

# Research on Teaching Strategies of Private Teachers Based on Behavioral Science Theory

Defang Sha\*

Zhujiang College of South China Agricultural University, Guangzhou 510900, Guangdong Province, China

\*Corresponding author: Defang Sha, 837081312@qq.com

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**Abstract:** This paper systematically analyzes and optimizes teaching strategies for *private* university teachers through the lens of *Behavioral Science* theory. The introduction explores the role and function of *private* universities in the higher education system, highlighting key issues in current teaching strategies. The literature review examines domestic and international research progress on teaching strategies in *private* universities, outlining the application of *Behavioral Science* theories to teaching. The research design and methodology section present the research model, hypotheses, sample selection, data collection, and analysis methods. Based on surveys, interviews, and classroom observations, the status analysis section investigates teaching design, classroom organization, and teacher-student interactions, identifying existing problems and challenges. The study proposes multidimensional optimization strategies grounded in *Behavioral Science* theory, emphasizing individual *behavioral* incentives, group *behavior* management, and organizational culture shaping, with a strong focus on digital teaching platforms. The conclusion summarizes the main findings, discusses research limitations, suggests future directions, and highlights practical insights for university administrators, frontline teachers, and policymakers.

**Keywords:** *Private* universities; Behavioral science theory; Motivation theory; Teaching strategies; Organizational culture

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## 1. Introduction

With the widespread expansion of higher education, *private* universities have become increasingly prominent in China's education system. Their flexible operational mechanisms and market-oriented academic programs have cultivated many application-oriented talents for society. However, compared to public universities, *private* institutions face gaps in faculty strength and teaching resources, which directly impact teaching strategies <sup>[1]</sup>. Currently, *private* university teachers often encounter issues such as inefficient classroom organization, insufficient teacher-student interaction, and incomplete feedback mechanisms, all of which constrain teaching quality and the overall development of *private* universities.

To address these issues, this paper introduces a new theoretical perspective to comprehensively analyze

teaching behaviors. *Behavioral Science* theory, which integrates psychology, sociology, and management, provides a powerful analytical tool. By applying theories such as *Motivation Theory*, *Social Learning Theory*, and *Attribution Theory*, we can gain deeper insights into teaching strategies. *Motivation Attribution Theory* <sup>[2]</sup> suggests that individuals' causal beliefs about behavioral outcomes and their attributes (e.g., stability, controllability) form the cognitive basis of motivation. These beliefs interact with emotional responses to create a deep-seated *cognition-emotion-action* motivation structure. This theory has broad explanatory power in areas such as achievement pursuit, physical health, and social support <sup>[2]</sup>.

This study, starting from teachers' subjective initiative, thoroughly explores their teaching motivation, classroom interaction processes, and the attribution of teaching outcomes. The research aims to systematically analyze the teaching strategies of *private* university teachers through the lens of *Behavioral Science* Theory and propose targeted optimization paths. Theoretically, this approach integrates *behavioral science* with education and instructional technology, expanding the academic perspective on faculty development in *private* universities. Practically, the research findings provide actionable optimization strategies for faculty development and teaching reform.

The innovation of this research lies in introducing a multi-theoretical perspective from *behavioral science* to comprehensively examine teaching behaviors. By integrating *Motivation Theory* and *Attribution Theory*, the study can better understand teachers' strategic choices and the underlying behavioral drivers, providing a scientific basis for optimizing teaching strategies.

## 2. Literature review

With the popularization and development of higher education, *private* universities have become an integral part of China's education system. For these institutions, improving teaching quality and optimizing teaching strategies are critical for sustainable development <sup>[3]</sup>. This section reviews research progress on teaching strategies for *private* university teachers and explores the application and integration of *Behavioral Science* Theory in this domain.

Scholars domestically and internationally have extensively studied teaching strategies, primarily focusing on aspects like digital teaching capabilities, classroom organization, teacher-student interaction, and feedback mechanisms. Effective classroom organization enhances students' learning interest and participation, influencing content delivery and learning experiences. Teacher-student interaction is a crucial element of the teaching process, as it promotes active learning and helps teachers adjust strategies based on real-time feedback. Meanwhile, feedback and evaluation mechanisms are essential for guiding students' reflection and continuous improvement. In the era of rapid technological advancement, digital literacy has become a key indicator of teaching competence.

*Behavioral Science* Theory provides a solid foundation for optimizing teaching strategies. *Behaviorism* emphasizes the importance of incentives and feedback, especially *Skinner's* operant conditioning, which highlights the role of positive reinforcement in shaping student behaviors. *Social Learning Theory*, introduced by *Bandura (1977)*, underscores the impact of teacher modeling and classroom interactions on student learning. Additionally, *Maslow's hierarchy of needs*, *Attribution Theory*, and *Achievement Motivation Theory* offer valuable perspectives to inspire and shape teacher behaviors <sup>[4]</sup>.

Research integrating *Behavioral Science* Theory and teaching strategies has yielded numerous practical cases. Both domestic and international higher education practices demonstrate that applying *behavioral science* not only guides teaching more precisely but also helps teachers better understand students' learning needs and

behavioral patterns, enhancing overall teaching effectiveness<sup>[5]</sup>.

### **3. Strategy optimization and implementation**

#### **3.1. Clarifying goals for individual behavior management**

In the realm of individual behavior management, it is essential to set clear teaching goals and expectations. This study emphasizes aligning faculty development with student needs by requiring teachers to submit detailed teaching plans at the beginning of each semester. This practice not only helps teachers streamline their instructional design but also ensures coherence and completeness in content delivery. The academic affairs office reviews these plans, incorporating student evaluations and teaching outcomes into annual performance assessments and linking them to academic advancement, research project approvals, and teaching awards.

Additionally, regular “Outstanding Teacher” evaluation events reward high-performing educators, fostering a culture of excellence. Psychological support is also prioritized through collective lesson-planning workshops and participation in teaching innovation competitions, which inspire teachers to explore new methodologies and enhance their sense of professional fulfillment. Psychological support and emotional motivation, facilitated through attribution training and achievement motivation guidance, help teachers navigate teaching challenges, boosting confidence and fostering a growth mindset.

#### **3.2. Expanding classroom teaching through interaction optimization**

To optimize classroom teaching, strengthening teacher-student interaction is pivotal, leveraging *Social Learning Theory*. Techniques such as group discussions and collaborative activities encourage active participation and enhance students’ self-efficacy and enjoyment of learning. A classroom observation feedback system is established, using rubrics and video reviews to improve teaching practices.

Furthermore, modern information technologies (big data analytics and AI) are employed to collect, organize, and analyze faculty development data, ensuring data accuracy and reliability. By leveraging smart education platforms (*Rain Classroom*), multi-module evaluation systems are constructed, fostering continuous improvement and making digital literacy training a routine practice. This ecosystem promotes real-time resource sharing and data-driven teaching adjustments, ultimately enhancing teaching efficiency and quality.

#### **3.3. Strengthening team and organizational culture building**

Team collaboration and organizational culture are crucial to sustainable teaching improvement. Establishing interdisciplinary teaching teams and action research communities encourages cross-disciplinary dialogue, fostering collective growth in teaching quality. The integration of ideological and political education into professional courses is also explored, embedding core values like patriotism, scientific spirit, professional ethics, and social responsibility into disciplinary content. The university allocates special teaching reform funds and organizes regular teaching seminars and faculty training programs to support innovation. Embedding the principles of *positive interaction* and *incentive orientation* throughout teaching and management cultivates a positive and proactive campus culture.

#### **3.4. Enhancing learning support systems to boost competitiveness**

In terms of student behavior and learning support, behavior-guided strategies are implemented to enhance participation and motivation. As *Murray* (2019) posited, competition can be beneficial in certain cultural

contexts, particularly among high-achieving students and in specific disciplines<sup>[6]</sup>. The competitive dynamic is shifted from an individual-to-individual model to a group-to-group collaboration model, fostering teamwork and collective achievement.

At the micro level, *competitiveness* is viewed as an individual capability, shaped by personality traits, environmental factors, and cultural influences<sup>[7]</sup>. Team tasks are designed with clear and challenging goals, and students are grouped based on their strengths, interests, and preferences, ensuring that each member finds their optimal role.

An essential component of improving learning outcomes is the integration of smart learning platforms, which enable real-time tracking of students' learning processes and provide personalized feedback, fostering continuous academic growth.

### 3.5. Validation of strategy effectiveness and precision enhancement

To ensure the effectiveness of the optimized strategies, it is essential to implement and validate them systematically. Pilot programs are conducted across disciplines and academic levels, with gradual scaling to ensure feasibility and generalizability. Pre- and post-tests, in-depth interviews, and questionnaire surveys are combined to assess strategy effectiveness, allowing for timely adjustments and improvements. Ultimately, continuous improvement is achieved through teaching reflections, peer evaluations, and institutional review panels, ensuring sustained enhancement of teaching strategies.

This research employs a rigorous methodological framework to comprehensively explore the status and optimization paths of teaching strategies for private university teachers based on behavioral science theory. The findings provide robust theoretical support and practical guidance for teaching reform in private universities, laying a solid foundation for ongoing innovation and development in teaching strategies. This multi-phase approach ensures comprehensive data collection, allowing for a detailed examination of the factors influencing private university teachers' instructional strategies and enabling the proposal of evidence-based optimization paths (Figure 1).

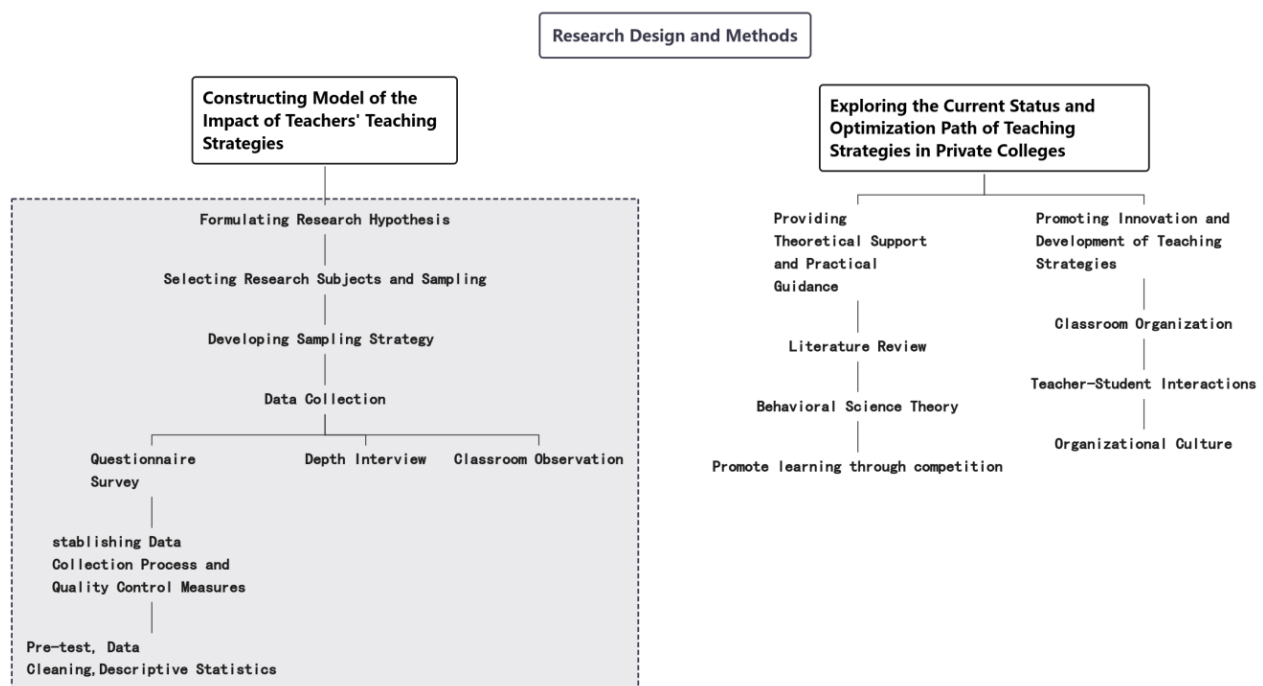


Figure 1. Teaching teacher strategy research and design methods.



### **3.6. Intrinsic motivation as the key factor in teaching strategies**

Based on interviews with eight teachers across general education, specialized courses, and practical classes, the study deeply analyzes various aspects of teaching, including instructional design, classroom organization, teacher-student interaction, feedback evaluation, and digital teaching integration. Teachers highlighted the effectiveness of interactive learning, case studies, and group discussions but also pointed out challenges in adapting to diverse learning styles and student needs, emphasizing limitations in flexibility and innovation.

Participants reported difficulties in adapting to and integrating new technologies into teaching. Heavy teaching loads, research commitments, and administrative tasks strained time management, course content updates, and resource allocation. The interviews underscored the importance of personalized teaching and timely feedback in enhancing student engagement and learning outcomes. Teachers recommended increased training in teaching technologies and curriculum design, along with greater resources and administrative support.

Students, in turn, expressed a need for more guidance in self-management and learning strategies, as well as stronger connections between theoretical knowledge and real-world applications. Practical sessions, project-based learning, and real-world problem-solving activities were identified as crucial for improving learning outcomes, reinforcing the teacher's pivotal role in guiding student development through feedback and continuous support.

#### **3.6.1. Behavioral patterns and classroom performance**

Classroom observations, analyzed through the lens of *Attribution Theory*, provided further insights into the impact of teacher behaviors on student learning. Positive reinforcement was widely used, with teachers attributing student success to effort and ability (internal attribution), boosting self-efficacy and learning motivation. In 85% of observed classes, group interactions were prevalent, with teachers attributing learning success partly to social interactions and cooperation (external attribution), fostering teamwork and social skills.

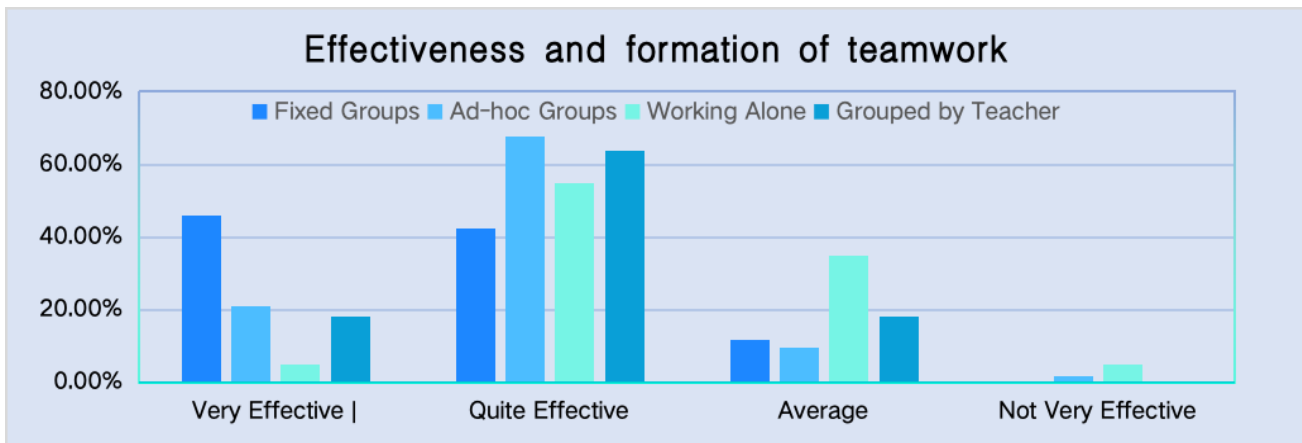
However, punitive mechanisms were observed in 10% of classrooms, where failure was attributed to laziness or lack of effort (internal attribution), which negatively impacted student motivation and engagement. This approach risked diminishing students' learning enthusiasm and self-confidence. On the positive side, 60% of teachers demonstrated strong abilities to stimulate student interest, using engaging content to draw students into learning activities. Moreover, 50% of teachers exhibited well-structured classroom organization, creating an orderly learning environment that enhanced learning efficiency. Nevertheless, 45% of teachers lacked personalized teaching approaches, and 35% were slow to provide feedback, potentially neglecting individual student needs and affecting learning outcomes.

#### **3.6.2. Team collaboration as a key driver of efficiency**

The study further investigated the impact of team collaboration on learning outcomes by distributing surveys to 242 students from various media disciplines. The survey examined whether team-based learning environments enhanced communication efficiency, coordination, and academic performance. The results indicate that effective teamwork significantly improves these aspects, underscoring the critical role of team collaboration in driving overall efficiency in learning environments (**Table 2**) (**Figure 2**).

**Table 2.** Effectiveness and formation of teamwork

Categories of group work	Very effective	Quite effective	Average	Not very effective
Fixed groups	45.88%	42.35%	11.76%	0%
Ad-hoc groups	20.87%	67.83%	9.57%	1.74%
Working alone	5%	55%	35%	5%
Grouped by teacher	18.18%	63.64%	18.18%	0%



**Figure 2.** Effectiveness and formation of teamwork

### 3.6.3. Team collaboration and communication effectiveness

The data reveal a clear correlation between team structure and communication effectiveness. In relatively stable teams, nearly 86% of Members reported that their communication and coordination abilities were either “very effective” or “relatively effective,” highlighting the advantage of stability in team dynamics. In contrast, temporary teams exhibited more variability, with 67.83% rating communication as “relatively effective,” while 20.87% considered it “very effective,” indicating potential communication challenges in ad hoc group settings. For individuals accustomed to working independently, 55% reported “relatively effective” communication, but only 5% rated their communication as “very effective,” reflecting potential gaps in collaborative communication inherent in solitary work. Teacher-assigned groups showed relatively high effectiveness, with 63.64% rating communication as “relatively effective,” though the smaller sample size may limit the generalizability of these results. Overall, the findings suggest that stable team structures foster more efficient communication and coordination, while temporary teams and individual work may present greater communication obstacles.

## 4. Conclusion

Through systematic research and analysis, this study highlights the significant role and value of *Behavioral Science* Theory in enhancing teaching strategies for *private* university teachers. By collecting data through surveys, interviews, and classroom observations, the research tested its hypotheses and demonstrated a positive correlation between teacher motivation levels and teaching investment. Timely behavioral feedback from teachers was shown to have a substantial impact on student learning outcomes, reinforcing the applicability of *behavioral science* principles in teaching practice.

However, limitations remain. The sample’s geographic and disciplinary constraints may affect the

generalizability of the findings, and self-reported data from surveys may introduce subjective bias. Future studies could expand the sample scope, covering more regions and disciplines, while integrating objective metrics such as student academic performance and classroom participation rates to enhance data reliability.

Longitudinal studies are also recommended to explore the long-term impact of *behavioral science*-based strategies. Emerging technologies like *generative AI* and *learning analytics* present new opportunities for strategy optimization, enabling more precise analysis of student learning behaviors and more personalized teaching interventions.

For university administrators, the findings offer evidence-based insights for designing faculty training and performance evaluation systems that foster teaching innovation and enthusiasm. For frontline teachers, the research provides practical, actionable strategies to better meet students' evolving needs and enhance teaching quality. For policymakers, the study offers a valuable reference for building a more effective and sustainable *private* higher education system.

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## Disclosure statement

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