

Study on the Influence of the Second Classroom on Students' Willingness to Teach in Normal Colleges

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Abstract: In recent years, the relevant policy documents on teacher education issued by the Ministry of Education and other departments have put forward systematic and comprehensive requirements for the training of pre-service teachers, and the stability of teachers is determined by the willingness of pre-service teachers to teach. Normal colleges undertake the important task of training pre-service teachers. As an important part of teachers' education in normal colleges, the second classroom plays an important role in improving students' teaching skills and increasing generative teaching experience. Aiming at the problems such as the poor willingness to teach of some normal college students, this paper explores the influence of the second classroom on the willingness to teach of normal college students through empirical research. The results show that: (1) The second classroom of teacher literacy and the participation in the second classroom have a positive impact on the teaching intention of the students in normal colleges, especially the participation in the second classroom of teacher literacy has a significant impact on the teaching intention of the students; (2) In the whole model, the second classroom of ideology and practice has a negative impact on students' willingness to teach, while the second classroom of literacy has a positive and significant impact. In the future, normal colleges and universities should make efforts in four aspects, including strengthening the construction of the second classroom, expanding the publicity of relevant policies, strengthening the education of teachers' professional beliefs among normal students, and giving full play to the guiding role of families.

Keywords: Normal Colleges and Universities; Students; Willingness to Teach; Second Classroom.

1. Introduction

Students enrolled in tertiary teacher training colleges and universities are the strategic reserve for building China's high-quality teaching force, as well as the innovative engine for efforts to promote the modernisation of Chinese-style education. As the cradle for the growth of future educators and famous teachers, how to effectively carry out pre-service training in higher teacher training colleges and universities is getting more and more attention from the state and scholars. In recent years, China's Ministry of Education and other departments have issued a number of policy documents on teacher education. For example, *the Circular on the Implementation Measures for Publicly-funded Education for Teacher Trainees in Teacher Training Universities directly under the Ministry of Education*, *Strong Teachers in Basic Education for a New Era (STRONG TEACHERS IN BASIC EDUCATION FOR A NEW ERA) Program*, *Circular on Further Improving the Training of Teacher Candidates under the "Excellent Teacher Program"*, *Opinions on the Implementation of the National Outstanding Primary and Secondary School Teacher Training Program*, etc. All the above documents set out systematic and comprehensive work requirements for pre-service teacher training. The purpose of the State's emphasis on pre-service teacher training is not only to provide high-quality teachers for basic education, but also to form an efficient, stable and long-term teaching force that will educate people for the Party and nurture talent for the country. It has been shown that a high willingness to teach is an important prerequisite for students (both teacher educators and non-teacher educators) in teacher education institutions to "go and stay". Therefore, the willingness of students enrolled in higher teacher training colleges to teach is a topic

of particular concern in building a strong educational nation. However, in the real scenario, the willingness of students enrolled in higher education teacher training colleges to teach, which is the reserve force of the teaching force, is not optimistic. The study found that the intensity of the willingness of some teacher trainees to teach was not strong enough, and that teacher trainees from local colleges and universities did not have a high willingness to go to rural areas to teach. One-third of the students enrolled in the Ministry's teacher training colleges do not want to consider teaching as their first career choice.

In view of the above problems, the second classroom, as a kind of practical field that empowers generative teaching experience, is an important organisation for students in higher teacher training colleges to acquire teaching skills training such as "three words and one language", social practice in summer and winter, teaching in rural areas, and educational apprenticeships, which plays a key role in the willingness of students in teacher training colleges to engage in teaching. The importance of the organisational form of teaching experience gained by students in teacher training colleges. Based on the analysis, the students of Beijing Normal University are selected as the research object, and the second classroom of the teacher training colleges is used as the research environment to analyse the development of the willingness to teach of the students of the teacher training colleges, focusing on revealing the role of the influence of different types of the second classroom on the willingness to teach of the students of the teacher training colleges and putting forward targeted countermeasure suggestions, with a view to providing useful references for the reform of teacher education in China's new era.

2. Literature Review and Research Hypotheses

The willingness of students enrolled in higher education teacher training colleges to teach is not only related to their personal career development, but also an important indicator for predicting the stability and quality of teachers in the future education career. As a vast stage for the personality development of students in teacher training colleges, the second classroom not only expands the boundaries of the first classroom, which focuses on knowledge learning and ability development, but also exerts a "silent" immersive influence on the students' initial heart, beliefs and willingness to teach. Therefore, studying the mechanism of the role of the second classroom on the willingness of students in teacher training colleges to teach and proposing targeted improvement strategies will help to optimise the allocation of educational resources in a targeted manner and promote the epochal change of the teacher education system, so as to cultivate more outstanding teachers who can adapt to and lead the development of education in the new era.

The enhancement of professionalism among students enrolled in teacher training colleges is a comprehensive process that relies on both the first and second classrooms working together. The second classroom generally refers to "all kinds of on- and off-campus activities that are flexible in form, diversified in content, and comprehensive in coverage, in addition to the teaching programme of the first classroom, taking into account the needs of the country, the locality and the university itself, with the purpose of improving the comprehensive quality and future-oriented ability of students". For students in teacher training colleges, the second classroom not only increases their participation in practical activities, but also has an impact on their willingness to teach. Firstly, the second classroom is the external continuation and organic supplement of the first classroom, which helps students in teacher training colleges to realise the close connection between theoretical learning and teaching practice. Rich and colourful second-class activities can not only put the theoretical learning in the first classroom into practice, but also provide opportunities for the students of teacher training colleges to practice before participating in basic education internships. Secondly, the second classroom plays an indispensable role in broadening the practical training of teaching and enhancing the willingness of students to engage in teaching. The second classroom activities can effectively address the problems of low willingness to teach on the part of publicly-funded teacher trainees in the lower grades and the inability of publicly-funded teacher trainees in the upper grades to adapt quickly to the transition from student to teacher, enhance the teacher trainees' competence to teach, raise their willingness to teach and their professional identity, and strengthen their idealistic beliefs of lifelong teaching. However, despite the fact that researchers have realised the significant impact of the second class on the willingness of students in teacher training colleges to teach, there is still a lack of systematic research on how different types of second class affect the willingness of students to teach, which has led to a failure to comprehensively understand the complex role of the second class in shaping the career choices of teacher trainees, and consequently, it is difficult to make targeted innovations and optimisations in the goal-setting and content design of the second class.

One of the core elements of research on the willingness to

teach is the "factors influencing the choice to teach" framework, which is currently the most widely used. The framework is based on the Expectation-Value Theory and derives from the FIT-Choice scale. They are the basis for numerous studies that have undertaken explorations of the factors influencing willingness to teach. At present, there is a certain degree of consensus in the research on the factors influencing the willingness to teach, and factors such as professional identity, policy awareness, professional environment and practical experience can all have an impact on the willingness to teach. The factors influencing willingness to teach can be classified in terms of internal and external factors. In terms of internal factors, the main ones are: firstly, professional identity. Professional identity is regarded as a fundamental factor influencing the willingness to teach, and the higher the sense of teachers' professional identity, the higher the willingness to teach. Professional identity has a significant impact on the willingness to teach of the students in teacher training colleges, and the education to strengthen professional identity should be carried out throughout the students' school life and teaching career. Secondly, policy perception or altruistic factors, in terms of policy perception, policy perception has a significant effect on the rural teaching intention of teacher trainees in western colleges and universities; policy knowledge has a significant positive effect on the rural teaching intention of teacher trainees. Among the altruistic factors, public service motivation is a key factor and potential psychological mechanism influencing teacher students' willingness to teach in the countryside, and the higher the public service motivation, the stronger the teacher students' willingness to teach in the countryside; the sentiment of the local area plays a chain mediating role between the motivation of publicly-funded orientated physical education students' enrollment in the examination and their willingness to teach; the more the teacher students are willing to serve the rural areas, the higher the willingness of teacher students to teach in the countryside; and the social utility value factor not only influences the teacher students' choice of teaching career, but also plays the strongest role in their motivation to teach. The social utility value factor not only affects teacher trainees' career choice, but is also the most powerful factor in their motivation to teach. Thirdly, there is the factor of personal characteristics. Female students and senior teacher trainees are relatively more willing to teach; ethnic minorities, males, and those who are not only children are more willing to teach in the countryside for a long period of time, and teacher trainees with rural household registration are more willing to teach in the countryside. In terms of gender differences, male students have lower willingness to teach in the countryside compared to female students; in terms of the type of specialisation, teacher trainees majoring in liberal arts have significantly lower willingness to teach than teacher trainees majoring in the sciences; and pre-service teachers' interest in teaching can affect their motivation to teach, and thus their willingness to teach. External factors mainly include: Firstly, there is the family factor. Family factors have a significant effect on teacher trainees' willingness to teach. However, there are contradictory findings in the current study. On the one hand, some studies have shown that the willingness of publicly-funded teacher trainees to teach in rural areas is relatively low in places with poorer family economic conditions, and one of the reasons these students choose to enroll in publicly-funded teacher traineeships is to reduce the burden on their families,

and the proportion of their choices is much higher than that of students with average or better family economies; on the other hand, some studies have found that the lifelong willingness of students to teach in rural areas who grow up in rural areas, have low family incomes, and whose parents are engaged in farming at home or working outside the home is significantly on the other hand, some studies found that students who grew up in rural areas with lower family income and whose parents worked in agriculture or outside the home were significantly more willing to pursue lifelong education than those who grew up in urban areas with higher family incomes and whose parents had formal jobs. These conflicting findings suggest that the influence of family on willingness to teach may be complex and deserves further exploration. Secondly, there is a factor is salaries and wages. Salary is a key factor affecting the long-term employment of publicly-funded teacher trainees, with about one third of the teacher trainee subjects identifying it as one of the top three factors affecting their long-term employment; the increase in rural teachers' salaries is hardly enough to make up for the decline in the rate of return on investment in education, and this has had a direct impact on the reluctance of teacher trainees of rural origin to go into rural areas for a career in the field of teaching. Thirdly, there is a factor is environment or climate. In terms of geographic location, the willingness of teacher trainees to teach in rural areas is low, and it is even lower when teacher trainees are concerned about teaching conditions in rural areas. In terms of working atmosphere, factors related to the atmosphere of the campus where the teacher trainees were studying affected their willingness to teach. In addition, there are also studies that focus on the dynamic process of key teaching events, significant others, career attraction and other factors that directly affect the willingness to teach of non-publicly-funded teacher trainees enrolled in teacher training colleges, and analyse the mechanism by which the relevant factors play a role in the willingness to teach.

In summary, while there are a large number of factors and a fair amount of research affecting teacher trainees' willingness to teach, there is a relative lack of in-depth research on how the second classroom affects the willingness of school students to teach. As an important platform for students to participate in practical activities and accumulate teaching experience, exploring the potential impact on students' willingness to teach will not only be of guiding significance for the innovation of the curriculum system of the second classroom in colleges and universities, but also provide both theoretical and practical support for enhancing the enthusiasm of teacher trainees to teach and firming up their educational ideals. In view of above, the current students of Beijing Normal University (BNU) Beijing Campus and Zhuhai Campus were selected as the subjects of this study. Based on the requirements of the Opinions on the Implementation of the "Second Class Report Card" System of the Communist Youth League in Colleges and Universities and the actual implementation of the second class in colleges and universities. The categories of the second classroom in teacher training colleges were constructed (as shown Table 1), and the questionnaire survey was used to explore the willingness of the second classroom to influence the intention of school students to pursue teaching, and finally, based on the empirical results, suggestions were made to promote the optimisation of the second classroom.

Table 1. Types and Definitions of Second Classes in Teacher Training Colleges

Types	Definitions
Thought Leadership (referred to as "thought leadership")	Strengthening the ideals and beliefs of students, strengthening their political stance, and guiding them to love the country, the Party and students, such as learning the spirit of General Secretary Xi Jinping's various speeches, education policy learning, and the experiences of exemplary educators or famous teachers.
Teacher Literacy Development (referred to as "literacy")	It consists of two major categories: common professional literacy (character, competence, knowledge, and beliefs) and core subject teaching literacy, of which common professional literacy includes four aspects: teacher character literacy, teacher competence, teacher knowledge, and teacher beliefs. Core subject teaching literacy means that teachers are able to teach on the basis of the characteristics of the subject, including understanding the body of knowledge, history and development trends of the subject and being able to translate them into teaching, understanding the nature of the subject and the nurturing value of the subject, and formulating targeted and stage-by-stage teaching plans, and so on.
Practical Training for Teaching (referred to as "practical classes")	Including field teaching activities, winter and summer holiday practice and other types of practical activities, aimed at guiding students to take the initiative to participate in social research, volunteer services, work-study, field teaching activities, etc., in practice to refine the ability to practice education and cultivate a sense of responsibility and accountability.
Career Planning Guidance (referred to as "planning category")	To guide and help school students to carry out activities related to career planning and enhancement of job-seeking and employability, such as one-to-one workshops on career planning, training on interviewing skills and training on CV production.

3. Data and Variables

3.1. Data Sources

Forty students of Beijing Normal University were randomly selected for the pre-survey, and the test questions were revised according to the educational measurement indicators and the actual research needs to form the official *Questionnaire on the Influence of the Second Classroom on the Willingness of Students to Teach in Beijing Normal University*. In March 2023 among undergraduate and master's students of NNU, 258 questionnaires were distributed through the Questionnaire Star platform and 252 questionnaires were returned, with a 97.67% return rate.

3.2. Variable Settings

School students' willingness to teach was taken as the dependent variable. The "second classroom" as the core independent variable, which mainly contains four parts: ideology, literacy, practice and planning. Specific dimensions analysed included level of understanding, level of participation and evaluation of effects. The control variables included four dimensions of personal traits, family

background, policy perceptions and motivation to teach.

3.3. Research Methodology

Firstly, descriptive statistics were conducted to analyse students' willingness to teach. Secondly, OLS regression method was used to analyse how the second classroom affects the willingness of students to teach in teacher training colleges. Finally, OLS group regression analyses were conducted on the dimensions of students' academic departments, student categories and grades.

4. Results of the Study

4.1. An Empirical Analysis of the Impact of the Second Classroom on the Willingness of School Students to Engage in Teaching

Table 2. Results of the mean value of the sub-dimension "willingness to teach"

Dimension	Scoring average	Selection ratio
Willingness to sit for a teacher's qualification examination or a teaching competence test organised by the school	4.3	88.94%
Willingness to teach in the future	3.88	76.49%
Willingness to choose teaching as a first career	3.76	69.13%
Willingness to teach for the long term	3.71	64.52%

Table 3. Mean and variance statistics for different dimensions of the second classroom

Types	Dimension	Average	Variance
Ideology	Degree of understanding	3.37	0.98
	Degree of participation	3.24	1.06
	Effectiveness evaluation	3.27	0.97
Literacy	Degree of understanding	3.71	1.06
	Degree of participation	3.12	1.18
	Effectiveness evaluation	3.68	0.98
Practical	Degree of understanding	3.53	1.01
	Degree of participation	3.48	1.23
	Effectiveness evaluation	3.78	0.90
Planning	Degree of understanding	3.46	0.92
	Degree of participation	3.00	1.00
	Effectiveness evaluation	3.62	0.97

Factor analyses were conducted for the second classrooms of ideology, literacy, practical and planning respectively, and factor scores were calculated and added to model 1. Factor analyses were conducted to evaluate the understanding, participation and effectiveness of the second classroom, respectively, and factor scores were calculated and added to Model 2. The literacy category understanding, engagement and effectiveness ratings were normalised and added to Model 3.

As can be seen in **Table 3**, in Model 1, from the four dimensions of the second classroom, the literacy category is significant at the 1% level with a coefficient of 0.35; the coefficients of the other dimensions are not significant; and the model 1 adjusted R^2 is 0.15. On the basis of model 1, model 2 was obtained by analysing the dimensions of understanding, participation and effect evaluation of the second class. From the results, participation is significant at

Firstly, a survey on the current situation of school students' willingness to teach was analysed.

Secondly, on the basis of existing studies, an empirical study was conducted with willingness to teach as the dependent variable, "second classroom" as the core independent variable, and personal characteristics, family background, policy factors and motivation to teach as the control variables, as shown **Table 2**.

4.1.1. Composite Score of Willingness to Teach

Firstly, the comprehensive score of the four dimensions of the willingness to teach was processed, and factor analysis was taken to deal with it through a variety of methods of comparison. As the dependent variable of the composite score of willingness to teach (TI), the KMO value is 0.73, which meets the requirements of factor analysis, and one factor is extracted with a cumulative contribution rate of 0.65, and all four variables are correlated with this factor; after normalisation, the mean value is 0.67, and the standard deviation is 0.22.

4.1.2. An Empirical Analysis of the Impact of the "Second Classroom" on the Willingness of School Students to Engage in Teaching

The second classroom contains ideological, literacy, practical and planning categories, and school students' perceptions of different types of second classrooms are measured through the dimensions of understanding, participation and evaluation of effectiveness, as shown **Table 3**.

the 1 per cent level with a coefficient of 0.32; the coefficients of the other dimensions are not significant; and the model 2 adjusted R^2 is 0.14. From the results of model 1 and model 2, it can be seen that the participation degree of the second class of literacy class has a positive effect on the willingness of school students to teach, and the coefficient is significant. On this basis, put into the literacy class of understanding, participation and effect evaluation dimensions, to verify the analysis, to get model 3. From the results, all three coefficients are positive, in which the literacy class participation is significant at the 1% level with a coefficient of 0.158; the coefficients of the other two dimensions are positive but not significant; and the adjusted R^2 of model 3 is 0.15. From the results of the three models, it can be seen that increasing the participation in the second class of the literacy class contributes to the willingness of school students to engage in teaching.

Based on Model 1, control variables such as personal traits, family background, policy factors, and motivation to teach were added to obtain Model 4 with an adjusted R^2 of 0.37. There is a positive effect of the second class of literacy on the willingness of school students to teach and the coefficient is significant, with a coefficient of 0.25, which is a decrease from model 1, which is corrected to some extent. Ideological second class has a negative effect on students' willingness to teach and the coefficient is significant at 0.20. Practical second class has a negative effect on students' willingness to teach and the coefficient is significant at 5 per cent level at 0.201. Planning second class has a positive effect on students' willingness to teach but the coefficient is not significant. From the point of view of control variables, the coefficients of student category and grade level are significant in terms of personal traits. The category of student is significant at the 5 per cent level, with a coefficient of 0.078, and the grade level is significant at the 10 per cent level, with a coefficient of -0.047. In terms of family background, parental expectation to teach has a significant effect on the willingness of students enrolled in teacher training colleges to teach, and monthly family income is a non-significant effect. Parental expectations from teaching were positively significant at the 1% level, with the TI increasing by 0.057 points for each additional tier of parental expectations from teaching. On policy awareness, the coefficients on both dimensions are significant. Policy understanding is positively significant at the 1 per cent level, with TI increasing by 0.03 points for every 0.1 point increase in policy understanding. Policy identity is positively significant at the 5 per cent level, with TI increasing by 0.02 points for every 0.1 point increase in policy identity. In terms of motivation to teach, personal and social values are significant and intrinsic value is insignificant. In this case, social value is positively significant at the 1 per cent level and for every 0.1 point increase in intrinsic value, TI increases by 0.04 points. Personal value was negatively significant at the 5 per cent level, with TI decreasing by 0.02 points for every 0.1 point increase in intrinsic value.

5. Conclusions and Recommendations

5.1. Conclusion and Discussion

The results of the survey show that the overall willingness of students in teacher training colleges to teach is high, and that literacy second class and second class participation have a positive effect on the willingness of students in teacher training colleges to teach. In particular, literacy second class participation has a significant positive effect on the willingness of current students to teach. In the full model, ideological and practical second classrooms have a negative effect on school students' willingness to teach, and literacy second classrooms have a positive and significant effect. Student category, parental expectation of teaching, policy knowledge, policy acceptance, personal value motivation and social value motivation to teach have significant effect on the willingness of school students to teach.

5.2. Apocalypse

Although the overall willingness of students currently enrolled in teacher training colleges to teach is high, there is still room for improvement. Based on the results of the study, higher teacher training colleges should take the characteristics of teacher training students and non-teacher training students into full consideration in the top-level design of the second

class, explore and design the contents of different types of second class from the perspective of differentiated teaching and learning, and enhance the willingness of students in teacher training colleges to engage in teaching in a balanced manner through the balanced design of the type of module and the diversified and comprehensive contents of the course. Based on the results of the empirical analyses, the following policy recommendations are made from the perspectives of internal development in second-course schools and external integrated parenting.

5.2.1. Optimisation of the Second Classroom and the Development of Teacher Trainees' Willingness to Teach

The second classroom plays an important role in the training of teacher trainees, and its quality and effectiveness directly affect students' willingness to teach. At present, the construction of the second classroom needs to start from the top-level design and comprehensively improve the quality of the programmes, especially the literacy programmes, in order to get rid of the limitations of traditional education and enhance the effectiveness of practical education. At the same time, it is important to ensure in-depth participation and authentic experience in practice-based courses to avoid formalisation. In addition, through the provision of career planning courses, students are assisted in planning their educational career paths and are provided with strong support and guidance, thereby enhancing their willingness to pursue a career in education.

5.2.2. The Role of Policy Advocacy and Supervision in Enhancing Willingness to Teach

Enhancing teacher trainees' awareness of education policies will help strengthen their professional identity and their willingness to teach. Teacher training colleges should make use of the flexibility of the second classroom to publicise national education policies and enhance students' policy perceptions. Through in-depth interpretation of the content of the policy and inviting participation from various parties, students are helped to fully understand the spirit and value orientation of the policy. Strengthening the supervision of the implementation of the policy, guaranteeing the implementation of the policy, guiding students to actively comply with the policy, improving their understanding and recognition of the policy, and maintaining their willingness to engage in teaching in the long term.

5.2.3. Deepening Education on Professional Beliefs and Strengthening Teachers' Professional Identity

Teacher training students' positive understanding of the professional role of teachers can effectively increase their willingness to teach. Teachers' colleges should integrate education on teachers' professional identity into the second classroom, and promote students' in-depth thinking about the role of teachers through lectures by famous teachers, motivation by role models and experience sharing. Strengthening education on the beliefs of the teaching profession, so that students can perceive and identify with the value of the teaching profession and lay the ideological foundation for their path to teaching. At the same time, it strengthens the training and guidance of students' personal qualities, teaching skills, abilities and interests, and enhances their perception of the intrinsic value of the teaching profession.

5.2.4. Home-school Co-operation and All-round Support for Nurturing Future Teachers

Family environment and educational background play an important role in students' career choices. Teachers' colleges should establish a home-school linkage mechanism to serve as a bridge for parents to understand teacher support policies and the dynamics of education and teaching. Through field observations and home-school exchanges, parents are helped to gain a comprehensive understanding of the teaching profession and are encouraged to support their children in teaching. Strengthening support for students from poor families, ensuring that they fully understand and enjoy the benefits of the policy, establishing a system of assistance and protection, and strengthening the determination and willingness of students from poor families to pursue a career in teaching.

Through the above measures, we can comprehensively optimise the construction of the second classroom, strengthen policy publicity and supervision, deepen education on professional beliefs, as well as support the nurturing of future teachers on all fronts through home-school liaison, thus effectively enhancing the willingness of teacher trainees to

engage in teaching.

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