

A Literature Review of Teachers' Preparedness to Teach and its Influencing Factors

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Abstract

Pre-service teachers' self-assessment of their preparedness to teach is closely related to their sense of teaching efficacy. A clear definition of the concept of preparedness to teach, an understanding of its structure, and the corresponding measurement tools based on national and regional professional standards for teachers are essential scientific and theoretical foundations for research on preparedness to teach. This study collects the latest research findings and policies on teaching readiness in different countries and regions based on national contexts. It then complements and organizes them to form a literature review.

Keywords

Preparedness to Teach; Pre-service Teacher; Measurement; Factors.

1. Introduction

In recent years, "preparedness to teach" has emerged as a novel research topic in domestic education. For novice teachers, they often encounter significant "reality shocks." In the process of practical application, novice teachers find a disconnection between their theoretical knowledge and the actual educational context, making it difficult for them to apply it to effectively guide educational practices flexibly. For example, novice teachers often find that students' cognitive, physical, and behavioral development far exceeds their expectations in classroom management and teacher-student relationships. This leads to significant discrepancies from the student situations they have learned, making it challenging to address these issues. Moreover, within the training process, an academic inclination, overall low guidance level of mentor teams, curriculum content detached from training objectives, and insufficiently rational course sequencing are specific issues in teacher training programs that contribute to their poor effectiveness. As the main elements of teacher training programs, teacher training courses play a crucial role in addressing these challenges.

2. Definition of Preparedness to Teach

The concept of preparedness to teach, also known as pre-service readiness or readiness to teach, first emerged in Housego's 1990 publication "Student Teachers' Feelings of Preparedness to Teach," originating from Bandura's self-efficacy expectancy theory. Researchers utilize teachers' subjective perceptions of preparedness to measure the effectiveness of teacher training programs or specific courses within them. Housego (1990), based on pre-service teachers' performance during internships, found that some students exhibited confidence and enthusiasm while others displayed nervousness, fear, or concern. He pondered how these behaviors were related to their feelings of preparedness for teaching, which could influence the knowledge and classroom teaching experience pre-service teachers

gain. Their perceived preparedness for teaching may equally impact the effectiveness of their teaching as obtaining certification, which is a similarly important issue. Thus, based on Ashton and Webb's (1986) teaching efficacy theory, Housego proposed that pre-service teachers' self-assessment of teaching preparedness is closely related to their teaching efficacy. Preparedness refers to individuals' perceived readiness when engaging in specific tasks and is reflected in their actions.

Scholars in the field of teacher education tend to focus on the willingness level of pre-service readiness. However, mature research considers pre-service teachers' subjective feelings about their preparedness for educational and teaching work and focuses on their actual performance after entering practical teaching positions (Darling-Hammond, 2010; Mayer, Dixon & Kline, 2017). Yet, assessing the actual ability level demonstrated when entering practical teaching positions is limited by various factors and presents particular difficulties in implementation. Few scholars have provided specific conceptual explanations of pre-service readiness. However, in existing statements, the concept's core idea remains consistent. For example, Scholz (2014) defines preparedness to teach as teachers' perception of their ability to effectively engage in teaching practices using existing resources, knowledge, skills, and experiences. Chinese scholars Wu Zongjin and Rao Congman (2018) define preparedness to teach as pre-service teachers' subjective evaluation of their professional qualities, indicating the degree of psychological expectation or confidence they exhibit in their professional attributes. Therefore, many researchers attempt to present the effectiveness of teacher training programs through preparedness to teach and use it to evaluate the cultivation effects of teacher education programs or related training courses.

3. Structure and Measurement of Preparedness to Teach

A literature review found that research on the structure of teaching preparedness is mainly based on the national or regional professional standards for teachers. Representative studies include those by Housego, Darling-Hammond, and Mayer.

3.1. Housego's Ten-Factor Structure

Housego's research on preparedness to teach, based on Bandura's (1986) refined efficacy theory applied to teaching by Ashton and Webb (1986), examines self-assessment of teaching readiness. His ten-factor structure provides a comprehensive framework covering various aspects such as knowledge, skills, attitudes, and values to ensure that teachers can effectively fulfill their responsibilities in educational practice.

These factors are:

- 1) Understanding and applying inductive and deductive methods.
- 2) Identifying and clearly articulating comprehensive objectives.
- 3) Designing appropriate, personalized, and precise questions and using them proficiently.
- 4) Assessing materials based on student levels, curriculum guidelines, and community standards, identifying biases.
- 5) Managing the classroom: teaching and implementing classroom rules and routines, monitoring and providing appropriate feedback.
- 6) Assessing and analyzing one's teaching and student learning, maintaining daily records, and grouping learners as needed.
- 7) Understanding and personalizing approaches to problem behavior.
- 8) Motivating learners, selecting strategies, conveying expectations and encouragement, and promoting optimal performance through grouping.

9) Playing educational roles in the school environment: motivating, explaining, providing timely activities and reviews, etc.

10) Selecting and arranging topics and activities in the planning and guidance process.

In Housego's study, participants from the Faculty of Education at the University of British Columbia exhibited high self-efficacy before engaging in actual educational practices. The sources of self-efficacy may be active (based on performance achievements), vicarious (based on observations of models), persuasive (based on verbal persuasion), or emotional (rooted in physiological arousal states). Since students had yet to gain formal teaching experience in this study, preliminary assessments of their teaching readiness or personal teaching effectiveness relied more on vicarious, persuasive, and emotional sources. This means they may evaluate their teaching abilities based on observing others' teaching behaviors, receiving encouragement and advice from others, and their emotional states.

After a period of educational practice, participants' perceptions of their teaching preparedness exhibited deviations. Factors such as task difficulty, effort expended, and amount of external assistance received during practice tasks influenced judgments of personal teaching preparedness. Due to the complexity of judging teaching levels, teaching levels need to be assessed based on student performance, which may affect teachers' confidence due to differences in student learning levels. However, this is a reciprocal process. We must inform pre-service teachers of what it takes to improve teaching levels. Pre-service teachers' teaching efficacy is an essential outcome of their preparation. In the classroom system of reciprocal determinism, personal teaching effectiveness influences teachers' and students' behaviors and working environment. By studying preparedness to teach based on the perspective of efficacy expectations, we can not only reflect the effectiveness of teacher training programs to a certain extent but also identify the specific contributions of courses and educational practices to pre-service readiness, providing empirical evidence for the improvement of teacher training programs (Wu, 2018).

3.2. Darling-Hammond's Five-Factor Structure

Darling-Hammond also emphasizes the correlation between pre-service teachers' self-efficacy and teaching effectiveness. She believes that once teachers can teach more confidently, their effectiveness may be more significant, consistent with Housego's findings. However, Hammond also emphasizes integrating teachers' professional knowledge with teaching practice. "Designing learning and development scientifically in practice is both the goal and the guide for teacher educators."

Hammond believes that attention should be paid to the systematic and coherent nature of the curriculum, with organic connections established between courses to construct a complete educational theoretical system. By profoundly integrating clinical practice with professional courses, a nearly realistic learning and teaching experience (referred to as scaffolding for teaching practice by her) is created for pre-service teachers. This approach helps pre-service teachers grasp child and adolescent development, subject knowledge, and relevant professional theories, develop adaptive expertise, inquiry, curriculum design and guidance, and reflection and diagnosis skills (Xu, 2022). Cases provide an excellent learning opportunity for learners due to their complexity, contextuality, and richness, enabling them to engage in scenes of theoretical and practical interaction (Shu, 2014), especially for those who will undertake educational and leadership responsibilities in the future. Through practical operations and experiences, they can better understand educational methods and leadership strategies and accumulate practical experience for future work, laying a solid foundation.

Hammond proposes the following five essential practice factors:

- 1) Integrating the learning of teacher educators with human development and research;
- 2) Integrating theory with practice;

- 3) Providing opportunities for actual practice, assessment, feedback, and reflection;
- 4) Engaging in inquiry and analysis;
- 5) Participating in collaboration within professional learning communities.

These five factors complement each other, and through their combined effects, a relatively complete teacher education preparation can be achieved. In her view, the University of Colorado Denver and Montclair State University are examples of exemplary practices.

3.3. Mayer, Dixon & Kline's Nine-Factor Structure

Mayer, Dixon, and Kline (2012) developed the Novice Teachers' Readiness Scale based on the Australian Professional Standards for Teachers and interviews with open-ended questions. This scale includes nine dimensions: teaching learners of different cultures, languages, and social statuses; designing and implementing curriculum, encompassing aspects such as curriculum goals, curriculum knowledge, curriculum implementation, classroom management, and curriculum development; assessing and providing feedback and reports on student learning, which includes student academic assessment, diagnostic assessment, formative assessment, and summative assessment; pedagogical methods, including principles of teaching, teaching methods, teaching strategies, classroom management, reflective teaching, and teaching wit; classroom management; professional communication with parents, guardians, and the community; shared governance, including colleague collaboration, involvement in management, and learning communities; professional ethics; and participation in continuing professional development, with a total of 46 items. The scale utilizes a Likert 5-point scoring system, with language stating, "The teacher education program has prepared me in the following area..." where "1" represents "strongly disagree," and "5" means "strongly agree." This scale is used to investigate the effectiveness of teacher education in Australia and has provided robust evidence for improving teacher education in Australia.

4. Impact Factors of Preparedness to Teach

Factors such as teacher training approaches, training courses, and teachers' backgrounds influence teaching preparedness.

4.1. Training Approaches

The teacher training model in the United States is relatively diverse, with a multifaceted composition of educators. Consequently, some American scholars have scrutinized the efficacy of different certification pathways or types of teacher training programs by examining teacher readiness for professional practice.

Silvernail (1997) pioneered this comparative approach by evaluating unlicensed teachers in New York, those who obtained their teaching certificates through teacher education programs, and those who acquired certification independently through self-study and examination. His findings indicated that unlicensed teachers needed to be more prepared overall than their certified counterparts. Teachers who completed teacher education programs were notably more prepared than those who self-studied and passed certification exams, particularly in enhancing student learning, fostering critical thinking and social development, understanding learners, and developing teaching leadership. However, no significant difference was observed regarding preparedness for using technology.

Other studies have reached similar conclusions (Darling-Hammond, 2002; Wooten, 2009; Jones, 1998). Additionally, Darling-Hammond et al. (2002) compared the readiness of teachers who completed traditional teacher education programs with those who underwent alternative certification programs. Their findings suggest that those who completed traditional programs were significantly better prepared in most aspects of teaching than those who participated in

alternative programs or had no formal teacher education. They compared teachers' readiness from teacher education programs with at least 18 participants to ascertain any differences. The results showed that variances in readiness between different programs were significantly more significant than within-program individual differences ($F=1.84, p=0.017$), indicating noticeable disparities in teacher readiness fostered by distinct teacher education programs.

4.2. Training Courses

Preparedness to teach is individual teachers' psychological preparation or expectation level for their professional qualities and abilities. Therefore, many researchers attempt to present the effectiveness of teacher training programs through preparedness to teach and use it to evaluate the cultivation effects of teacher education programs or related training courses (Huang 2016). More importantly, through preparedness to teach based on Bandura's self-efficacy expectancy theory, researchers can also determine the contribution of relevant training courses to preparedness to prepare and provide empirical evidence for improving teacher education programs. Research shows that the educational knowledge, educational philosophy, and educational abilities that teachers master during pre-service training significantly influence their self-efficacy and readiness for teaching. Different training courses have different impacts on improving teachers' pre-service readiness, with practical courses such as micro-teaching and educational internships considered the most important. Educational internships, as "capstone experiences" (BROWN A L, LEE J, COLLINS D, 2016), allow senior pre-service teachers to enter primary and secondary schools under the guidance of dual mentors to experience educational situations firsthand and implement teaching activities (Ye, 2002). Through this form, pre-service teachers can integrate knowledge into educational and teaching practices, cultivate and exercise their abilities to engage in educational and teaching work and strengthen their professional thinking. Darling-Hammond (2006), integrating traditional teacher training program evaluations with teacher development research, provided a systematic interpretation of graduates' pre-service readiness. Her study on pre-service readiness found that teachers' beliefs, practices, and careers are the main contents of pre-service readiness (Kee A N., 2012). Thus, educational internships and other practical courses can help pre-service teachers conduct fundamental teaching exercises. During this process, pre-service teachers can actively participate in teaching practices, which helps cultivate their professional identity and resilience, contributing significantly to pre-service readiness.

Educational theory courses also play an essential role in cultivating pre-service teachers' readiness for teaching. Ball (Deborah et al.) stated that if teaching requires helping students learn, then understanding the subject matter is at the core of teaching (BALL D L, WILLIAMSON M G., 1989). Through the study of educational theory, pre-service teachers can have modern educational concepts, master the theoretical knowledge system and basic educational teaching skills, help pre-service teachers develop awareness of their roles as educators, discuss education-related issues from relevant disciplinary perspectives, and focus on education. Research has found that pre-service teachers' educational and teaching experience before internships, attitudes toward educational and learning practices, and professional abilities can significantly impact their teaching design capabilities. Additionally, the degree of mastery of theoretical knowledge before internships, internship guidance, and the external environment of internship schools are also essential influencing factors (Wang, 2019). Furthermore, pre-service teachers' discipline, educational psychology, and general courses also have specific effects (Jiao, 2020).

4.3. Personal Background

Preparedness to teach is also closely related to the individual conditions of each teacher. Research results show that teachers with higher educational attainment often have more significant professional development needs, which may be due to higher education levels

providing teachers with more apparent self-awareness (SHAFFER D R, KIPP K, 2013). They are more likely to recognize their shortcomings more profoundly and take more proactive steps to enhance their abilities, improving their preparedness to teach and enabling them to participate in educational work more confidently.

In addition to the above factors, preparedness to teach is also influenced by the different social environments in which teachers are situated. Survey results show that existing professional development activities for teachers often overlook the stage-specific needs of teachers' professional quality structures, leaving many pre-service teachers feeling that their personalized development needs need to be met and training content is often repetitive (Huang et al., 2021). As a result, the willingness and demand of pre-service teachers to participate in professional development are reduced. Work satisfaction and self-efficacy partially mediate between preparedness to teach and professional development needs, especially work satisfaction, which has the most significant indirect effect. Surveys show that the overall satisfaction of teachers with their work is relatively low, mainly reflected in considerable dissatisfaction with the fairness mechanism of schools (Dong et al., 2022), perception of high work pressure, low personal achievement (An, 2020), and the general belief that the teaching profession has a low social status (Zhao, 2019) and is not respected. At the same time, self-efficacy plays a vital role in the relationship between preparedness to teach and professional development needs, serving as the second-largest indirect effect path. This is consistent with Piaget's cognitive development theory (SHAFFER D R, KIPP K, 2013) and Bandura's self-efficacy theory, which describe efficacy expectations (Chen, Liu, 2007). Factors affecting teachers' self-efficacy mainly include personal factors such as teaching experience and teaching practice (An, Li, 2021), while environmental factors include various aspects such as school location and type, management style, development conditions and opportunities, overall atmosphere, interpersonal relationships, and social values (Wang et al., 2021).

References

- [1] BALL D L, WILLIAMSON M G. The subject matter preparation of teachers [R]. National Center for Research on Teacher Education, 1989(5):1-31.
- [2] BROWN A L, LEE J, COLLINS D. Does student teaching matter? Investigating pre-service teachers' sense of efficacy and preparedness [J]. Teaching education, 2015, 26(1):77-93.
- [3] CLARK S K, BYRNES D, SUDWEEKS R R. A comparative examination of student-teacher and intern perceptions of teaching ability at the preservice and in-service stages [J]. Journal of Teacher Education, 2015, 66(2):170-183.
- [4] DARLING-HAMMOND L. Assessing teacher education: the usefulness of multiple measures for assessing program outcomes [J]. Journal of teacher education, 2006, 57(2):120-138.
- [5] DARLING-HAMMOND L. Constructing 21st-Century teacher education [J]. Journal of Teacher Education, 2006, 57(03):300-314.
- [6] FENSTERMACHER, G. Philosophy of research on teaching: Three aspects [M//Wittrock, M. G. (Ed.), Handbook of research on teaching (3rd ed). New York: Macmillan, 1986:37-49.
- [7] HOUSEGO B E J. Student teachers' feelings of preparedness to teach [J]. Canadian journal of education, 1990, 15(1):37-56.
- [8] HOUSEGO B E J. Monitoring student teachers' feelings of preparedness to teach and teacher efficacy in a new elementary teacher education program [J]. Journal of education for teaching, 1992, 18(3): 259-271.
- [9] KEE A N. Feeling of preparedness among alternatively certified teachers: What is the role of program features? [J]. Journal of Teacher Education, 2012, 63(1):23-38.
- [10] SHULMAN, L.S. Knowledge and Teaching: Foundations of the New Reform. Harvard Educational Review, 1987, 57, (01):1-22.

- [11] SUZANNE, M., Wilson, S. M., Floden, R. E., Ferrini-Mundy, J. Teacher Preparation Research: Current Knowledge, Gaps, and Recommendations [M]. Washington: Center for the Study of Teaching and Policy, 2001: 12.
- [12] An Xiaomin, Tong Yanjie. Study on the influence of job stress on rural teachers' job satisfaction: Based on the mediating role of teachers' low personal accomplishment [J]. Educational Scientific Research, 2020, (1): 66-72.
- [13] An Yi, Li Li, Wei Xiaoman. Influencing factors and implications of teachers' self-efficacy: A multi-level analysis based on TALIS 2018 Shanghai sample [J]. Educational Measurement and Evaluation, 2021, (10): 19-26.
- [14] Chen Qi, Liu Rude. Contemporary Educational Psychology (2nd Ed.) [M]. Beijing: Beijing Normal University Press, 2007: 220.
- [15] Bandura. Self-efficacy: The Implementation of Control (Part 2) [M]. Lin Ying et al., trans. Shanghai: East China Normal University Press, 2003: 593-566.
- [16] Dong Hua, Han Yu, Zhang Qingshan. Investigation and fuzzy comprehensive Evaluation of university teachers' Job Satisfaction: A Comparative analysis of different types of teachers [J]. Research on higher education in Heilongjiang Province, 2022, 40(1): 23-30.
- [17] Huang Jiali. A study on the Teaching readiness of students under the first period of the Excellence Teacher Cultivation Scholarship [J]. Journal of Educational Research and Development, 2016, 12(1): 1-38.
- [18] Huang Shanshan, Wang Xiwen, Yang Zhaoqing. Research on the Professional Development Needs of Middle School teachers based on teaching age [J]. Teacher Education Forum, 2021, 34(2): 79-82.
- [19] Jiao Haiyan, Rao Congman. The contribution of teacher training courses to the teaching readiness of full-time master of Education [J]. Degree and Graduate Education, 2020(08): 58-66.
- [20] SHAFFER D R, KIPP K. Developmental Psychology: Children and Adolescents (8th Ed.) [M]. Zou Hong et al. Trans. Beijing: China Light Industry Press, 2013: 338-341.
- [21] Schulman. Practical Wisdom: On Teaching, Learning, and Learning to Teach. Translated by Wang Yanling, Wang Kai, Mao Qiming, et al. Shanghai: East China Normal University Press, 2014.
- [22] Wang Qiaojun. Research on the Impact of Educational Internship on the Classroom Teaching Design Ability of Physics Teachers [D]. Linfen: Shanxi Normal University, 2019.
- [23] Wu Zongjin, Rao Congman. Research on the Contribution of Teacher Wang Wei, Yan Hanbing, Huang Xiaorui How Far OMO Teaching is: breakthroughs in the Key and difficult points of online teaching from the perspective of teacher self-efficacy [J]. Modern distance education, Teaching: From the Perspective of Efficiency Expectation. Journal of Education, 2018, 14(02): 78-88. DOI: 10.14082/j.cnki.1673-1298.2018.02.012.
- [24] Wang Wei, Yan Hanbing, Huang Xiaorui How far OMO teaching is: breakthroughs in the key and difficult points of online teaching from the perspective of teacher self-efficacy [J]. Modern distance education, 2021, (1): 48-5.
- [25] Xu Fenghua, Tan Xin. Review of Teacher Education Thought and Practice by Linda Darling Hammond [J]. Journal of Shenyang Normal University (Education Science Edition), 2022, 1(05): 72-80. DOI: 10.13972/j.cnki.cn21-1500/g4.2022.05.004.
- [26] Wu Zongjin, Rao Congman. Investigation of Teacher Preparation for Teaching: A Simple and Effective Strategy for Evaluating Teacher Training Effectiveness [J]. Education Science, 2018, 34(6): 55-61.
- [27] Ye Lan. New Encyclopedia of Chinese Teachers: Middle School Education Volume [M]. Beijing: China Encyclopedia Publishing House, 2002: 150.
- [28] Zhao Mingren. How to solve the problem of rural teachers being unable to stay? Journal of Education Science, Hunan Normal University, 2019, 18(6): 55-59+76.