An Exploration of English Discourse Teaching in Primary Schools Based on the SOLO Taxonomy

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Abstract: In alignment with the educational integration of “teaching-learning-assessment” and promotion of students’ subjective initiative in classroom context, this paper, taking Unit 3 Where did you go Part A Let’s talk in the second volume of Grade 6 of PEP English as an example, to explore the teaching strategy of primary English discourse based on the SOLO taxonomy. In light of the SOLO taxonomy, primary English discourse instruction proceeds from the discourse, focuses on the basic knowledge of the text while emphasizing the development of students’ English core literacy and the shaping of emotional values. The SOLO taxonomy introduces a brand-new perspective for primary English discourse teaching, and solves the problems that plague the traditional primary English discourse teaching. It fundamentally promotes the symbiosis and integration of students’ discourse skills and thinking development, thus opening up a new horizon of primary English discourse instruction and evaluation paradigm in the era of core literacy.

Keywords: The SOLO Taxonomy; Primary School English; Discourse Instruction; Core Literacy.

1. Introduction

The English Curriculum Standards for Compulsory Education (2022 Edition) (hereinafter referred to as the “New Curriculum Standards”) states: “Adhering to the principle of promoting learning and teaching through evaluation, and carrying out evaluation throughout the whole process of teaching and learning in the English curriculum. To enable students to give full play to their subjective initiative, teachers are supposed to help students become the designers, participants and collaborators of all kinds of evaluation activities, and consciously use the evaluation results to improve their learning. The emphasis is to be put on guiding teachers to make scientific use of evaluation tools and results, providing timely feedback and help for students’ learning performance, reflecting on teaching behavior and effects, and benefiting both teaching and learning.” (Ministry of Education 2022) It can be seen that systematic, scientific and reasonable teaching evaluation is an important guarantee for carrying out teaching activities, realizing teaching objectives and implementing core literacy. With the deepening of the new curriculum reform, the demand for education has shifted from "learning" to "learning well", and the examination of English subject is tilted towards testing students’ comprehensive language ability and guiding students to understand and grasp the theme of the discourse so that they are able to apply the knowledge they have acquired to practice. However, due to the strong uncertainties of the design of discourse teaching, the general evaluation methods cannot visualize students’ thinking ability at the present stage, let alone qualitatively measure individual students’ thinking levels, making it virtually impossible to achieve the integration of “teaching-learning-assessment”. In addition, the actual effect of discourse teaching cannot be effectively and accurately fed back coupled with the strong decentralized nature of the relevant teaching. Therefore, this paper will explore a new orientation of English discourse teaching in elementary school based on the SOLO taxonomy.

2. Brief Description of Relevant Theories

2.1. Interpretation: the SOLO Taxonomy

John B. Biggs and Kevin F. Collis(2010), professors of Educational Psychology at the University of Hong Kong, based on the research of modern psychology, especially cognitive theories, believe that the thinking structure shown by a person when answering a certain question can be detected, and thus proposed the “SOLO taxonomy”, which is a “qualitative” evaluation method for students’ academic performance in a hierarchical manner. The “SOLO taxonomy” (as shown in Fig. 1), the full name is Structure of the Observed Learning Outcome, abbreviated as SOLO. With the support of the SOLO taxonomy, when teaching English discourse in elementary school, the level of thinking reflected in students’ responses can be observed with the help of hierarchical descriptive evaluation, so as to visualize the level of students’ thinking ability, diversify the evaluation dimensions, and hierarchize the learning outcomes.

![Fig 1. The SOLO taxonomy](image)

2.2. Reflections and Applications of English Subject Based on the SOLO Taxonomy

Learning and using English lays an important foundation for students to understand different cultures, compare the
similarities and differences between Chinese and foreign cultures, absorb the essence of each country’s culture, and form cross-cultural awareness. It helps students to develop their firm cultural self-confidence, cultivate a sense of nationalism and enhance their awareness of a community with a shared future for mankind. Nowadays, there are many related research enthusiasts applying the SOLO taxonomy to the English education, and the research results of these scholars are of great reference value and significance for the teaching and applying of the SOLO taxonomy to the English teaching.

Pan Neng (2022) argues that extensive reading is different from traditional reading teaching, in that both teachers and students are no longer modeled. Under the evaluation standard of extensive reading based on the SOLO taxonomy, teachers turn language into a carrier and guide students to interact with the text, author, teacher, classmates, and themselves through progressive thinking, to understand, analyze, question, and create in interaction, and to experience, feel, and discover in reading, so as to achieve humanistic education in silence.

Ye Xiangyang (2021) combining Requirements of the General English Curriculum Standard for High Schools (2017 Edition) and the current situation of the evaluation of high school English reading teaching, proposes to apply the SOLO taxonomy to the evaluation of reading teaching and construct an evaluation model of English reading teaching. When applying the SOLO taxonomy to the evaluation of high school English reading teaching, teachers should fully consider the characteristics of reading teaching, link theory to practice, construct the SOLO reading teaching quality evaluation model, conduct specific evaluation of reading teaching design, students’ classroom learning, etc., and the point is to find out problems and make timely improvements, effectively promote the continuous improvement of students’ thinking quality and reading literacy, so as to realize English reading instruction in depth.

Jin Fengping (2019), in conjunction with Requirements of the English Curriculum Standards for High Schools (Experimental Draft) (hereinafter referred to as the “Curriculum Standards”), argues that teachers should pay great attention to students’ reading ability, especially their ability to acquire and process information in the process of reading. According to the propositional requirements of the Curriculum Standards and the literacy requirements of the Elementary Examination in English, he designs or modifies test papers from different high schools in different regions as reference templates so that students can demonstrate their knowledge and abilities to the full. In this way, it maximizes students’ reading skills and reflects their authentic emotional attitudes and values while being close to their real life.

3. Incorporating the SOLO Taxonomy to Facilitate English Discourse Teaching in Elementary Schools

The New Curriculum Standards clearly states that “Teachers should take discourse study as a logical starting point to carry out effective teaching design, and fully recognize the important role of discourse in conveying cultural connotations, leading value orientation, promoting thinking development, and serving language learning, meaning comprehension and expression.” (Ministry of Education 2022) Primary English discourse segment involves great quantities of knowledge points, including new words and new sentences, morphological changes, sentence structure, text features and value orientation. (Fan Wenyan 2023) However, the traditional teaching methods are not competent for these objectives and requirements. Therefore, we introduce the advanced teaching tool the SOLO taxonomy and adhere to the law of EFL learning to innovate the teaching method with a focus on the integrated design of "teaching-learning-assessment", according to the developmental progression of primary school students’ English ability. In particular, we concentrate on the requirements of the core literacy in English discipline and clarify discourse teaching objectives to engage students in discourse teaching activities. The following is an example of Unit 3 Where did you go Part A Let’s talk in the second volume of the sixth grade of PEP English, exploring the discourse teaching strategy of primary school English based on the SOLO taxonomy.

3.1. Before-class Guided Reading, Text-based, Student Self-learning to Complete the Discourse Task Card

In the teaching of any subject at any stage, the introduction of a new lesson is quite an important part as a prelude to the whole learning. (Du Tongtong 2022) In primary school English discourse teaching, as long as the new lesson introduction is done well, students’ attention can be firmly attracted at the very beginning of the class, which lays a good foundation for the successful development of subsequent teaching activities. Based on the textbook and incorporating the SOLO taxonomy, teachers can design the discourse reading task cards (as shown in Table 1) and distribute them to students so that they can study the text on their own in advance and prepare for the class. The table is mainly composed of the following four elements: “I master some new words_____________” is oriented to uni-structural of the SOLO taxonomy, pointing to a certain keyword of the discourse; “I know what the text says_____________” is oriented to multi-structural of the SOLO taxonomy, pointing to the theme of the discourse; “I know the structure of the text_____________” is oriented to relational of the SOLO taxonomy, pointing to the structure of the discourse; “From the text, I know_____________” is oriented to extended abstract of the SOLO taxonomy, pointing to the cultural values of the discourse. Under the guidance of the SOLO taxonomy, students will understand the content of the discourse and train their English thinking according to their own thinking level, combining with their own cultural background knowledge and the textual information of the discourse, thus laying a good foundation for class.

<table>
<thead>
<tr>
<th>Table 1. Task cards based on the SOLO taxonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task Card</td>
</tr>
<tr>
<td>Class________ Name________</td>
</tr>
<tr>
<td>I master some new words________</td>
</tr>
<tr>
<td>I know what the text says________</td>
</tr>
<tr>
<td>I know the structure of the text________</td>
</tr>
<tr>
<td>From the text, I know________</td>
</tr>
</tbody>
</table>

3.2. Classroom Teaching, Based on the Theme, Teachers Utilizes the SOLO Taxonomy

3.2.1. Focus on the Topic of the Text and Sublime the Theme of the Text

English knowledge at the primary school level is...
distributed in the form of themes in the textbooks of each grade, and the knowledge acquired by students is fragmentary and scattered (Li Qin 2020). The New Curriculum Standards points out that the content of the English curriculum focuses on three major thematic categories, namely, people-self, people-society, and people-nature, and the second volume of Grade 6 of PEP English book Unit 3 Where did you go Part A Let's talk discourse is oriented towards the theme of people-society. Through the study of this text, students should be inspired to have good memories of their past lives, to be able to talk freely about the places they have been to and the things they have done, to learn to love life, to learn to share, and to enhance friendship. Teachers can use the SOLO taxonomy to evaluate students’ understanding of the theme meaning, according to this theme and the actual situation (as shown in Table 2).

**Table 2. Evaluation of Students’ Understanding of Thematic Meaning Based on the SOLO Taxonomy**

<table>
<thead>
<tr>
<th>Students’ Answers</th>
<th>Thematic meaning of discourse</th>
</tr>
</thead>
<tbody>
<tr>
<td>I went to a lot of beautiful places, I think life is beautiful, we should love life.</td>
<td>Unstructured</td>
</tr>
<tr>
<td>Last year, my parents took me to Hainan to play. I walked barefoot on the beach, feeling the delicate and soft sand. The salty sea breeze blew my cheeks. The waves and the joy of playing on the beach came from my ears. I looked at the boundless sea. My troubles vanished in an instant, and my mood became extremely calm. I just felt that life was infinitely beautiful and worthy of our love.</td>
<td>Multistructural</td>
</tr>
<tr>
<td>It is not just the beautiful scenery that I encounter during the journey that makes me feel that life is beautiful. The people I meet during the journey and the local cultural customs also make me feel that life is extremely beautiful. In Hainan, in addition to the Han nationality, the ethnic minorities living in Hainan Island are Li, Miao and Hui. The ethnic minorities not only have their own style of clothing, but also the houses they live in are very distinctive! The ethnic minorities still retain many folk customs and unique living habits, which make Hainan’s social style colorful. Such a colorful journey not only makes me love my motherland more but also makes me love life more!</td>
<td>Relational</td>
</tr>
<tr>
<td>On the trip to Hainan, I enjoyed the beautiful scenery of Hainan, experienced hospitable Hainan customs, and tasted delicious Hainan flavor. Hainan Island, the place that exports sunshine, air and sand to the world, welcomes friends from all over the world with bright sunshine, and relieves people’s tiredness with beautiful scenery. When former Australian Prime Minister Romas, former Japanese Prime Minister and former President of the Philippines decided that Beijing would be a permanent venue for the Asia Forum, they labelled Hainan a positive one. Whenever the Asia Forum is held, the heads of countries line up here, enjoying the beauty of Hainan. Their affirmation is the pride of being a Chinese! In the future, I will study harder and do my part to show my beautiful motherland to the world.</td>
<td>Extended Abstract</td>
</tr>
</tbody>
</table>

### 3.2.2. Focus on Discourse Teaching Activities and Practice People-oriented Principle

Under the guidance of the concept of quality education, classroom activities emphasize student-oriented integrated learning, which requires teachers to combine the six elements of the English curriculum in the "learner-centered" classroom, practice the "people-oriented" student concept, create a good classroom learning atmosphere, provide equal, open, inclusive and cooperative learning opportunities. Through the design of text-based learning and comprehension activities, in-depth text-based application activities, and transcendental text-based transfer and innovation activities, students are motivated to ask questions spontaneously and solve problems independently, so that students can learn how to exercise self-evaluation and self-monitoring. Teachers are expected to explore a suitable way for students to learn, guide them to actively probe rather than passively accept knowledge, so that students can actively participate in discourse teaching activities, to experience, cooperate, discuss, and explore. While obtaining the sense of adequacy and achievement in learning, we can also cultivate students’ good discourse learning habits, stimulate students’ interest in discourse learning, and then implement in-depth discourse teaching.

### 3.2.3. Focus on the Purpose of Discourse Teaching and Implement Core Literacy

The purpose of teaching English discourse should be directed to promoting the acquisition of language knowledge, using language skills and learning strategies through a series of teaching activities in line with the concept of quality education, upgrading students’ learning ability and thinking quality, enhancing students’ cultural awareness, realizing silent humanistic infiltration, thus, developing students’ higher-order thinking, and implementing the core literacy of English subject. Undoubtedly, systematic, scientific and reasonable teaching evaluation is an important guarantee for carrying out teaching activities, realizing teaching goals and implementing core literacy. The discourse teaching objectives designed based on the SOLO taxonomy (as shown in Table 3) are visualized, which can clearly show the cognitive level of students’ thinking that is associated to their present learning situation. Through this, teachers is capable of diagnosing the students’ learning performance, which, in turn, helps to improve their teaching methods, moreover, it also provides students with a platform and an opportunity to be informed about what level of thinking they are actually at, and how to correct or improve, so as to develop their higher-order thinking.
3.2.4. Focus on After-class Teacher-student Evaluations and Improve Following Instruction

Effective English discourse teaching is inseparable from the positive interaction between students and teachers. In order to improve teaching efficiency and ensure teaching quality, teachers need to consistently create two-way interaction between teachers and students, and build a mutual evaluation mechanism between teachers and students after class. The establishment of an after-class teacher-student mutual evaluation mechanism can not only effectively check students' learning situation, help them consolidate the knowledge points they must master, but also stimulate their enthusiasm for discourse learning, motivate them to consciously carry out discourse learning outside the classroom, promote the further development of discourse teaching, coupled with improve the students' core literacy. (Pan Neng 2022)

3.3. Extracurricular Expansion, Based on Practice, Consolidate Basic Knowledge and Develop Students’ Higher-order Thinking

3.3.1. Carry out Extensive Reading, Quantitative Change Leads to Qualitative Transformation

Emphasizing the cultivation of students’ reading literacy plays an important role in primary school English discourse teaching and the formation of students’ English disciplinary core literacy. It is not enough for students to rely solely on the study of textbooks for the development of reading literacy, but also requires a lot of reading experience and the accumulation of reading experience. (Pan Neng 2022) Whole book reading, with its completeness and richness of content, has become a powerful means for students to use reading strategies comprehensively and improve their disciplinary core literacy. (Li Chunxia 2023) The Little Prince, written by French writer Antoine de Saint-Exupéry, from the perspective of a pilot as the narrator of the story, tells about the adventures of the Little Prince from an alien planet as he sets off from his own planet to Earth. The book, with moderate reading difficulty of a philosophical theme, rich content and vivid plot, fits in well with the content of the lesson and the theme of the textbook unit. Its rich vocabulary and beautiful, profound statements make up for the lack of vivid content, less language input, and the lack of linguistic materials in the textbook, which can promote the development of students’ language, cognition, emotion, etc. Therefore, The Little Prince is very suitable as a tool for vocabulary upgrading, material accumulation, and extracurricular expansion. The SOLO taxonomy is applied to the reading teaching of the book, and the reading evaluation framework (as shown in Fig. 2) is formulated to interpret, apply and deepen the standards. Through spiral thinking, students can learn to self-regulate in the process of independent reading and independent inquiry, which contributes to realizing silent humanistic infiltration, developing their higher-order thinking and cultivating their
English higher-order thinking is manifested in the classification of teaching objectives as analyzing, synthesizing, evaluating and creating reading texts and reading information, which focuses on the development of students’ series of abilities, such as the ability to critically evaluate information self-regulated reading, the ability to solve problems, and the ability to think creatively. (Pan Neng 2022) It can be seen from the figure that the reading evaluation framework is based on three main questions: “What does the book say?” is oriented to the main content of the book; “What does the book do?” is oriented to the logical development of ideas in the book; “What does the book mean?” is oriented to the cultural value of the book, step by step, it guides the students from superficial absorption and understanding of the book, and gradually points to the humanistic nature of language learning. Inadvertently, the seeds of humanistic concepts are planted in the students’ hearts, and in the subsequent learning, they will take root until they blossom and bear fruits, thus reaching the perfect closed loop of education.

3.3.2. After-class Assignments, to Promote Thinking Spiral Development

Writing is the output form of language learning, which is a comprehensive manifestation of language expression and thinking ability. (Wang Yanpeng 2021) The training of students’ writing skills should not only rely on the design of classroom teaching, but also benefit from a scientific evaluation method, because a reasonable evaluation method can effectively promote the cultivation of students’ interest in writing and the improvement of their writing level. (Li Qin 2019) The SOLO taxonomy is combined with the English subject and applied to writing in the upper grades of primary English to provide teachers with a new type of writing evaluation standard. (Li Ye 2021) Focusing on the theme of this lesson and this unit, teachers can ask students to write a composition on the topic of “Where did you go?” as an extension of this lesson in this unit, which will help to improve the accuracy of students’ language use, enhance the ability of students’ knowledge transfer, and cultivate the logic of students’ thinking. At the same time, the level of students’ thinking structure based on the SOLO taxonomy (as shown in Fig. 3) is used to construct the evaluation criteria of exercises (as shown in Fig. 4), clarifying students’ thinking level, and then adjusting the teaching objectives and optimizing the teaching design, so as to develop students’ higher-order thinking.
4. Discussion and Reflection

4.1. Based on Cross-cultural Awareness, Emphasizing Cultural Immersion

English teaching is a kind of language teaching based on international perspective and cross-cultural awareness. (Jingxuan 2023) The curriculum is an important carrier for cultivating and developing students’ cultural awareness. (Huang Wanhui 2023) The English curriculum should help students to learn, understand and appreciate Chinese and foreign excellent cultures, cultivate Chinese sentiment, strengthen cultural confidence, expand international vision, enhance international understanding, gradually improve cross-cultural communication skills, critical thinking skills, learning ability and innovation ability, and form a correct world view and a positive outlook on life and values. (Ministry of Education 2020) Culture teaching is a process of perception, experience and communication, and a process of shaping internal personality and external behavior. (Lin Pingzhu 2023) Cultural knowledge in discourse is the foothold for students to learn language and understand culture. (Guo Xiang 2023) Taking the SOLO taxonomy as the framework for the development of discourse teaching, teachers can compare the current situation of students’ thinking level, focus on the essence of excellent culture, integrate the cross-cultural elements they find in the discourse into their teaching design, guide students from text-based learning to in-depth and transcendental learning, which will help students understand the cultural connotation, enrich their cultural experience, realize the charm of excellent culture, and enhance their cultural confidence, so as to realize cultural cultivation process of “internalizing in the heart and externalizing in the action”.

4.2. Oriented to Core Literacy, Developing Students’ Higher-order Thinking

In today’s world, with science and technology progress, the new media of the network is rapidly popularized, the way people live, study and work are constantly changing, making a big difference to the growth environment of children and adolescent. In the era of core literacy, talent training faces challenges. The era of core literacy especially emphasizes the development and expansion of students’ abilities in information integration, knowledge transfer and innovation, and the cultivation and development of higher-order thinking. According to the viewpoint of the SOLO taxonomy, the complexity of individual thinking structure is positively correlated with the development level of thinking ability, that is, the more complex the cognitive processing of students’ thinking is, the higher the development level of their thinking is, and the higher the quality of the learning results present. (Yang Yong 2019) Therefore, primary school English discourse teaching based on the SOLO taxonomy can effectively test out the thinking level of students at the present stage, accurately evaluate the level of students’ thinking ability at the present stage. It helps to provide a clear direction for the students, on the basis of integrating and grasping what they have learned, to connect with their own realities, to transfer and innovate the acquired knowledge, to develop higher-order thinking, and to implement the core literacy. The SOLO taxonomy introduces a new perspective for primary English discourse teaching to solve the problems that traditional primary English discourse teaching has failed to overcome, to drive the improvement of students’ discourse learning skills by the transformation and development of students’ thinking, and pushing the further development of students’ thinking. This constitutes a spiral upward channel, which fundamentally promotes the symbiosis and integration of students’ discourse skills and thinking development. To a great extent, the SOLO taxonomy not only broadens the instruction and evaluation pattern of primary school English discourse teaching, but also it opens up a brand-new paradigm of primary school English discourse teaching and evaluation in the era of core literacy.

4.3. In Interests of Patriotic Sentiment, Cultivating National Identity

Teachers must take Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era as their guide in the process of teaching English discourse in primary school, center on the requirements of core literacy of the English discipline, clarify the objectives of discourse teaching, focus on discourse teaching activities, innovate the teaching methods, improve the examination and evaluation, adhere to the law of foreign language learning, follow the advanced development of primary school students’ English ability, and establish a sustainable, gradual and graded system of teaching and evaluating English language discourse in elementary school with the reference to the international experience. The SOLO taxonomy perfectly meets the needs of primary school English discourse teaching, since it advocates visualizing students’ thinking, specifying evaluation dimensions, and hierarchizing teaching objectives. While implementing the core literacy of the English discipline and optimizing and innovating the teaching design of English discourse in primary schools, the SOLO taxonomy also emphasizes the development of students’ higher-order thinking, thus laying the solid foundation for cultivating talents expected in the new era.

5. Conclusion

The positive impact of the SOLO taxonomy on discourse teaching is obviously manifested in the case study above: discourse interpretation is processed from the outside to the inside, from shallow information acquisition to deep humanistic dialogue, which contributes to spiral development of students’ thinking as well as systematic transformation of students’ fragmented learning. On the one hand, it helps students better understand the connotation of discourse, stimulates students’ interest in discourse learning, implements students’ English subject core literacy development; on the other hand, the application of the SOLO taxonomy in classroom context optimizes and innovates primary school English discourse teaching design, improves teachers’ teaching efficiency, and increases interaction and emotional communication between teachers and students. Of course, this paper cannot cover all the situations in teaching practice, however, the SOLO taxonomy visualizes students’ thinking, which facilitates teachers to carry out personalised teaching in accordance with individual students’ aptitude, and provides direction for students to explore by themselves in future. As the saying goes, “the value of teaching lies in enlightenment; the value of learning, in perception.” Teacher’s applying the SOLO taxonomy to primary schools English teaching is like
a musician playing the piano, harmonising the sound with the rhythm; Teacher's applying the SOLO taxonomy to the cultivation of core literacy is like nourishing spring buds with fine rain, silently penetrating deep into people's hearts; and Teacher's applying the SOLO taxonomy to the education of talents as the pillars of the country is like a good craftsman carving jade, removing its flaws and highlighting its beauty.

References
[12] Li Qin. 2020. Enhancing the level of English writing thinking based on SOLO categorization and evaluation theory [J]. Teaching and Learning of English in Primary Schools, (01)