calling.

Second, by implementing a tiered approach to tasks and providing systematic feedback, students' professional competence is strengthened. Drawing on Vygotsky's Zone of Proximal Development theory (Vygotsky, 1978), labor tasks are divided into three progressive levels: in the foundational stage, the focus is on skill-building activities, such as basic community services and simple production tasks, designed to help students experience early success; in the development stage, the emphasis shifts to problem-solving tasks, such as designing community eldercare services or optimizing processes for small businesses, to systematically enhance students' practical abilities; in the advanced stage, real-world career scenarios are simulated, such as participating in enterprise project development or grassroots public affairs management, enabling students to face challenges in a highly realistic professional environment. In parallel, a dual-feedback mechanism, jointly managed by teachers and practice organizations, should be established. Upon completion of each task stage, personalized reports on students' skill development will be provided, clearly outlining their core strengths and areas for improvement. This model, combining tiered challenges with precise feedback, effectively guides students in steadily building professional skills through a continuous cycle of challenges and successes, thereby fostering the confidence needed to pursue their career calling.

Third, collaborative team practices are employed to strengthen students' social identification. The curriculum is designed to leverage interdisciplinary project-based learning, where teams are formed around regional development topics to simulate real-world labor divisions. Through the integration of structured reflection, students are guided to assess the relationship between their individual contributions and collective goals, while evaluating the social value of the team's output. This approach helps students understand the social significance of their professional roles within group collaboration, recognizing how diverse functions integrate to serve public welfare, thereby reinforcing their commitment to using their professional actions to contribute to society.

In summary, based on SDT, labor education fosters career calling by satisfying the three basic psychological needs—autonomy, competence, and relatedness—through a process of motivation activation, skill enhancement, and value identification. This student-centered approach, supported by innovative designs such as discipline alignment, scenario simulation, and interdisciplinary collaboration, addresses the challenges of the existing disconnect between labor education and career development, as well as the externalization of student motivation for participation. It provides a practical psychological framework for cultivating career calling.

4.3 Leveraging Social Synergy to Enhance College Students' Perception and Practice of Career Calling

4.3.1 Social Cognitive Career Theory as the Foundation for Leveraging Social Synergy to Cultivate Career Calling

SCCT provides a comprehensive framework for understanding career development, emphasizing the dynamic interplay between personal, behavioral, and environmental factors (Lent et al., 1994, 2002). According to this theory, an individual's career interests, choices,

and persistence are shaped not only by personal traits but also by external environmental influences. This theoretical perspective offers valuable insights for this study, suggesting that cultivating a sense of career purpose among college students should extend beyond simply instilling values. Instead, it is crucial to establish an educational ecosystem that offers diverse social support, fosters positive social interactions, and creates abundant opportunities for practical experience.

4.3.2 Practical Applications of Curriculum Design

First, it is essential to develop a collaborative curriculum that integrates support from family, school, community, and enterprise. According to SCCT, social support from multiple sources, such as family, school, and community, can enhance an individual's self-efficacy, which in turn influences their career choices and performance (Lent et al., 2002). Therefore, curriculum design should be grounded in the principle of collaboration, systematically integrating resources from family, school, and industry to establish a cohesive support system. At the family level, collaborative programs that focus on the value of labor can be developed. These programs may involve activities such as organizing joint family labor tasks and hosting career experience exchange sessions. The aim is to encourage parents to model behaviors by teaching the values that labor creates societal value and that careers contribute to society. This will help students form an initial awareness of career responsibility. At the school level, a dual support system should be established, combining teacher guidance and peer assistance. This can be achieved by designing group-oriented tasks, such as community service projects, and incorporating process-based feedback from teachers. Such initiatives will guide students to develop a deeper understanding of the inherent connection between professional behavior and societal needs. At the industry level, collaboration with enterprises and industry organizations is essential to jointly develop a career experience curriculum. This curriculum could include organizing seminars on career purpose and offering students the opportunity to visit business production environments. These initiatives will allow students to gain direct insight into the social contributions of various professions, thereby enhancing their understanding of the value of career responsibility.

Second, design team-based interactive courses that emphasize collective goal-setting. According to SCCT, individuals better understand the social attributes and requirements of professions through interaction and participation in collective activities, which helps them make informed career choices (Lent et al., 2002). Thus, curriculum design should focus on interdisciplinary team-based projects, using collective goal-oriented activities to foster students' sense of career purpose. Specifically, projects could address real-world social challenges, such as elder-friendly community renovations or rural cultural preservation. These projects should bring together students from diverse fields—such as engineering (providing technical support), humanities (handling cultural communication and human care), and management (coordinating resources and project management). The course follows a structured process: goal consensus, role division, collaborative practice, and outcome refinement. First, students collectively establish clear group goals, such as community service and rural development. Tasks are then assigned based on each student's professional strengths to foster collaboration. Throughout the process, structured discussions encourage students to

reflect on the relationship between their individual contributions and the collective goals. Finally, the team presents their outcomes and reflects on the impact of their social service efforts. This process aims to help students understand that career purpose lies in creating a collective force for social service through specialized roles and collaboration, transcending individual career pursuits and deepening their understanding of the societal value of professions.

Third, offer a ‘Practice—Reflection—Sublimation’ transformational course. According to SCCT, individuals can transform their career interests and identities into specific professional behaviors and goals through real-world career activities (Lent et al., 2002). To facilitate the transition from cognitive understanding to active engagement in career purpose, the course includes three progressive practical components. The first is volunteer service, where students participate in public welfare projects like rural revitalization and community support, helping them understand social issues and motivating them to take on meaningful responsibilities. The second is professional internships, where students are assigned to job positions in organizations such as smart manufacturing companies or community service centers that align with their academic disciplines. Engineering students may engage in research and development roles, while humanities students may work in grassroots public service agencies, gaining firsthand experience of how professional activities directly address specific societal needs. The third is social research, where students investigate social issues such as grassroots governance and elderly care, analyze the relationship between professions and social demands, assess the roles and value of different professions in solving social problems, and write reflective reports on their professional purpose. These reports are discussed in class and reviewed by experts, allowing students to internalize their experiences and develop a deeper understanding of their professional values.

In summary, based on SCCT, labor education fosters career purpose through a course system of 'collaborative support, team interaction, and practice transformation,' thus cultivating a path from 'awareness to recognition to active engagement.' This path is underpinned by social synergy, addressing the challenges of traditional labor education—such as fragmented resources and disconnection from society—and providing practical solutions at the societal level.

4.4 A Multidimensional Educational Framework

Based on the above analysis, the Marxist labor value theory provides the value orientation for the labor education system, while SDT focuses on how education can serve students by fostering their awareness and practice of career calling. SCCT emphasizes the role of engaging multiple stakeholders to enhance the educational synergy that drives students' career calling. Together, these three theories complement each other, forming a multidimensional theoretical framework that provides a solid foundation for labor education reform in higher education.

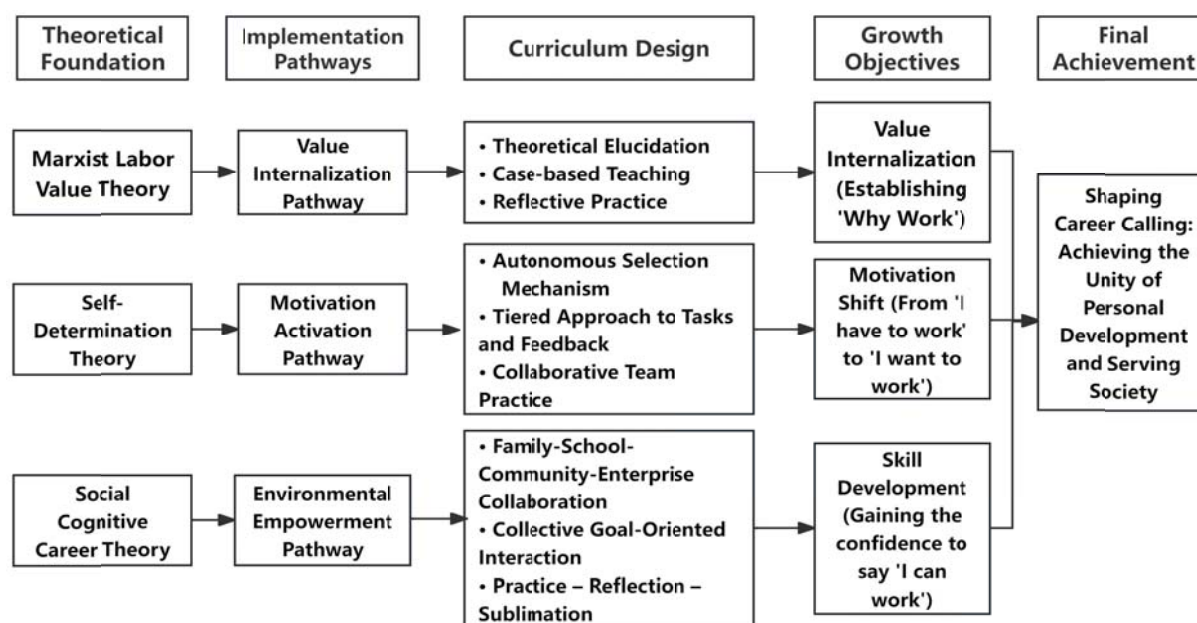


Figure 1. Multidimensional Framework of Labor Education in Shaping Career Calling

5. Conclusion

5.1 Research Findings

This study systematically examines the role of labor education in cultivating career calling among university students and develops a multidimensional, integrated course framework centered on the core principles of 'value internalization, motivation activation, and environmental empowerment.' Research demonstrates that labor education is much more than mere skill training; it is a systematic process aimed at shaping a well-rounded professional identity for students. In the instructional practice, Marxist labor value theory serves as the guiding principle, addressing the fundamental question of 'why work.' The SDT provides intrinsic motivation, facilitating the shift from 'I have to work' to 'I want to work,' while SCCT offers external support, establishing a practical framework for 'I can work.' Together, these three components form a mutually reinforcing, interdependent theoretical loop. This integrated framework offers a solid theoretical foundation and clear, actionable pathways for reforming labor education in higher education, providing specific directions for philosophical updates, curriculum design, and the innovation of practical models.

5.2 Limitations of the Study

Despite presenting a theoretical framework and conducting a thorough theoretical analysis,

this study has some limitations. First, its conclusions are primarily based on literature analysis and theoretical deduction, without being fully validated through large-scale empirical surveys or rigorous experimental designs. Therefore, the validity and generalizability of the findings require further support through additional quantitative and qualitative research. Second, the effects of labor education are typically long-term and latent. The pathway proposed in this study for cultivating career calling requires further validation through continuous longitudinal studies to examine its long-term impact. Third, while this study addresses a common phenomenon in higher education, its applicability may vary across different institutions and disciplines, and adjustments will be needed in practical implementation. Therefore, although this study presents an innovative theoretical framework, its generalizability and applicability still require further research and exploration.

5.3 Future Research Directions

Future research could explore the following areas.

First, future studies could investigate the specific implementation pathways and curriculum reform strategies of the theoretical framework proposed in this study across different academic disciplines, identifying discipline-specific approaches to integrating labor education with professional education. By tailoring labor education content and methods to the characteristics of each discipline, these efforts could more effectively support the cultivation of students' career calling.

Second, to assess the effectiveness of labor education systematically, future research could develop a scientifically grounded and practical evaluation tool and indicator system. This system should measure both the immediate and long-term effects of labor education on students' value internalization, motivation, and skill development. Implementing this system would provide feedback and a foundation for improving educational practices, enabling labor education to better achieve its goal of fostering career calling.

Additionally, future research could use longitudinal or case-comparison studies to explore how the three dimensions of 'value, motivation, and environment' interact, empirically testing their key impact pathways and the strength of their effects on the development of career calling. This would enhance understanding of the mechanisms of labor education, further refining the theoretical model and providing more actionable guidance for implementation.

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