Research on Computer Aided Chinese Reading Teaching Strategy under the Background of Intelligent Education

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\textbf{Abstract.} Intelligent education is the latest theory that affects reading teaching. It not only has two-tiered influence on the study of reading teaching strategies from both theoretical and technical aspects, but also has great significance for the comprehensive development of education in China. With the help of the Chinese Language Intelligence Research Center's "Reading the World" computer aided Chinese reading teaching platform system, aiming at cultivating the core literacy of students' Chinese courses, we clarify the promotion of teaching strategies which effect by the computer aided Chinese reading platform in the context of intelligent education from the perspectives of theoretical model and applied model.

\section*{Introduction}

Reading teaching is one of the important contents of the compulsory education stage \cite{1}. In the current society, the rapid development of artificial intelligence technology has caused tremendous impact on the education including reading teaching, which also caused people's reading content sources, methods and habits changed. The development of technology leads to the transformation of society's demand for talents directly. Inevitably, reading teaching strategies should also be promoted by the development of society.

Academician De-yi Li, chairman of the China Artificial Intelligence Society, believes that education is not only an important livelihood, but also the biggest dividend for talent development in the future. As the biggest part in the demographic dividend, intelligent education is of great significance to the overall development of China's education. Intelligent education AIFF (artificial intelligence education = deep integration of artificial intelligence and education) is the use of artificial intelligence technology, based on educational big data, accurate calculation of students' knowledge base, subject orientation, thinking type, emotional preference, ability potential, combined the law of acquisition and the law of education, rational allocation of education and teaching content, scientific implementation of teaching students in accordance with their aptitude, to promote students' comprehensive development and core quality improvement\cite{2}. The introduction of intelligent education has had an important impact on reading teaching strategies.

\section*{Organization of the Text}

\textbf{Computer Aided Reading Platform}

Intelligent education not only conform to the new trend of improving teaching with educational big data in the context of artificial intelligence, but also realizes the transformation of teaching methods with the help of online learning platform, which will become the trend of educational reform and development in the world. The platform of "Reading the World", which is a computer aided reading
platform, is based on big data, with readers as the subject, using artificial intelligence technology to improve reading efficiency, select reading content, and create a new reading mode for personalized reading services [3].

**Theoretical Model.** The Six Dimensions reading model—the direction of individual development, the level of individual knowledge, reading content’s level, quality, quantity and reading effect model, is the core theoretical basis of computer aided reading platform based on cognition and learning law, which is aimed at clarifying the direction of student growth. The function to judge the ability in a specific growth direction, determine the reading ability level of students accurately, choose the reading content scientifically, ensure the high quality of the reading content, control the length of reading content and the length of reading time scientifically, and ensure that the reading activities achieve the design effect. The core solution is to make up for the gaps among knowledge points. Reading ability training is the main purpose of reading teaching. The improvement of reading ability should not be in isolated single point way, but should be in a focused and regular system way [4].

![Figure 1. The Six-dimensions Reading Model.](image)

**Application Model.** Computer Aided reading platform combines four steps of reading ability assessment, reading data analysis, reading content recommend and reading activities to form a closed-loop for improving reading ability. The reading scope covers a number of major subjects. It adopts a variety of reading methods to improve reading ability. In the end, the auxiliary system of intelligent reading could cover the reading teaching phase of pre-class, in-class, after-class, and extra-curricular reading scene. It can also retain the full record of the learning process, recommend the reading content targeted, cooperate with the teacher to complete the reading teaching link effectively, and combine the effective integration of artificial intelligence technology and reading teaching application together.

The evaluation of "Reading the World" is an effective way to comprehensive evaluate the learner's reading ability. It is a vital technical way to construct a learner's reading ability slice model which could track the learner's individual reading ability precisely [5]. The “Reading the World” computer aided Chinese reading teaching platform system is based on the cultivation of the core literacy ability of the language, and is based on the “Orientation, Positioning and Grading” model of the Six Dimensions theory, evaluate students' reading ability accurately.

Reading data analysis is of great significance for capturing learners' reading learning activities, knowledge acquisition methods and constructing reading strategy knowledge [6]. Computer aided reading, while recording the learner's entire reading data, takes individual data as research sample, and uses the "qualitative, quantitative, and effective" model of the Six Dimensions theory to capture the reading characteristics of the learner and establish the foundation for constructing a comprehensive knowledge map to provide a reliable basis for personalized reading.
Reading content recommendation is the core function for personalized learning which is based on resource multi-dimensional annotation and reading data analysis in reading intelligent platform. “Reading the World” break down the time and space limitations of reading resources by chapter topic aggregation and topic expressive analysis, filter reading resources intelligently, and assists learners to promote personalized reading ability efficiently.

As with other learning activities, the most effective way to acquire reading knowledge is to stimulate the inner learning motivation of students' self-reading. Compared with the traditional teaching strategy in reading class, “Reading the world” not only achieves the accurate matching of learners from the reading resources, but also change the learners as the dominant players from the perspective of reading learning services, and provide a platform for the learners to release their enthusiasm and creativity, change the situation of learners accepting knowledge indoctrination passively.

Figure 2. Intelligent Reading Functions.

Improving Reading Teaching Strategies

In the context of intelligent education, from the design concept to the application, the computer aided reading system has significant influence on the reading teaching strategy from the four aspects of ability evaluation which are reading ability evaluation, data analysis, content recommendation and activity stimulation. It not only improves the teaching communication mode, promotes students’ autonomy learning, contributes to the cultivation of deep reading habits, but also provides a new teaching strategy for language reading.

Reading Teaching Strategies Assist Improving Teaching Communication. This reading teaching strategy constructs a real learning situation and makes the teaching communication more complete. In the past, Chinese reading teaching of a single text is almost all about one certain knowledge. It is difficult to form a coherent knowledge system among the texts. What’s more, the knowledge content is almost rigid and closed, so it is unrealistic to adapt to the world’s development and theoretical progress [7]. In the computer aided reading platform, reading knowledge becomes the start of learning. Under the conditions of language application context in which the knowledge is organically integrated, students can complete the reading learning tasks arranged by the teacher in advance, and clarify their level of cognitive ability, determine the focus of reading and learning in the intelligent computing system, then start class training with questions.
In this case, the classroom-centered teaching model will be changed. Teachers can publish reading tasks through the intelligent reading platform. They use artificial intelligence technology to analyze the situation before class, focus on typical problems, organize discussion and exchange in classrooms, promote the occurrence of deep learning, and further improve the teaching communication vividly and completely. The efficiency of education and teaching will also be increased significantly.

**Reading Teaching Strategies Promote Students' Self-directed Learning.** The computer aided Chinese reading platform can vest more rights to students in reading learning, and promote students to carry out independent and individualized reading practice. The transformation of teaching methods implies the redistribution of curriculum rights profoundly, which means to exert the autonomy and independence of students' learning legitimately. In this perspective, intelligent computer aided reading platform makes implantation classroom teaching method has no more advantage. The core concept of reading teaching is no longer to regard students as passive recipients of knowledge, but to stimulate students to propose the complex and open problems with certain comprehension. Teachers can open up a learning path based on the question that the intelligent system filtered in the classroom, and lead the students to rediscovery knowledge. It requires not only students to acquire new knowledge, but more importantly, reconstruct and internalize the new knowledge in the process of combining their existing knowledge or experience, migrating and applying knowledge in the future.

Therefore, the effective reading activities should be the speech practice with the students’ willingness. Students can learn typical topics, create profound discussions, exchange learning insights share learning outcomes to better complete learning tasks and solve learning confusion with the assist of the intelligent network platform. For example, the platform could recommend articles of different themes according to the reading interests and abilities of different students. Hereafter the students can be leaded to complete the task of reading and writing which focused on cultural relic’s protection plan, folk investigation report, poetry appreciation collection, career planning book, theme restaurant design and so on. They can play a subjective initiative to carry out personalized teaching practice independently.

**Reading Teaching Strategies can Cultivate Deep Reading Habits.** More importantly, the computer aided reading platform can break out the limitations of space and time, and cultivate students' deep reading habits precisely. Traditional reading teaching is limited to the classroom with certain space, certain time and certain number of students. With the rapid development of intelligent technology, different types of handheld terminals assist people to achieve the goal of reading “anytime, anywhere”. Accordingly, the time and space boundaries of reading are completely cleared away. Learners are no longer just paper readers in reading class. However, the phenomenon of fragmentation and superficiality which is caused by e-reading also makes people wonder whether it can really promote the reading contents’ quality or help the readers forming deep reading habits. In fact, the computer aided reading teaching in the context of intelligent education is not the digitization of learning content, not the fragmentation of technology to the curriculum, nor the disorderly and untargeted natural reading of students. We should consider it in the intelligent teaching ecosystem. It is to coordinate the relationship among various elements in teaching activities through the intelligent information interaction both online and offline, and then reshape the single mode of traditional reading teaching in classroom, make the recreation of "hybrid" learning ecosystem come true.

Based on its powerful intelligent computing ability, teachers could use the function of text automatically recommendation in computer aided reading teaching platform as learning resource and lead students to an opening, unbounded and personalized reading field. Teachers could focus on organizing the group to do collaborative question-oriented learning and project based learning, then promote students to a higher level of cognitive ability. Reading not only becomes a way of life, but also the main channel for the improvement of thinking literacy.
Summary

The essence of computer aided reading teaching strategy under the background of intelligent education is not the technical orientation, but the transcendence of the traditional reading teaching in class mode. It oversteps from the "end point" of the text center and the knowledge-based skill teaching in the past to core literacy-oriented situational creation and task-driven teaching. It reflects the concept’s change of the study and the trend of the balanced development of education profoundly. Educational fairness is the ultimate goal of intelligent education which includes computer aided reading system. The promotion of education in computer aided reading system is reflected in large-scale and rapid evaluation methods, adaptive learning strategies to promote deep learning and the personalized development of each student gained in reading. True fairness is substantive fairness. The substantive fairness of education is responding to the call of the new era for everyone in the balanced development of education.

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