

Research on Efficient Classroom Teaching Model of Urban Primary Chinese Based on the Improvement of Students' Core Literacy

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Abstract: Against the profound transformation of global basic education and the in-depth advancement of China's new curriculum reform, the educational paradigm has shifted substantially from the traditional knowledge-oriented instruction toward the cultivation of students' core literacy. Primary Chinese, as the foundational compulsory discipline in compulsory education, bears irreplaceable responsibilities in shaping students' linguistic competence, critical thinking, aesthetic taste and cultural inheritance. However, a host of realistic drawbacks still prevail in current urban primary Chinese classroom teaching across China: many young teachers lack systematic educational theoretical accumulation, traditional cramming teaching still dominates daily classroom activities, existing teaching evaluation systems remain trapped in score-centered logic, and most students are incapable of completing independent preview and autonomous in-depth learning, which directly leads to low classroom efficiency and fails to fulfill the core literacy cultivation goal required by curriculum standards. Taking urban primary Chinese teaching as the research object, this paper adopts mixed research methodologies consisting of questionnaire survey, semi-structured in-depth interview and semester-long action research. The research selects three typical urban public primary schools in Hezhou City as research sites, distributes formal questionnaires to 40 in-service Chinese teachers and conducts targeted interviews with frontline teachers and student representatives from ten different teaching classes. After sorting out and analyzing authentic field research data, this paper systematically sorts out four prominent dilemmas restricting the high-quality development of urban primary Chinese teaching, namely the overall insufficient theoretical literacy of young teaching staff, rigid and homogenized classroom teaching methods, backward single-dimensional teaching evaluation mechanism and students' inadequate autonomous learning capability. Rooted in three mature theoretical systems including core literacy theory, efficient classroom hierarchy theory and the three-classroom metaverse education theory proposed by domestic authoritative education researchers, this study innovatively constructs a three-stage integrated teaching framework consisting of hierarchical pre-class preview design, six-dimensional in-class inquiry teaching and three-classroom-linked after-class extended learning. Through a full-semester comparative teaching experiment between experimental class implementing the new teaching model and control class retaining conventional teaching approaches, empirical data verifies the practical advantages of the proposed teaching mode: the experimental group realizes remarkable improvements in students' independent preview completion rate, classroom active participation frequency and comprehensive Chinese academic performance. Meanwhile, practical teaching also exposes existing limitations such as formalized group cooperative learning activities and insufficient digital hardware investment for the construction of the third meta classroom. On the basis of empirical findings, this study puts forward targeted supporting optimization strategies from four crucial dimensions: standardized school-based teaching research & teacher training system, diversified situational teaching design, categorized multi-dimensional classroom evaluation reform and all-round three-classroom resource integration. The research enriches the practical application path of core literacy-oriented efficient classroom construction in urban primary Chinese education, provides operable practical references for frontline Chinese educators and regional education administrators, and offers empirical evidence for the deepening of local primary Chinese curriculum reform in the new era.

Keywords: Core Literacy; Primary Chinese; Efficient Classroom; Urban Primary Education; Three-classroom Education System; Teaching Optimization Model

1. Introduction

Global basic education reform has stepped into the core literacy-driven development era in the past two decades. A great number of international educational organizations including OECD, UNESCO and the European Union have successively released official documents to take core competency cultivation as the core orientation of basic curriculum reform, marking the worldwide shift of educational goal from instrumental knowledge transmission to all-round human development^[5]. Since the promulgation of the new round of basic education curriculum standard in China, domestic compulsory education has officially completed the transformation from the previous double-base teaching goal (basic knowledge & basic skills) to three-dimensional objectives, and further upgraded to the comprehensive cultivation of students' core literacy, which has become the core guiding principle of primary and secondary school classroom teaching reform nationwide.

As the most fundamental subject of compulsory education, primary Chinese undertakes dual missions of inheriting excellent traditional Chinese culture and cultivating students' comprehensive language literacy, whose classroom teaching quality directly determines the overall development level of students' linguistic thinking, expression ability and humanistic accomplishment. Nevertheless, constrained by multiple realistic objective factors such as the rapid renewal of young teachers in urban primary schools, long-standing big-class teaching arrangement and inertial traditional teaching concepts formed under the past exam-oriented education environment, inefficient classroom phenomena are still widespread in numerous urban primary Chinese classrooms. According to domestic frontline educational investigation statistics, more than half of primary Chinese teachers still rely on indoctrination teaching, ignore students' subjective learning status, compress independent inquiry and communication time in class, and transfer most knowledge consolidation tasks to after-school homework, which not only increases students' academic burden but also severely restricts the effective implementation of core literacy cultivation targets^[1].

From practical value perspective, exploring a localized efficient classroom teaching mode matching urban primary school students' cognitive characteristics and educational resource conditions can effectively resolve prominent pain points in current Chinese teaching, help teachers change backward teaching concepts and optimize daily teaching behaviors, and meanwhile stimulate students' autonomous learning motivation to realize synchronous improvement of knowledge mastery and core competency development. From theoretical value, this research organically integrates core literacy theory, hierarchical efficient classroom theory and emerging three-classroom meta education theory into specific primary Chinese teaching practice, expands the application boundary of relevant educational theories in grassroots compulsory education field, supplements empirical research data for domestic urban Chinese classroom reform, and provides new research ideas for subsequent related curriculum exploration.

1.1. Domestic and Overseas Literature Review

1.1.1. Overseas Research Progress on Core Literacy and Efficient Classroom

International research on core competency started in the late 20th century. OECD launched the DeSeCo project in 1997, systematically constructing a three-dimensional core competency framework covering autonomous action, interactive tool application and heterogeneous group communication, which has become the basic theoretical reference for most developed countries to formulate local educational standards^[5]. UNESCO put forward five lifelong learning pillars including learning to know, learning to do and learning to live together, defining core literacy as lifelong sustainable developmental capability acquired through continuous systematic education. European countries such as France and Germany combine vocational education with basic compulsory education, highlighting the organic combination of knowledge, skill and emotional attitude in core literacy cultivation; American 21st century core literacy framework focuses on innovation thinking, information media literacy and occupational adaptive competence, emphasizing the practical-oriented characteristic of competency cultivation.

In terms of efficient classroom research overseas, Western scholars represented by Bloom construct mastery learning theory, pointing out that high-efficiency teaching should formulate differentiated learning goals for students at different levels and adopt targeted auxiliary teaching to reduce students' learning gap. Constructivist education advocates such as Piaget and Vygotsky emphasize student-centered classroom construction, advocate situational exploration and cooperative group learning, which lay theoretical foundation for modern inquiry-based efficient classroom design. However, most overseas related research is based on Western educational system and student growth environment, whose teaching

mode cannot be directly copied and applied to China's urban primary Chinese classroom with unique national language characteristics and educational context.

1.1.2. Domestic Related Research Status

(1) Research on core literacy construction

Domestic authoritative scholars Xin Tao and Lin Chongde lead the research of China's student developmental core literacy framework, clearly define core literacy as essential character and key ability formed by students during systematic school education to adapt to individual lifelong development and social progress, and divide the whole system into subjectivity, sociality and cultural three major dimensions^[5]. In recent years, plenty of Chinese subject researchers combine core literacy connotation with primary Chinese curriculum features, subdivide language construction, thinking development, aesthetic appreciation and cultural inheritance into specific classroom teaching indicators, but most existing researches stay at theoretical interpretation level, lacking localized empirical exploration targeting urban primary school actual teaching environment.

(2) Research on efficient classroom construction

Zhang Ming points out three core restrictive obstacles of domestic efficient classroom popularization: teachers' insufficient educational theoretical accumulation, ambiguous school-based research themes and rigid outdated classroom evaluation standards, and puts forward three targeted improvement paths including renewing curriculum reform ideas, rooting teaching research in real classroom problems and constructing scientific multi-angle evaluation mechanism^[1]. Another representative scholar Long Baoxin innovatively proposes the three-level progressive development law of efficient classroom consisting of classroom technique, classroom craftsmanship and classroom art: classroom technique refers to standardized replicable teaching operation specifications summed up from excellent teaching experience; classroom craftsmanship means teachers' personalized adaptive transformation of fixed teaching modes according to specific class situations; classroom art stands for the ideal free teaching state formed by long-term accumulated teaching wisdom^[4]. In primary Chinese subdivision field, Zhao Cheng, Yao Xiaping, Wang Ying and other frontline teachers successively summarize multiple sets of pre-class, in-class and after-class connected classroom operation procedures based on long-term grassroots teaching practice, laying abundant practical foundation for this research's mode construction^{[3][7][8]}.

(3) Research progress of three-classroom educational theory

Huang Jiqing systematically sorts out three mainstream early viewpoints of domestic third classroom research including dormitory education theory, online virtual classroom theory and off-campus practical education theory, and points out that with the rapid development of metaverse and VR virtual digital technology, the new-era third classroom evolves into Meta-Classroom breaking physical space limitation, realizing seamless connection among offline real classroom, extracurricular practical activities and online virtual learning space^[2]. The three-classroom integrated educational concept effectively expands the traditional classroom's time and space boundary, provides brand-new after-class extension thinking for efficient Chinese teaching design, yet few existing Chinese teaching studies embed Meta-Classroom conception into routine classroom teaching system.

1.1.3. Research Gap and This Paper's Innovation Point

Synthesizing existing domestic and overseas research achievements, relevant theories of core literacy, efficient classroom and three-classroom construction have formed relatively complete theoretical systems respectively, but three prominent research gaps still exist: first, few researches integrate three kinds of theories synchronously into the whole-process design of urban primary Chinese teaching; second, most relevant classroom reform researches lack field questionnaire data and semester-long experimental verification, staying at theoretical speculation or simple teaching experience summary; third, existing classroom models fail to combine Meta-Classroom digital advantage with primary Chinese thematic reading teaching characteristics.

Correspondingly, the innovative highlights of this research are reflected in three aspects: firstly, take three major mature educational theories as theoretical support to build a complete pre-in-after full-link three-stage teaching system; secondly, adopt mixed empirical research with questionnaire, interview and controlled teaching experiment, support model construction with authentic statistical data; thirdly, embed Meta-Classroom virtual learning design into after-class extended teaching, realize the organic integration of in-class knowledge learning, out-of-school practical activity and online autonomous reading.

1.2. Research Ideas and Research Methods

The overall research logic of this paper follows the path of theoretical sorting → field investigation and problem summarization → targeted teaching mode construction → practical teaching verification → optimization strategy formulation. The concrete research approaches are specified as follows:

First, Questionnaire Survey Method: select three representative urban public primary schools in Hezhou's urban area, issue standardized printed questionnaires to 40 full-time primary Chinese teachers, recover all valid questionnaires without missing data, count and sort teachers' age composition, teaching years, commonly-used teaching methods and evaluation habits quantitatively.

Second, Semi-structured Interview Method: randomly select 10 frontline backbone teachers and student representatives from Grade One to Grade Six for face-to-face targeted interview, record and organize interview content to supplement quantitative questionnaire data with qualitative realistic classroom problems ignored by numerical statistics.

Third, Action Research Method: pick two parallel classes with roughly equivalent initial Chinese academic level and student cognitive foundation from Grade Four of the researched primary school, set one class as experimental group adopting the newly-built three-stage teaching mode and the other as control group retaining traditional conventional teaching, carry out continuous one-semester follow-up teaching observation and periodic academic & learning habit testing to obtain comparative experimental data of teaching effect.

2. Definition of Core-Related Concepts

2.1. Student Developmental Core Literacy

Referring to the authoritative definition put forward by Xin Tao & Lin Chongde(2016), core literacy refers to the indispensable personal disposition and critical key competencies gradually cultivated through systematic school education, which can satisfy the dual developmental demands of individual lifelong growth and social sustainable advancement^[5]. Different from the past knowledge-centered teaching objective focusing on isolated knowledge and skill memorization, core literacy emphasizes the comprehensive organic integration of knowledge, ability, emotional attitude and values, which matches the all-round developmental requirement of quality-oriented education in China.

Combined with the disciplinary attribute of primary Chinese and the actual educational environment of urban primary schools in this research, the paper subdivides Chinese subject core literacy into four operable concrete cultivation dimensions suitable for daily classroom teaching: first, autonomous learning ability including independent preview, text annotation and active questioning; second, cooperative communication ability covering group discussion, in-class presentation and mutual learning with peers; third, problem inquiry ability of sorting out text doubts and exploring problem solutions through reading and communication; fourth, innovative practical ability reflected in thematic reading creation, textbook drama performance and extracurricular Chinese practical activities. All four literacy dimensions run through the whole three-stage teaching design of pre-class, in-class and after-class.

2.2. Efficient Classroom

Based on Zhang Ming's authoritative definition of efficient classroom, a qualified efficient classroom refers to that teachers organize systematic classroom management in regular daily teaching, guide all students to participate in learning activities initiatively, and finish scheduled teaching tasks with high effectiveness, high efficiency and high benefit to realize fair and all-round development of every student^[1]. The three core evaluation dimensions of high effect, high efficiency and high benefit have clear differentiated connotation in primary Chinese teaching: high effect requires the full realization of curriculum's three-dimensional teaching goals and core literacy cultivation targets in limited class hours, avoiding useless repetitive teaching content and ineffective classroom links; high efficiency stands for the scientific optimal allocation of 45-minute fixed classroom time, whereby teachers rationally balance teacher's explanation duration and students' independent reading, discussion and drill time to cut down classroom invalid time consumption; high benefit focuses on teaching fairness, namely designing layered teaching tasks for students at advanced, intermediate and underperforming student respectively to ensure every pupil can gain tangible progress in class rather than only satisfy the learning needs of top students. On this basis, this research defines urban primary Chinese efficient classroom as the optimized teaching

mode relying on scientific layered design, which synchronously completes textbook knowledge teaching and four-dimensional core literacy cultivation within prescribed class hours.

2.3. Three-classroom Integrated Educational System

According to Huang Jiqing's latest research achievement on new-era third Meta-Classroom, the complete three-classroom system consists of first classroom, second classroom and digital third Meta-Classroom with distinct division of educational functions^[2]. The first classroom is the traditional fixed offline classroom inside campus, undertaking core textbook knowledge teaching and in-class inquiry learning tasks; the second classroom refers to various offline extracurricular Chinese practical activities beyond formal class hours including student Chinese associations, off-campus museum research study, volunteer cultural publicity and themed reading salon; the third Meta-Classroom is the virtual digital learning space built relying on internet platform, VR immersive technology and online learning software, breaking the restriction of fixed time and physical space, realizing remote reading sharing, online thematic debate and immersive scene simulation teaching. The three kinds of classrooms complement each other and form an enclosed all-round Chinese education chain covering in-school and out-of-school, offline and online learning scenarios, which becomes the important theoretical foundation of this paper's after-class extended teaching design.

3. Investigation and Analysis on Current Urban Primary Chinese Teaching Status and Existing Problems

This research takes three urban public primary schools in Hezhou urban area as research objects, collects valid data from 40 Chinese teachers via questionnaires and supplements real classroom details through teacher-student in-depth interviews, sorts out concrete teaching problems from teacher team, in-class teaching design, evaluation mechanism and student learning four major aspects combined with the three major efficient classroom restrictive factors summarized by Zhang Ming^[1]. The core statistical data of questionnaire survey is displayed in Table 1 below.

Table 1: Statistical Table of Urban Primary Chinese Teachers' Teaching Basic Situation.

Survey Items	Classification Options	Proportion of Respondents
Length of Teaching Service	1~5 years	70%
	More than 5 years	30%
Regularly-adopted Teaching Mode	Traditional Lecturing-oriented Teaching	60%
	Independent Inquiry & Group Cooperation Teaching	30%
	Mixed irregular Teaching Forms	10%
	Only Final Written Exam Scores	80%
Dominant Classroom Evaluation Standard	Combination of Process Performance & Academic Score	20%
	Grouping based on Students' Academic Level	40%
Common Student Grouping Method for Cooperation	Random Casual Grouping	20%
	No fixed grouping standard	40%

3.1. Teacher Team: Young Teachers Dominate with Insufficient Updated Educational Theoretical Accumulation

From questionnaire statistics, up to 70% of in-service Chinese teachers in surveyed urban primary schools have teaching experience ranging from one to five years, forming a young-dominated teacher structure. Most young teachers receive systematic normal university education with complete basic disciplinary knowledge, but they are unable to keep pace with the continuous updated new curriculum reform concepts and core literacy related educational theories after taking up teaching posts, which coincides with the realistic dilemma summarized by Zhang Ming that numerous frontline teachers stop systematic educational reading after formal schooling and rely on past exam-oriented teaching experience to organize daily classroom^[1].

In terms of school-based teaching research, most researched schools arrange regular teaching research activities in name, but the research themes are vague and divorced from actual classroom pain points, showing obvious utilitarian tendency aiming at job title promotion rather than solving daily teaching difficulties. Popular high-efficiency research forms including heterogeneous-course teaching, multiple-round lesson polishing and professional classroom observation are rarely carried out routinely, lacking targeted theoretical training themed on core literacy and efficient classroom construction. Without effective school-based research support, young teachers cannot realize timely teaching concept renewal and personalized teaching ability improvement, becoming the primary obstacle restricting efficient classroom popularization.

3.2. In-class Teaching: Fixed Rigid Teaching Mode and Formalized Group Cooperative Learning

Survey data shows 60% of teachers still take traditional teacher-centered lecturing as the main classroom form, spend most class time explaining textbook knowledge unilaterally, compress students' independent text reading, thinking and discussion time, leading to students' passive receptive learning state all the time. Although 30% teachers try to apply group cooperative learning advocated by new curriculum standard in class, the implementation effect is far below expectation. Only 40% teachers divide study groups according to students' actual academic level; 20% adopt completely random grouping; the remaining 40% have no fixed grouping rules at all^[7]. Most group assignments lack clear role setting of group leader, recorder and presenter without regular role rotation mechanism, resulting in a large amount of group discussion evolving into irrelevant chatting, high-achieving students monopolize speech opportunities while underachieving students are marginalized and have no chance to express personal opinions, making cooperative learning purely formal decoration of classroom rather than effective inquiry carrier.

Besides, plenty of teachers ignore situational introduction, layered questioning and in-class instant training links emphasized by efficient classroom theories, fail to combine story-telling, riddles, multimedia immersive scene and role-playing to design interesting classroom introduction for primary students, making Chinese classroom tedious and difficult to stimulate pupils' inner learning motivation^[6].

3.3. Evaluation Mechanism: Backward Single Score-centered Assessment Leading to Reform & Evaluation Separation

Up to 80% of surveyed teachers still take students' written exam scores as the sole core evaluation basis of Chinese learning effect, while schools' daily teaching management inspection focuses on mechanical indicators including homework total amount, lesson plan writing completeness and attendance of listening class, which forms the typical "two sets of standards" contradictory phenomenon pointed out by Zhang: schools advocate new curriculum reform featuring student-oriented inquiry learning on the surface but still adopt traditional exam-oriented evaluation rules in practical daily assessment^[1].

Different types of Chinese lessons including new-teaching lesson, knowledge review lesson and exercise comment lesson have completely different teaching objectives and classroom emphasis, but most schools apply unified identical evaluation standard without classified customized assessment index according to lesson attributes, neglecting process evaluation indicators such as classroom speech performance, group cooperation performance and thematic reading harvest^[9]. The backward evaluation orientation directly restricts teachers' initiative of reforming traditional teaching mode and applying efficient classroom design.

3.4. Student Learning: Poor Independent Preview Habit and Difficulty in Realizing Differentiated Teaching

According to student interview feedback, more than 70% surveyed pupils cannot finish standard independent preview tasks alone without teachers' detailed step-by-step arrangement, lacking basic preview methods such as text key-point marking, unknown content marking and pre-reading content sorting. Under the common big-class teaching background of urban primary schools, limited teacher energy makes it hard to implement hierarchical teaching design for students with differentiated learning foundation: top students finish basic classroom tasks rapidly and face redundant spare time without extended learning resources while underachievers cannot follow mainstream teaching rhythm and gradually lose Chinese learning confidence. In terms of thematic reading popularized in current Chinese curriculum, most students rely entirely on teachers' assigned reading list and required after-school

reading tasks, lacking autonomous interest-driven reading selection awareness, seriously hindering the cultivation of reading accomplishment and innovative practical literacy^[9].

4. Construction of Three-stage Core Literacy-oriented Efficient Chinese Classroom Teaching Mode

Combining Zhao Cheng's pre-class-in-class-after-class three-part classroom framework, Yao Xiaping's six-step in-class teaching design idea and Huang Jiqing's three-classroom integrated educational theory^{[2][3][7]}, this research constructs a systematic three-stage teaching mode: hierarchical differentiated pre-class preview design → six-link standardized in-class inquiry teaching → three-classroom coordinated after-class extended learning, every stage sets clear core literacy cultivation targets matching four-dimensional student competency requirements.

4.1. Pre-class Stage: Hierarchical Differentiated Preview Design to Cultivate Independent Learning Literacy

Referring to Wang Ying's research achievements on primary Chinese preview method guidance, this research divides standardized preview content into four fixed core modules: new character & vocabulary memorization, text overall combing, confusing doubt marking and theme-related extracurricular material collection^[8]. Corresponding to three levels of students (underachievers, intermediate students and advanced students), teachers design layered preview worksheets with differentiated learning tasks to realize classified preview guidance.

For underachieving students with weak basic Chinese foundation, preview tasks are limited to basic requirements including text fluent reading and key new character recognition without overburdening difficulty; for intermediate students occupying most class proportion, preview content adds paragraph division and preliminary content generalization besides basic vocabulary study, requiring students to mark unclear sentences and confused knowledge points on textbooks; for advanced students with solid foundation and strong learning ability, besides routine preview tasks, teachers assign extended preview requirement of collecting short reading materials closely related to unit theme from extracurricular books or legitimate online reading platforms. Before formal class starts, each study group collects all members' preview puzzles uniformly and submits to the teacher; the teacher sorts out high-frequency common doubts from collected preview information and takes these targeted confusing points as the core inquiry topics of in-class cooperative discussion, which greatly reduces ineffective classroom teaching content and optimizes the utilization efficiency of 45-minute class time from the source, effectively lowering students' classroom learning energy loss rate^[1].

4.2. In-class Stage: Six-step Closed-loop Teaching Links to Realize Efficient In-class Inquiry

Based on lots of frontline Chinese teaching practical experience summarized by Yao Xiaping and Zhao Cheng, the in-class teaching part is divided into six closely connected progressive links to guarantee orderly classroom development and balanced cultivation of multiple core literacy^{[3][7]}.

(1) Interesting Situational Lead-in Link: Teachers select diversified lead-in forms adapting to primary students' psychological characteristics including relevant short stories, literary riddles, beautiful music, real-scene video clips and character role introduction according to specific text content. For instance, adopting real tide landscape video to introduce the text Viewing the Tide, using historical allusion story to start the learning of General and Premier, utilizing character guessing game for new character teaching of Sweet Osmanthus Rain, rapidly activate students' learning interest and pull pupils into text learning atmosphere within several minutes at the beginning of class^[6].

(2) Dual-objective Presentation Link: After successful classroom lead-in, teachers explicitly display dual teaching objectives including knowledge objective (vocabulary mastery, text content understanding) and core literacy cultivation objective (corresponding autonomous inquiry & cooperative communication ability training), making all students clarify learning direction of the whole lesson.

(3) Overall Text Perception Link: Organize diversified reading forms including teacher's model reading, whole-class collective reading and individual skimming, guide students to grasp the general writing clue and core theme of the full text rapidly and lay foundation for subsequent in-depth content inquiry.

(4) Group Preview Achievement Display Link: Each group sends representatives to present their

preview harvest orderly including new-word learning outcomes, text structure sorting results and preliminary reading experience; other groups supplement and put forward different opinions aiming at displayed content, teachers make targeted correction and key knowledge emphasis aiming at common wrong points appeared in preview display.

4.3. After-class Stage: Three-classroom Synergistic Extended Learning to Expand Chinese Educational Boundary

Following Huang Jiqing's three-classroom Meta-Classroom construction conception, the after-class extended learning part realizes organic linkage of first classroom leftover consolidation, second classroom offline practical activity and third Meta-Classroom online virtual learning^[2], combining Jiang Min's thematic reading teaching research fruits to take textbook unit theme as core of all after-class expansion design^[9].

First Classroom after-school part: teachers design three levels of hierarchical written homework corresponding to students' academic tier, basic-level homework focuses on text key content review; improvement-level homework centers on text fragment appreciation and sentence writing; expansion-level homework guides students to finish short thematic reading reflection.

Second Classroom offline practical part: rely on school's Chinese student association, campus reading salon and off-campus cultural museum, library & patriotic education base resources to organize diversified offline activities such as unit-themed handwritten newspaper making, textbook drama rehearsal and field research activity, realize the practical transformation of in-class Chinese knowledge.

Third Meta-Classroom online virtual part: make full use of legitimate domestic online reading platforms and simple VR immersive resource to build virtual reading classroom, organize regular online themed debate, cloud reading sharing and immersive historical scene simulation learning activities beyond fixed campus space restriction, realize anytime autonomous online reading for students after school.

All three after-class links center on unit unified theme to form closed-loop extended learning matching in-class teaching content, continuously deepen students' thematic reading accumulation and innovative practical literacy.

4.4. Layered Cooperative Inquiry Link

Take preview-collected common doubts as inquiry core, carry out hierarchical group discussion with fixed member role rotation rule, deliberately create more speech opportunities for underachieving group members to guarantee classroom teaching fairness required by high-benefit efficient classroom^[1]. Teachers patrol among different groups during discussion process, give targeted prompt guidance when groups fall into long-time thinking deadlock instead of directly announcing standard answers to retain students' independent inquiry space.

4.5. Summary & In-class Instant Drill Link

Teachers organize whole-class joint summary of text core knowledge and literacy harvest after inquiry activities finish; reserve no less than ten minutes fixed in-class drill time according to efficient classroom training quantity standard, arrange layered written exercises of basic word consolidation, excellent sentence excerpt and short paragraph imitation respectively for three-level students, realize most basic knowledge consolidation finish in class to cut down excessive after-school written homework burden^[7]. Meanwhile, teachers reasonably compress their own unilateral lecturing time to practice Long Baixin's "less teaching, more learning" core classroom technique principle^[4].

5. Supporting Guarantee Strategies for Efficient Classroom Implementation

5.1. Improve Mentor-mentee Pairing System and Standardized School-based Teaching Research Mechanism

Aiming at young teachers' insufficient theoretical accumulation highlighted in field investigation, schools establish two long-term teacher development mechanisms. First, implement formal blue-green mentor-mentee pairing project: arrange senior backbone teachers with abundant efficient classroom

practical experience to form fixed mentoring relationship with new teachers who have less than five-year teaching experience, realize regular listening to new teachers' daily lessons, targeted after-class lesson evaluation and joint lesson preparation before new teaching content, improve young teachers' practical classroom operation ability via demonstration teaching and one-to-one guidance. Second, normalize categorized school-based teaching research themed on core literacy and efficient classroom construction: regularly organize special theoretical training combining Zhang Ming's efficient obstacle research and Long Baixin's three-level classroom development theory^{[1][4]}, arrange monthly heterogeneous-course teaching activity and quarterly multiple-round lesson polishing; carry out three-stage reflective teaching requirement including pre-lesson predictive reflection, in-process instant reflection and post-lesson comprehensive summary reflection for all Chinese teachers, form the closed-loop teacher growth mode of "teaching practice→timely reflection→optimized teaching adjustment".

5.2. Optimize Diversified Classroom Teaching Methods and Rational Multimedia Application

Popularize situational teaching method in daily character teaching and text explanation: adopt character riddle, pictographic analysis and life-associated introduction for lower-grade Chinese character teaching represented by words in Sweet Osmanthus Rain to reduce pupils' memorization difficulty^[6]. Teachers clarify the auxiliary positioning of multimedia teaching equipment according to Jiang Min's research conclusion: multimedia video and picture resources can be used for scene restoration and classroom lead-in, but they cannot replace students' independent text reading and personal imagination; teachers shall avoid directly presenting all content that requires pupils' in-depth text appreciation and autonomous thinking through courseware direct full presentation via courseware to prevent rigid thinking solidification caused by over-reliance on digital resources^[9]. Meanwhile, teachers implement layered questioning design in every formal class, set basic-oriented questions for underachievers and expansion-oriented open questions for advanced students; teachers make use of after-school service time to carry out targeted one-on-one tutoring for pupils who cannot follow mainstream teaching rhythm in class.

5.3. Construct Classified Multi-dimensional Differentiated Classroom Evaluation System

Follow the three-quantity (information quantity, thinking quantity, training quantity) and three-movement (body movement, mental movement, spiritual movement) efficient classroom evaluation criteria proposed by Zhang Ming, formulate differentiated evaluation indexes for new-teaching lesson, review lesson and exercise-comment lesson respectively^[1]. For new lessons, evaluation focus on the completion degree of dual teaching objectives and students' whole-class participation condition; for knowledge review lessons, evaluation core lies in whether students can independently finish knowledge framework construction rather than teachers' systematic knowledge listing; for exercise comment lessons, evaluation concentrates on teachers' targeted error screening efficiency and matching variant exercise design effect. Teachers break the past single-score evaluation mode, build multi-subject evaluation system integrating teacher scoring, intra-group mutual evaluation and student self-evaluation, and incorporate multiple non-examination indicators including classroom speech performance, group cooperation performance and after-class reading achievement into comprehensive Chinese learning assessment^[9].

6. Practical Teaching Effect and Existing Deficiencies after Experimental Implementation

6.1. Positive Practical Teaching Effects of the New Three-stage Mode

After continuous one-semester controlled comparative teaching experiment between experimental class adopting the constructed three-stage teaching mode and control class retaining traditional teaching method, tangible differentiated data appears in multiple learning indicators. In terms of independent preview completion rate: the experimental class's average valid preview finish rate rises from original 29% before experiment to 78% after one-semester implementation, while the control group only increases slightly from 27% to 33% under unchanged teaching mode; in terms of in-class active speech frequency: experimental students' voluntary in-class presentation quantity improves by 52% compared with pre-experiment level, most formerly quiet underachieving students gradually dare to express personal ideas in group discussion; from academic achievement perspective, the experimental class's average Chinese unit test score rises by 7.2 points compared with the start of experiment, showing obvious overall academic progress.

From teacher development dimension, among those 81% interviewed young teachers who never

contacted systematic efficient classroom mode before the research, most gradually master layered preview design and six-step in-class teaching skills after participating in school-based research and experimental teaching observation, finish the transformation from past indoctrination teaching concept to student-oriented core literacy teaching idea. All experimental data fully verifies the practical effectiveness of the three-stage teaching mode constructed in this paper.

6.2. Existing Practical Limitations and Restrictive Factors

First of all, part of participating teachers mechanically copy fixed six-step classroom links rigidly without personalized adjustment according to real-time classroom generating situation, leading group cooperative learning and situational lead-in falling into formalized superficial activity, violating Long Baixin's progressive development law from fixed classroom technique to personalized classroom craftsmanship^[4]. Secondly, restricted by limited daily class arrangement and tight curriculum schedule, after-class practical activities such as textbook drama performance and themed offline debate cannot realize regular weekly development and are only carried out on occasional special activity days. Thirdly, the construction of third Meta virtual classroom is constrained by insufficient school digital hardware configuration and limited special education fund allocation; the uneven distribution of digital resources among different urban schools leads to unbalanced popularization progress of online extended learning across regions.

7. Conclusion and Future Research Prospect

Centering on core literacy cultivation goal required by new curriculum reform, this research takes authoritative domestic research fruits of core literacy, hierarchical efficient classroom and three-classroom Meta education as solid theoretical foundation, combines field questionnaire statistics and real teacher-student interview data of urban primary Chinese teaching, summarizes four prominent practical teaching dilemmas in current urban campus, and innovatively constructs the three-stage integrated teaching system covering hierarchical pre-class preview, six-link in-class inquiry and three-classroom-linked after-class expansion. The full-semester controlled teaching experiment verifies that the proposed teaching mode can effectively improve students' autonomous learning, cooperative communication and innovative practical core literacy, optimize classroom time utilization efficiency and reduce invalid teaching links, which provides operable practical blueprint for frontline urban primary Chinese teachers to realize core literacy-oriented efficient classroom reform. Meanwhile, practical implementation also exposes existing drawbacks including mechanical copy of fixed teaching procedures and insufficient digital resource input for Meta-Classroom construction, which need continuous optimization in follow-up long-term teaching practice.

In future follow-up research and practical popularization work, three optimization directions can be further promoted: first, continuously enrich categorized school-based teaching research content to guide teachers break rigid mechanical imitation of fixed classroom technique and gradually form personalized classroom craftsmanship adapting to their own teaching style and class characteristics^[4]; second, reasonably integrate school after-school service spare time to make various second-classroom offline Chinese practical activities normalized and institutionalized; third, rely on local regional education informatization promotion policy to strive for special digital education funding, improve campus online learning hardware configuration step by step and perfect the resource construction of third Meta virtual classroom. With continuous iterative optimization of the whole teaching system, urban primary Chinese classroom can realize comprehensive transition from past exam-oriented knowledge indoctrination to core literacy-oriented all-round student cultivation.

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References

- [1] Zhang M. *Obstacles and Improvement Strategies for the Implementation of Efficient Classroom*[J]. *Chinese Journal of Education*,2011,11:53-55.
- [2] Huang J Q. *Research Review and Contemporary Definition of the Third Classroom*[J]. *Education Exploration*,2025,03:44-48.
- [3] Zhao C, Wang C Y. *Practical Exploration on Constructing Efficient Primary Chinese Classroom*[J]. *Gansu Education*,2020,05:84.
- [4] Long B X, Zhe Y D. *Research on the Construction Logic of Efficient Classroom*[J]. *Educational Research*,2014,06:122-129.
- [5] Xin T, Jiang Y, Lin C D. *Connotation, Characteristics and Framework of Students' Developmental Core Literacy*[J]. *Chinese Journal of Education*,2016,06:3-7,28.
- [6] Wang Z Q. *Exploration on Efficient Classroom for Senior Grade Primary Chinese Teaching*[J]. *Tutorship for Primary Students*,2021,32:26.
- [7] Yao X P. *Practical Exploration of Primary Chinese Efficient Classroom Teaching Mode*[J]. *Documentary Resources*,2016,06:59-60.
- [8] Wang Y. *Construction Exploration of Primary Chinese Efficient Classroom*[J]. *China School Education*,2017,18:112-113.
- [9] Jiang M. *Research on Thematic Reading-oriented Efficient Primary Chinese Classroom*[J]. *Extracurricular Chinese*,2019,22:92-94.