Research on the "Dual-wheel Drive" Guided Learning and Educating Mechanism in Universities under Systems Thinking

Ye Tao¹, Jiang Wenqian¹, Yang Zongkang²

¹School of Electrical and Information Engineering, Jiangsu University, No.301 Xuefu Road, Zhenjiang City, Jiangsu Province, China

²School of Management, Jiangsu University, No.301 Xuefu Road, Zhenjiang City, Jiangsu Province, China

Abstract

China has successfully built the world's largest higher education system, marking the formal entry of higher education into the stage of popularization. The iterative development and innovative application of digital technology play an indispensable role in promoting the digital transformation of education. At the same time, diverse temptations such as smartphones, the internet, and games pose numerous challenges to students' learning lives. Some students experience weakened motivation, lack of self-discipline, and face risks such as demotion, dropout, or even withdrawal. This paper aims to explore how systematic thinking can promote effective division of labor and deep cooperation between counselors and academic advisors, thereby facilitating high-quality growth and development of college students.

Keywords: systems thinking; counselors; academic advisors; guided learning and educating mechanism

1. Introduction

With the authoritative release of data from the Ministry of Education, China has successfully established the world's largest scale higher education system, surpassing a total enrollment of 44 million, marking the formal entry of higher education into the stage of popularization. Simultaneously, with the iterative development and innovative application of digital technology, digital governance provides support for

the modernization of educational governance through new technological means and operational mechanisms, playing an indispensable role in promoting the digital transformation of education. "Educational digital governance" has become a contemporary proposition, strategic choice, and significant driving force for the modernization of educational governance [1]. However, challenges brought by diverse temptations such as smartphones, the internet, and games have led to issues like decreased motivation and insufficient self-discipline among some university students, with some facing academic difficulties that may lead to demotion, non-completion, or even dropout. This paper aims to explore how systematic thinking can facilitate effective division of labor and cooperation between counselors and academic advisors, achieving a deep integration and dual-wheel drive of ideological and political education with academic guidance, thereby promoting high-quality development and growth of university students.

2. Challenges in Guided Learning and Educating Work in Higher Education in the New Era

2.1 Transformation Challenges of Traditional Educational Models under the Technological Wave in the New Era

In the current digital and intelligent educational ecosystem, traditional educational models are facing unprecedented pressures for transformation. The rapid development of new media and information technology has provided broader platforms and abundant resources for education. However, it also poses severe challenges to the effectiveness of guided learning and educating in traditional educational models. Although counselors and academic advisors extensively utilize online communication and teaching, inherent drawbacks of one-way information transmission remain prominent. The lack of deep interaction and real-time feedback has become a critical factor limiting educational effectiveness. Moreover, the non-face-to-face nature of online environments weakens educators' acute insight into students' psychological states and life learning contexts, leading to reduced control during guided learning processes. While increased student autonomy promotes individual development, it also accompanies issues such as decreased motivation and declining self-discipline. Therefore, effectively integrating the strengths of online and offline education and constructing a guided learning and educating model that meets the demands of the new era have become crucial topics in current higher education reform.

2.2 The New Positioning and Challenges of Mental Health Education in Higher Education Student Development Systems

With the rapid development and transformation of society, the mental health issues of university students and faculty are increasingly being highlighted. In the current educational context, faculty members face multiple professional pressures, while students need to continuously adjust themselves in rapidly changing learning environments. The ability of both faculty and students to adapt psychologically has

become a crucial factor influencing educational quality and personal development. Consequently, mental health education in higher education has transitioned from the periphery to the core, becoming an indispensable component of student development systems. To address this challenge, universities need to deepen the content of mental health education, enhance the professionalism and accessibility of psychological counseling services, and explore new mechanisms for home-school collaboration to establish a multidirectional network for mental health education. By constructing a comprehensive mental health support system, universities can help students establish positive psychological defense mechanisms, enabling them to cope with the challenges of learning and life in a proactive mental state. This represents a significant direction for innovation in student guidance and development mechanisms in the new era of higher education.

3. The Underlying Causes of Challenges Facing Current Student Guidance and Development Mechanisms

3.1 The Lag in Construction and Implementation of Student Guidance and Development Mechanisms

The "Three All-round Education" in colleges and universities is an era expansion of the Marxist theory of all-round development of human beings in the new era, an era evolution of the century old ideological and political education of the CPC, and an era innovation of ideological and political work in colleges and universities. The "Three All-round Education" in universities has progressed from theoretical extension and ideological derivation to practical innovation, from comprehensive reform pilot to demonstration and guidance, and from partial to comprehensive, achieving significant results. At the same time, there are still practical shortcomings in the educational pattern, mechanism, and motivation of the "Three All-round Education" in universities [2]. Specifically, the role positioning and division of responsibilities between counselors and academic mentors are not yet clear, and the synergistic effect of the two in the process of educating students has not been fully utilized, resulting in insufficient integration of "curriculum ideological and political education" and academic guidance, leading to the phenomenon of "each acting independently". In addition, with the changes in the characteristics of the student population - expansion of scale, diversification of needs, and highlighting of individuality - the existing guidance and education mechanisms are inadequate in terms of adaptability and flexibility, making it difficult to effectively respond to the complex challenges of student education management in the new era.

3.2 Challenges in Students' Digital Literacy and Self-discipline

With the rapid development of information technology, the widespread adoption of new teaching models such as MOOCs and flipped classrooms has provided students with abundant learning resources and flexible learning methods. However, this has also placed higher demands on students' digital literacy and self-discipline. In the

current educational environment, some students exhibit excessive reliance on online resources and uncontrolled use of new media tools, becoming excessively engrossed in social media, short videos, and games. These behaviors negatively impact their professional learning and cognitive development, potentially hindering personal growth. Furthermore, limitations of online learning platforms and insufficient self-management skills among students further exacerbate disparities in learning outcomes. Therefore, enhancing students' digital literacy, fostering their awareness of self-discipline, and developing their self-management skills have become crucial topics for innovating educational mechanisms aimed at guiding and nurturing students.

3.3 The Cumulative Effects of Mental Health Education and Academic Stress Management

In the context of rapid societal changes, contemporary university students are confronted with unprecedented academic stress and psychological challenges. As focal points of attention for families and society, they often bear high expectations and self-demands. Moreover, changes in living environments and the complexity of interpersonal relationships further complicate psychological adjustment for some students. Particularly in the current social environment, increased economic uncertainties and employment factors exacerbate students' psychological pressures. Simultaneously, the heavy academic workload and intense competition impose significant burdens on students. Therefore, institutions of higher education must place significant emphasis on the dual tasks of mental health education and academic stress management within the guidance and nurturing of students. Establishing robust systems of psychological support and academic guidance mechanisms is essential to provide comprehensive growth support for students.

4. The Concept of Constructing a Dual-Wheel Driven Educational Guidance Mechanism with "Counselors + Academic Advisors"

To further advance the fundamental tasks of comprehensive education and moral education, universities have adopted a dual-wheel driven educational guidance system involving "counselors + academic advisors." This system collaboratively oversees aspects such as ideological guidance, academic advising, and personal growth planning for university students, aiming to facilitate their better development and success.

4.1 Constructing a Dual-Wheel Driven Educational Guidance Mechanism

(1) Consistency of Objectives

Higher education institutions adhere to the direction of socialist education, aiming to cultivate qualified builders of socialism with comprehensive moral, intellectual, physical, aesthetic, and labor development, who are reliable successors. Efforts are

directed towards constructing an educational system that comprehensively nurtures moral, intellectual, physical, aesthetic, and labor qualities, thereby forming a higher-level talent development system. The integration of moral education and the cultivation of personal virtues is embedded across all aspects of ideological and moral education, cultural knowledge education, and social practice education. This integration spans across basic education, vocational education, and higher education domains. Discipline systems, teaching systems, textbook systems, and management systems are all designed around this objective. Teachers focus on teaching with this objective in mind, while students center their learning around it. Both counselors and academic advisors regard guiding ideological development as a shared objective in their work.

(2) Integration Across Domains

University students are the main focus of moral and intellectual education by both counselors and academic advisors. Counselors primarily engage in ideological and political guidance within students' daily life management, aiming to enhance their practical skills and psychological development. Academic advisors, on the other hand, integrate ideological and political factors into their daily classroom teaching and provide post-class academic guidance. They assist students in setting academic goals, engaging in research and practical activities, and developing academic plans. The integration of ideas between counselors and academic advisors in the educational and teaching practices of students is mutually beneficial and interconnected

(3) Complementary Responsibilities

College counselors are the main force to guide students' thoughts and carry out ideological and political education. However, due to different professional backgrounds and lack of social experience, sometimes when students' academic confusion, effective adjustment methods and suggestions are given at the first time. Academic tutors need to use professional background and education and teaching experience to guide students' academic practice and guide students in the way they need. The practice of counselors in the management of students' daily affairs and the teaching of academic tutors in the professional field complement each other, and multi-level, multi angle and multi pronged collaborative cooperation for students' growth and success is the AB angle of work.

4.2 Design of the "Counselor + Academic Advisor" Dual-Driven Educational Guidance Mechanism

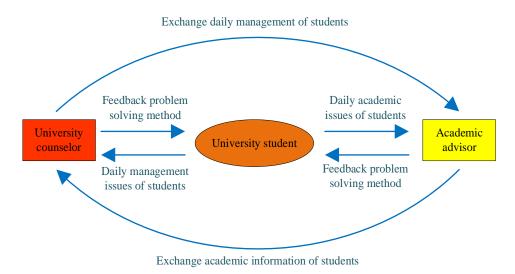


Figure 1. Design of the Dual-Driven Educational Guidance Mechanism

(1) The dual wheel drive mechanism path of "counselor student academic mentor" for guiding and educating students

As managers of students' daily affairs, college counselors can understand students' ideological dynamics, practical activities, psychological development, and other situations from their daily affairs, and provide positive feedback based on each student's dynamics and needs. As the main body of student academic teaching, academic mentors can understand students' academic dynamics, academic problems, and other situations from their daily education and teaching, and provide positive feedback based on students' confusion and needs.

(2) A dual wheel drive feedback mechanism of "counselor student academic mentor" for guiding and educating students

As mentors and guides for students' growth and development, counselors and academic supervisors share the same goal. The nodes of their work are both students, and their job functions can complement each other. The counselor provides feedback on the dynamics and unresolved academic issues in students' daily affairs to the academic advisor for professional solutions. The academic advisor then provides feedback on the students' academic progress and potential influencing factors in their daily activities to the counselor. Counselors and academic advisors provide feedback, communicate, and complement each other, and then come up with corresponding work measures to enhance work synergy.

5. Key Points of "Dual Wheel Drive" Guidance and Education for Counselors and Academic Mentors in System Construction

With the continuous evolution of the times and profound changes in the global education environment, the higher education system is entering a new stage of development, experiencing unprecedented changes and restructuring. Universities need to be more firm in the core concept of "returning to the origin of education and adhering to the principle of educating people", while actively exploring new paths of "innovating ways of educating people and strengthening technological empowerment". In the new era, universities need to enhance the deep integration of counselor and academic advisor work, promote information sharing, stimulate students' subjectivity and enthusiasm, and build a dual wheel drive and feedback incentive guidance and education mechanism, which has become the key to improving the quality of higher education and promoting students' comprehensive development.

5.1 Ideological guidance is the "key point" of the dual wheel drive mechanism for guiding and educating students

With the deepening of the comprehensive reform of "Three All-round Education", the fundamental task of cultivating morality and talents is the first goal task. Counselors and academic supervisors must take strengthening education on ideals and beliefs, and more effective ideological guidance as their main work, fully integrating education, student affairs management and other work into the elements of education, and integrating ideological guidance throughout the entire process of all work. Counselors understand students' ideological and political beliefs through heart to heart talks, feedback from student cadres, and daily activities, and play a leading role in ideological guidance; Academic mentors integrate ideological and political elements into academic teaching, innovative practice guidance, and academic planning guidance, and subtly carry out "curriculum ideological and political" and "ideological and political courses". Only when both counselors and academic supervisors prioritize ideological guidance, actively and unconsciously integrate it into teaching, management, service, and communication processes, complement each other, and promote together, can we better achieve dual wheel drive.

5.2 Physical and mental health is the "fundamental point" of the dual wheel drive mechanism for guiding and educating students

The enhancement of the psychological quality of college students is the result of the combined effects of internal and external factors such as home school, society, and students. Counselors should not only manage and serve student affairs, but also pay attention to heart to heart talks, especially focusing on the physical and mental state of students, and provide care and warmth; Academic mentors should not only care about students' academic progress and completion, but also pay attention to their personal emotions, especially providing guidance and assistance for negative energy and problem difficulties; During this process, both parties exchanged information in a

timely manner, worked together with parents, and guided by the concept of developmental counseling, provided multi-faceted, multi-level, and multi-dimensional guidance and assistance to students who had problems, thereby helping them build a stronger physique, a healthy body and mind, a harmonious learning and living atmosphere, and cultivate a positive and upward spirit.

5.3 Academic research is the "focal point" of the dual wheel drive mechanism for guiding and educating students

Academic performance and research level are the main manifestations of the achievements in cultivating college students, and they are also the explicit results of students' learning in school. Good results can motivate and guide students, while poor results may bring many troubles to students, and even affect their entire lives. The dual wheel drive mechanism of counselors and academic mentors requires both parties to leverage their respective strengths and expertise, strengthen guidance and assistance for student activities in their respective dimensions, and work hard, diligently, and vigorously in the first and second classes to help students at different levels classify and implement measures, achieve personal expectations, and strive to learn on the basis of self-affirmation and success, providing a continuous source of motivation for students' growth and success.

5.4 Digital empowerment is the "new engine" of the dual wheel drive mechanism for guiding and educating students

Driven by the wave of digital economy, the higher education sector is accelerating towards the path of digital and intelligent transformation, aiming to drive a leapfrog improvement in education quality through technological innovation. In the current digital age, the multidimensional data of student education management is becoming increasingly abundant, providing broad space for digital empowerment. If new technologies such as "big data" and "cloud platforms" can be utilized to achieve "digital empowerment" in the process of student education management services, realizing "one table" of personal learning and development parameters and "one network" of data for students, real-time observation of relevant variables of student development, and timely interaction between teachers such as counselors and academic supervisors in the "one system", the relevant work results can be uploaded, shared and feedback in a timely manner, which can effectively improve the work efficiency and effectiveness of counselors and academic supervisors. With the same time and energy, more accurate and effective services and guidance can be provided to students, promoting the improvement of the effectiveness of guidance and education.

Conclusion

College students are the backbone of national rejuvenation, the backbone of technological innovation, and the hope and future of the country and the nation. Doing a good job in student education management in the new era is the fundamental task of cultivating morality and talents in universities. In the new era, universities should establish a dual wheel drive mechanism of "counselors+academic mentors" to guide and educate students, with two-way feedback and integrated promotion. They should pay more attention to the physical and mental health development of students, focus on the two basic tasks of ideological and political guidance and academic guidance, and use "digital empowerment" as the "new engine" to provide institutional supply and directional support for the comprehensive development of college students, in order to achieve the goal of cultivating socialist qualified builders and reliable successors with comprehensive development in morality, intelligence, physical fitness, aesthetics, and labor.

Acknowledgements

This work is supported by the following funding projects: Philosophy and Social Science Research Project of Jiangsu Higher Education Institutions (Grand No. 2017SJBFDY153 and 2023SJYB2148); Special Project on College Student Ideological and Political Education of Jiangsu University (Grand No. JDXGA201103); Research Project on Higher Education Reform of Jiangsu University (Grand No. 2019JGYB093); Ministry of education industry university cooperation collaborative education project(Grand No. 231107551105414); Special project of Counselor Work Research Committee of Jiangsu Higher Education Society(Grand No. 19FYHYB023).

References

- [1] Zhang Pei, Xia Haiying. Innovation in Data Empowered Education Governance: Connotation, Mechanism, and Practice [J]. China Distance Education, 2021 (7): 10-17
- [2] Li Yongrui, On the Generation Logic, Realistic Review, and Improvement Path of "Three All-round Education" in Universities. Contemporary Education Forum, 2023 (01): 93-99