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Inquiry-Based Teaching Method and Junior High School Chinese Language and Literature Education—A Brief Analysis of Challenges in the Teaching Process and Solutions

Mengke Li

University of Edinburgh, Edinburgh, Scotland, the United Kingdom

Abstract: ***Inquiry-based teaching and learning have gained significant attention in the education field in recent years and have been formally introduced into compulsory education classrooms in China (Zhang et al., 2005). However, its effective implementation in junior high school Chinese (language and literature) classes faces various challenges, including teaching efficiency, differences in student abilities, and the unique psychological characteristics of adolescence. To address these challenges, several strategies have been proposed and discussed, such as clarifying inquiry steps, grouping students based on their abilities, combining lectures with inquiry, integrating group and individual inquiries, and maximising the teacher's guiding role. These measures aim to facilitate the application of inquiry-based teaching in junior high school Chinese classrooms.***

Keywords: Inquiry-based; Junior high school Chinese language and literature; Challenges; Solutions.

1. INTRODUCTION

The choice of teaching methods has long been a popular topic of discussion in the field of education. Since the 1970s, student-centred teaching methods and inquiry-based teaching models have gradually gained popularity (Weimer, 2013). These methods emphasise the learning process and strategies rather than the knowledge itself (Vygotsky, 1978). In inquiry-based classrooms, teachers encourage students to collaborate to identify problems, find solutions, resolve problems, and reflect on outcomes, thereby fostering students' abilities from different dimensions, such as subject knowledge, learning abilities, and critical thinking (Prince, 2007).

However, as inquiry-based teaching has been promoted worldwide, numerous challenges have emerged. These include slow teaching progress, inconsistent student abilities that negatively impact inquiry outcomes, and difficulties in classroom management (Gutierez, 2015). This paper explores issues related to inquiry steps, student grouping, and the teacher's role, discussing strategies to overcome these challenges and ensure the effective implementation of inquiry-based teaching in Chinese language and literature class.

2. Literature Review

The origins of inquiry-based teaching can be traced back to the 1930s. The American educator Dewey (1938) argued that children’s understanding of the world arises from their integration into society, an approach often referred to as "learning by doing." He emphasized fostering students' curiosity to promote their enthusiasm for learning and creativity, thereby enhancing their learning abilities. This idea gained recognition among many educational scholars and was widely promoted in American primary and secondary classrooms (Gutierez, 2015). However, due to its immature theoretical foundation, it failed to show significant results during implementation at that time (Prince & Felder, 2007).

In 1961, Schwab introduced the concept of "inquiry-based teaching" at an educational conference at Harvard University. He pointed out two key ideas: *science as inquiry and teaching by inquiry*, supporting the cultivation of students' scientific understanding through guided inquiry into objective phenomena. This marked a major advance in the development of inquiry-based teaching. By the 1970s, this approach had been widely integrated into science classrooms across countries such as the United States, the United Kingdom, France, and Japan (Prince, 2007). Over time, its application expanded from natural sciences to humanities and social sciences (Costes-Onishi et al., 2020).

In 2001, China's Ministry of Education issued the *Outline of Basic Education Curriculum Reform (Trial)*, which encouraged teachers to organize students for inquiry activities, marking the formal introduction of inquiry-based teaching into Chinese primary and secondary education. That same year, the *Full-time Compulsory Education Chinese Curriculum Standards (Experimental Draft)* was published, explicitly promoting self-directed, cooperative, and inquiry-based learning styles alongside fostering an innovative spirit in Chinese language and literature classrooms. The standards were revised in 2011, further highlighting the importance of inquiry-based teaching in Chinese education during compulsory education.

These policy documents sparked considerable interest among Chinese educational researchers. For instance, Wang (2009) outlined the stages of inquiry-based teaching—encountering problems, exploring them, presenting findings, and reflecting. Zhai (2011) analyzed the effectiveness of inquiry lessons, focusing on the precision, breadth, depth, quality, and simplicity of inquiry content. Shen (2013) proposed the "3D" teaching model (Discover, Discuss, Deliver) based on inquiry principles, demonstrating through research that this model could enhance students' interest and performance in Chinese language and literature learning. Zhang (2015) incorporated the unique characteristics of Chinese language instruction, proposing strategies like "small context," "large context," and multi-perspective inquiry to guide teachers in effectively linking teaching materials with inquiry activities. These studies have provided valuable theoretical and practical support for the development of inquiry-based teaching in Chinese language and literature education in China.

Nevertheless, inquiry-based teaching is a student-centerd approach where students are the primary agents in classroom activities, while teachers play a guiding and participatory role (Prince & Felder, 2007; Weimer, 2013). This has led some scholars to label it a "minimalist teaching" model, arguing from cognitive structure theories that it is ineffective and outputs inferior results compared to direct instruction (e.g. Kirschner et al., 2006). Others have noted that inquiry-based teaching presents significant classroom management challenges for teachers. For example, differences in student abilities within groups may leave some students completing tasks early and feeling boring, while others struggle to get started (Gutierez, 2015).

In summary, inquiry-based teaching continues to gain prominence internationally and domestically. However, its implementation poses challenges from both student-learning and teacher-teaching perspectives. To ensure its effectiveness, it is essential to understand the theoretical underpinnings of inquiry-based teaching and design specific strategies to apply it to individual circumstances. This includes not only different subjects but also different students demands, which would enable the most effective implementation of this teaching method. This is what this paper aims to discuss.

3. Challenges in Application

The author, as both a teacher and a researcher, has been practicing inquiry-based teaching in junior high school Chinese classrooms for several years. My students range from Year 7 to Year 9, and the class size is around 20 students, with Chinese being the students' native language. Based on the previous research and teaching experiences, the challenges of implementing inquiry-based teaching can be broadly summarized into three main categories:

3.1 The Impact of Collaborative Inquiry on Teaching Progress

Whether in public schools, private schools, or international schools, and regardless of the version of the Chinese language textbook used, there are fixed curriculum progress requirements (Gutierez, 2015). Inquiry-based teaching, which prioritizes student-centered learning, often requires a significant amount of class time for students to engage in self-directed learning. This approach inevitably takes longer than direct instruction. For instance, when teaching imagery in poetry, a teacher can explain the concept of imagery and provide illustrative examples just for about 20 to 40 minutes. In contrast, allowing students to collaboratively explore related concepts, discuss them, and then present their findings in groups might take two to three hours—substantially more time than direct teaching.

3.2 The Impact of Differentiations on Inquiry Outcomes

Inquiry-based teaching emphasizes collaborative efforts to identify, analyze, solve, and reflect on problems (Prince & Felder, 2007). However, variations in students' abilities and study habits within a learning group could hinder its effectiveness. When the inquiry task is too challenging, weaker students may become entirely reliant on

stronger peers, losing the opportunity to engage meaningfully in the inquiry process. Conversely, if the task is too simple, advanced students may lose interest, perceiving the activity as a waste of time.

Moreover, teachers generally give the same mark to all students in one group based on their collective performance. As a result, highly capable students who are eager to secure high grades may end up completing the tasks themselves, excluding less capable group members from contributing, which leads to unequal distribution of responsibilities within the group. These disparities can further complicate classroom management. For example, advanced students who finish early may become disruptive by chatting, while weaker students who feel disengaged and have nothing to do. These issues are more pronounced in larger classes, ultimately diminishing the expected effectiveness of inquiry-based teaching.

3.3 The Impact of Adolescents' Psychological Characteristics on Inquiry Outcomes

Junior high school students, particularly those in the latter half of Y7, are entering a critical stage of development—adolescence. During this period, students often exhibit heightened self-awareness, active thinking, and rich emotions, yet struggle with effective communication (Yan, 2008). These psychological characteristics pose challenges to group-based collaborative inquiry. Disputes over differing viewpoints within groups can escalate into conflicts. In some cases, disagreements may become so intense that certain students request to leave the group and complete the task independently. Emotionally sensitive students may even react to group dynamics with visible distress, such as blushing or crying, further disrupting group harmony. These issues, developing from the unique psychological characteristics of adolescence, reduce the efficiency and effectiveness of collaborative inquiry to some extent.

4. Exploring Solutions to Different Challenges

Based on the challenges mentioned above and in conjunction with my teaching practice, I have summarized the following solutions, aiming to provide recommendations for the implementation of inquiry-based teaching in secondary Chinese language and literature education.

4.1 Clarifying Inquiry Steps

Different educational researchers propose varying perspectives on the teaching steps of inquiry-based learning (Furtak et al., 2012). Broadly, these steps can be summarized into three main phases: inquiry, action, and reflection. Alternatively, they can be further detailed into five stages: posing questions, conducting investigations, generating insights, sharing discussions, and reflecting on conclusions. Clearly defining these steps and implementing targeted strategies for each phase maximizes the effectiveness of inquiry-based teaching. Below is a detailed discussion of these five stages:

4.1.1 Posing Questions

Posing questions does not mean allowing students to ask aimless questions; rather, it requires students to base their inquiries on a foundational understanding of the subject. Banchi and Bell (2008) proposed the concept of "progressive inquiry," dividing inquiry into four levels:

- Confirmation Inquiry: Teachers provide questions, explain methods, and offer answers; students verify the answers using the methods provided.
- Structured Inquiry: Teachers provide questions and explain methods, but students are expected to find the answers themselves.
- Guided Inquiry: Teachers pose questions, requiring students to devise their own methods and use them to find answers.
- Open Inquiry: Students independently pose questions, design methods, and discover answers.

This progression mirrors a deepening cognitive process. In junior high school Chinese classes, seventh-grade students often retain elementary-level learning and answering habits. For example, when asked to "analyze the function of a metaphor," students typically provide a simple response like "vivid and expressive." At this point, the teacher can appropriately use confirmation inquiry to help students establish a deeper approach to literary analysis. Throughout seventh and eighth grades, structured and guided inquiry should dominate, with open inquiry used as a supplement. Teachers primarily pose the questions, gradually guiding students to analyze texts from multiple

perspectives, improving classroom efficiency. By ninth grade, as students develop sufficient knowledge and skills, they become capable of posing valuable questions themselves. This makes ninth grade an ideal time to practice open inquiry, laying the groundwork for more advanced literary analysis in high school.

4.1.2 Conducting Investigations

This phase involves group-based investigations addressing the posed questions. Teachers hold differing views on the use of external tools for investigations. Some prefer students to use technology, while others advocate classroom discussions without external tools, because this could lead to issues like copying answers from online sources or unreliable materials (Kirschner et al., 2006; Gutierez, 2015; Zhang et al., 2014).

The investigation process should depend on the specific inquiry. For example:

- In-class investigations: For analyzing texts studied in class, students should engage in group discussions to deepen their understanding of their knowledge and collectively derive answers without any technology support.
- Out-of-class investigations: For tasks such as exploring works like The Essays of Mr. Zhu Ziqing, students can conduct inquiries outside class, with teachers recommending authoritative resources to guide self-directed learning.

Combining in-class and out-of-class investigations fosters analytical thinking and self-learning while enhancing inquiry efficiency.

4.1.3 Generating Insights

This step requires students to summarize their findings and form a comprehensive understanding of the inquiry questions. Summaries can take diverse forms, such as posters, slideshows, or comics. However, in current collaborative inquiry classrooms, it is common to see group leaders divide the tasks, with each student only responsible for completing their own part rather than thinking about the sections handled by their peers. While this summary may appear complete, it is actually fragmented. To avoid this, teachers should emphasize consistency and integration, ensuring all students are familiar with every part of the group's summary (which can be verified in subsequent stages). This practice maximizes the overall quality of the group’s work.

4.1.4 Sharing Discussions

This stage involves presenting findings (e.g., posters or slides) as a group to the whole class. During this phase, teachers evaluate and grade the inquiry results while summarizing solutions, methodologies, and outcomes of each group. For greater reliability, a combination of group self-assessment, inter-group peer review, and teacher evaluation can be employed.

Common issues include students delivering uninspired, scripted presentations while their classmates remain disengaged. To solve this, teachers can enhance interaction by linking presentation quality to grades (e.g., requiring presentations without scripts) and involving listeners more actively. For instance, students could complete prediction forms before presentations, note potential answers, listen critically, and pose questions or contrasting viewpoints afterwards.

4.1.5 Reflecting on Conclusions

In this step, students enhance their understanding of the inquiry question through personal reflection, peer discussions, and teacher feedback. Teachers can provide reflection templates for students to document their learning. Templates might include sections for summarizing answers, learning new vocabulary, identifying effective presentation techniques, and outlining analytical strategies.

This step not only deepens students’ understanding of the inquiry question but also cultivates their abilities to think critically, solve problems, and summarize effectively. Some teachers, in a rush to meet curriculum schedules, omit this reflection stage after discussions. Although this might seem to expedite progress, it deprives students of valuable opportunities for self-reflection and improvement, thereby diminishing the overall effectiveness of inquiry-based teaching activities.

4.2 Grouping Students Based on Abilities

In classrooms, especially those with large numbers of students, polarization in academic performance is inevitable. Addressing how to form effective groups in highly polarized classes—where 20% of students score near full marks and 20% fail—is a critical issue. Experimental research suggests that grouping students of varying abilities within the same group, with the aim of having stronger students assist weaker ones, often leads to stronger students dominating all the work. This results in weaker students being deprived of opportunities for inquiry and expression, effectively placing them in a state of long-term marginalization (Gutierez, 2015).

To address this issue, students of similar or near-similar abilities should be grouped together, with group sizes ranging from 4 to 6 students. Inquiry questions should then be differentiated based on the group's ability level. For instance, groups with weaker students can focus on simpler inquiries, such as identifying unfamiliar words or analyzing literary devices, while advanced groups can tackle more complex tasks, like interpreting the meaning of specific sentences or discussing the central ideas of a text.

This approach enables teachers to provide more targeted guidance during the inquiry process, ensuring differentiated instruction that neither bores advanced students nor overwhelms weaker ones. In less polarized classes—where approximately 30% of students score near full marks and only 5% fall below the passing line—more flexible grouping strategies, where students rotate between groups based on specific tasks, can promote better collaboration among students (Gentry, 2021). In such classes, the overall academic level is relatively strong, and the teacher can manage individual differences through one-on-one guidance without reducing the difficulty of inquiry tasks.

4.3 Combining Direct Teaching with Inquiry and Group Inquiry with Individual Inquiry

An analysis of inquiry steps reveals that completing a full inquiry activity within a class requires at least five to six hours. Given the heavy teaching workload of each semester, it is unrealistic to apply inquiry-based teaching to every text. Therefore, selective application of inquiry-based teaching is essential.

For Y7 and Y8 students, texts chosen for inquiry should be moderately challenging and conducive to comprehension, such as *Spring (《春》) and Deep in the Alley (《小巷深处》). For more complex texts, such as The Drama of the She Village (《社戏》) or On Giving Advice to Mashieng Dongyang (《送东阳马生序》)*, direct teaching methods can be employed. This dual approach allows students to quickly grasp difficult texts while gaining a sense of achievement through inquiry-based activities. It improves teaching efficiency while cultivating students' inquiry skills.

Additionally, although quality-oriented education is a dominant trend, students still face the pressure of exams. Collaborative inquiry ultimately serves as a foundation for developing independent inquiry skills, as students must eventually complete exams individually. Therefore, regular instruction should balance group and individual inquiries. For instance, group inquiries might focus on analyzing the structure or artistic techniques of an essay, while individual inquiries could extend these methods to their own writing. This makes individual inquiry an extension and evolution of group exploration.

4.4 Maximizing the Teacher's Guiding Role

Although inquiry-based teaching appears to be student-centered, the teacher's role remains indispensable at every stage. As previously discussed, teachers should provide timely, guiding feedback to students. They should encourage students when they are not participating in group work, issue appropriate warnings to disengaged students, and mediate conflicts within groups.

Specific examples include:

- Actively moving around the classroom during discussions to monitor group progress and address questions promptly.
- Educating students on the importance and value of teamwork when individuals request to work independently.
- During presentations, not only evaluating students' inquiry results but also providing constructive feedback to guide them toward appropriate analytical approaches.

In essence, while students are the protagonists of inquiry activities, teachers act as the connective thread, ensuring that the entire process is cohesive and effective.

5. Conclusion

In conclusion, the application of inquiry-based teaching in junior high school Chinese language and literature classrooms can cultivate students' critical thinking, creative thinking, as well as teamwork and peer communication skills. However, the implementation of this teaching method poses significant challenges for teachers, such as differences in students' abilities, developmental psychology, and the pressure of chasing to the teaching schedule.

To ensure the effective implementation of inquiry-based teaching, it is essential to integrate educational theory with practical classroom realities. Teachers should adopt differentiated instruction, clearly define the inquiry steps, and fully show their role as facilitators. This approach will not only help students develop learning abilities but also allow them to enjoy the process of inquiry itself.

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Author Profile

Mengke Li Ph.D. in Education, Moray House School of Education and Sport, University of Edinburgh; research interests: Chinese language education, culture, identity, and Chinese language learning. E-mail: mli33@ed.ac.uk.