



# “One Main Thread, Two Carriers”: A Discussion on Curriculum Reform for Systematically Cultivating Classical Thinking in Warm Diseases

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## Abstract

**Background:** This paper addresses the challenges observed in the Warm Diseases (Wen Bing Xue) course at Tianjin University of Traditional Chinese Medicine, where students struggle to effectively master classical texts and their corresponding TCM clinical thinking. **Methods:** A teaching reform model named “One Main Thread, Two Carriers” was proposed and implemented. This approach takes the spirit of “Great Physician’s Sincerity” (Da Yi Jing Cheng) exemplified by renowned Warm Diseases scholars as its central thread (“One Main Thread”). It utilizes both the classical texts of Warm Diseases and the medical cases of famous practitioners as its foundational elements (“Two Carriers”). This framework aims to construct an integrated teaching system combining ideological and political education, knowledge acquisition, and ability cultivation. **Results:** Practice indicates that this model significantly enhances students’ intrinsic motivation for learning the classics of Warm Diseases studies and bolsters their professional confidence. Reforms led to top national rankings in Warm Diseases sections of licensing exams and awards for student research papers. **Conclusion:** The “One Main Thread, Two Carriers” reform represents an effective approach to cultivating classical thinking, integrating moral education with professional competency development in Warm Diseases education. Future work will focus on optimizing the teaching content and structure.

## Keywords

Warm diseases; Curriculum ideological and political education; Classical original texts; TCM thinking patterns; Curriculum reform

## 1. Introduction

President Xi has emphasized the importance of “inheriting the essence, upholding integrity and innovation” for Traditional Chinese Medicine (TCM), a treasure of Chinese civilization. The “Opinions of the Central Committee of the Communist Party of China and the State Council on Promoting the Inheritance and Innovative Development of Traditional Chinese Medicine” further underscore the significance of TCM classics. Warm Diseases (Wen Bing Xue), one of the Four Major Classics of TCM, exemplifies this principle of “Upholding Integrity and Innovation”. Its historical development, building upon and innovating the doctrines of Zhang Zhongjing, demonstrates how ancient methods were adapted without being rigidly bound by ancient formulas, embodying the concept of “medical mastery through adaptation”<sup>[1]</sup>. Talent cultivation is central to the inheritance and innovation of TCM. To enable TCM students to “study the classics, emphasize practice, and enhance competence”, mastering the profound patriotism, rich practical experience, and distinctive TCM thinking embedded within the Warm Diseases classics is crucial<sup>[2]</sup>. We have continuously explored and attempted reforms in our teaching practice, leading to a preliminary restructuring of the existing Warm Diseases curriculum content and system. This paper aims to discuss the connotative reconstruction of the Warm Diseases course and subsequent challenges, proposing corresponding teaching strategies.

## 2. Background and necessity for reform

### 2.1. Challenges in warm diseases teaching

Warm Diseases is a core course within the TCM professional curriculum, serving as a bridge between basic TCM theory and clinical specialties. Classical texts such as Wu Youke’s “Treatise on Pestilence”, Ye Tianshi’s “Guide to Clinical Practice with Case Studies” and “Systematic Identification of Warm-Factor Diseases”, Xue Shengbai’s “Treatise on Damp-Heat Diseases”, and Wu Jutong’s “Systematic Differentiation of Warm Diseases” represent the crystallization of Warm Diseases scholars’ wisdom, containing rich clinical thinking and practical experience. Current national examination standards, including the Licensed Physician and Classic Competency Level 3 exams, focus on these classical

passages. However, the undergraduate textbook for Warm Diseases still places the selected readings from these classics at the end of the book. Due to limited class hours, the syllabus often designates these readings as supplementary self-study material, which hinders students from building a solid foundation in the classics and translating them into clinical thinking.

### 2.2. Survey on classical warm diseases teaching

To understand the current state and issues regarding the teaching of Warm Diseases classics at the undergraduate and residency training stages, our team conducted an anonymous online survey. Participants included faculty from peer institutions in the Beijing-Tianjin-Hebei and Jiangsu-Zhejiang-Shanghai regions, as well as teaching physicians from relevant departments (e.g., Infectious Diseases) at our university’s affiliated training hospitals. Associate professors comprised 55.6% of respondents, and 63% had over six years of teaching experience. The survey focused on three core dimensions: mastery of classical texts, teaching challenges, and reform suggestions.

#### 2.2.1. Poor mastery of classical texts

Data revealed significant weaknesses among undergraduates, with 70.4% of teachers rating their mastery as “poor” or “partial”. Even among postgraduates who had undergone systematic review for licensing and classic competency exams, 40.7% of teachers believed they had not achieved “proficient” or “basic” mastery.

#### 2.2.2. Teaching challenges focus on the theory-practice gap

Over 70% of teachers cited the complex theoretical system of the classics and students’ lack of systematic learning methods as primary obstacles. This leads to difficulty grasping the connection between classical theory and modern clinical practice. Feedback from chief physicians in tertiary hospitals confirmed this issue: “We can explain the Wei-Qi-Ying-Blood differentiation theory thoroughly in class, but when students encounter fever in clinical practice, they still prefer Western medicine first”. This disconnects results in 37% of teachers rating postgraduates’ clinical application of thinking as “average”.

### 2.2.3. Reform consensus centers on deep integration of classics

Over half of the teachers rated the current Warm Diseases teaching system as “average”. Experts strongly recommended revising the syllabus to significantly incorporate classical passages (85.2%), increasing their citation and interpretation in teaching. Establishing a “Classical Warm Diseases Case Database” (77.8%) was suggested to bridge the abstract nature of theory through real clinical scenarios, thereby driving deeper understanding and constructing clinical thinking pathways.

Tianshi’s “respect for science” in recognizing distinct treatments from Cold Damage, leading to his writings, and his “life-first” attitude evidenced by effectively treating many; to Wu Jutong’s “innovation within inheritance” through decades of dedicated study before compiling his systematic work, advocating adaptation of ancient methods; to Wang Shixiong’s “self-sacrifice and shared destiny”, who remained dedicated to serving the public during turmoil despite personal tragedy <sup>[4]</sup>. This value-oriented shaping makes the course an effective vehicle for core socialist values education, providing students with a continuous source of professional confidence.

## 3. Reform methodology

Addressing the above issues and following the general requirements of the “Opinions on Strengthening the Work of TCM Talents in the New Era”, we innovatively reconstructed the Warm Diseases curriculum syllabus and teaching design. This reconstruction uses the classical passages outlined in the licensing exam, Classic Competency Level 3, and National Excellent Clinical Talent Training Program as the warp, and the characteristic Warm Diseases diagnostic frameworks of Wei-Qi-Ying-Blood and San Jiao (Triple Burner) differentiation as the weft, all guided by clinical relevance. The goal is to enable students to simultaneously inherit the essence and innovate, value moral cultivation alongside competency enhancement, and combine thinking training with skill development, thereby solidifying their classical knowledge and learning to apply the authentic clinical thinking of Warm Diseases masters.

### 3.1. “One main thread”: The spirit of “great physician’s sincerity” exemplified by warm diseases masters

Aligning with the State Council’s requirement to “integrate ideological and political education and medical ethics training throughout the entire teaching process”, this thread addresses not only the fundamental task of fostering virtue but also the common issue of insufficient student engagement, thereby enhancing lifelong learning motivation <sup>[3]</sup>. When teaching the classics, we subtly integrate the valuable spirits of these masters: from Ye

### 3.2. “Two carriers”: Classical texts and famous case studies

#### 3.2.1. Inheriting the essence: Using classical passages as the warp to substantially strengthen classical learning

To familiarize students with the classics, our team incorporated a “Morning Recitation of Warm Diseases Classics” elective in the semester preceding the main course <sup>[5]</sup>. This course focuses on the essential passages required for licensing exams. Each class holds at least two sessions weekly, involving a 5-minute lecture by a faculty member, 10 minutes of guided group recitation, and 10 minutes of self-directed study. Postgraduate students serve as teaching assistants for online Q&A. The course concludes with an online exam mirroring licensing exam format. To cater to high-achieving students and guided self-study, our team created micro-lectures explaining all exam-relevant passages, uploaded to a blended online-offline learning platform.

Recognizing that the Warm Diseases course, unlike classics courses focused on original texts, is structured more like a clinical course, and that students struggle to connect fragmented classical passages with their textbook knowledge, we restructured the teaching approach <sup>[6]</sup>. We trace the origins of core concepts (e.g., definition of Warm Diseases, diagnostic methods) back to their classical sources, teaching them through original passages. This helps students understand the classical basis before applying the characteristic thinking. Additionally, carefully selected readings beyond the core syllabus are assigned weekly, encouraging habitual engagement with classical literature as advocated by Wang Mengying, to

gradually master the characteristic theories.

### **3.2.2. Promoting innovation: Using famous case studies as the weft to highlight clinical adaptation**

Following TCM classical teaching principles and student cognitive patterns, the teaching of specific disease patterns shifted from pure theoretical lecture to a case-based approach. Classic cases from renowned masters are used to illustrate the etiology, pathogenesis, progression, diagnosis, treatment principles, and pattern identification for common warm-heat and damp-heat diseases.

For warm-heat diseases, the focus is on integrating Wei-Qi-Ying-Blood and San Jiao theory with pattern diagnosis and treatment. Embracing modern educational concepts where the teacher guides and the student learn autonomously, selected cases are presented in stages. This allows students to appreciate the typical progression through Wei, Qi, Ying, and Blood levels, or from Upper to Lower Jiao, as well as critical variations like “reverse transmission” from the Lung to the Pericardium. Through classroom discussions, students learn how Warm Diseases scholars inherited and innovated upon prior classical theories, developing new diagnostic frameworks. This enables students to integrate foundational knowledge with classical thinking, constructing distinctive Warm Diseases clinical reasoning skills, and fostering problem-solving and communication abilities. The aim is to equip students to understand and treat future emerging infectious diseases based on pattern differentiation<sup>[7]</sup>.

For damp-heat diseases, we first integrate relevant passages from Xue Shengbai, Ye Tianshi, and Wu Jutong to create a systematic framework for San Jiao differentiation of damp-heat. Typical cases are then used for discussion, helping students establish a pattern-based treatment model centered on the patient. This integrates Warm Diseases knowledge with other classical theories, building interdisciplinary clinical reasoning skills, and fostering innovation, critical thinking, and decision-making.

Furthermore, these cases highlight the dedication of masters like Wu Youke, Ye Tianshi, and Wang Shixiong in combating major epidemics, fostering students’ sense of medical compassion (“benevolence of the physician”) and prioritizing people’s life safety and health, thereby enhancing professional and humanistic qualities.

## **4. Results and summary**

The team has developed a syllabus and teaching design integrating ideological education, classical theory, and characteristic TCM thinking. To provide targeted guidance, all members participated in compiling a three-volume Guidebook Series for the Classic Competency Exam. The reform has increased student interest in Warm Diseases. Our university achieved top national rankings in the Warm Diseases sections of the Licensed Physician exam and phase examinations. Undergraduates were inspired to publish theoretical articles based on Warm Diseases theory, winning awards in regional academic competitions. Teaching and research capabilities were also enhanced: the team now holds leadership positions in national Warm Diseases teaching committees and virtual teaching research offices. Members hold positions in professional societies like the Chinese Society of Traditional Chinese Medicine. Through leading multiple provincial/ministerial- level teaching reform projects, publishing related papers, and winning teaching awards (e.g., national micro-lecture competition prizes), the team’s capacity has been significantly strengthened.

Through the “One Main Thread, Two Carriers” reform aimed at cultivating classical thinking, the team has attempted to organically integrate classical passages, case studies, characteristic academic thought, and the spirit of “Great Physician’s Sincerity”. Looking forward, we will continue to optimize the teaching content and structure of Warm Diseases to achieve seamless integration of theory and medical virtue, contributing to the cultivation of virtuous and competent physicians.

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## Disclosure statement

The authors declare no conflict of interest.

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