Cultivating College Students' English Reading Ability in the Digital-intelligence Era

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Abstract: In the digital-intelligence era, emerging digital and intelligent technologies have brought profound changes to educational models, posing new challenges and opportunities for cultivating college students' English reading abilities. This paper discusses the connotation and characteristics of English reading ability in the digital-intelligence era. It identifies current issues such as insufficient innovative thinking in English reading, a lack of deep reading skills, and weak digital reading abilities among college students. To address these issues, the paper proposes strategies including enhancing critical reading training to foster innovative thinking, reshaping deep reading habits to improve deep reading, and integrating digital literacy education to develop digital-intelligent reading skills. Ultimately, these approaches aim to comprehensively improve college students' English reading abilities in the digital-intelligence era, thereby enhancing their overall quality and international competitiveness.

Keywords: English reading ability; digital-intelligence era; innovative thinking; deep reading; digital -intelligent reading skills

1. Introduction

The era of digital intelligence refers to a new epoch driven by emerging digital and intelligent technologies. These technologies, based on information and digitalization, integrate with artificial intelligence (AI) to create innovative technological tools and operational systems [1]. Their rapid iterative development has brought revolutionary changes to the forms and methods of education, challenging traditional educational models while offering opportunities for improving educational quality. For the field of English education, responding to the challenges of the digital intelligence era is particularly essential. As a bridge for international communication, English facilitates students' access to cutting-edge global knowledge and enhances their international competitiveness. Within English education, reading ability is a core aspect of language learning. Through reading, students not only build and accumulate knowledge of the English language and culture but also develop critical thinking skills, forming an essential foundation for enhancing their overall competence. Therefore, improving college students' English reading ability is crucial to cultivating interdisciplinary talents with global perspectives and cross-cultural capabilities.

However, in the digital intelligence era, the cultivation of English reading ability among college students faces significant challenges. These include the overwhelming and fragmented nature of digital information, which makes it difficult for students to maintain focus during reading, leading to a decline in deep reading capabilities. Additionally, students tend to rely excessively on translation tools and AI-assisted technologies during reading, which weakens their capacity for independent thinking and hinders the development of critical and innovative thinking skills [2][3]. Furthermore, traditional English teaching methods fail to adapt to the demands of digital reading in this era, lacking systematic training in digital reading skills. These issues not only limit students' ability to comprehend diverse and complex English texts but also impede the enhancement of their cross-cultural communication skills.

Therefore, this paper seeks to explore new approaches to cultivating college students' English reading abilities in the digital intelligence era. This effort represents not only a transformation of traditional educational models but also an inevitable choice to meet the demands of the times and improve the nation's talent competitiveness.

2. English Reading in the Digital-intelligence Era

2.1 English Reading Ability in the Digital-intelligence Era

Reading is a vital skill required in both daily life and academic contexts, serving as an essential means for enhancing other language skills. Among the most critical skills within a learning environment, reading enables individuals to acquire new information and explore diverse interpretations of that information. For college English learners, reading is one of the most important skills to master, as it not only aids in expanding vocabulary and improving language comprehension but also fosters critical thinking and cross-cultural communication skills.

English reading ability refers to the capacity to read and deeply comprehend the meaning of passages in English written materials. It is an indispensable skill for assessing students' ability to comprehensively apply their English knowledge and is regarded as a key component of English learning and evaluation [4][5]. in the digital-intelligence era, English reading ability is defined as the ability of college students to effectively acquire, comprehend, analyze, and apply information through reading English texts in a context where digital and intelligent technologies are deeply integrated. This ability encompasses traditional linguistic competencies such as vocabulary, grammar, and textual structure comprehension [6], while placing greater emphasis on skills such as quickly filtering information from massive datasets, critical thinking, cross-cultural communication, and utilizing digital-intelligent tools to support reading. The cultivation of English reading ability in the digital intelligence era aims to help college students adapt to the rapidly changing information landscape, enhancing their overall competence and international competitiveness. This objective aligns with the 21st-century skills framework, which stresses the importance of information literacy, critical thinking, and cross-cultural communication [7].

2.2 Characteristics of English Reading Ability in the Digital-intelligence Era

In the digital-intelligence era, the characteristics of college students' English reading abilities are first reflected in the efficiency of information acquisition and processing [8][9]. With the proliferation of digital and artificial intelligence technologies, students can quickly access vast quantities of English reading materials through various digital platforms, such as e-books, online journals, and educational applications. Compared with traditional reading, reading in the digital intelligence era emphasizes the diversity of information. Students must develop cross-platform reading skills and use smart tools, such as translation software and vocabulary lookup tools, to assist in comprehending complex texts. This convenience and diversity not only expand the range of available reading resources but also require students to possess the ability to filter, integrate, and analyze information rapidly.

In addition, the characteristics of college students' English reading ability are also evident in the integration of autonomous learning and critical thinking [10][11]. In a digitalized environment, students' learning methods are increasingly personalized, allowing them to choose reading content and learning paces that suit their individual needs. However, this also demands stronger self-regulated learning ability and time management skills to prevent information overload and distractions. Additionally, the digital reading environment is filled with unverified information, requiring students to cultivate critical thinking skills to assess the authenticity, reliability, and relevance of information. This capability manifests not only in the deep analysis of textual content but also in the multidimensional evaluation of information sources, authorial intent, and cultural context.

Therefore, English reading ability in the digital-intelligence era is no longer merely a matter of linguistic skill improvement. Rather, it represents a comprehensive integration of digital literacy and critical thinking, reflecting the demands of today's digital and intelligent world.

3. Current Situation of Cultivating College Students' English Reading Abilities in the Digital-intelligence Era

3.1 Lack of Innovative Thinking in College Students' English Reading

Innovative thinking refers to a cognitive process whereby individuals, based on specific purposes and by following the rules of development, utilize known information and existing knowledge to transform parts or the whole of something using available resources to achieve renewal and development [12]. In the era of digitalization and intelligence, innovative thinking in college students'

English reading refers to the ability to adapt to changes, find directions for growth in a dynamic environment, identify, analyze, and solve problems in the face of these changes. This also encompasses judgment, which includes the capacity to filter and select information, maintain critical thinking, and refrain from conformity [13]. However, a prevalent problem among college students is the lack of innovative thinking in English reading.

For one thing, the rapid development of the digital and intelligent era poses students with an overwhelming amount of reading material, but their ability to filter and analyze information is often insufficient. Many college students lack clear reading goals and effective screening strategies when faced with complex English reading materials. They are easily distracted by irrelevant information, failing to grasp the core content of their reading material, let alone process and utilize the information creatively. For another thing, students often lack critical thinking skills when reading English texts. They tend to passively accept textual information rather than actively question or analyze the viewpoints and logic of the text. This not only affects their deep comprehension of the reading material but also hinders their overall development of competency within the context of the digitalized and intelligent era.

3.2 Deficiency in College Students' Deep Reading Abilities

Some reading experts define deep reading as a series of complex processes that promote understanding, including reasoning, deductive reasoning, analogy, critical analysis, reflection, and insight [14]. Chinese scholar Fang Liu conceptualizes deep reading as a profound reading approach aimed at uncovering the objective laws of things and enhancing intellectual depth, theoretical knowledge, and critical thinking skills. It is distinct from shallow reading, which emphasizes entertainment and immediacy [15]. In the context of digitalization and intelligence, deep reading ability in English refers to students' capacity to analyze, associate with, and evaluate English reading materials. Specifically, it entails active engagement in deep reading processes to raise intellectually profound, academically valuable, and practically significant questions [13].

However, the deficiency in college students' deep reading abilities has become an issue of significant concern, as illustrated by the following two aspects. On the one hand, in the digital age, people have become accustomed to electronic and fragmented reading. While enjoying the convenience of information accessibility, students have gradually lost the focus and patience required for deep reading. Many students lean toward shallow reading, preferring to quickly browse through information instead of engaging in deep analysis or cognitive training through deep reading. On the other, college students today demonstrate reduced reading concentration and shorter attention spans, which can be attributed to their tendency toward fragmented reading and the increasing distractions present in their environment. The widespread use of digital tools in educational settings often leads to numerous distractions, such as notifications and entertainment content, which significantly detract from students' focus during the reading process.

3.3 Insufficient Digital-intelligent Reading Skills among College Students

With the rapid development of digitalization and intelligence, traditional paper-based reading has progressively been replaced by electronic and intelligent reading methods. The transformation in English reading formats and tools has been profound. However, college students' insufficient digital reading skills have become a major impediment to improving their English reading capabilities.

In the first place, students lack effective methods for accessing digital reading resources. On the one hand, some students have limited awareness of high-quality digital reading resources and insufficient understanding of authoritative platforms or reliable sources, making it difficult for them to locate materials that meet their learning needs. On the other hand, economic constraints or limited access to technological devices prevent some students from consistently obtaining paid resources or high-quality digital learning tools, consequently affecting their learning efficiency and reading performance [16]. In the second place, many students lack proficiency in using digital reading tools [17], such as corpora, intelligent translation tools, e-book readers, and language analysis software that support learning. As a result, they struggle to effectively extract information from complex texts and face even greater challenges in engaging in deeper-level thinking and comprehension of reading materials.

4. Strategies for Cultivating College Students' English Reading Abilities in the Digital-intelligence Era

4.1 Enhancing Critical Reading Training to Foster Innovative Thinking

In the digital-intelligence era, critical thinking is an essential skill for college students to handle massive amounts of information and serves as a key foundation for cultivating both innovative thinking and English reading abilities. Teachers should employ systematic critical reading training to help students enhance their innovative thinking skills.

Firstly, critical reading tasks should be designed to integrate skills such as questioning, logical analysis, and identifying the intentions of texts into classroom instruction. For instance, teachers can select two English reports on the same event and guide students to evaluate differences in perspectives and viewpoints, thereby training their independent thinking and judgment abilities. Secondly, problem-driven project-based learning can provide space for students to engage in practical innovation. By assigning open-ended reading tasks, such as thematic explorations on global cultures, environmental issues, or social phenomena, students are required to review diverse English literature, conduct comprehensive analyses, and present their ideas in well-crafted reading reports, thereby strengthening both critical and innovative thinking skills. Lastly, it is vital to cultivate students' ability to assess and filter information. Teachers should guide students to identify reliable English resources, such as authoritative databases (e.g., CNKI, Google Scholar), and provide comparative analysis training to help students uncover biases or logical fallacies in information, improving their ability to discern and filter information.

4.2 Reshaping Deep Reading Habits to Enhance Deep Reading Abilities

Deep reading is vital for promoting understanding, critical thinking and insight. However, fragmented and shallow reading habits have emerged as significant obstacles to the development of students' deep reading abilities. Strategies must therefore be adopted to help students reshape their deep reading habits.

To start off with, cultivating focus is fundamental to deep reading. Fixed reading schedules can be implemented, requiring students to complete focused reading tasks regularly. The length of the reading tasks can be gradually increased in stages to extend students' attention spans, with immersive exercises such as creating mind maps or analyzing the logical structure of articles. Next, optimizing the reading environment is crucial to minimizing external distractions. Universities should establish "deep reading zones," such as areas in libraries that restrict the use of digital devices, to help students focus on complex English materials. In the classroom, students should be encouraged to turn off social media notifications or use focus tools to block distractions during designated deep reading periods, progressively forming focused reading habits. Finally, systematic reading training should be introduced to gradually enhance deep reading abilities. Teachers can assign long-form intensive reading tasks, dividing the material into smaller components, such as logical structure analysis or background interpretation. These tasks can be combined with book reviews, opinion presentations, or thematic debates. This long-term training approach not only helps students master advanced analytical techniques but also improves their reflective reading skills.

4.3 Incorporating Digital Literacy Education to Improve Digital-intelligent Reading Skills

In the digital-intelligence era, the cultivation of college students' English reading abilities must integrate language learning with technology to equip students with the digital-intelligent skills necessary to navigate evolving digital reading formats. Digital literacy education serves as a critical entry point for improving these skills.

First, digital reading tool training should be strengthened to assist students in efficiently interpreting complex texts. Practical training sessions involving digital tools, such as corpus analysis tools, academic database resources, and intelligent translation tools, should be integrated into English courses. For example, when analyzing an academic article, teachers can guide students in using corpus tools to study variations in word usage across contexts or employing intelligent translation tools to better understand complex sentences, thereby enhancing their academic text processing skills. Second, students' ability to access and utilize high-quality digital resources should be developed. Teachers can organize specialized courses, workshops, or training programs to introduce students to high-quality

English learning platforms and methods for managing open-access resources, equipping them with the skills needed to locate and apply high-quality learning materials effectively. Finally, personalized learning needs can be met through intelligent learning platforms, which offer tailored reading training plans based on students' vocabulary levels, reading preferences, and communication abilities. The real-time feedback provided by such platforms can help students address errors promptly, enabling them to progressively improve their reading skills with the support of intelligent tools.

5. Conclusion

The arrival of the digital-intelligence era has posed new challenges and unprecedented opportunities for cultivating college students' English reading abilities. In the context of deep integration between digitalization and intelligent technologies, the core of English reading proficiency lies not only in the mastery of linguistic knowledge but also in the comprehensive enhancement of innovative thinking, deep reading, and digital reading skills. Through systematic critical reading training, the development of deep reading habits, and the incorporation of digital literacy education, students can not only meet the diverse demands of English reading but also gain a competitive edge in information filtering, application, and cross-cultural communication. In summary, cultivating multifaceted English reading talents to meet the needs of the era is not only crucial for enhancing individual competitiveness but also represents a vital step toward advancing education toward greater intelligence and internationalization.

Conflict of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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