A Comparative Study of Chinese High School Multimodal English Textbooks under the "Double Reduction" Policy

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Abstract. High school English textbooks play a pivotal role in the English learning effectiveness of high school students. Following the implementation of the "Double Reduction" policy in Mainland China in 2021, there have been significant changes in the English learning approaches of high school students, necessitating adjustments in the content of English textbooks. This study selected two widely used high school English textbooks published by the Foreign Language Teaching and Research Press, specifically the English (New Standard) (Volume 1, 2004 edition) and the General Senior High School English Textbook (Volume 1, 2022 edition). Based on the theory of visual grammar, a multimodal comparative analysis was conducted. The findings suggest that the latter is more suitable for first-year students in high schools after "Double Reduction". The former requires improvements in content difficulty, learning objectives, intercultural communication, and media technology utilization. This research offers insights for textbook compilation and enhancement, recommending an emphasis on the practical arrangement of English knowledge and the cultivation of students' intercultural competencies.

Keywords: Chinese high school English textbooks, visual grammar, "Double Reduction" policy, comparative analysis.

1. Introduction

In 2017, the Ministry of Education of China issued the English Curriculum Standards for Ordinary High Schools in China, which designated the cultivation of cultural knowledge, cultural understanding, intercultural communication awareness, and capabilities as one of the goals of the English curriculum. For the first time, cultural awareness was listed alongside language knowledge, language skills, learning strategies, and emotional attitudes as one of the five main objectives of the high school English curriculum. Textbooks have become a crucial medium for achieving educational goals in high school English instruction. The Foreign Language Teaching and Research Press has been dedicated to publishing textbooks for general senior high schools, guided by the curriculum goals and teaching requirements specified in the new curriculum standards. This paper selects one recent and one older edition of high school English textbooks published by the Foreign Language Teaching and Research Press for a comparative analysis. It aims to analyze the differences and similarities in the selection of linguistic and cultural content between the new and old textbooks, aiding teachers and students in understanding the cultural content of high school English textbooks. Specifically, this study addresses three research questions:

(1) What are the similarities and differences in the unit structure between the two high school English textbooks?

(2) What are the similarities and differences in content and difficulty between the two high school English textbooks?

(3) What are the similarities and differences in the use of media and technology between the two high school English textbooks?

2. Literature Review

2.1. China's "Double Reduction" Policy and Its Implications for English Textbooks

In 2021, the General Office of the Communist Party of China Central Committee and the General Office of the State Council jointly issued the Opinions on Further Reducing the Homework Burden and Off-campus Training Burden of Students in Compulsory Education (hereafter referred to as the "Double Reduction" policy). This policy encompasses all primary and secondary schools across China, aiming to significantly alleviate the excessive burdens of homework and off-campus training during the compulsory education phase. As found in Yang's (2023) study, this policy strengthens the schools' primary role in education, enhances the overall quality of school teaching, reduces students' excessive academic loads, ensures comprehensive and effective learning within school settings, and improves the level of after-school services. However, these new changes and requirements pose a series of challenges for high school teachers (Li et al., 2022). The implementation of the "Double Reduction" policy should focus on reducing homework loads, regulating off-campus training, and maintaining a collaborative approach among schools, families, and communities (Li et al., 2023).

Under "Double Reduction", teachers are required to alleviate students' academic pressures and integrate cultural awareness into classroom learning and the English teaching process (Wang, 2022; Xu, 2023). By enriching students' knowledge in the classroom, the pressure from homework can be lessened, enhancing students' cognitive skills and improving learning efficiency, thus fostering a positive educational cycle (Liu, 2022).

Consequently, reforming English textbooks is essential for achieving a positive educational cycle under "Double Reduction". English textbooks need innovative content and teaching methods, such as transforming formats to stimulate interest, grounding and extending text-based learning; differentiated instruction, tiered assignments, ensuring learning gains for all students, and project-based options; fostering deep integration and application, creating practical scenarios, facilitating transfer and innovation, and reflecting authentic language use (Guo & Tuo, 2023; Huang, 2022).

A prominent feature of the "Double Reduction" is the emphasis on the integration of moral education, which includes three specific categories as shown in Table 1:

Table 1. Three Categories of Moral Education Permeation under the "Double Reduction" Policy

Moral Education Category	Moral Education Elements	Main Contents
Individual and Nation	Homeland Education	Emphasizing family ties, filial piety, cultural confidence, patriotism, national spirit, cultural identity, etc.
	International Understanding Education	Sense of shared destiny, equality and openness, respect for diversity, learning from each other's strengths, cultural communication, mutual development, etc.
Individual and Society	Civic Awareness Education	Civil manners, social responsibility, rule of law awareness, honesty and integrity, democratic views, moderate rationality, etc.
	Ecological Civilization Education	Reverence for nature, disaster prevention, environmental protection, sustainable development, harmonious coexistence, space exploration, etc.
Individual and Self	Personal Character Education	High aspirations, psychological health, responsibility, self-awareness, harmonious interpersonal relationships, perseverance, etc.
	Scientific Literacy Education	Proficient in critical thinking, methodical, respect for science, information security, daring to critique, and the courage to innovate, etc.

(Li & Qian, 2024)

According to Li and Qian (2024), English textbooks published by the Foreign Language Teaching and Research Press are organized into categories of "Individual and Nation," "Individual and

Society," and "Individual and Self." The "Individual and Nation" category focuses on cultivating students' international understanding and capabilities. The "Individual and Society" category emphasizes shaping students' civic consciousness, while the "Individual and Self" category aims to enhance students' scientific literacy. Li and Qian (2024) conducted a quantitative analysis, measuring the frequency and proportion of specific moral education elements within these textbooks. They found that elements related to scientific literacy education appeared most frequently, followed by personal character education, homeland education, civic awareness education, and ecological civilization education. However, the qualitative analysis of the textbooks remains to be supplemented.

2.2. Intercultural Competence in Textbooks

The English Curriculum Standards for Ordinary High Schools in China specifically states that the curriculum should cultivate an awareness of intercultural communication and the foundational skills necessary for such interactions. First, the cultural content in textbooks should be comprehensive, extensive, and accurate. Zheng and Chen (2015) recommend including dialogues from real-life scenarios such as shopping, ticket booking, hotel reservations, and inquiries in high school English textbooks. This aids teachers in creating relevant teaching contexts and provides students with realistic cultural information, thereby bridging the gap between students and the material. Additionally, incorporating news reports, commentaries, advertisements, and practical texts can enrich the cultural content.

Second, the cultural content should have both depth and breadth, allowing students to deeply understand the similarities and differences between cultures, and to appreciate the nuances and values of diverse cultures (Wang, 2024). According to Kiss (2017), intercultural communication content in textbooks should go beyond merely touching on the surface of national cultures and histories, which leaves students with only a superficial understanding. Instead, the selected texts should engage students in active thinking and elevate their understanding.

Lastly, the cultural content should assist students in developing an awareness of intercultural communication, enhancing their cultural literacy and values, and effectively nurturing their intercultural communication skills (Su, 2016).

2.3. Application of Visual Grammar in English Textbooks

Based on Halliday's (1994) Systemic Functional Grammar theory, Kress and Van Leeuwen (2001) subdivided visual grammar into three functions: the Representational Function, the Interaction Function, and the Composition Function. The Representational Function corresponds to the Ideational Meta-function in Systemic Functional Grammar. This function is divided into Narrative Representation and Conceptual Representation.

Narrative Representation is further segmented into action processes, reaction processes, and verbal/mental processes. Conceptual Representation indicates the structure, categories, and meanings of image patterns and is subdivided into classification processes, analytical processes, and symbolic processes.

Visual grammar is widely applied in English textbooks. For example, Wu, Lu, and Chen (2024) conducted a comparative analysis of English textbooks from Beijing Normal University Press and Foreign Language Teaching and Research Press, from a visual grammar perspective. They discovered that illustrations in the reading sections outnumber those in other sections. The total number of illustrations in the reading sections of the Foreign Language Teaching and Research Press textbooks exceeds those in Beijing Normal University Press materials. Furthermore, the total number of illustrations in the compulsory high school English textbooks from the Foreign Language Teaching and Research Press significantly surpasses those in Beijing Normal University Press versions, largely due to the prevalent use of composite images in the Foreign Language Teaching and Research Press textbooks.

2.4. Research Gap

Previous literature has analyzed high school English textbooks from the perspectives of the "Double Reduction" policy, intercultural competence, and visual grammar. However, there is a lack of comprehensive analysis that integrates these three perspectives, indicating a need for more holistic textbook research. Moreover, as textbooks continue to evolve, there remains a scarcity of comparative evaluations of the most recent editions. Therefore, this study aims to compare the latest versions of textbooks, addressing these gaps in the research.

3. Research Methods

This study selects English (New Standard) (Volume 1, 2004) and the General Senior High School English Textbook (Volume 1, 2022) as data sources. English (New Standard) is a bilingual textbook, published in 2004 by the Foreign Language Teaching and Research Press. It comprises 7 units and is utilized by Grade 10 students in approximately 20 provinces across China.

General Senior High School English Textbook is also a bilingual textbook, published in 2022 by the Foreign Language Teaching and Research Press. This textbook contains 6 units and is used by Grade 10 students in about 30 provinces in China.

Both textbooks were chosen as data sources for this research because they are published by the same authoritative publishing house and have extensive application across Chinese high school English courses, ensuring comparability.

This study employs qualitative research methods, converting paper-based textbooks into electronic versions, and conducts thematic analysis on the content of each unit using the thematic analysis method. The research adheres to the six steps of thematic analysis proposed by Braun and Clarke (2006), namely Familiarization, Generating Codes, Generating Themes, Reviewing Themes, Defining and Naming Themes, and Creating the Report, to complete the qualitative data analysis.

This study strictly adhered to academic ethical standards throughout the process, focusing solely on textual analysis of the textbooks without involving any participants, and maintaining confidentiality regarding the intellectual property information of the materials.

4. Results

4.1. Unit Structure

Upon comparative analysis at the level of the table of contents of the two textbooks, similarities and differences were identified. A common feature is that both books use a large table format for their contents, titled "Scope and Sequence", where horizontally the knowledge structure of each unit is displayed, and vertically, details of the distribution of a specific skill (such as grammar) across different units can be overviewed.

However, there are more significant differences between the two books. In English (New Standard) (as shown in Figure 1 below), the table of contents is text-heavy and features vocabulary that is challenging, with words that may exceed the cognitive range of Grade 10 freshmen. Additionally, the overall background color is dark, which is less likely to capture students' reading interest.

In contrast, the General Senior High School English Textbook (as shown in Figure 2 below) presents a clear and concise table of contents with fewer words and simpler readability. The background color is fresh and visually appealing, more likely to engage students' reading interest, and facilitates easier note-taking by making content more distinguishable.



Figure 1. *English* (New Standard) Catalogue



Figure 2. *General Senior High School English Textbook* Catalogue

4.2. Content and Difficulty of Unit

The first units of both textbooks share the same theme, titled "My first day at senior high", providing a strong basis for comparison, while subsequent units show significant divergence in themes. This similarity, where both books' first units address the theme of new students entering school, aligns with the psychological state of Grade 10 learners, stimulates their interest in learning, and features content that is relevant and resonant. To minimize the impact of varying unit topics on the analysis of content and difficulty, this chapter will focus on a detailed comparative analysis of the first units of both books.

In English (New Standard), taking the content of page 1 of the first unit as an example: the introductory section features few illustrations and the language points and tasks are densely packed. The psychological maturity and learning abilities of Grade 10 students in China are still developing, making it challenging for them to derive meaningful insights from complex and dense material. The introductory section's high difficulty level, with its sequence of questions and fill-in-the-blanks, can leave learners unsure of where to begin. For teachers, this requires a substantial amount of time to explain and introduce, thereby affecting the teaching progress.

The structure of the first unit is divided into two sections of grammar explanations, interspersed with vocabulary usage and practice exercises, concluding with a "Cultural Corner" that offers advice to Grade 10 freshmen in the voice of upper-grade students.

This study's analysis finds that in the first unit's instructional content, the space occupied by the text on the textbook pages (about 40%) is much smaller than that of the exercises (about 60%). This layout is considered unscientific; students who have not studied the text see a large area of exercises first, which naturally reduces their interest and ability to apply what they learn, potentially negatively impacting their motivation.

From the perspective of teaching content, the first unit's text merely lists simple sentences that introduce the school's facilities, class structure, etc. The content is monotonous and too easy, lacking any significant challenges or focal points for language learning.

In the General Senior High School English Textbook, page 1 is equipped with vivid illustrations that portray realistic scenes of teacher-student communication, effectively utilizing visual grammar to captivate learners' interest and enhance the enjoyment of learning. This approach also facilitates the creation of a conducive atmosphere for communicative scenarios and discussion topics. Additionally, placing five questions at the unit's start in a questionnaire format allows learners to make open selections for the introduction, presenting less difficulty and more enjoyment, thus fostering greater interaction between teachers and students.

The structure of the first unit is organized into three sections: preview, practice, and consolidation. The number of exercises has been significantly reduced compared to the period before the "Double Reduction" policy, yet the exercises remain innovative and practical, focusing on essential content while eliminating the extraneous. Furthermore, the unit features two interconnected texts, with the second text building upon the knowledge from the first and introducing new concepts, thereby enhancing the learners' depth of memory. Simultaneously, the unit includes a variety of text genres, incorporating both poetry and prose.

In the teaching section of Unit 1, the text layout is clean and straightforward, with well-sized fonts, and the exercises are proportionally balanced on the page, enabling students who can handle more to engage further.

From a pedagogical perspective, the text in the first unit predominantly consists of dialogues, which are rich in linguistic elements including new words, phrases, and sentence structures not previously encountered. This not only enriches the high school students' vocabulary but also enhances their ability to use phrases flexibly and master new sentence patterns. Such a design is well-suited for students transitioning from middle to high school.

4.3. Media and Technology Applications

In English (New Standard), the book primarily relies on printed content, supplemented by a CD that provides audio recordings for each unit's vocabulary pronunciations and text readings. The minimal use of video restricts students' visual learning opportunities. Furthermore, many high school students now lack devices capable of playing CDs, highlighting the impracticality and limited use of CDs, while also adding to the textbook's publishing costs. Additionally, it is currently challenging to find accompanying educational resources for this book.

In contrast, the General Senior High School English Textbook incorporates video and audio multimedia applications, enhancing learners' understanding of the lesson content from multiple perspectives. For example, the explanation of the "Starting out" theme in the first unit includes a 3-minute and 16-second video that vividly depicts English-speaking high school students riding a school bus, effectively setting up a communicative scenario. Scenes that mirror everyday life stimulate students' interest in cross-cultural communication. Furthermore, the textbook aligns with technological advancements by incorporating QR codes. Scanning these codes grants access to auditory materials and exercise content. Finally, the book provides teacher's manuals and dedicated presentation materials for teachers, standardizing teaching methods, reducing the teaching workload, and improving preparation efficiency.

5. Conclusion

This paper, through the above analysis of unit settings, content and difficulty, and the application of media and technology, finds that the General Senior High School English Textbook is better suited for Grade 10 students in China's general high schools following the implementation of the "Double Reduction" policy. However, English (New Standard) has many areas that need improvement, primarily in three aspects. First, from an aesthetic perspective, the overall color scheme is too dark,

the content difficulty should be appropriately reduced, and language learning objectives need to be more concise. From the content perspective, the design should more closely align with high school students' psychological needs, increase the proportion of illustrations and text content, appropriately organize new knowledge, and include texts from diverse genres and cultural backgrounds to enhance students' cross-cultural capabilities. Lastly, in terms of media and technology applications, improvements are necessary in the use of CDs.

Overall, the comparative analysis of these two textbooks offers practical suggestions for the composition and enhancement of high school English textbooks post-"Double Reduction" policy. This includes focusing on the arrangement of new knowledge and enhancing students' cross-cultural capabilities. It addresses issues such as Chinese students' inadequate grasp of language background knowledge, unclear understanding of new concepts, and difficulty in identifying key points.

Additionally, users of the textbooks can better adapt to the characteristics of the materials. This includes addressing the absence of new media technology applications in older textbooks. English teachers could independently supplement with relevant videos to compensate for the lack of multimodal resources in the textbooks. For issues like small note-taking areas and challenging exercises in older textbooks, teachers could organize students to uniformly prepare English notebooks to record relevant points and integrate exercises with teaching content to practice as they teach, thereby strengthening high school students' mastery of English knowledge.

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