Teachers' beliefs, motivation and classroom practices in Chinese universities

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Abstract

This study aimed to determine the beliefs, motivations, and classroom practices of Chinese university teachers as basis for teachers' training plan. Descriptive research methods were employed, and questionnaires served as the primary data collection tool. Statistical analyses included frequency count, weighted mean and ranking, regression analysis, and analysis of variance (ANOVA). The survey revealed no significant differences in responses based on the sex, age, education attainment, and teaching experience of respondents regarding the three variables teacher beliefs, motivations, and classroom practices. Teachers exhibited common beliefs, motivations, and classroom practices regardless of sex, age, education attainment, or teaching experience. Therefore, university teacher training programs should emphasize the participation of all faculty members rather than being based on individual attributes. There was a significant positive correlation between teacher beliefs and classroom practices, highlighting the importance of teacher beliefs in the teaching process. Job satisfaction, performance, intrinsic factors, and certain external factors were significantly correlated with classroom practices, indicating that enhancing teachers' proficiency in these areas could further optimize classroom practices. Respondents' analysis of the correlation between teacher beliefs, motivations, and classroom practices revealed significant relationships, indicating that teachers are passionate about their work, strive for excellence, and foster a conducive learning environment for students.

Keywords: teachers' beliefs, motivation, classroom practices, training plan

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1. Introduction

Since China implemented the strategy of "revitalizing education through science and education", the status of education has become increasingly prominent. China's Education Modernization 2035 further emphasizes the importance of education and puts forward eight basic principles for promoting education modernization: paying more attention to moral education, comprehensive development, accessibility, Lifelong learning, tailoring, integrating knowledge with practice, inclusive development, and joint construction and sharing (Yang, 2020). It emphasizes prioritizing the development of education, vigorously promoting the modernization of educational concepts, systems, institutions, content, methods, and governance, with a focus on improving educational quality, promoting educational equity, and optimizing educational structure. Starting from 2020, after 15 years of efforts, the overall goal is to achieve modernization of education, promote China to become a strong education country, and promote China to become a leading country in learning, manpower, and talent by 2035 (Liu, 2019). These strong reasons give more emphasis to teachers who are considered as the heart of educational processes.

According to the theory of higher education popularization proposed by American scholar Matin Trow, when the enrollment rate exceeds 50%, it is called the popularization stage. The gross enrollment rate of higher education in China is 59.6%. The quality of education is related to the national quality and the future of society. In the stage of rapid popularization of higher education in China, the issue of education quality is increasingly attracting widespread attention from all sectors of society (Cui, 2021).

Teachers' teaching beliefs are a series of concepts that individual teachers firmly believe in, and these beliefs indirectly and directly govern their educational practices. According to sociocultural theory, teachers' teaching beliefs primarily stem from specialized, highly contextualized, and socialized meaning construction activities. Constructivist teaching theory emphasizes the learner's active role in the learning process, where teachers assist and guide learners to engage in deep thinking. There is a widespread difference between teachers' teaching beliefs and their actual practices, and the disconnect between the two can lead to challenges in teachers' teaching beliefs. Meanwhile, motivation refers to the reasons behind an individual's actions and has characteristics of persistence and endurance. The term has its roots in Latin, implying a driving force and holding significant meaning in daily life. Motivation is the desire and willingness of an individual to strive to increase their efforts to attain organizational goals. It refers to how much an individual tries to work hard and effectively.

In other words, this involves passion, consistency, and perseverance in work. According to Liu et al. (2021), teachers' motivation stems from their personal intrinsic values, commitment, and focus. This definition refers to a person who has "strength" in action and can overcome work difficulties with energy and effort. This is the most critical part when it comes to motivation. "Direction in individual efforts", which comes from the individuals' intrinsic values, shows that people try to act for a clear goal (personal or organizational goals). "Perseverance in a personal effort" - retention and concentration - helps measure how long people can maintain their actions at work.

Research shows that motivated individuals can maintain this persistence long enough to achieve their goals. These studies show that people who have power at work will try to work with their efforts. However, the individual's great efforts only bring the expectation in work results to the organization if it is aligned with the organizational goals. Teachers in schools and universities should always be motivated to engage in classroom practices that would yield positive learning outcomes that would shape the character, skills and values of students who will serve as strong pillars of the nations.

Teachers are the actors who deploy classroom practices that lead to students learning. Classroom practices mainly include cultivating students' critical and reflective abilities, and becoming the main body of students'

classrooms. Teachers then become professional researchers, teachers, and managers who manage their classrooms very well towards shaping students' abilities.

Classroom practice also includes observation, description, and understanding of classroom behavior, analysis of teaching management strategies, presentation and reflection on classroom records and classroom examples, interpretation, reconstruction, and reflection on issues related to curriculum, teachers, and teaching reform from different disciplinary perspectives, as well as international comparisons of curriculum and teaching reform.From the perspective of the process of classroom research, many research contents include aspects such as classroom connotation, classroom form, classroom type, and classroom teaching element system.

According to Yu (2019), with the continuous deepening of the new curriculum reform, significant changes are occurring in classrooms. The classroom atmosphere has become more lively, and dynamic interactions have become more frequent, revitalizing the classroom environment. However, it is also clear that faced with dynamic classrooms, teachers are experiencing the awkwardness of leadership. The lack of clear leadership goals, deficient guiding strategies, and unreasonable course designs directly hinder and affect the effectiveness of classroom teaching. Chen, et. al., (2020) point out that with the advancement of curriculum reform, the role and function of teachers have undergone profound changes. Teachers, as the direct implementers of curriculum reform, play a leading role in the process. The functions of teachers in curriculum reform have undergone a transformation, shifting from traditional didactic instructors to coaching-style teachers, from directive teachers to guiding teachers, and from closed-minded instructors to open-minded instructors.

From the perspective of the purpose of classroom research, overall, its purpose is to explore classroom phenomena and problems through grounded practice and serve classroom practice. The ultimate goal of research is to explain many classroom phenomena, reveal the root causes of classroom problems, and discover the essence of classroom teaching through the presentation and research of classroom language, classroom interaction, classroom power relations, classroom dialogue, classroom learning, classroom teaching methods, and other classroom issues, in order to improve classroom teaching and improve the quality and efficiency of classroom teaching.

Teacher beliefs, motivations, and classroom practices have a direct impact on teaching quality. The belief systems and motivation levels of teachers are reflected in their teaching, influencing the organization of classrooms, choice of teaching methods, and interactions between teachers and students. These factors are crucial for improving student learning outcomes and promoting lifelong learning. Through studying these aspects, insights can be gained to optimize teachers' instructional behaviors, thereby enhancing teaching quality and creating more meaningful and positive learning environments. Jing (2019) points out that teacher beliefs, motivations, and classroom practices are closely related and manifest in various forms during teaching practice, such as expectations for student performance or theoretical perspectives on specific subject areas. Regardless of the form, these factors subtly influence both teachers' teaching and students' learning.

In the process of building a strong human resources nation, higher education plays a crucial role. University teachers, as integral components of higher education, bear significant responsibilities. The ability of universities to cultivate large numbers of outstanding talents largely depends on whether they have high-level and high-quality faculty teams. Teachers play an irreplaceable role in education (Sun, 2024), and their beliefs, motivations, and classroom practices are core issues that scholars should focus on. Due to existing gaps in the investigation of the relationships among teacher beliefs, motivations, and classroom practices, this study is beneficial not only for university teachers but also for education practitioners and policymakers in China.

Furthermore, in various studies, the analysis of teacher beliefs, motivations, and classroom practices mostly revolves around improving teaching quality or student satisfaction, with little emphasis on their correlation with teacher training, especially personalized training for teachers. Zhang (2019) pointed out that although the "Education Informatization 2.0 Action Plan" explicitly proposes to initiate the "AI + Teacher Workforce Development Action" and transform the existing training model for university teachers, there is scarce research

on personalized training for university teachers. With the advent of the big data era, personalized development in university teacher training becomes possible.

Objectives of the Study - This research paper aimed to determine teacher's beliefs, teacher's motivation and classroom practices in Chinese universities. Specifically, this present study determined the beliefs of the identified teachers in terms of learner-centered beliefs and non learner-centered beliefs about learners, learning, & teaching; identified d the teachers' motivation factors in terms of job satisfaction, internal factors and external factors; and assessed the classroom practices in terms of discipline dimension inside the classroom, teaching and learning dimension, and personal dimension; tested the significant relationship among the three major variables; finally, proposed a faculty teacher's training plan based on the results of the study.

2. Methods

Research Design - Descriptive research refers to a method used to depict existing phenomena with precision (Atmowardoyo, 2018). Its purpose is to gather information about the current state of phenomena, describing conditions related to variables or circumstances in a given situation. Descriptive research may encompass both quantitative and qualitative approaches (Mutakinati et al., 2018). The present study employed a descriptive research design. Guided by a certain theoretical framework and relevant literature, it identifies three research variables guiding the training programs for university teachers in China: beliefs, motivations, and classroom practices. Through a review of the literature on these variables, the study describes the beliefs, motivations, and classroom practices of university teachers in China, as well as teaching practices. It determines the status of these three variables from universities in China and constructs a theoretical model for the study. The relationships between the three variables are determined through quantitative analysis of measurements. Finally, the study results are thoroughly discussed and analyzed using relevant theories.

Participants of the study - In this research, a questionnaire survey was conducted among 453 teachers in universities. The subjects of this questionnaire survey were teachers from universities in various regions of China. In the end,453 questionnaires were collected, and 453 valid questionnaires were collected, with an effective rate of 100%.

Instruments of the Study - Questionnaires were distributed for pilot testing. The questionnaire was meticulously checked and revised by the dissertation adviser as expert. The investigation and research employ a quantitative research approach. The questionnaire consists of four sections. The initial part of the survey comprises four questions focusing on demographic information, encompassing sex, age, educational attainment, and teaching experience as a university teacher. The Teacher Beliefs Questionnaire comprises three parts: Learner-Centered Beliefs about Learners, Learning, & Teaching; Nonlearner-Centered Beliefs about Learners; and Nonlearner-Centered Beliefs about Learning & Teaching. The Teacher Beliefs Questionnaire centered on learners consists of 10 questions, while the two surveys on beliefs centered on learners and teaching and learning from a non-learner Beliefs respectively consist of 8 questions each. The Cronbach's α values for variables and all sub-dimensions exceeded 0.7, indicating that the organizational support scale possesses good internal consistency reliability, fully meeting the requirements of the study. The third section, concerning the "Teacher Motivation Questionnaire," is adapted from the "Motivation Factors and Staff Capabilities Questionnaire for Vocational Education Institutes in Northern Thailand, Second Region. It is based on three dimensions: job satisfaction, internal factors, and external factors. Analysis of the questionnaire data indicates that the structure, reliability, and validity of the questionnaire have reached satisfactory levels, validating various factors influencing university teachers' motivation. This provides a reliable research tool for studying the motivation of university teachers in our country. The fourth section, the "Classroom Management Skills Checklist," is adapted from the questionnaire "Validation of Pre-Service and In-Service English Teachers' Classroom Management Questionnaire". It is based on three dimensions: subject dimension, teaching dimension, and personal dimension. Analysis of the questionnaire data indicates that the structure, reliability, and validity of the questionnaire have reached satisfactory levels, validating various factors influencing university classroom practices. This provides a

reliable research tool for studying university classroom practices.

Data Gathering Procedures - The study adopted the form of online and mobile customer surveys. With the assistance of the "Questionnaire Star" platform on WeChat platform, the online survey work was completed. The questionnaires were mainly distributed to the teachers of some universities. The content of the survey questionnaire was accurate and standard. Subsequently, the researchers contacted the heads of the personnel departments of the surveyed universities by phone, explained the purpose of the survey in detail, obtained their support and consent, and established survey teams for relevant school projects. These universities included Wuyi University, Jiangxi Institute Of Fashion Technology and Jiangmen Polytechnic. The questionnaire was distributed to teachers at three designated schools via WeChat, and they were asked to fill it out carefully. Then, the collected questionnaire data was exported using the result export function of the Questionnaire Star platform. After the survey questionnaire was exported, the investigators were required to input the survey questionnaire data into Excel and verify the input data to ensure the accuracy of the survey questionnaire.

Data Analysis - The present study utilized various statistical tools. Weighted means and ranking were utilized to assess teachers' beliefs, motivation, and classroom practices. Furthermore, the Pearson r test was employed to examine significant relationships between the three variables. All data were analyzed using statistical software, specifically SPSS version 26.

Ethical Consideration - University teachers being surveyed have the right to know the purpose of the experiment. Surveyors should convey information to ensure that anonymous test papers and questionnaires remain anonymous throughout the entire research process. Additionally, this study was conducted under the supervision of the personnel departments of the surveyed schools. Based on the questionnaire survey, all statistical data in this paper are accurate. Furthermore, ethical clearance was obtained from the from the research center of Lyceum University of the Philippines (LPU).

3. Results and discussion

Table 1
Summary Table on Teachers Beliefs

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Learner-Centered Beliefs about Learners, Learning, & Teaching	2.88	Agree	1
2. Non learner-Centered Beliefs about Learners	2.86	Agree	3
3. Non learner-Centered Beliefs about Learning & Teaching	2.87	Agree	2
Composite Mean	2.87	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

In terms of cognitive understanding of classroom management, the overall average score for this project is 2.87, indicating that teachers typically demonstrate a balanced perspective between learner-centered and non-learner-centered learning and teaching beliefs. This average score suggests that teachers pay attention to both the centrality of learners and the importance of non-learner-centered approaches in classroom management.

Addressing the fundamental issues in the field of education requires a targeted approach, particularly considering the national conditions of different countries, especially the differences in social and cultural backgrounds. Taking the United States as an example, their educational philosophy has long leaned towards learner-centeredness". Since the early 20th century, Dewey vigorously advocated for "child-centered" and "activity-centered" education. This educational philosophy and teaching environment provide students with ample space for free development, undoubtedly benefiting the cultivation of students' innovative spirit and creativity. However, neglecting the teacher's guiding role directly weakens students' foundational knowledge. The consequence is that, under the rapid realization of educational informatization, the teaching quality in American elementary and secondary schools has not only failed to improve but has experienced a significant decline. In the past, the dominance of non-learner-centered teaching beliefs in the Chinese educational system can be attributed to various factors. Firstly, deeply rooted traditional educational beliefs played a significant role.

Influenced by Confucianism, Chinese education traditionally emphasized the reverence for teachers and regarded them as authoritative figures of knowledge, positioning students in a passive role of receiving instruction. Such entrenched views in the minds of both teachers and parents hindered the development of learner-centered teaching philosophies. Secondly, the prevalent exam-oriented education system also contributed significantly to the prevalence of non-learner-centered teaching beliefs. To ensure good exam results, teachers often resorted to rote memorization and exam-oriented training, neglecting students' active exploration and innovation abilities.

In the context of exam-oriented education, basic education tends to be teacher-centered, where teachers hold authority and students assume passive roles as recipients. Over the years, teachers' educational beliefs have made them unwilling and hesitant to truly empower students to attempt self-learning. The absolute authority of teachers has overshadowed students' creative thinking, hindering the cultivation and development of students' abilities in understanding, expressing, collaborating, and innovating (Tian, 2019). Furthermore, the inadequacy of educational resources and the overall quality of the teaching workforce also influenced teaching beliefs. Limited resources resulted in insufficient pre-service training and ongoing professional development for teachers, leaving them constrained by traditional teaching beliefs and methods. The balanced scores in surveys focusing on learner-centered and non-learner-centered approaches indicate that Chinese university teachers are undergoing a transition from the traditional non-learner-centered ideology to learner-centered approaches. Amidst changes in educational resources, traditional culture, and individual needs, they neither remain conservative nor blindly adopt Western educational methods. Instead, they integrate and reform both approaches, adapting to national development and individual needs while seeking a balance between collective and individual considerations.

In modern Chinese education, there exists a balance between non learner centered or learner centered education, and it has become the mainstream of educational philosophy. Research indicates that learner-centered teaching is more effective in certain disciplines compared to others. For subjects with ambiguous definitions, such as social sciences and humanities, the use of learner-centered teaching methods has been found to be highly effective. However, in highly structured fields like mathematics and natural sciences, non-learner-centered teaching methods tend to yield better results. Additionally, learner-centered teaching methods may be less effective in the initial stages of instruction, as students may not yet possess the necessary knowledge to determine what and how they should learn. Furthermore, there exists a disparity between the theoretical understanding and practical application of learner-centered teaching, presenting educators with challenges in the classroom that are often greater than anticipated. Both non-learner-centered and learner-centered teaching approaches have their own characteristics, advantages, disadvantages, and adaptabilities. There is no inherent superiority or inferiority between the two approaches. As implementers of teaching methods, teachers should not harbor biases but should instead treat them equally (Li, et. al., 2018).

Collaborative learning believes that teaching should balance the individual and collective characteristics of instruction and organically integrate individualization with interpersonal interaction. Therefore, in terms of teaching format, collaborative learning emphasizes teacher-centered collective lectures as the foundation, with learner-centered cooperative group activities as the main form, striving to embody the unity of collectivism and individualism. Collaborative learning is a form of teaching activity based on group activities, but collective lectures still hold a significant position throughout the teaching process (Wang, 2020). Furthermore, teachers' balanced attitudes may be influenced by their education attainments and teacher training. If teachers have received training in learner-centered teaching, they may lean towards using such methods in classroom management while still acknowledging the importance of traditional teacher-centered approaches.

Song (2020) believes that in the new era of university teaching reform, there is a need to transform teaching concepts, methods, modes, and means, to break away from the traditional classroom teaching centered on the teacher, enabling college students to actively participate in classroom teaching, thereby achieving a shift from passive learning to active learning. When selecting and applying teaching methods, teachers should maintain a rigorous, cautious, and rational attitude to ensure the scientific and effectiveness of teaching methods. Chinese

university teachers have an open attitude towards educational reform and a pursuit of educational innovation.

Table 2
Summary Table on Teacher Motivation

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Job Satisfaction	2.85	Agree	1
2. Job Performance	2.84	Agree	2.5
3. Internal factors	2.84	Agree	2.5
4. External factors	2.78	Agree	4
Composite Mean	2.83	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

From Table 2, it is evident that the overall perception of teacher motivation is positive (2.83), with job satisfaction and internal factors having a more significant impact compared to job performance and external factors. The survey indicates that respondents rated job satisfaction the highest (2.85), indicating that teachers are satisfied with the job itself and the work environment. This likely reflects that teachers derive a sense of achievement, fulfillment, and belonging from their work, as well as a sense of identification with the job content and organizational culture. High job satisfaction may stem from interaction with students, achievement in teaching, and good relationships with colleagues and supervisors.

Therefore, organizations should continue to focus on and strengthen these aspects of the work content to ensure that teachers continue to feel the meaning and value of their work. The sense of organizational support reflects employees' perception of the organization's recognition of their contributions and concern for their well-being. High organizational support often sends a strong message to employees that the organization values their efforts and is willing to reward them. However, respondents perceive external factors as having the lowest motivational impact on teachers (2.78), indicating dissatisfaction with external factors, which may affect their motivation and performance. This could be attributed to factors such as salary, reward systems, and working conditions. The low ranking may reflect teachers' dissatisfaction with these factors or the belief that they are not the main drivers of their work. Teachers may place more emphasis on intrinsic motivation, such as love for the education cause, concern for student growth, and pursuit of professional development.

With the rapid development of teaching informatization, intelligence, and globalization in China and globally, the external environment of the education industry has undergone significant changes, such as adjustments in educational policies and intensified market competition, leading to continuous changes in teachers' external motivational factors. The imbalance in international and domestic economic development also affects the imbalance in education development, requiring continuous adjustments in aspects such as school salaries, incentive mechanisms, internal evaluation and management systems, and guarantee and quality evaluation systems.

In conclusion, through a thorough analysis of the survey results, we can conclude that in the process of motivating teachers, organizations need to consider the roles of both internal and external factors comprehensively. Although the motivational impact of external factors is limited, they still require sufficient attention. Only by optimizing internal factors and improving job satisfaction can we truly stimulate the motivational effects of teachers and enhance their overall performance and effectiveness.

Table 3
Summary Table on Classroom Practices

Indicators	Weighted Mean	Verbal Interpretation	Rank
Inside the classroom	2.91	Often	1
Organization of the lesson	2.84	Often	4.5
Interaction during the lesson	2.84	Often	4.5
Teacher-student personal communication	2.88	Often	2.5
Psychological and social classroom environment	2.88	Often	2.5
Composite Mean	2.87	Often	

Legend: 3.50 – 4.00 = Usually; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 - 1.49 = Never

The composite average for all indicators is 2.87, and the scores for these five indicators are all around the "Often" level, indicating that classroom practices generally occur frequently.

The survey results indicate that participants rated "Inside the classroom" (2.91) as "Often," ranking it first. This suggests that teachers are adept at creating conducive classroom teaching environments, reflecting excellent classroom management practices. The survey shows that participants are effective in classroom management, creating favorable learning environments for students. Effective management strategies and clear classroom rules and behavior guidelines can maintain order and stability in the classroom, providing students with an organized learning environment. University teachers employ positive teaching methods and techniques, such as encouragement, praise, and rewards, to motivate students to actively participate in classroom activities and cultivate their interest in learning. A positive atmosphere can enhance students' motivation and confidence, thereby improving their academic performance. In university classroom practices, teachers can create a positive classroom atmosphere by implementing effective management strategies, addressing students' learning needs and individual differences, thereby creating a conducive learning environment for students.

According to Lu, classroom management in higher education is achieved through the construction of psychological contracts, forming equal and harmonious teacher-student relationships; fulfilling psychological contracts, creating a benign interactive classroom atmosphere, and achieving flexible and adaptable soft management (Lu, 2021). These practices are crucial for improving students' learning outcomes and motivation.

According to the survey results, "Organization of the lesson" and "Interaction during the lesson" were rated as "Often" (2.84), ranking the lowest. This indicates that teachers perform well in classroom organization, emphasizing interaction with students in the classroom to stimulate their enthusiasm, but there is still room for improvement.

Kang, et. al., (2023) through their survey, found that with the same content of classroom activities, but with different organizational methods and sequences, there were significant differences in students' learning emotions and effectiveness at each stage. In higher education, concerning course organization, teachers need to ensure that the course content is clear, coherent, and orderly for students to understand and grasp the knowledge. Therefore, teachers need to pay more attention to planning and scheduling to ensure the coherence and effectiveness of the teaching content. This can be achieved through detailed course planning, reasonable timetables, and regular teaching assessments.

Based on the survey results, some teachers may have shortcomings in classroom organization. For instance, some teachers may not fully consider students' cognitive abilities and learning levels, resulting in course content that is overly complex or abstract, making it difficult for students to comprehend. This may lead to poor learning outcomes and a loss of interest in the course.

Additionally, some teachers may not effectively plan and manage class time, resulting in improper arrangement of course content. They may not allocate sufficient time to complete teaching tasks or spend too much time on certain aspects, affecting the explanation of other content. This may impact students' learning experiences and outcomes. "Classroom organization" is an important indicator of classroom management practices. To improve students' learning outcomes and interest, teachers need to focus on students' cognitive abilities and learning levels, plan class time reasonably, enhance the logic of course content, and increase interaction and participation opportunities. By improving these aspects, teachers can create a more orderly, coherent, and effective learning environment, thereby enhancing students' academic performance and learning motivation.

Zang (2020) suggests that to enhance the quality of higher education classroom teaching, teachers, as managers of the classroom, need to improve the effectiveness of classroom organization. University teachers can strengthen new teacher-student relationships, utilize innovative teaching methods to deliver course content, and overcome the drawbacks of traditional teaching methods, thus achieving a qualitative leap in the quality of

higher education teaching. Teachers need to actively employ effective interactive strategies to increase student engagement. They should reduce reliance on lecture-style teaching, actively encourage student participation in discussions and questioning, foster a positive interactive atmosphere, encourage students to express opinions and exchange ideas, and explore more interactive methods and techniques to enhance student participation and learning outcomes.

Table 4
Relationship Between Teachers Beliefs and Motivation

Learner-Centered Beliefs about Learners, Learning, & Teaching	rho-value	p-value	Interpretation
Job Satisfaction	.331	0.000	Highly Significant
Job Performance	.331	0.000	Highly Significant
Internal factors	.359	0.000	Highly Significant
External factors	.408	0.000	Highly Significant
Non-learner-Centered Beliefs about Learners			
Job Satisfaction	.353	0.000	Highly Significant
Job Performance	.371	0.000	Highly Significant
Internal factors	.311	0.000	Highly Significant
External factors	.358	0.000	Highly Significant
Non-learner-Centered Beliefs about Learning & Teaching			
Job Satisfaction	.394	0.000	Highly Significant
Job Performance	.392	0.000	Highly Significant
Internal factors	.365	0.000	Highly Significant
External factors	.379	0.000	Highly Significant

Legend: Significant at p-value < 0.01

Table 4 shows the association between teachers belief and motivation. The obtained r-values indicates a moderate direct correlation and the resulted p-values were less than the alpha level. This means that there was significant relationship exists and shows that the better the assessment on teachers belief, the more that they are motivated.

Based on the survey regarding the Learner-Centered Beliefs about Learners, Learning, & Teaching and Motivation Relationship, the correlation coefficients (rho-value) with job satisfaction, job performance, internal factors, and external factors are all highly significant with a p-value of 0.000. This indicates a significant positive correlation between these learner-centered beliefs and teachers' work motivation. Similarly, in the survey of the Non-learner-Centered Beliefs about Learners and Motivation Relationship, the correlation coefficients (rho-value) with job satisfaction, job performance, internal factors, and external factors are also highly significant with a p-value of 0.000. This suggests a significant positive correlation between these non-learner-centered beliefs and teachers' work motivation. Additionally, in the survey of the Non-learner-Centered Beliefs about Learning & Teaching and Motivation Relationship, the correlation coefficients (rho-value) with job satisfaction, job performance, internal factors, and external factors are highly significant with a p-value of 0.000. This indicates a significant positive correlation between these beliefs about learning and teaching and teachers' work motivation.

The survey results demonstrate that teachers' learner-centered beliefs about learners, learning, and teaching, as well as non-learner-centered beliefs, are highly positively correlated with their job satisfaction, job performance, internal factors, and external factors. This indicates that teachers' beliefs significantly influence their work motivation, particularly in terms of job satisfaction and job performance. Li points out that teachers' beliefs serve as intrinsic motivators that drive their professional development, helping them maintain a positive work attitude. On the other hand, motivation greatly promotes teachers' professional autonomy, bringing about a sense of "professional efficacy" for them. Teachers' beliefs, motivation, and other intrinsic factors effectively facilitate their professional development, thereby enhancing their professional competence (Li, 2024).

Table 5 illustrates the association between teachers belief and classroom practices. The obtained r-values indicates a moderate direct correlation and the resulted p-values were less than the alpha level. This means that there was significant relationship exists and shows that the better the assessment on teachers belief, the better are

the classroom practices.

Table 5
Relationship Between Teachers Beliefs and Classroom Practices

Learner-Centered Beliefs about Learners, Learning, & Teaching	rho-value	p-value	Interpretation
Inside the classroom	.341	0.000	Highly Significant
Organization of the lesson	.359	0.000	Highly Significant
Interaction during the lesson	.362	0.000	Highly Significant
Teacher-student personal communication	.339	0.000	Highly Significant
Psychological and social classroom environment	.334	0.000	Highly Significant
Non-learner-Centered Beliefs about Learners			
Inside the classroom	.362	0.000	Highly Significant
Organization of the lesson	.362	0.000	Highly Significant
Interaction during the lesson	.362	0.000	Highly Significant
Teacher-student personal communication	.362	0.000	Highly Significant
Psychological and social classroom environment	.362	0.000	Highly Significant
Non-learner-Centered Beliefs about Learning & Teaching			
Inside the classroom	.338	0.000	Highly Significant
Organization of the lesson	.371	0.000	Highly Significant
Interaction during the lesson	.341	0.000	Highly Significant
Teacher-student personal communication	.335	0.000	Highly Significant
Psychological and social classroom environment	.327	0.000	Highly Significant

Legend: Significant at p-value < 0.01

Relationship Between Learner-Centered Beliefs and Classroom Practices. Learner-centered beliefs about learners, learning, & teaching exhibit a highly significant positive correlation with classroom practices across various dimensions, including inside the classroom, organization of the lesson, interaction during the lesson, teacher-student personal communication, and psychological and social classroom environment (p-value < 0.01). The conclusion is consistent with Rietdijk, et al. (2018). This suggests that teachers who hold learner-centered beliefs tend to implement corresponding teaching methods and strategies in classroom practices, thereby creating a conducive learning environment and experience.

Relationship Between Non-learner-Centered Beliefs about Learners and Classroom Practices. Similarly, non-learner-centered beliefs about learners show a highly significant positive correlation with classroom practices across all dimensions, including inside the classroom, organization of the lesson, interaction during the lesson, teacher-student personal communication, and psychological and social classroom environment (p-value < 0.01). The conclusion is similar to Wu's. Wu, (2021) pointed out that the classroom management behavior of Chinese teachers lies between democratic and authoritarian management styles, but leans more towards authoritarian management. This indicates that even when teachers do not prioritize students in their beliefs, they still tend to adopt methods and strategies in teaching practices to meet instructional goals and classroom needs.

Relationship Between Non-learner-Centered Beliefs about Learning & Teaching and Classroom Practices. Non-learner-centered beliefs about learning & teaching also exhibit a highly significant positive correlation with classroom practices across various dimensions (p-value < 0.01). This further emphasizes the significant influence of teachers' beliefs on classroom practices, irrespective of whether those beliefs are learner-centered or non-learner-centered. Classroom management practices are expected to be directly influenced by teachers' beliefs about student motivation. These beliefs, in turn, are expected to be influenced by general conceptions of teaching and learning, as well as self-efficacy beliefs. The correlation between teachers' beliefs and classroom practices is indivisible, mutually strengthening, and interdependent, fostering educational advancement. Emphasizing the significance of teachers' beliefs, quality education underscores the establishment of a favorable classroom atmosphere by understanding its idealistic, abstract, and consistent attributes. This ambiance subtly and continuously shapes the physical and mental growth of educators and learners alike, cultivating the talents essential for societal needs (Luo, et. al., 2019).

Table 6
Relationship Between Teachers Motivation and Classroom Practices

Job Satisfaction	rho-value	p-value	Interpretation
Inside the classroom	.371	0.000	Highly Significant
Organization of the lesson	.338	0.000	Highly Significant
Interaction during the lesson	.308	0.000	Highly Significant
Teacher-student personal communication	.333	0.000	Highly Significant
Psychological and social classroom environment	.351	0.000	Highly Significant
Job Performance			
Inside the classroom	.362	0.000	Highly Significant
Organization of the lesson	.343	0.000	Highly Significant
Interaction during the lesson	.314	0.000	Highly Significant
Teacher-student personal communication	.328	0.000	Highly Significant
Internal Factors			
Inside the classroom	.340	0.000	Highly Significant
Organization of the lesson	.278	0.000	Highly Significant
Interaction during the lesson	.277	0.000	Highly Significant
Teacher-student personal communication	.298	0.000	Highly Significant
Psychological and social classroom environment	.298	0.000	Highly Significant
External factors			
Inside the classroom	.375	0.000	Highly Significant
Organization of the lesson	.345	0.000	Highly Significant
Interaction during the lesson	.353	0.000	Highly Significant
Teacher-student personal communication	.399	0.000	Highly Significant
Psychological and social classroom environment	.409	0.000	Highly Significant

Legend: Significant at p-value < 0.01

Table 6 illustrates the association between teachers motivation and classroom practices. The obtained r-values indicates a moderate direct correlation and the resulted p-values were less than the alpha level. This means that there was significant relationship exists and shows that the more motivated, the better are the classroom practices. Based on the data provided, we can analyze the highly significant positive correlations (ρ values with p-values less than 0.0001) between four factors of teacher motivation (job satisfaction, job performance, internal factors, and external factor and classroom practices . Firstly, when teachers are more satisfied with their work, they tend to perform better in organizing lessons, interacting with students, engaging in personal communication, and fostering a conducive classroom environment. Secondly, regarding job performance, it indicates that the quality of practical activities directly influences teacher job performance.

Furthermore, internal factors imply intrinsic drivers such as satisfaction with the environment and love for the job, which positively influence teachers' classroom practices. Zhao, et. al., (2022) indicate that teachers with strong intrinsic motivation, especially driven by internal achievement, tend to employ more effective teaching methods in the classroom, thereby inspiring students' learning motivation. Other studies further suggest that teachers propelled by strong motivation exhibit high dedication to students, the school community, and the teaching profession. They demonstrate higher levels of intrinsic motivation and lower levels of extrinsic motivation (Chen et al., 2018).

Finally, external factors, including the organization of lessons, interaction during lessons, teacher-student personal communication, and psychological and social classroom environment, are all significant in influencing teacher motivation. This conclusion aligns with the findings of Agyapong et al. (2022), which suggest a positive correlation between teachers' motivation influenced by external factors and classroom practices. Hascher, et. al., (2021) emphasize the crucial role of external factors in influencing teacher motivation and classroom practices, highlighting the importance of recognizing these factors in educational environments. To inspire teachers' enthusiasm and motivation for teaching, the role of these external factors should be emphasized, creating a positive and harmonious external environment to promote teachers' professional development and improve teaching quality.

Table 7

Teachers' Training Plan

Key Result Area	Objectives	Strategies	Key Performance Indicator	Persons Responsible
Teachers' Beliefs (Non learner-Centered Beliefs about Learners)	1.To raise awareness among teachers regarding the importance of learner-centered approaches in teaching. 2.To enhance teachers' understanding of student diversity and individual differences. 3.To foster teachers' awareness of attending to students' needs, interests, and learning styles.	1.Conduct interactive training activities such as case studies, discussions, and role plays to demonstrate the effectiveness of learner-centered teaching methods. 2.Organize seminars and workshops featuring presentations from educational psychologists and experts to share theories and practical experiences of learner-centered teaching. 3.Design teaching scenarios where teachers engage in resolving real teaching situations, deepening their understanding of learner-centered principles.	1.Enhancing teachers' awareness of individual student differences, teachers can recall 100% of students' names and can use more than 3 sentences to describe students' learning or family situations. 2.More than 70% of teachers utilize personalized teaching methods in the classroom, and student classroom participation rates exceed 80%. 3.Using digital network systems to track teachers' handling of student feedback, ensuring that over 80% of teachers can provide appropriate responses to student feedback within 2 days after class.	1.Educational departments or school administrations are responsible for designing and implementing the training program. 2.Teaching supervisors or professional development mentors are accountable for monitoring the progress and effectiveness of the training. 3.Individual teachers are responsible for actively participating in the training and applying the learned content to actual teaching practices.
Motivation (External factors)	1.Increase awareness and understanding of external factors influencing teacher motivation. 2.Equip teachers with strategies to effectively manage external factors that impact motivation. 3.Enhance teacher resilience and adaptability in response to external challenges.	1.Conduct workshops and seminars to educate teachers about the various external factors affecting motivation, such as workload, organizational culture, and societal expectations. 2.Provide case studies and real-life examples to illustrate the impact of external factors on teacher motivation. 3.Facilitate discussions and group activities to brainstorm strategies for mitigating negative influences and maximizing positive ones. 4.Offer resources and tools for self-assessment and reflection on personal responses to external factors.	1.Through training on teacher motivation and awareness of external factors, teachers rated their motivation regarding external factors above 3 points on average (out of 5). 2.Following the training, over 60% of teachers learned and applied strategies to address external factors. 3.More than 75% of teachers provided positive feedback on the effectiveness of the training sessions.	Training coordinators and facilitators for organizing and delivering workshops and seminars. Department heads or school administrators for monitoring and providing support to teachers during and after training. Trained mentors or peer support networks to offer ongoing guidance and encouragement to teachers implementing new strategies.
Classroom Practices (1.Organization of the lesson 2.Interaction during the lesson)	1.Enhance teachers' skills in organizing and structuring lessons effectively. 2.Improve teachers' ability to manage time and resources during lessons. 3.Foster an engaging and conducive learning environment through better lesson organization.	1.Conduct workshops or seminars focusing on lesson planning and organization. 2.Offer training sessions on time management strategies tailored to classroom settings. 3.Facilitate discussions and peer learning sessions to share best practices in lesson organization.	1.Teachers' self-assessment scores on course organization skills increase by at least 0.5 points (out of 5). 2.Each department organizes training programs with over 25% of the total teachers participating each semester. 3.The Teaching Supervision Department conducts teaching evaluations on course organization for 100% of teachers.	1.Human Resources and Academic Affairs Department: Responsible for designing and organizing training workshops and seminars. 2.National or Local Training Institutions: Host training courses and provide guidance on course organization techniques. 3.Department
	1.To enhance teachers' understanding of the importance of interaction during lessons. 2.To equip teachers with	1.Conduct workshops and seminars focusing on the significance of interaction in the classroom. 2.Provide training sessions	1.During classroom observation, the frequency of interaction between teachers and students increases by at least 15%, with a quality	

effective strategies to promote interaction among students and between students and teachers during lessons. 3.To improve teachers' ability to create an engaging and interactive learning environment in the classroom.	on various techniques and tools for fostering interaction, such as group discussions, peer teaching, and interactive multimedia resources. 3.Offer mentoring opportunities for teachers to receive personalized guidance on enhancing interaction during lessons.	improvement of at least 20%. 2.The feedback rating from students on their level of participation and interaction in the course increases by at least 0.5 points (out of 5) on the scale.	Heads: Supervise the implementation of new strategies and monitor progress. 4.Teachers: Actively participate in training courses, apply new techniques in teaching, and provide feedback for continuous improvement.

4. Conclusions and recommendations

Respondents exhibit positive attitudes towards teaching beliefs within their respective universities, with similar perspectives on whether learner-centered beliefs should be adopted. Regarding motivation, respondents express high levels of job satisfaction, recognize the implementation of their work, and positively respond to both intrinsic and extrinsic factors. In terms of classroom practices, respondents show agreement across all indicators, emphasizing classroom discipline, curriculum organization, interaction with students, fostering good teacher-student communication, and establishing a positive psychological and social atmosphere in the classroom. There is a highly significant relationship between teacher beliefs, motivation, and classroom practices. This implies that teachers' thoughts, motivations, and practices are crucial for teaching effectiveness and student learning outcomes. A teacher training plan was proposed to enhance teacher beliefs, motivation, and classroom practices.

Decision-makers and university administrators may prioritize the diversity of teachers and ensure policies and management practices accommodate this diversity. While there are no significant differences based on sex, age, education attainment, and teaching experience, attention should be paid to teachers' career development and work environment. For university teachers, it is necessary to reflect on teaching beliefs, motivations, and classroom practices to continually improve teaching quality. While individual traits may not be paramount, ongoing professional development remains crucial. Daily sharing of teaching experiences with colleagues fosters mutual learning. For future researchers, delving into the correlations between teachers' beliefs, motivations, and classroom practices, exploring underlying causes and influencing factors, is crucial to support future policy-making and practice. Collaborating with teachers on research projects enhances teaching effectiveness and professional development. The HR department collaborates with the education department and teachers to establish communication channels and coordination mechanisms, ensuring understanding of training needs and school development for better planning. Comprehensive support and resources, including financial aid and facilities, are vital for smooth training implementation, improving its quality and effectiveness, and fostering teacher professional development and school enhancement. In teacher training programs, provide sufficient resources and support, customize plans based on teachers' needs and skills, encourage post-training peer discussions, and establish a follow-up system for ongoing monitoring and improvement based on feedback.

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