

Exploration of Teaching Development Strategies for Double-Qualified Teachers in University-Affiliated Hospitals Based on Role Conflict Theory

Yuanyuan Jia¹, Yu Cai^{1*}, Siqi Wang¹, Ying Yang², Ge Wu²

¹Faculty Development and Teaching Evaluation Office, The First Affiliated Hospital of Xi'an Medical University, Xi'an 710000, Shaanxi Province, China

²Xi'an Medical University, Xi'an 710000, Shaanxi Province, China

*Corresponding author: Yu Cai, jxzlzk@126.com

Copyright: © 2024 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: This study draws on the classic theories and research achievements of university teacher development, and from the perspective of role conflict in social psychology, proposes policy recommendations for the development of clinical teachers in medical colleges, including following different stages of teacher development and designing teaching development strategies at different levels; designing the content and form of teaching development activities to meet the temporal and spatial needs of clinical teachers; and building an academic community for clinical teachers to promote the creation of teaching development behaviors.

Keywords: University-affiliated hospitals; Double-qualified teachers; Role conflict theory; Teaching development strategies

Online publication: July 5, 2024

1. Classification of role conflicts among double-qualified teachers in university-affiliated hospitals

According to the possible sources and nature of role conflicts, clinical teachers' role conflicts can be divided into three types: expected role conflicts, overload role conflicts, and adaptive role conflicts.

1.1. Expected role conflicts

The role transition from a clinical healthcare worker to a clinical teacher may face inconsistent expectations and requirements from different interactive groups, inconsistent expectations and standards for clinical teachers from hospitals and schools, inconsistent policies and regulations within the scope of the text and actual situations at the operational level, and inconsistencies between the clinical teacher's own standard identification, values, and prescribed role expectations and behaviors. These can all be attributed to role conflicts caused by incompatibility or contradictions among the various expectations of the role ^[1]. At the same time, clinical

teachers may face conflicts in fulfilling their teaching responsibilities, as they are unable to simultaneously protect the rights of patients and the learning rights of students. The text system of hospitals requires an emphasis on teaching, but in practical work, the importance of teaching has not been reflected, and due to the increasingly heavy clinical work, the normal teaching rights of clinical teachers cannot be guaranteed. Some clinical teachers try to promote teaching reform, but the conventional ideas of their superiors or hospitals are not completely consistent and cannot be achieved. These conflicts can be classified as expected conflicts.

1.2. Overload role conflicts

Once becoming a clinical teacher, the teaching tasks also increase with the growth of the number of medical students, such as regular undergraduate and graduate internship teaching, theoretical course teaching, standardized training for resident physicians, and teacher training in schools. Some clinical teachers also undertake clinical teaching management work simultaneously. However, the original clinical work has not been reduced due to the increase in teaching tasks. In the current medical environment, affiliated hospitals and teaching hospitals of major medical colleges are overcrowded, and the heavy roles and tasks of clinical medical workers inevitably lead to an overload of different roles and tasks for clinical teachers, which cannot fully meet the requirements of teacher roles. This form of conflict can be called overload conflict.

1.3. Adaptive role conflicts

With the demand of the country and society for the quality of higher education, the reform of medical education is gradually deepening, and higher medical colleges are paying increasing attention to the academic teaching of clinical teachers. Clinical teachers rely on their personal practice and understanding to carry out teaching, gradually showing difficulties in coping with it. On the one hand, due to the progress of the times and changes in the student population, the expectations for clinical teachers have increased. On the other hand, clinical teachers lack the necessary training and experience required for their teaching roles, as well as external human and material resources to support them. This means that they cannot meet their role expectations and cannot properly complete their role behaviors, resulting in role conflicts. When clinical teachers enter the stage of theoretical teaching from bedside guidance, the difference between clinical thinking and teaching thinking, the new round of medical education reform, such as the deepening of problem-based learning, the requirements of international courses, and the impact of massive open online course (MOOCs), all bring obstacles to the role adaptation of clinical teachers. At the same time, the lack of resources for clinical teaching reform has also caused difficulties for clinical teachers who want to deepen their teaching reform and practice. This type of conflict can be summarized as adaptive conflict.

2. Development strategies for double-qualified teachers of university-affiliated hospitals

2.1. Designing teaching development strategies at different levels following the different stages of teacher development

The adaptive role conflict of clinical teachers reflects the differences in teaching among clinical teachers at different stages of development. This also suggests that the teaching development strategy of clinical teachers should be based on the characteristics of clinical teacher development stages, meeting the actual needs of clinical teacher teaching development at different stages, and planning long-term planning and sustainable development ^[2]. Ralph Fessler and Judith C. Christensen constructed a tool for understanding and promoting teacher professional development, the Teacher Career Cycle Model, based on extensive literature collection and

interviews with over a hundred primary and secondary school teachers. This model divides a teacher's career into eight stages, namely the pre-service education period, early service period, ability construction period, enthusiasm and growth period, career setbacks period, career stability period, career decline period, and career departure period^[3]. It is not difficult to find that teachers at different stages have varying psychological and behavioral characteristics, and their professional development needs are also different. Patricia S. O'Sullivan and others believed that medical teacher development targets four different types of people: the first type is students, resident physicians, and others who are engaged in medical education careers and are required to teach but lack experience; the second type is teachers who teach in universities, but teaching is only a small part of their job responsibilities; the third type is the teacher whose main role is teaching; the fourth type is a teacher who wants to be a researcher and teacher developer in medical education. The development content of teachers varies among different groups of people^[4]. The main groups of clinical teachers in medical colleges and universities in China currently include the following: (1) Teaching assistants such as graduate students and resident physicians who have been participating in clinical practice teaching (clinical internships, internship guidance, etc.); (2) New theoretical course teachers are mainly clinical teachers who have just started participating in theoretical course teaching; (3) The main group of clinical teaching, mainly consisting of attending physicians (chief caregivers) and deputy chief physicians (caregivers), needs to further enhance the teaching of clinical teachers; (4) A group of clinical teachers or course developers and leaders who actively engage in teaching reform or teaching trials. The four types also reflect to a certain extent the growth stage of clinical teachers, indicating that the development of clinical teacher teaching cannot be generalized. It is necessary to clarify the core competency requirements of different development stages and design teaching development strategies at different levels based on this, providing corresponding teacher development resources, tools, and opportunities^[5].

Firstly, participating in clinical teaching during graduate studies and resident physician training is almost every clinical teacher's experience during their student years. This is also the professional preparation stage for clinical teachers, and the teaching experience at this stage has a significant impact on the formation of their subsequent teaching ideas and concepts. The development of teaching at this stage should focus on educational beliefs and values, helping them establish advanced teaching concepts and adapt to the establishment of teacher identity, and master basic teaching skills, especially strategies for conducting teaching while providing medical services.

Secondly, for new theoretical course teachers, due to the significant differences between the classroom teaching mode in schools and the bedside teaching mode in hospitals, the teaching space, objects, content, and methods have all undergone changes. At this stage, clinical teachers have formed relatively mature clinical thinking, and helping them transform clinical thinking into teaching thinking is an important idea for the development of teaching in this stage. The focus of teaching development also lies in further refining and enhancing teaching skills, such as how to control large lecture courses or small seminars, how to present logical course content, how to promote teacher-student interaction, and how to master evaluation, feedback, and grading skills.

Once again, the main group of clinical teachers who are in a period of enthusiasm and growth should cultivate higher requirements for teaching academic abilities, promote teaching reflection, prevent setbacks during the career setback period, cross the plateau period, and smoothly enter the career stability period. LuAnn Wilkerson believed that after participating in teaching for several years, clinical teachers will start to think about why some teaching methods are more effective while others are ineffective. Teachers will focus more on learners rather than themselves, which is also the best time to introduce these teachers to how to connect teaching and learning, and how to better understand learning from reflective educational practices^[6].

Lastly, clinical teachers or course developers and leaders who actively engage in teaching reform or experimentation have accumulated considerable experience in clinical teaching and are in a period of career

stability. This group of teachers needs to constantly achieve new breakthroughs through practical self-reflection and professional guidance. The focus of teaching development is to help students become educational leaders, enhance their teaching leadership, provide guidance and support for teaching reform, and help them play a radiating role in clinical teaching.

2.2. Designing the content and form of teaching development activities to meet the temporal and spatial needs of clinical teachers

For clinical teachers with special job characteristics, the content of teaching development should be highly targeted and the form should reflect appropriateness in order to attract their participation. Lan Xu and Ying Li found through interviews with staff at the Teaching Development Center of Taiwan Normal University that there are usually two excuses teachers are unwilling to participate in teacher development activities: “It is unnecessary” and “I do not have time”^[7]. “Lack of time” is often the main contradiction for clinical teachers to participate in teaching development. If the content of teaching development does not provide substantial assistance to clinical teachers, making them feel “unnecessary,” the progress of teaching development work will be more difficult. However, conducting needs assessments for clinical teachers before teaching development projects is highly welcomed^[8]. Therefore, the project design or strategy implementation of clinical teacher teaching development should follow adult learning theory, design systematic and targeted content tailored to the needs of clinical teachers, and fully consider the nature, time, and location of clinical teacher work.

The rapid development of medical education and the increase in enrollment urgently require clinical teachers to transform from quantity expansion to quality improvement. The content of clinical teacher teaching development activities should be both top-notch and grounded in order to meet the needs for quality improvement. Jack Mezirow’s theory of adult transformational learning suggests that for most adult learners, only by changing their basic assumptions or values about the learner themselves, the role of the teacher, educational goals, etc., can practical changes occur^[9]. The application of transformational learning theory in teacher development aims to make teachers aware of their values regarding teaching and to revise these values based on critical self-reflection and peer criticism^[10]. Therefore, the teaching development of clinical teachers is not only the development of teaching technology or skills but also the updating of teaching beliefs and values and the enhancement of teaching professional awareness and ethical spirit. Only profound changes in thoughts and attitudes can drive real changes in practice. Especially for disciplines such as medicine that deal with human life, the professional ethics of teachers are more important, and the essence of medicine and education is to respect people and life, which is held in the highest regard.

It is required that the content of teaching development activities should be in line with the actual situation of clinical teachers, and be able to truly solve the problems and confusions they encounter. Medical education researchers have conducted extensive research on the role expectations of an excellent clinical teacher. Many scholars have studied the roles that clinical teachers should undertake from various perspectives and using different methods, and have established some models or frameworks. For example, Ronald M. Harden and Joy Crosby proposed a 12-role model for medical teachers, which suggests that medical teachers assume 12 roles, including evaluators (student evaluators, course evaluators), planners (course planners, course organizers), resource developers (learning guide developers, resource material creators), information providers (lecture teachers, clinical or practical teachers), role models (doctors, teachers), and facilitators (guides, learning facilitators)^[11]. This role model provides a good content framework for the development of clinical teachers, providing training content for each role requirement of clinical teachers, such as macro-level teaching leadership, project evaluation and management^[12], and micro-level evaluation of student learning, curriculum planning, and development of learning resources. In terms of specific methods, innovative strategies are applied

to enhance clinical teaching skills, such as using “standardized students” in simulated teaching or teaching evaluations, similar to using “standardized patients,” and setting various typical teaching challenges^[13]. Various methods such as face-to-face teaching or MOOC-based blended learning can also be carried out. Regarding the nature, timing, and location of the work of clinical teachers, the form of teaching development should be appropriate and flexible, planned and progressive, to meet the work needs of different clinical teachers. In terms of learning schedule, there are afternoon study, weekend study, short-term workshop off-campus study, summer study, etc; in terms of learning location arrangement, it can be at school, in a certain affiliated hospital, or located in a city where affiliated hospitals are concentrated, achieving different combinations of space and time.

2.3. Building an academic community for clinical teachers to promote the creation of teaching development behavior

Clinical teachers in medical colleges are distributed in various departments of affiliated hospitals or teaching hospitals. Their participation in teaching is mostly in the form of “working alone,” and the academic community of their department is mostly divided into clinical or scientific research tasks. The academic community has not yet formed an atmosphere regarding clinical teaching. Lee Shulman, former chairman of the Carnegie Foundation for the Advancement of Teaching in the United States, believed that teaching should be the most community learning activity^[14]. The concept of academic community was first proposed by British philosopher Brown in the 20th century. He regarded scientists engaged in scientific research throughout society as a social group with common beliefs, values, and norms, in order to distinguish them from general social groups and organizations^[15]. Jean Lave and Etienne Wenger proposed the connotation of a practical community in *Situated Learning: Legitimate Peripheral Participation*, pointing out that members of a community have shared goals, careers, and understanding in a shared cultural and historical context^[16]. Therefore, a community is a shared spiritual guidance, common action standards, an authoritative structure of trust, and a valued pursuit of mutual benefit, cooperation, and common development among members. Building an academic community for clinical teacher teaching is a collective learning experience for teachers, from individual learning experiences of working alone to common growth. It is particularly important to create a real or virtual communication platform, establish a public field for clinical teachers, and gradually achieve default consensus and shared beliefs. The academic community of teaching has the general characteristics of an academic community, but its fundamental task is to revolve around teaching and learning. The most essential characteristics are sharing, cooperation, research-oriented, and action-oriented.

Regarding the sources of members in the academic community of teaching, Patricia O’Sullivan divided the community into a community formed by participants in teacher development projects, a community formed by teaching practices in the workplace (classroom or clinical) where teaching actually occurs, and referred to as the teacher development community and the classroom/clinical workplace community^[4]. Therefore, the formation of an academic community for clinical teaching in medical colleges can be based on internal teacher development projects, such as members of the problem-based learning and training program, or the department responsible for clinical teaching in a certain subject system. So, how can the specific practical activities of the academic community of clinical teachers be carried out? The “Four Links of Teaching and Learning” theory proposed by Mary T. Huber and Pat Hutchings provides a practical guidance framework for the development of teaching and learning activities: exploring teaching issues; researching teaching issues; changing teaching methods and understanding public teaching research results. Based on this, domestic scholar Weijia Yang refined the teaching and academic practice methods by integrating the concepts of inquiry learning and community learning and readjusted four aspects, namely the exploration and re-exploration of teaching problems, multi-approach research on teaching issues, teaching reform and shared reflection, and the establishment and expansion

of learning relationships^[14]. This also provides a theoretical basis for us to propose practical strategies for building an academic community for clinical teacher teaching in the future. The practical activities within the academic community of clinical teachers can include four stages: dialogue, sharing, action, and reflection.

- (1) Dialogue: The essence of an academic community lies in the connotation of Jaspers' "spiritual activities"—"the source of spiritual activities mostly exists in the smallest scope, such as in a college or hospital, where two or three people gather together, openly exchange views, and discuss topics related to the future development of their own group... This spirit belongs purely to small groups. If there are many such small groups in a university, and they are interconnected with each other, then the university has reached the peak of spiritual life."^[17] Dialogue means the exchange of ideas and the debate of viewpoints, through direct presentation and in-depth analysis of the teaching process, accepting criticism from peers, and maturing in criticism. The members of the academic community jointly study teaching problems, explore the essence of the problem, trace the root cause, and discuss solutions.
- (2) Sharing: Ertai Di said, "Life experience is not like what is perceived or presented as 'meeting me,' it does not appear to me... I can realize it in the form of reflection... it only becomes objective and concrete in thought."^[18] When we obtain life experiences through memory, life experiences have interpretive significance. When the essence of life experience is expressed in the form of text or linguistic text, the effect of the text immediately becomes a re-experience and reflective possession of meaningful things^[19]. By building a teaching academic community for clinical teachers, members can share experiences that activate teaching life and give teaching meaning, engage in dialogue with the text, and create an academic culture and atmosphere for clinical teaching.
- (3) Action: The ultimate goal of building a teaching academic community is the implementation of effective educational actions, including changes in teaching methods, promotion of teaching reform, development of teaching research, and improvement of teaching evaluation, which are often difficult to sustain solely by clinical teachers. By leveraging the academic community platform, members can negotiate and cooperate to jointly promote the implementation of teaching actions within the discipline.
- (4) Reflection: In the academic community of teaching, reflection is no longer limited to individual behavior. However, individual reflection is the foundation of collective reflection, and collective reflection is an extension of individual reflection, communication, and interaction, which is the exercise of critical ability^[14]. Medical clinical teaching is not just a teaching technique, but a process of cultivating clinical thinking. It is the teacher's teaching of how to work with the thinking of a doctor or nurse. Therefore, clinical teachers must be reflective practitioners. On the basis of individual reflection, we need to strengthen collective reflection, unleash collective wisdom, gather collective strength, establish rules that are more in line with the teaching context, and form subject-based teaching professional knowledge.

Funding

2023 Shaanxi Teacher Development Research Program "Research on the Construction and Improvement Path of a Teaching Engagement Model for Double-Qualified Teachers in Medical Colleges" (Project number: 2023JSQ011)

Disclosure statement

The authors declare no conflict of interest.

References

- [1] Mu Y, Wang J, 2021, The Current Situation and Influencing Factors of Role Conflicts Among Clinical Nursing Teachers. *Chinese Nursing Research*, 35(11): 2013–2018.
- [2] Qing Y, Zeng Z, 2023, Construction of a Hierarchical and Progressive Clinical Teacher Training System. *Lingnan Journal of Emergency Medicine*, 28 (01): 41–43.
- [3] Fessler R, Christensen J, 2005, *Teacher Career Cycle - Guidance on Teacher Professional Development* [Dong L, Gao Y, Trans.], China Light Industry Press, Beijing, 32.
- [4] O’Sullivan PS, Irby DM, 2011, Refining Research on Cultural Development. *Academic Medicine*, 86(4): 421–428.
- [5] Walsh A, Antao V, Bethune C, et al., 2015, *Fundamental Teaching Activities in Family Medicine: A Framework for Cultural Development*, College of Family Physicians of Canada, Mississauga, ON.
- [6] Wilkerson L, Irby DM, 1998, Strategies for Improving Teaching Practices: A Comprehensive Approach to Cultural Development. *Academic Medicine*, 73(4): 387–396.
- [7] Xu L, Li Y, 2015, “Doctor” or “Matchmaker”: Difficulties in Positioning University Teacher Development Institutions: A Case Study of a University in Taiwan. *University Education Science*, (4): 108–115.
- [8] Bigbee JL, Rainwater J, Butani L, 2016, Use of a Needs Assessment in the Development of an Interprofessional Faculty Development Program. *Nurse Educator*, 41(6): 324–327.
- [9] Saroyan A, Amundsen C, Li C, 1997, Incorporating Theories of Teacher Growth and Adult Education in a Culture Development Program. *To Improve the Academy*, (16): 93–115.
- [10] Cranton P, 1994, Self-Directed and Transformative Instructional Development. *The Journal of Higher Education*, 65(6): 726–744.
- [11] Crosby RMHJ, 2000, AMEE Guide No 20: The Good Teacher Is More Than a Lecturer the Two Roles of the Teacher. *Medical Teacher*, 22(4): 334–347.
- [12] Frantz JM, Bezuidenhout J, Burch VC, et al., 2015, The Impact of a Cultural Development Program for Health Professionals Educators in Sub-Saharan Africa: An Archaeological Study. *BMC Medical Education*, (15): 28.
- [13] Gelula MH, Yudkowsky R, 2003, Using Standardized Students in Cultural Development Workshops to Improve Clinical Teaching Skills. *Medical Education*, 37(7): 621–629.
- [14] Yang W, 2015, On the Construction of “Teaching Academic Community.” *Jiangsu Higher Education*, (5): 23–26.
- [15] Li L, Du P, Yu D, 2012, Reshaping the Academic Community of Universities: A Study Based on the Development of University Disciplines. *Journal of National Academy of Education Administration*, (8): 49–53.
- [16] Lave J, Wenger E, 2004, *Situated Learning: Legitimate Peripheral Participation* [Wang W, Trans.], East China Normal University Press, Shanghai, 4.
- [17] Jaspers C, 1991, *What Is Education* [Zou J, Trans.], Life Reading New Knowledge Sanlian Bookstore, Beijing, 175.
- [18] van Menen M, 2003, *Life Experience Research - Education in the Perspective of Humanities* [Song G, et al., Trans.], Education Science Press, Beijing, 44.
- [19] van Menen M, 2003, *Life Experience Research - Education in the Perspective of Humanities* [Song G, et al., Trans.], Education Science Press, Beijing, 45–47.

Publisher’s note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.