

Improvement Strategies for Discipline Policy Tools Based on Enhancing Teachers' Self-Efficacy

Yongyi Qin^{1,*}, Poramatdha²

¹Educational Administration PhD Studend, Department of Educational Administration, Graduate School, Suan Sunandha Rajabhat University, Bangkok 1003, Thailand

² Assistant Professor, Department of Educational Administration, Graduate School, Suan Sunandha Rajabhat University, Bangkok 1003, Thailand

E-mail: ^{1,*}qinyongyi798@gmail.com; ²poramatdha.ch@ssru.ac.th

ARTICLE INFO	ABSTRACT
Received: 20 Dec 2024	Self-efficacy exerts a profound influence on teachers' teaching, research endeavors, and professional development. Policy tools serve as critical guides for shaping teachers' disciplinary behaviors, thereby rendering discipline policy a pivotal factor affecting teachers' self-efficacy. Following the enforcement of the "Double First-Class" initiative in recent years, universities have witnessed both commendable outcomes and areas for enhancement in their policy implementations. Determining the optimal direction for discipline policy refinement has emerged as a matter of considerable importance. By constructing a two-dimensional analytical framework encompassing "disciplinary construction themes and policy tools," we can dissect the structure of policy tools within the policy documents for regional first-class disciplinary construction. This analysis aids in identifying the distribution patterns of policy tools and potential adverse impacts that could undermine teachers' self-efficacy. An unreasonable allocation of discipline policy tools may give rise to issues such as a uniform evaluation system, unequal resource distribution, and decreased teacher engagement. These consequences negatively affect teachers' self-efficacy, impeding the attainment of disciplinary development objectives and governance effectiveness. Addressing the imbalance between policy tool supply and demand necessitates policy optimization. Hence, there is a pressing need to further refine discipline policies and optimize the structure of policy tools across dimensions such as refining the evaluation mechanism, optimizing resource allocation, and fostering teacher participation. Introducing corresponding authoritative tools, capacity-building tools, or incentive measures within disciplinary construction themes lacking sufficient policy tools holds immense significance for bolstering teachers'
Revised: 21 Feb 2025	
Accepted: 27 Feb 2025	

self-efficacy and advancing high-quality development in higher education.

Keywords: "Double First-Class" Initiative; First-Class Disciplines; Teachers; Self-Efficacy; Policy Tools

o INTRODUCTION

Teachers serve as the core force in higher education, and their self-efficacy plays a pivotal role in both academic development at universities and teachers' professional development. Self-efficacy (Bandura, 1977), defined as an individual's confidence or belief in their ability to perform a specific task or activity, is a subjective judgment. Its formation and enhancement are influenced by various factors, such as successful experiences, positive encounters, social support and encouragement, modeling, imitation, and learning (Kong Linghong, 2024). Across different domains of action, the level, intensity, and scope of self-efficacy can vary for the same individual. Studies have shown that teachers' innovative self-efficacy impacts their teaching, research, and talent cultivation behaviors, as well as their job performance and the overall effectiveness of discipline construction (Liang Aichan, 2022; Bai Ying, 2022; Wang Huaqiang, He Ying, & Qi Fangmei, 2022). In the context of discipline construction in universities, self-efficacy profoundly influences teachers' teaching commitment, willingness to engage in research innovation, and enthusiasm for professional development.

Disciplinary policy serves as a crucial basis for resource allocation in universities, while policy tools represent an important environmental factor influencing teachers' sense of self-efficacy. China has been implementing the "Double First-Class" Initiative in higher education for nearly a decade, and exploring disciplinary governance from the perspective of policy tools is a new trend in current academic circles. Wu Yujie (2015) analyzed the evolution of disciplinary policies in Chinese universities, arguing that the continuous evolution of policies has expanded the space for the decentralization of policy tools, enabling a match between policy tools and the real-world environment, thus gradually rationalizing the distribution of disciplinary governance power among different entities. Judging from the results of national disciplinary evaluations and global academic rankings of Chinese universities in recent years, the adaptability of discipline policy tools has provided a strong impetus for China's academic development and technological progress. Of course, the disciplinary policies also need to be improved. In studies on optimizing discipline policies, scholars have found through deconstruction analysis of policy tools that the policy tools for "Double First-Class" construction are comprehensive and diverse but lack strong systematicness and obvious synergistic effects, necessitating optimization of the combination of policy tools. (Xie Ran & Li Wenting, 2019, 2023; Zhou Fujun & Hu Chunyan, 2019). In studies on regional discipline policies, scholars have found that although policy supply varies among provinces, there are also issues such as structural imbalance in policy classification supply, misallocation of policy tools, and insufficient synergies (Liu Peijun, He Chaomin & Zhao Shuangliang, 2023; Ye Xiaoli, Xu Peixin & Cai Jingmin, 2023). Xu Jie (2021) proposed that to enhance the pertinence and effectiveness of policy tools, the top-down design of discipline policies should be adjusted from a governance perspective, optimizing discipline policies at the levels of ideology, systems, pathways, and

action mechanisms. Pang Shengmin & Li Hui (2020) suggested that the core issue of the "Double First-Class" Initiative is policy objectives, and therefore, systematic and complementary structural optimization of policy tools should be carried out according to policy objectives, combined with the attributes and functions of policy tools. In summary, regarding the improvement of discipline policies, tool selection is a key factor in realizing the expected value of the "Double First-Class" Initiative. At present, no matter in breadth or depth, the research on discipline policy tools still needs more in-depth exploration.

Currently, under the trend of "Double First-Class" Initiative, the regional first-class discipline construction in Guangxi Province has been in place for over two policy cycles. The policy practices of different universities are gradually revealing both the benefits of the discipline policies and certain areas that need improvement. Therefore, to better optimize Guangxi's regional discipline policies, it is necessary to explore potential structural problems in the discipline policy tools that may adversely affect teachers' self-efficacy, from the dual perspectives of teachers as key actors in discipline construction and discipline policies as significant environmental factors influencing teachers' behavior. This holds positive significance for enhancing teachers' self-efficacy in Guangxi's universities and promoting disciplinary development by improving the layout of policy tools.

1 THE PROMOTING EFFECT OF TEACHERS' SELF-EFFICACY ON DISCIPLINARY DEVELOPMENT

1.1 Enhancing the quality of talent cultivation

Teaching is a crucial area of work in disciplinary development related to talent cultivation. Teaching self-efficacy has a promotional effect on enhancing teaching effectiveness and students' learning outcomes. Scholars have proposed that, due to the classification of people's perceptions of teaching expectations into outcome expectations and efficacy expectations, teaching efficacy can be divided into general teaching efficacy and personal teaching efficacy (Gibson, S., & Dembo, M. H., 1984; Megan Tschannen-Moran & Anita Woolfolk Hoy, 2001; Mimi Bong & Einar M. Skaalvik, 2003). Outcome expectations reflect teachers' beliefs that any ability to initiate change is constrained by external factors, embodying an external control orientation. Efficacy expectations reflect teachers' beliefs in their own ability to promote students' learning outcomes, embodying an internal control orientation. Teachers with high levels of personal teaching efficacy tend to adopt new teaching methods and technologies to address various challenges in the teaching process, such as diverse student needs, curriculum content updates, and teaching method innovations. They believe in their ability to effectively organize teaching activities and stimulate students' interest and potential in learning, thereby improving teaching effectiveness and students' satisfaction. Discipline policies are external environmental factors that influence teachers' levels, intensity, and scope of teaching self-efficacy. Huang Xuanyi's (2022) research found that university teachers have a good overall perception of the teaching environment and teaching self-efficacy; there are widespread group differences in teaching self-efficacy across dimensions such as gender, professional titles, university types, and major categories. Xiong Jingjing's (2023) research

shows that there is an important relationship between teaching efficacy and support from institutions; teaching efficacy increases with increased support from institutions; the support from institutions, leaders, and colleagues has a positive impact on teachers' teaching efficacy. Thus, it can be seen that teaching self-efficacy plays an important promotional role in talent cultivation work and is also influenced by discipline policies.

1.2 Driving technological innovation

The self-efficacy of teachers plays a crucial role in advancing technological development and academic progress, as well as enhancing universities' academic competitiveness. Teachers' research self-efficacy refers to their confidence or belief in their abilities in scientific research, technological development, and social services. In scientific research activities, self-efficacy can be termed as research self-efficacy or innovative self-efficacy. Teachers with strong self-efficacy are often more willing to explore unknown research areas and undertake challenging research tasks. These teachers present confidence in their abilities throughout the research process, including research design, data collection and analysis, and result publication. Teachers' innovative self-efficacy has a positive impact on their research performance (Liu Rui, Guo Yungui&Zhang Lihua, 2016). Regarding the factors influencing research self-efficacy, work stress, extrinsic satisfaction, intrinsic satisfaction, and innovative self-efficacy are significantly correlated. Additionally, performance feedback patterns and feedback-seeking behaviors have important impacts on innovative self-efficacy (Tian Meiling, 2018; Pan Xiaoxin, 2022). It is evident that research self-efficacy promotes research performance and is also influenced by various aspects of the policy environment.

1.3 Promoting Teachers' Professional Development

Self-efficacy influences teachers' career development pathways. Research has found that self-efficacy plays a significant moderating role in teachers' job performance and career development. Teachers with high-level innovation self-efficacy are more effective in their teaching and research work, or actively seek career development opportunities, which helps to eliminate occupational burnout. On the other hand, self-efficacy is influenced by work feedback models and organizational atmosphere. Positive work feedback and a good organizational environment can enhance teachers' self-efficacy, thereby preventing or alleviating occupational burnout (Liu Jianxun, Dong Xiaoli & Yang Qian, 2016; Xu Tan, 2018; Wang Ling, 2022). Therefore, self-efficacy has a significant impact on teachers' career development and is also influenced by various policy factors.

2 THE IMPACT OF DISCIPLINE POLICIES ON TEACHERS' SELF-EFFICACY

In the process of disciplinary development, discipline policies are an important external environmental factor influencing teachers' self-efficacy. Considering the scope of their influence, discipline policies comprehensively encompass talent cultivation, scientific research, and social services within higher education institutions, thereby exerting a comprehensive impact and shaping teachers' self-efficacy. Some scholars have observed that while young teachers exhibit a strong desire to participate in the "Double First-Class" Initiative, they often lack a comprehensive understanding of its

objectives, significance, action framework, and policy implications. Additionally, the resource support mechanisms for the "Double First-Class" construction are inadequate, and the workload has increased due to additional construction tasks. Consequently, this has resulted in reduced confidence and motivation among these teachers to engage in the initiative (Zhang Junfeng & Zhao Yingzhi, 2018). Hence, it is apparent that discipline policies have a substantial impact on teachers' self-efficacy.

2.1 Positive Effects

Discipline policies serve as a potent means of fostering disciplinary development within an institution. As institutional support has a beneficial impact on teachers' self-efficacy, discipline policies, being a form of such support, similarly enhance teachers' self-efficacy. Through the knowledge-attitude-practice (KAP) framework, a robust discipline policy system, ample resources for disciplinary development, and the accumulation of knowledge pertinent to these policies can prompt teachers to adopt a more favorable stance towards disciplinary development, thereby motivating them to actively participate in related activities. The positive influence of discipline policies on teachers' self-efficacy manifests in three primary areas.

1. Guiding Teachers' Disciplinary Conduct Positively: A well-structured discipline policy clarifies the objectives of disciplinary development and the prerequisites for various aspects of discipline construction. This enables teachers to devise teaching plans and research projects accurately, leading to exceptional teaching outcomes and research achievements, thereby bolstering their self-efficacy.

2. Supporting Teachers' Career Development: A comprehensive discipline policy fosters teachers' engagement in disciplinary development training and professional teaching and research training, thereby advancing their professional growth. It may also offer funding for teachers to participate in academic forums, teaching seminars, and exchange programs. By acquiring new, advanced teaching methodologies and enhancing their teaching skills, as well as gathering knowledge and resources pertinent to disciplinary development, teachers' self-efficacy is significantly enhanced.

3. Recognizing and Motivating Teachers' Disciplinary Efforts: A thoughtfully designed discipline policy acknowledges and rewards teachers' accomplishments in disciplinary development, positively influencing their career trajectory. In summary, the beneficial effects of discipline policies empower teachers to recognize their professional worth, elevate their self-efficacy, and heighten their motivation to contribute to disciplinary development.

2.2 Negative Effects

In contrast to the positive effects of well-established discipline policies, unreasonable or incomplete ones can adversely impact teachers' self-efficacy.

1. Increased Work Pressure or Burden: Disciplinary development projects, often implemented in a project-based manner at the institutional level, are subject to time constraints. To meet these goals, excessive tasks might be assigned to teachers in some universities, such as overburdening them with teaching or research responsibilities. This can lead to feelings of being overwhelmed, divided focus, and ultimately a decrease in self-efficacy.

2. Limitation of Teachers' Autonomy in Disciplinary Activities: Unreasonable teaching

requirements or unrealistic innovation expectations can hinder teachers' ability to adjust their work plans according to the actual needs of their teaching and research activities. This could result in teaching outcomes and research results falling short of expectations, thereby affecting their self-efficacy.

3. Single Evaluation Criteria: Disciplinary development encompasses multiple areas, including teaching, scientific research, social services, and collaborative exchanges. A flawed evaluation system will weaken teachers' self-efficacy. For instance, if teaching outcomes are solely evaluated based on students' exam scores, it may lead to a narrow focus on exam results and neglect the development of students' professional skills. Unsatisfactory exam scores can then result in a decline in teachers' self-efficacy in teaching. Similarly, unreasonable research evaluation criteria can diminish teachers' sense of innovation self-efficacy.

3 ISSUES EXISTING IN DISCIPLINE POLICIES: AN ANALYTICAL APPROACH BASED ON THE TWO-DIMENSIONAL FRAMEWORK OF DISCIPLINE DEVELOPMENT THEMES AND POLICY TOOLS

The primary aim of analyzing discipline policy texts is to pinpoint those policy tool factors that could impede the enhancement of teachers' self-efficacy. By doing so, this study aims to provide strategies and insights for further refining top-tier discipline policies, bolstering teachers' self-efficacy, and fostering disciplinary development. Since the enactment and implementation of two regional top-tier disciplinary construction policies in Guangxi Province in 2017—namely, the "Implementation Plan for First-Class Discipline Construction" and the "Implementation Measures for First-Class Discipline Construction"—approximately 60 high-level disciplines with distinct regional characteristics from 20 universities in Guangxi have received substantial resource support from the government. Following two policy cycles of assistance, several disciplines have achieved notable construction outcomes, ranking prominently in global academic rankings and making significant strides in talent cultivation and social services. Conversely, the construction effects of some disciplines have been less than satisfactory. This disparity prompts the question: Among disciplines with comparable basic conditions and within the same policy environment, what factors account for the differences in their development? Is it the result of misguided policy orientation or deviations in policy implementation? Assuming that the role of discipline policies in all universities is the same, then it can be inferred that the reasons for the different development effects of discipline supported by policies should be that the implementation process of policies in universities leads to problems in teachers' self-efficacy. From the perspective of the agents involved in disciplinary construction, teachers are the primary executors of these activities, and their self-efficacy holds a pivotal role in disciplinary development. Discipline policies, as a crucial environmental factor influencing teachers' self-efficacy, offer a valuable lens through which to explore the potential causes of these differing disciplinary construction outcomes. Therefore, the foremost task is to conduct a thorough analysis of the combinational structure of discipline policy tools and to identify any potential issues that may hinder the enhancement of teachers' self-efficacy.

3.1 Classification of Discipline Policy Tools

Policies consist of various policy tools, also referred to as government or governance tools. These tools represent the methods or institutional arrangements employed by public authorities to achieve policy objectives (Zhang Zhang, 2006; Chen Qingyun, 2006; Chen Zhenming, 2015). Policy tools function as a conduit between policy goals and policy outcomes. Research indicates that classifying policy tools can link policy objectives with the behavioral motives of actors. Consequently, employing the classification of policy tools for post-implementation assessments can offer governments valuable insights for improving their management strategies (Wu Hewen, 2011). Lorraine M. McDonnell and Richard F. Elmore (1987) categorized policy tools into authoritative tools, incentive tools, capacity-building tools, and systematic change tools, based on the government's level of intervention in policy activities and target dimensions. Anne Schneider & Helen Ingram (1990), on the other hand, classified policy tools into authoritative policy tools, inducement policy tools, capacity-building policy tools, symbolic or persuasive policy tools, and learning policy tools, according to the government's guidance of target groups' behavior and their responsive actions. These classification frameworks have been extensively utilized in various educational research areas. According to the aforementioned classification methods, it can be inferred that both distinctions and overlaps exist among different types of policy tools, as well as similarities and differences in their meanings. By merging inducement policy with incentive tools and learning tools with capacity-building tools, discipline policy tools can be categorized into five types: authoritative tools, incentive tools, capacity-building tools, systematic change tools, and persuasive tools. The specific details of each type of discipline policy tool are outlined in Table 1.

Table 1 Classification of Discipline Policy Tools

Type	Primary Policy Tools
Authoritative Tools	Requirements, Standards, Evaluation, Supervision, Procedures, Regulations, Responsibility
Incentive Tools	Funding, Rewards, Punishments, Authorization
Capacity-Building Tools	Platform Development, System Construction, Special Policy Support, Educational and Training Support, Information Consultation Support
Systematic Change Tools	Power Restructuring, Function Definition, Organization Establishment
Persuasive Tools	Encouragement, Call to Action, Appeal

3.2 The Themes and Contents of Discipline Policy

The theme of discipline policy pertains to the primary tasks outlined within the policy for advancing disciplinary development, alternately referred to as the theme of disciplinary construction. Each policy theme encompasses a series of disciplinary construction tasks, accompanied by corresponding action objectives or guidelines. According to policy documents, the themes of Guangxi's regional first-class discipline policies can be categorized into six areas: disciplinary construction management, disciplinary orientation and standard, disciplinary team development, talent cultivation,

scientific research and social services, as well as international cooperation and exchanges (as elaborated in Table 2). These themes collectively focus on the three fundamental functions of universities: talent cultivation, scientific research, and social service provision.

Table 2 Theme Classification of Discipline Policies

Policy Theme Types	Policy Theme Contents (Tasks of Disciplinary Construction)
Discipline Construction Management	Governance system and management regulations for discipline construction, responsibilities of discipline construction entities, utilization and management of funds, etc.
Discipline Directions and Levels	Stable discipline directions, construction of doctoral and master's degree programs, major construction, discipline evaluation and ranking, etc.
Discipline Team Building	Personnel scale (number of full-time teachers), team development, personnel structure (degree structure and age structure), etc.
Talent Cultivation	Teaching platforms, teaching achievements (such as teaching awards and textbook compilation by teachers, awards obtained by students in academic competitions), quality of talent cultivation (such as student publications, patent authorizations, employment rates, enrollment rates, thesis evaluations, etc.)
Scientific Research and Social Services	Research platforms, research projects, research funding, research achievements (such as papers, monographs, patents, etc.) and achievement awards, social services (such as the number of projects and funding for external social institutions, benefits from the commercialization of research results), etc.
International Cooperation and Exchange	Internationalization of the teaching staff (such as the number and duration of teachers' overseas academic exchanges and visits, number of foreign teachers), internationalization of talent cultivation (such as the number and duration of students studying abroad and participating in academic exchanges, number of foreign students), international exchanges (such as platforms and projects for international research cooperation, international academic conferences hosted or co-hosted, international academic conferences attended), etc.

3.3 Two-Dimensional Analysis Framework for Discipline Policy Tools

Drawing upon the classification of policy tools, their constituent elements, and the themes of discipline policies, a two-dimensional analysis framework for discipline policy tools can be constructed, with the policy tools serving as the horizontal dimension (X-axis) and the policy themes as the vertical dimension (Y-axis), as shown in Figure 1.

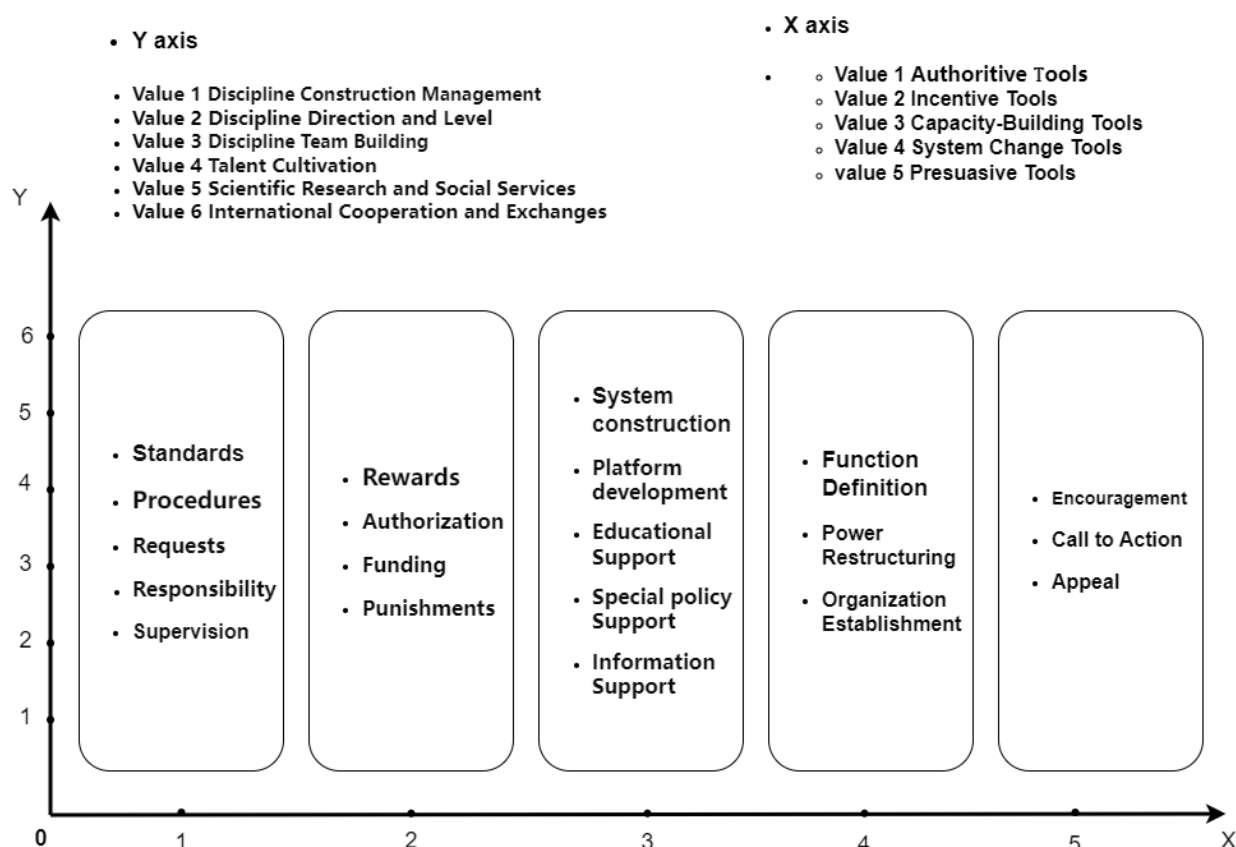


Fig. 1. 2-D analysis framework of discipline policy tools.

3.4 Coding of Policy Tools

To facilitate an in-depth analysis of the policy tools embedded within policy texts and to gain insights into their distribution, it is imperative to systematically code the contents of these texts. This coding process enables the decomposition and identification of the various policy tools. Adopting the structured framework of "Policy Name - Policy Clause - Tool Type," this study rigorously extracted policy tools from Guangxi's regional discipline policies—the "Implementation Plan for First-Class Discipline Construction" and the "Implementation Measures for First-Class Discipline Construction."

In this study, the JIEBA word segmentation software developed based on Python is used to segment discipline policy texts. After the text is disassembled, the content elements of discipline policy are extracted from the text, and the keyword cluster analysis is carried out according to the word meaning, and the two-dimensional analysis framework of policy tools is constructed. The results of word segmentation show that the focus of discipline policy is on talent training, discipline team building, discipline platform construction, scientific research, discipline system and other closely related aspects of discipline development, and put forward relevant implementation methods. High-frequency words such as "teaching", "science and technology", "achievements", "platform construction", "talents", "team", "funds", "institution" and "strengthening" fully indicate that the core work of promoting discipline development is to promote the university's personnel training, academic progress and social

service level improvement through teaching, scientific research, platform, institution and faculty team.

Upon meticulous examination, a total of 221 policy tool entries were successfully decomposed from these two policy documents. Within the operational flow of discipline policies, the "Implementation Plan" holds a superior position relative to the "Implementation Measures." The latter serves as a detailed elaboration of the former, providing guidance to discipline entities on how to carry out specific actions for disciplinary development within the confines of the former's framework. Consequently, among the 221 policy tool entries, there exist inevitable duplicates or overlapping information. To eliminate redundant calculations, policy tool entries with identical main purposes were merged into a single tool category. Following this consolidation, a final tally of 172 policy tool entries was obtained for Guangxi's regional discipline policies. Subsequently, the policy tool entries were meticulously coded in accordance with the sequence of "Policy Name - Policy Clause - Policy Theme - Policy Tool," culminating in the creation of a comprehensive policy tool coding table (shown in Table 3).

Table 3 Coding Table for Policy Text Analysis Units (Excerpt)

No.	Policy Name	Analysis Unit of Policy Text Content	Y-Dimension: Discipline Construction Themes	X-Dimension: Discipline Policy Tools	Coding
1	Implementation Plan for First-Class Discipline Construction	I. With the core aim of enhancing the quality of talent cultivation and scientific and technological competitiveness, we will innovate mechanisms, deepen reforms, focus on quality, and accelerate construction, striving to transform the talent and scientific and technological resource advantages of universities into real productivity to serve regional economic and social development.	Discipline Construction Management	Authoritative Tools	1-1-1
		V. Send middle-aged and young backbone teachers to study at domestic and foreign top universities and research institutions.	Discipline Team	Capacity-Building Tools	1-5-3
		V. Improve the quality assurance system for talent cultivation.	Talent Cultivation	Systematic Change Tools	1-5-4

2	Implementat ion Measures for First- Class Discipline Construction	V. Enhance the effectiveness of student exchanges, credit recognition, and joint cultivation with high-level universities both at home and abroad, and expand international influence.	International Cooperation and Exchange	Persuasive Tools	1-5-5
		VI. Actively implement a representative research evaluation system, and formulate evaluation standards and systems centered around academic contributions, academic impact, and academic vitality.	Scientific Research and Social Services	Systematic Change Tools	1-6-4
	
		IX. Cultivate top-notch innovative talents, highlighting the central role of talent cultivation in the process of disciplinary construction.	Talent Cultivation	Authoritative Tools	2-9-1
		X. Construct a well-organized and logically structured talent hierarchy within the discipline, led by academic leaders, with outstanding talents forming the backbone and excellent young talents serving as the core.	Discipline Team	Systematic Change Tools	2-10-4
		XI. Establish an incentive mechanism that attaches equal importance to academic quality and research contributions	Scientific Research and Social Services	Incentive Tools	2-11-2
		XII. Carry out internationalization of majors and curriculum development.	International Cooperation and Exchange	Capacity-Building Tools	2-12-3
		XV. Organize and implement tasks related to talent cultivation, scientific research, discipline team building, platform construction, academic exchanges, and social services within various disciplines independently.	Discipline Directions and Levels	Systematic Change Tools	2-15-4
	
	

3.5 Statistics and Analysis of Policy Tools

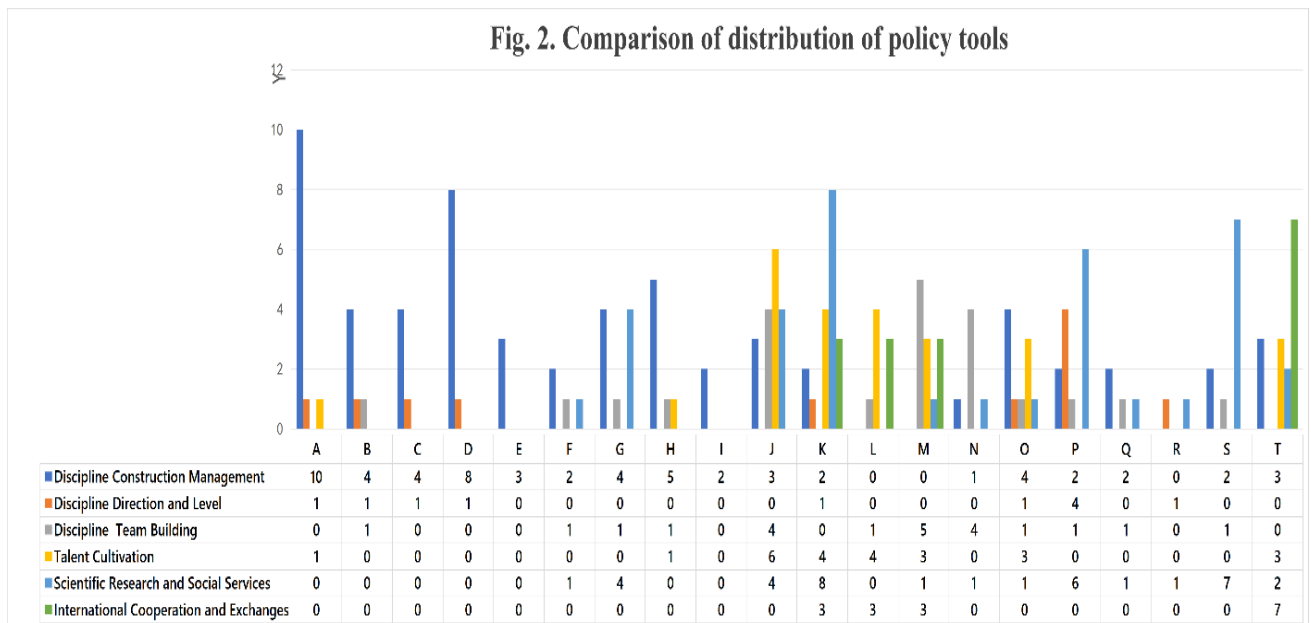
By categorizing and statistically coding the information on policy tools, we obtained the distribution frequency of various policy tools (X-axis) and the distribution frequency of policy tools under various discipline policy themes (Y-axis), as well as the proportions among the frequencies of policy tools (as detailed in Table 4). A histogram depicting the distribution of policy tools was drawn based on the two-dimensional analytical framework of policy tools (as detailed in Figure 2).

Table 4 Distribution Proportions of Discipline Policy Tools

Y \ X	Authoritative Tools				Incentive Tools				Capacity-Building Tools				System Change Tools				Persuasive Tools				Total	Percent
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T		
Discipline Construction Management	10	4	4	8	3	2	4	5	2	3	2	0	0	1	4	2	2	0	2	3	61	35.5%
Discipline Direction and Level	1	1	1	1	0	0	0	0	0	0	1	0	0	0	1	4	0	1	0	0	11	6.4%
Discipline Team Building	0	1	0	0	0	1	1	1	0	4	0	1	5	4	1	1	1	0	1	0	22	12.8%
Talent Cultivation	1	0	0	0	0	0	0	1	0	6	4	4	3	0	3	0	0	0	0	3	25	14.5%
Scientific Research and Social Services	0	0	0	0	0	1	4	0	0	4	8	0	1	1	1	6	1	1	7	2	37	21.5%
International Cooperation and Exchanges	0	0	0	0	0	0	0	0	0	0	3	3	3	0	0	0	0	0	0	7	16	9.3%
Total	12	6	5	9	3	4	9	7	2	17	18	8	12	6	10	13	4	2	10	15	172	100%
Percent	7.0%	3.5%	2.9%	5.2%	1.7%	2.3%	5.2%	4.1%	1.2%	9.9%	10.5%	4.7%	7.0%	3.5%	5.8%	7.6%	2.3%	1.2%	5.8%	8.7%	100%	

Subtool Annotation:

A: Standard; B: Procedures; C: Requests; D: Responsibility; E: Supervision; F: Rewards; G: Authorization; H: Funding; I: Punishments; J: System construction; K: Platform development; L: Educational Support; M: Special Policy Support; N: Information Support; O: Function Definition; P: Power Restructuring; Q: Organization Establishment; R: Encouragement; S: Call to Action; T: Appeal



1. In terms of the distribution across various types of policy tools (represented on the X-axis), there exist notable disparities in frequency (as shown in Figure 2). Firstly, capacity-building tools have a

frequency of 61, constituting 35.5% of the total and thereby representing the largest proportion. This underscores the pivotal role that capacity-building tools play in disciplinary development, and further highlights that the guidance provided by discipline policies and the emphasis placed on disciplinary development both converge on capacity building. Secondly, authoritative tools register a frequency of 35, accounting for 20.3% of the total. In a tie for third place, systematic change tools and persuasive tools each have a frequency of 27, representing 15.7% of the total respectively. Lastly, incentive tools have a frequency of 22, accounting for 12.8% of the total. In summary, when it comes to advancing disciplinary development, the government tends to prioritize the use of capacity-building tools and authoritative tools to foster progress. Consequently, the distribution of policy tool types indicates that systematic change tools, incentive tools, and persuasive tools have not garnered sufficient attention, hinting at a certain level of inadequacy in the structure of discipline policy tools.

2. From the perspective of discipline development themes (represented on the Y-axis), the distribution of policy tools also demonstrates significant disparities.

(1) Theme of Discipline Construction Management. This theme has the highest frequency of policy tools, being 61 and accounting for 35.5% of the total. This indicates that discipline policies are more focused on discipline construction management and reflect the government's leading role in discipline development.

(2) Theme of Scientific Research and Social Service. The frequency of policy tools for this theme is 37, accounting for 21.5% of the total. This reflects that scientific research and social service are important indicators of disciplinary development levels and key objectives of government-issued discipline policies.

(3) Theme of Talent Cultivation. The frequency of policy tools for talent cultivation is 25, representing 14.5% of the total. This suggests that talent cultivation, as a core task, has not received sufficient attention in disciplinary development activities and that related policy tools need to be enriched.

(4) Theme of Discipline Team Building. The frequency of policy tools for this theme is 22, accounting for 12.8% of the total. This indicates that the construction of teaching staff has not been a primary focus and that related policy tools also need to be enriched.

(5) Theme of International Cooperation and Exchange. The frequency of policy tools for this theme is 16, accounting for 9.3% of the total. Overall, the use of policy tools in this area is relatively reasonable.

(6) Theme of Discipline Direction and Level. This theme has the lowest frequency of policy tools, being 11 and representing 6.4% of the total. This indicates a lack of policy tools related to discipline direction and level. To a certain extent, this is detrimental to standardizing the direction of disciplinary development. Such a situation may lead to duplicate construction of the same discipline among different universities or deviation of disciplinary development from policy objectives.

3. From the vantage point of primary policy tools, discrepancies in the utilization of primary tools are evident across various discipline policy themes, under each type of policy tool. Specifically, the theme of discipline construction management is deficient in capacity-building tools. The theme of

discipline direction and level is lacking in both incentive tools and capacity-building tools. The theme of discipline team building is devoid of incentive tools, systematic change tools, and persuasive tools. In the theme of talent cultivation, there is a shortage of authoritative tools, incentive tools, and systematic change tools. The theme of scientific research and social service is lacking in authoritative tools and incentive tools. Similarly, the theme of international cooperation and exchange is deficient in authoritative tools, incentive tools, and systematic change tools.

3.6 Structural Defects of Discipline Policy Tools and Their Negative Impacts on Teachers' Self-Efficacy

1. Structural Defects of Discipline Policy Tools

Teachers' job responsibilities are primarily reflected in teaching and research, both of which involve all themes of discipline construction. Therefore, whether viewed from the perspective of discipline construction themes or types of policy tools, all discipline policy tools have a certain correlation with teachers' self-efficacy. Based on the closeness of teaching, research, and discipline construction themes, talent cultivation, scientific research and social services, and discipline team building are most closely related to teachers' self-efficacy, followed by international cooperation and exchange, discipline direction and level, and discipline construction management. In terms of the role of policy tools, the capacity-building tools of discipline policies are important environmental factors that play a significant role in shaping teachers' self-efficacy. From the perspective of teachers' individual internal dynamics, incentive tools and persuasion tools are also pivotal in shaping their self-efficacy. In conclusion, based on the level of correlation between teachers' activities and discipline construction themes, as well as the influence of policy tools on fostering self-efficacy, the distribution structure diagram of discipline policy tools reveals that all six themes suffer from a shortage of policy tools, which would negatively impact teachers' self-efficacy (as shown in Table 4 & Figure 2).

(1) The theme of discipline team building primarily lacks authoritative tools; meanwhile, it lacks punishment in incentive tools, platform construction in capacity-building tools, and encouragement and appeals in persuasive tools.

(2) The theme of talent cultivation mainly lacks authoritative tools and incentive tools; meanwhile, it lacks information consultation support in capacity-building tools, power and organizational restructuring in systematic change tools, and encouragement and calls in persuasive tools.

(3) The theme of scientific research and social services primarily lack authoritative tools; meanwhile, it lacks rewards and punishments in incentive tools and educational training support in capacity-building.

(4) The theme of international cooperation and exchange mainly lacks authoritative tools, incentive tools, and systematic change tools; meanwhile, it lacks system construction and information consultation support in capacity-building tools, and encouragement and calls in persuasive tools.

(5) The theme of discipline direction and level primarily lacks incentive tools; meanwhile, it lacks system construction, educational training support, special policy support, and information consultation

support in capacity-building tools, lacks supervision in authoritative tools, lacks organizational restructuring in systematic change tools, and lacks calls and appeals in persuasive tools.

(6) The theme of discipline construction management primarily lacks educational training support and special policy support in capacity-building tools, as well as encouragement and other basic tools in persuasive tools.

2. Negative Impact of Policy Tool Absence on Teachers' Self-Efficacy

An ample supply of discipline policy tools serves as a comprehensive catalyst for enhancing teachers' self-efficacy in discipline construction endeavors. Conversely, the absence of any policy tool signifies a lack of policy support for related discipline construction activities. A comprehensive analysis of policy texts reveals that particular attention must be directed towards the absence of policy tools in three crucial areas, as their impact on teachers' self-efficacy is intricately linked to the overall efficacy of discipline policies and the level of disciplinary development.

(1) The lack of resource allocation tools results in an unreasonable or uneven distribution of discipline resources, which undermines the shaping and enhancement of teachers' self-efficacy. Each discipline construction theme necessitates the investment of discipline resources. Within the confines of limited resources, themes that possess more policy tools are more prone to securing abundant resources, whereas those with fewer policy tools confront resource scarcity. This allocation outcome is equally applicable to various construction tasks within a single discipline construction theme. Such a scenario prompts teachers to diminish their self-efficacy in both discipline construction and personal career advancement. For instance, the absence of platform construction in discipline team building somewhat restricts teachers' career development prospects. Similarly, the lack of specific policy support in the theme of scientific research and social services may diminish teachers' self-efficacy in technological innovation. Therefore, the balanced allocation of policy tools should align with discipline construction themes or tasks to foster and elevate teachers' self-efficacy in discipline construction.

(2) The absence of evaluation tools for discipline construction makes it challenging to obtain positive feedback on its effectiveness, thereby hindering the shaping and enhancement of teachers' self-efficacy. Each specific task within a discipline construction theme ought to have corresponding evaluation criteria. An incomplete evaluation system will prompt teachers to concentrate their efforts primarily on discipline construction tasks that can garner positive feedback. Themes of discipline construction, including discipline team building, talent cultivation, scientific research and social services, as well as international exchanges and cooperation, encompass numerous tasks. The lack of authoritative tools implies that some disciplinary tasks lack evaluation standards or a basis for evaluation. This situation will lead to some of the teachers' discipline construction work not being evaluated appropriately. Consequently, teachers will lack motivation to undertake important discipline construction tasks but lack clear evaluation standards or have ambiguous evaluation bases, further weakening their self-efficacy.

(3) The scarcity of capacity-building tools and incentive tools will dampen teachers' enthusiasm for participating in discipline construction, which is detrimental to shaping and enhancing their self-

efficacy. During the implementation of discipline policies, the absence of educational training support, information consultation support, and incentive tools related to discipline construction will negatively impact teachers' sense of identity and initiative in executing policies, thereby influencing the formation and enhancement of their self-efficacy. Due to the lack of discipline construction training, relevant professional knowledge reserves are insufficient, and the pressure of discipline construction transforms into obstructive pressure, reducing teachers' enthusiasm or motivation to engage in discipline construction work and subsequently affecting their work performance (Wang Xianya, Lin Sheng, & Chen Liyun, 2014). Additionally, the absence of incentive tools may lead to ambiguous duties in discipline construction activities, which would restrict the range of disciplinary actions teachers can take and hinder the attainment of discipline construction objectives as a whole. As a result, discipline construction efforts will diverge from policy goals due to a decline in teacher participation, which will impact the policies' overall efficacy.

4 STRATEGIES FOR IMPROVING THE STRUCTURE OF DISCIPLINE POLICY TOOLS

4.1 Optimizing the tool structure for allocating disciplinary resources

Within the framework of discipline policies, it is imperative to fortify the mechanism for the rational allocation of disciplinary resources by incorporating authoritative and incentive tools pertinent to resource distribution. These tools are aimed at motivating universities to allocate disciplinary resources judiciously across diverse disciplinary development themes. On one hand, it is essential to guarantee the fulfillment of basic resource requirements for core disciplinary development tasks. Simultaneously, it is crucial to ensure that secondary tasks are also endowed with access to adequate disciplinary resources. On the other hand, the inclusion of monitoring tools within authoritative tools is necessary to augment the controllability of disciplinary resource allocation. Furthermore, it is pivotal to strengthen capacity-building tools and reinforce the institutional framework and dynamic resource allocation mechanisms for each disciplinary development theme. This will guarantee that all disciplinary development tasks have access to the necessary resources, thereby motivating teachers to actively participate in various disciplinary development themes and fostering a heightened sense of self-efficacy in disciplinary construction endeavors.

4.2 Enhancing the policy tool framework for evaluating disciplinary development mechanisms

Within the realm of authoritative tools, it is crucial to develop a comprehensive and diversified evaluation standard system tailored to disciplinary development themes and tasks. On the one hand, discipline policies should be enriched with authoritative tools to provide universities with comprehensive guidance for assessing teachers' teaching quality, research achievements, social services, and other related tasks from multiple perspectives. For example, in terms of research evaluation, alongside traditional quantitative indicators, novel criteria should be established to focus on evaluating the innovation, impact, and application of research outcomes in talent cultivation. In the context of social services, in addition to traditional quantitative metrics such as university-enterprise cooperation

projects and funding amounts, indicators assessing teachers' participation in enterprise collaboration, community education, student engagement, and impact effects should also be incorporated. On the other hand, authentic evaluation tools should be integrated within authoritative tools to transform potential irrational top-down behaviors stemming from symbolic or formal evaluation models, thereby fostering greater potential for practical innovation in disciplinary development. (Zhu Bingying & Dong Weichun, 2018) Through this diversified evaluation approach, teachers in diverse positions or involved in various disciplinary development activities can find recognition within discipline policies, ultimately enhancing their sense of self-efficacy.

4.3 Enhancing the policy tool structure for teachers' engagement in disciplinary development

Teachers serve as the pivotal force driving the advancement of higher education. Their values, interests, and academic endeavors profoundly shape disciplinary governance objectives, construction content, and development trajectories. The scarcity of incentive mechanisms and the dearth of training and information consulting support related to disciplinary construction negatively affect teachers' willingness to participate in disciplinary construction or governance. To tackle this issue, it is imperative to strengthen training and information consulting support within the capacity-building framework. This will empower teachers to gain a deeper understanding of the specific requirements of various disciplinary construction tasks and the beneficial impacts of such construction on universities, students, and educators themselves. By aligning disciplinary construction activities with their career development, teachers can harness their professional knowledge and expertise to propel disciplinary growth. Additionally, it is advisable to introduce additional incentive tools and systematic change tools, clearly delineating teachers' rights and responsibilities within various disciplinary construction initiatives. This ensures that teachers' interests and job requirements are adequately addressed within discipline policies. By doing so, teachers' sense of policy alignment and their sense of responsibility towards disciplinary construction will be enhanced, further elevating their self-efficacy.

5 CONCLUSIONS

The self-efficacy of teachers holds a profound impact on the progression of academic disciplines and the quality of education within universities. Currently, the structural framework of policy tools in the regional first-class discipline policy in Guangxi Province remains inadequate. This imperfection may give rise to concerns such as a monolithic evaluation system for disciplinary development, unequal distribution of resources, and insufficient teacher involvement. The imperfect structure of policy tools leads to differences in the policy implementation process of universities, resulting in changes in the discipline-building self-efficacy of teachers, and presenting different levels of discipline development. Consequently, these challenges impede teachers' capacity to bolster their self-efficacy, ultimately stifling the advancement of academic disciplines. Therefore, it is necessary to further improve discipline policies by supplementing policy tools related to evaluation mechanisms, resource allocation, and teacher participation. This will help create a policy environment conducive to enhancing teachers' self-

efficacy and stimulate their enthusiasm and creativity in discipline construction. Currently, discussions on policy science theory within the realm of higher education research tend to focus predominantly on general education resource allocation. Consequently, there is a scarcity of research findings that delve into disciplinary resource allocation, teacher development, student development, disciplinary development, and institution advancement from the vantage point of policy tools within the framework of discipline policy research. In addition, since no theoretical standards for policy tool allocation have been identified, determining whether policy tools are missing mainly relies on practical needs and text analysis, making the analysis of policy tools quite challenging. Moreover, discipline policy is only one of the environmental factors affecting teachers' self-efficacy; there are other environmental factors that also profoundly influence teachers' self-efficacy. Therefore, further expansion is needed in terms of the theoretical foundation, analytical methods, and case studies of this study. In the next step, hierarchical analysis research can be considered from the two dimensions of discipline-building topics (policy theme) and policy tools, so as to make hierarchical differentiation of the priorities of policy tools, so as to better identify the policy influencing factors of teachers' self-efficacy. This is a feasible option for the study of discipline policy optimization. As discipline governance receives increasing attention, it is necessary to conduct in-depth research on the impact of discipline policies on teachers' self-efficacy in future university management or policy research. In terms of policy practice, it is essential for policymakers to continuously innovate discipline policies and optimize the structure of policy tools based on changes in the behavioral agent structure of discipline governance and the external environment of disciplines during the policy-making process. This will help universities to shape and enhance teachers' self-efficacy and promote continuous development in higher education.

REFERENCES

- [1] Anne Schneider & Helen Ingram. (1990). Behavioral Assumptions of Policy Tools. *The Journal of Politics*, 52(2), 510-529.
- [2] Bai Ying.(2022). Research on The Collaborative Education of Teachers' Teaching and Scientific Research in Higher Educational Institution of "Double First-class" Construction (Master Dissertation, Fujian Normal University).
<https://link.cnki.net/doi/10.27019/d.cnki.gfjsu.2022.001754>doi:10.27019/d.cnki.gfjsu.2022.001754.
- [3] Bandura. (1977). Self-efficacy: Toward a Unifying Theory of Behavioral Change .*Psychology Review*,84(2),191-215.
- [4] Chen Qingyun. (2006). *Public Policy Analysis*. Beijing: Peking University Press, 81.
- [5] Chen Zhenming. (2015). *Policy Science Tutorial*. Beijing: Science Press, 55.
- [6] Gibson, S., & Dembo, M. H., H. (1984). Teacher Efficacy: A Construct Validation. *Journal of Educational Psychology*. 76(4):569-582. Doi:10.1037/0022-0663.76.4.569.
- [7] Huang Xuanyi. (2022). A study on Teaching Environment Perception and Teaching Self-efficacy of Higher Educational Institution Teachers (Master's Thesis, Xiamen University).
- [8] <https://link.cnki.net/doi/10.27424/d.cnki.gxmdu.2022.000446>doi:10.27424/d.cnki.gxmdu.2022.000446..
- [9] Kong Linghong. (2024). Research Progress on Self-efficacy. *Advances in Psychology*, 14(4), 62-67.

- Published Online April 2024 in Hans. <https://doi.org/10.12677/ap.2024.144195>.
- [10] Liang Aichan.(2022). Research on Teacher Development in Local Undergraduate Higher Educational Institution under the Background of First-Class Discipline Construction (Master's Thesis, Nanning Normal University).<https://link.cnki.net/doi/10.27037/d.cnki.ggxsc.2022.000743>doi:10.27037/d.cnki.ggxsc.2022.000743.
 - [11] Liu Jianxun, Dong Xiaoli & Yang Qian. (2016). Impact of IPC on Career Success of Higher Educational Institution Teachers: The Moderating Role of Self-efficacy. *Science Technology and Industry*,(02),117-122+145.
 - [12] Liu Peijun, He Chaomin & Zhao Shuangliang.(2023). Local Government Policies to Promote First-Class Discipline Construction: Tool Preference and Matching. *Exploration of Higher Education* (01),14-22.
 - [13] Liu Rui, Guo Yungui & Zhang Lihua.(2016). Impact of Creative Self-efficacy on Research Performance: the Role of Research Engagement and Challenge Research Stress. *Journal of Beijing University of Posts and Telecommunications (Social Sciences Edition)*,(2),86-96.
 - [14] Lorraine M. McDonnell & Richard F. Elmore.(1987). Getting the Job Done: Alternative Policy Instruments. *Educational Evaluation and Policy Analysis*, Vol. 9, No. 2, 133-152.
 - [15] Megan Tschannen-Moran & Anita Woolfolk Hoy. (2001).Teacher Efficacy: Capturing An Elusive Construct. *Teaching & Teacher Education*, 17(7):783-805.Doi:10.1016/S0742-051X(01)00036-1.
 - [16] Mimi Bong & Einar M. Skaalvik. (2003). Academic Self-Concept and Self-Efficacy: How Different Are They Really?. *Educational Psychology Review*, 15(1):1-40.
 - [17] Pan Xiaoxin (2022). The Effect of Work Pressure on Self-efficacy of Higher Educational Institution Teachers in Scientific Research. *Journal of Longyan University*, 40(6):117-122. Doi:10.16813/j.cnki.cn35-1286/g4.2022.06.019.
 - [18] Pang Shengmin & Li Hui.(2020). Characteristics of Policy Tools for China's "Double First-Class" Construction and Their Compatibility with Policy Objectives. *Higher Education Explore*, 8, 26-32.
 - [19] <https://lgwindow.sdut.edu.cn/info/1012/3597.htm>
 - [20] Tian Meiling.(2018). A study on the Effects of Performance Feedback Model and Feedback Seeking Behavior on Higher Educational Institution Teachers' Innovative Self-efficacy (Master's thesis, University of Electronic Science and Technology of China).
 - [21] Wang Huaqiang, He Ying & Qi Fangmei.(2022). Study on The Status quo, Causes and Countermeasures of The Career Plateau of Higher Educational Institution Teachers Under the Background of "Double First-Class" Construction. *Heilongjiang Province Higher Education Research* (11), 79-85. Doi: 10.19903 / j.carol carroll nki cn23-1074 / g. 2022.11.017.
 - [22] Wang Ling. (2022). A Study on The Effects of Organizational Climate and Teachers' Self-efficacy on Teacher Burnout in Private Higher Educational Institution (Master's Thesis, Sichuan Normal University).
 - [23] <https://link.cnki.net/doi/10.27347/d.cnki.gssdu.2022.000721>doi:10.27347/d.cnki.gssdu.2022.000721.
 - [24] Wang Xianya, Lin Sheng, & Chen Liyun. (2014). The Role of Challenging and Obstructive Research Stressors on Research Performance: The Mediating Role of Research Anxiety and Achievement Motivation, *Science and Management of S & T*,3,23-31.
 - [25] Wu Hewen. (2011). Analysis of Policy Tools for Higher Education. Beijing: Beijing Normal University Press, 61.
 - [26] Wu Yujie. (2015). Policy Changes of Building World-Class University in China from the Perspective of Policy Tools. *Modern Education Science* (11), 1-5. Doi: 10.13980 / j.carol carroll nki xdjy. 2015.11.001.
 - [27] Xie Ran & Li Wenting.(2019). Analysis on the Policy Tools of China's Construction of "Double First-Class" Policy. *Higher Science Education*, (02),25-32.

-
- [28] Xie Ran & Li Wenting.(2023). Rethinking and Reconstruction of Performance Responsibility System in Chinese Higher Education. Shanghai Education Evaluation Research (02), 13- 18.Doi: 10.13794 / j.carol carroll nki shjee. 2023.0029.
 - [29] Xiong Jingjing, (2023). Research on Teachers' Teaching Efficacy and Institutional Support in Local Higher Educational Institution (Ph. D. Dissertation, Fujian Normal University).
 - [30] <https://link.cnki.net/doi/10.27019/d.cnki.gfjsu.2023.000243>doi:10.27019/d.cnki.gfjsu.2023.000243.
 - [31] Xu Jie. (2021). Discipline Governance from the Perspective of Policy Tools of "Double First-class" Construction. Journal of National Academy of Education Administration (12),48-56.
 - [32] Xu Tan. (2018). A Study on the Relationship Between Emotional Intelligence, Self-efficacy and Job Burnout Among Higher Educational Institution Teachers (Master Dissertation, Central China Normal University). <https://link.cnki.net/doi/10.27159/d.cnki.ghzsu.2018.000325>doi:10.27159/d.cnki.ghzsu.2018.000325.
 - [33] Ye Xiaoli, Xu Peixin & Cai Jingmin. (2023). Preference and Optimization Strategy of Policy Tools for Classified Development of Higher Educational Institution in Chinese Provinces. Contemporary Education BBS, (05),33-43. Doi:10.13694/j.carol carroll nki ddjylt. 20230918.003.
 - [34] Zhang Junfeng & Zhao Yingzhi. (2018). Young Teachers' Willingness, Problems and Countermeasures to Participate in the Construction of "Double First-Class". Higher Education Forum, (11), 85-89.
 - [35] Zhang Zhang. (2006). Rationality and System: Choice of Government Governance Tools.Beijing: China National School of Administration Press, 74-81.
 - [36] Zhou Fujun & Hu Chunyan.(2019). A Study on the Selection of "Double First-Class" Policy Tools from the Perspective of Policy Tools: Based on a Two-Dimensional Analysis of Policy Tools and Construction Factors. Journal of Education (03), 84-93. Doi: 10.14082 / j.carol carroll nki. 1673-1298.2019.03.010.
 - [37] Zhu Bingying & Dong Weichun. (2018). From "Symbolic Evaluation" to "Authenticity Evaluation": The Core Approach of First-Class Discipline Construction Evaluation. Degree and Postgraduate Education, 6, 1-6. Doi: 10.16750 / j.a dge. 2018.06.001