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本科毕业论文（设计）

题　　　目 <u>多模态 PPT 辅助教学下高中英语学习</u>

<u>态度现状调查</u>

<u>——以山西省晋中市榆次区经纬中学为例</u>

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A Survey of High School English Learning Attitude Under Multimodal PPT Assisted Teaching
--A Case Study of Jingwei Middle School in Yuci District, Jinzhong City, Shanxi Province
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Abstract: In the era of rapid development of network information, it gradually presents that the diversity of English teaching in high school. As the core of multimodal teaching, multimodal PPT has been widely used in classroom teaching, especially in high school English classes. However, PPT tends to be paid more attention by English teachers, with teachers ignoring the attitudes of English learning and the performance of students. The study takes the 91 students from Senior three of Jingwei Middle School in Jinzhong City, Shanxi Province and the PPT collected as research objects. It is conducted from three aspects for the research, which are cognitive level, emotional experience and behavioral tendency. It finds that the attitude of English learning in high school is generally optimistic under the multimodal PPT teaching. There is no obvious difference between the cognitive level and emotional experience, but there is a big difference on the behavioral tendency. Moreover, the attitudes of English learning of students are affected by the speed of multimodal PPT and whether it is combined with blackboard writing to some extent. And by using sample analysis, the study finds that the atmosphere of class can be significantly improved with English teachers using different modes in PPT teaching. The study is helpful for high school English teachers to make PPT by taking into account cognition, emotion and behavior in a more comprehensive way, and integrating the methods of the multi-modal teaching into it, so as to correct the English learning attitudes of students more efficiently.

Keywords: multimodal PPT; senior English; English learning attitude

多模态 PPT 辅助教学下高中英语学习态度现状调查

——以山西省晋中市榆次区经纬中学为例

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摘 要:在网络信息迅速发展的时代，高中英语课堂教学逐渐呈现出多样化的趋势。多模态 PPT 的出现已经成为多样化教学最显著的标志。作为多模态教学的核心部分，多模态 PPT 已经在课堂教学中获得广泛应用，尤其是在高中英语的课堂。然而英语教师往往会把更多关注点放在课堂教学使用的 PPT 上，从而忽视了学生的英语学习态度与表现。本研究设定了两个研究对象，分别是来自山西省晋中市经纬中学高三年级 91 名同学以及收集到的 64 张 PPT，结合文献综述法，问卷调查法等研究方法分别从认知水平、情感体验、行为倾向等三方面进行调查。研究发现：多模态 PPT 辅助教学下，高中生的英语学习态度整体良好，英语学习态度在认知水平和情感体验两方面并不存在明显差异，但在行为倾向方面差异较大，再者，多模态 PPT 的播放速度和是否与板书进行结合在一定程度会影响学生的英语学习态度。通过样本分析法，研究发现英语教师经常在 PPT 中搭配不同模态进行课堂教学，学生会有良好的听课效果。本研究有利于高中英语教师更加全面的兼顾到认知、情感、和行为三方面来制作教学 PPT，并将多模态教学方式融入其中，从而更好地培养学生的英语学习态度。

关键词：多模态 PPT； 高中英语； 英语学习态度

Contents

I Introduction

With the rapid development of the information era, the significant combination of internet technology and computer information technology has improved the productivity of the society effectively and provided convenient conditions for living, studying and working.

The way of classroom teaching also begins to be diversified by using multimedia teaching. The single text mode is no longer able to meet the needs of oral expression as before. People need to use more modes to express the meaning, such as images, videos, audio and others, so as to enrich the way of communication and information transmission in the English learning.

Chang（2018）clearly points out that the English Curriculum Standards for General High School (2017 Edition) clearly states: "Discourse in English teaching is usually presented in the multi-modal form, including oral and written, audio and video. And these discourses are presented in different stylistic forms. Therefore, when teachers choose discourse, they try to cover a variety of languages in real life, including multi-modal discourse." The multimodal PPT which uses multiple modes to participate in meaning construction is in line with the multi-modal characteristics of foreign language teaching. As the effective tool in English classroom teaching, multimodal PPT is conducive to improve the expressions and verbal skills in target language which are based on the new Curriculum Standards. The multimodal PPT can directly show the relatively abstract content, which is quite beneficial to the understanding of difficult points of students, inspiring the students to learn, and deepening their impression of classroom knowledge. However, some students have low interest in learning, without motivation in learning, and have incorrect and inactive attitudes towards learning.

In the study, 91 senior students who are from Jingwei Middle School, Yuci District, Jinzhong City, Shanxi Province and the 64 PPT slides collected, are selected as the research objects. Combined with literature review method, questionnaire survey method and PPT sample analysis method, the study surveys the overall status quo of the English learning attitudes of high school students in three dimensions, which are cognitive level, emotional experience and behavioral tendency, under the multimodal PPT assisted teaching. It analyzes

the problems in the English teaching and looks for the main reasons of the problems, so as to help students establish an appropriate attitude of English learning under the multimodal PPT assisted teaching. The study can also help teachers improve their ability to deal with multimodal PPT due to their own shortcomings. Instead of just focusing on making multimodal PPT, teachers can design multimodal PPT based on students' characteristics so as to improve the efficiency of English teaching.

II Literature

With the widespread use of multimodal PPT in English classroom teaching, the research about multimodal PPT gradually increase, which produces the indirect effects. In this part, the concepts and theories involved in this research are introduced as well as the relevant researches at home and abroad.

First of all, three concepts are introduced, which are English learning attitude, multimodal PPT and multimodal PPT assisted teaching model.

There are many academic researches about English learning attitude. Chang (2018) points out that whether learners have a positive attitude towards English learning has a direct impact on their language learning. Wang (2021) believes that the learning attitude and the motivation are the two important factors in English learning, and the success of English learning mainly depends on whether learners have a positive learning attitude and strong learning motivation. Kadiliya and Wang (2021) believe that English learning attitude not only refers to the psychological tendency of learners towards English, but also towards English and its culture. In the study, Professor Tao's (2001) definition of English learning attitude is adopted -- English learning attitude is a more specific learning attitude in the system of learning attitude, which aims at learners' cognitive level, emotional experience and behavioral tendency formed in the process of learning English.

Multimodal PPT is widely used in high school English teaching, and it is the focus of scholars at home and abroad. Zhang (2013) believes that multimodal PPT has various modes, such as graphics, images, sounds and animated texts, which can accommodate a large amount of information. Zhang (2019) believes that multimodal PPT refers to making PPT to demonstrate in the classroom, which contains at least two or more symbol resources in the

process. Wang (2022) defines multimodal PPT as a learning tool, which is not only a carrier of information, as well as a way to deep understanding with text, pictures, audio and so on.

Due to multimodal PPT, multimodal PPT assisted teaching also is a hot topic in the English teaching. Zhang (2010) believes that multimodal PPT assisted teaching is a model that PPT courseware contains the resources more than two modes for classroom teaching. Huang (2011) believes that the mode with language and non-language media provides learners with a rich and active atmosphere. Moreover, as the auxiliary means, sounds, graphics, images and others can inspire the initiative and enthusiasm of learners, so as to have remarkable influence on learning effect. Li and Xu (2021) believe that the multimodal PPT assisted teaching mode is different from the traditional language-based teaching mode. It is a blending mode between online and offline teaching. And it combines graphics, images, text and network resources into a new multimodal form of the expression.

Every study needs to have theoretical support. In the study, the theories used in the research are ABC Model of Attitude and multimodal discourse analysis theory respectively.

American social psychologists Rosenberg and Hoveland (1960) put forward ABC Model of Attitude, also known as Tripartite Theory of Attitude. They believe that the attitude is composed of three parts, which are cognitive level, emotional experience and behavioral tendency. Thus A, B and C in attitude theory correspond to affection, behavior and cognition respectively.

Affection refers to the initial subjective experience produced by learners in the learning process and the reflection of objective reality. After forming the initial emotional experience, learners further develop the learning interest and motivation. Positive emotional experience in learning activities can promote learners' desire for new knowledge, while negative emotional experience makes learners feel disgusted in the learning process, and even giving up learning. The emotional experience of language learners is affected by many factors, such as their self-evaluation, the teaching style of English teachers, and the evaluation from teachers.

Behavioral tendency is often taken as an important basis to judge the learning attitude of students, because it is the outward performance of emotional experience and cognitive level. Generally, after establishing clear cognition and clear emotional experience, learners can

produce the behavioral preparation before language learning, which is behavioral tendency. However, sometimes they are not exactly equivalent between the behavioral tendency and learning attitude, which requires the researchers to be objective and practical in the research process.

Cognitive level is the understanding of the purpose, significance and value of learning. And it reflects the judgment of learning objects. To a certain extent the learning attitude from learners is affected by whether learners have a clear cognition of the learning object. For example, if it is of great help that learners can clearly realize the English learning in the future, learners will have a strong motivation to learn with a positive attitude towards learning.

Kress and Van Leeuwen (1996) first propose the theory of multimodal discourse analysis. Based on the systemic functional linguistics of Halliday (1985), they propose that language is a common social symbol. Zhang (2015) mentions that multimodal discourse analysis is a phenomenon of the discourse communication, which uses various senses such as hearing, smelling, and vision to communicate with symbols and means such as language text, action and sound. Chang (2018) points out that multimodal discourse accepts the view of systemic functional linguistics, and believes that other symbols such as pictures, colors and music are also the origin of meaning in language. She also explains that multimodal PPT is a multimodal discourse that achieves the construction and transmission in the sentence with the interaction of various symbolic resources such as graphics and images. It can be significant for combining the educational technology and multimodal discourse, so as to achieve better effect of English teaching.

Finally, the relevant domestic and foreign researches about the combination of multimodal PPT and learning attitude are introduced. Suisskind (2005) investigates the correlation between the self-efficacy, the learning attitude and the academic performance in the context of PPT teaching. He finds that PPT teaching can be used in ESL classroom effectively, improving students' sense of self-efficacy and helping them correct their learning attitudes. Lowerison (2006) believes that the multimodal PPT in class can greatly help students change their learning attitudes, making them being active rather than negative. Burke and James (2008) investigate the students' attitudes towards the effectiveness of PPT and their learning attitudes and performances, they come to the conclusion that students' attitudes

towards PPT directly affect their learning attitudes. Lavin (2009) conducts a survey of business students in a university and concludes that the use of multimedia courseware plays a positive role in the students' participation in the class. And it also improves their attending rates and the quality of note-taking, which enriches the interaction between teachers and students.

Chang (2018) investigates senior high school students, and she finds that students with different English learning abilities have different attitudes towards English learning based on multimodal PPT. But in general, the application of multimodal PPT teaching has a positive impact on students' learning. Zhang (2020) finds that under the assistance of multimodal PPT, students have good learning attitudes with a clear understanding of their learning purpose when they are learning English. Jiang (2021) shows in her research that under the multimodal PPT assisted teaching, students have good attitudes towards classroom participation in learning. But in terms of behavioral tendency, they show the dependence on courseware. Improper collocation of courseware modes leads to students' inactive attitudes towards learning, low interest in learning and other problems. In a study of four classes of students in a junior high school, Wang (2022) concludes that students like multimodal PPT teaching mode a lot. Students listen to lectures carefully, answer questions and take good notes, and multimodal PPT assisted teaching is conducive to develop the positive attitude for study in the English learning.

III A Survey of High School Students' Attitudes Towards English Learning

In order to explore the current situation of high school students' English learning attitudes under the multimodal PPT assisted teaching, the study is conducted for two months. The study sets up the specific research purpose and the research method which is useful for the study. According to research target in the senior high school, the study chooses two research objects.

3.1 Research purpose

With the rapid development of science and technology, modern information technology has an unprecedented impact on English teaching. The emergence of multimodal PPT makes

the classroom teaching more modern and diversified. However, it is worth thinking about how the English learning attitude of students is in the context of multimodal PPT assisted teaching. Thus, the author investigates three contents. Firstly, the overall status quo of high school students' English learning attitude under the multimodal PPT assisted teaching is investigated. Secondly, the differences of the overall English learning attitude of high school students in three dimensions is investigated, which are cognitive level, emotional experience and behavioral tendency. Finally, after collecting data, the influence of multimodal PPT teaching on the English learning attitude of students is analyzed, the problems in the teaching process are found out, and according to the analysis, reasonable suggestions are put forward.

The study provides a way for high school English teachers to know more about students, so that they can pay more attention to student-centered position in the English teaching, making PPT based on the characteristics of high school students.

3.2 Research object

In the study, there are 2 researching objects, which are 91 students in the two classes they are chosen from the 10 classes of Senior three in Jingwei Middle School, Yuci District, Jinzhong City, Shanxi Province. The second researching object is the 64 PPT slides which are collected from the English teacher of the 91 students. The reason why Senior three students are selected is that it is conducive to centralized data collection. Moreover, compared with the students of Senior one and Senior two, the students of Senior three have a more stable attitude in English learning after three years of multimodal PPT assisted teaching.

The 91 students involved in the study are mainly from two classes, 2001 and 2003, both of which are science classes. According to the regulation of the school, the classes of each grade are divided into two categories, namely key class and non-key class. The two classes involved in the study are both from key classes. There are 43 students in class 2001 of which 25 are boys and 18 are girls. The learning atmosphere of the class is relatively better, and the students' grades are mostly the top in the school. Most students work very harder, and they are very enthusiastic about learning English. And there are 48 students in class 2003 of which there are 28 boys and 20 girls. The overall performance of class 2003 is not better as that of class 2001. Compared with the learning atmosphere of Class 2001, the learning atmosphere of this class is quite relaxing and harmonious, but their overall learning attitude is also

excellent, and their learning motivation is much stronger.

The 64 PPT slides collected in the study are designed by the English teacher of 91 students, and it is mainly for stimulating students' minds and expanding their consciousness. Because Senior three students are forced to participate in the College Entrance Examination with high pressure, teachers focus more on helping students review previous knowledge and teaching them learning skills in this term. The main content of the courseware is to expand students' consciousness of learning vocabulary, so that students have a better way to memorize words. There are many modes in courseware, such as text, audio, table and so on. There are nice whole background color of courseware, the moderate size of font, and the better visual effect in the process of teaching. In addition, some pictures are used to make abstract concepts understood to help students. Starting from the theory of multimodal discourse analysis, the study analyzes the number and the type of modes used by teachers in PPT, to find out the problems in designing PPT courseware, so as to have a more integrated understanding of the effect on multimodal PPT assisted teaching on students' attitude in English learning

3.3 Research method

In the study, three research methods are used, which are literature research method, questionnaire method and PPT sample analysis method.

Literature research method mainly refers to the method of collecting, identifying and sorting out literature, and forming scientific understanding of facts through the researches. According to the research topic of the paper, relevant materials are searched in various ways, looking up many documents related to multimodal PPT and learning attitude on China National Knowledge Infrastructure (CNKI). The research achievements of domestic and foreign scholars in these aspects are learned gradually. The main literatures that the paper refers to are "The Research on the Correlation Between Multimodal PPT Presentation Teaching and Students' Learning Attitude" which is written by Zhang (2013), "A Study on Student's English Learning Attitude Under the Multimodal PPT Assisted Instruction Environment" whose author is Chang (2018), and "A Study on Junior High School Student's English Learning Attitude Under the Multimodal PPT Assisted Instruction" which is written by Wang (2022). The literature research method is a theoretical basis for the study of the correlation between multimodal PPT assisted teaching and learning attitude, as the logical

beginning for the study, with a foundation for further research.

Figure 3.1：CNKI

Questionnaire method is the main research method in the study. Questionnaires are distributed to students and the collected data are used to analyze and summarize the students' attitude towards English learning. The Sojump is an online questionnaire filling platform with the main functions of distributing and retrieving questionnaires, and it can present the final data in the form of a table to clearly show the proportion of the options of each question. The questionnaire used in the study is "Survey on the Status Quo of High School English Learning Attitude Under Multimodal PPT Assisted Teaching", which is adopted in Chang's (2018) paper. This questionnaire is based on the "English Learning Attitude Questionnaire" which is used in Tao's (2001) and Guo's (2010) papers and "Students' Classroom Participation Under Multimodal PPT Assisted Instruction" in Lu (2016) 's thesis. There are 30 questions in this questionnaire, respectively from three dimensions, each question has five choices A, B, C, D and E. The first part of the questionnaire is divided into four questions from the dimension of cognitive level. The second part of the questionnaire consists of 8 questions from the dimension of emotional experience. The third part of the questionnaire consists of 18 questions, which is the dimension of behavioral tendency. In addition, the questionnaire also uses a combination of forward and reverse questions, among which there are 7 reverse

questions, namely 6, 7, 11, 15, 16, 19, 20,26.

Figure 3.2：Sojump	Figure 3.3: The Questionnaire	Figure 3.4: The content
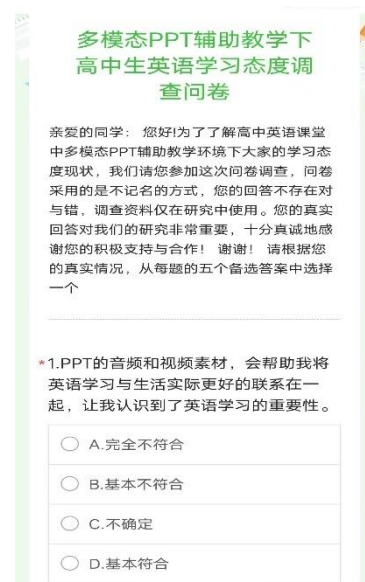
According to Zhou (2021), she indicates that there are three modes used in PPT courseware. The first mode is visual modality consisting of texts, pictures and charts. The second is digital audio with the background music playing an important role. And the last one is the combination of audio and visual, film and animation. PPT sample analysis is to analyze the collected PPT in the aspects of font size, color collocation, page layout, and modal collocation, so as to understand the characteristics of the PPT made by teachers, sum up the rules of PPT making, and explore the existing problems. In view of the problems found, the paper further explores the influence of multimodal PPT assisted teaching on students' English learning attitude, and puts forward some suggestions for improvement.

Figure 3.5: The PPT

3.4 Research procedure

The study is conducted for a total of two months, starting from January to February in 2023.

Firstly, in early January, the author interviews the English teacher of the selected school and asks the teacher about the general situation of each class. After consideration, the research chooses the students of Class 2001 and Class 2003 as the research objects. After the communication with the teacher, it learns that the students' number of these two classes is 91, and both of them are key science classes. There are 43 students in Class 2001 and 48 students in Class 2003. And both classes are mostly boys. In terms of academic performance, the overall performance of Class 2001 is better than that of the Class 2003, and the Class 2001 is in the heated competition. However, the overall learning atmosphere of the two classes is relatively full of stress. Only a small number of students are not competitive, appearing spirit slack. The research collects many PPT courseware from the English teacher, and selects one of the most representative courseware as the object of PPT sample analysis. There are 64 pieces of courseware, which is mainly used for stimulating student's mind, expanding their consciousness and providing students with methods to learn and memorize words.

At the end of January, after all senior high school students go home for winter vacation, questionnaires are sent to 91 students and collected on February 5. After checking whether

there is any incomplete answer in the questionnaire, it finds that there is no invalid questionnaire and 91 valid questionnaires are obtained.

In the process of waiting for the questionnaire to be returned, the samples of PPT are analyzed in the research. Firstly, the statistics of the modes used in the courseware show that text, pictures, graphics, mind maps, audio and video are used in the courseware. Then the modal collocation and combination in the courseware are counted. The courseware uses 4 combinations, which are the combination of the text and picture, the text and graphics, the video, and the last is the plain text. The combination of text and picture is the most frequently used in courseware. Finally, it analyzes whether the overall visual effect of courseware is great and whether the layout of the page is reasonable

On February 6th, the data are checked of the effective questionnaire through Sojump. Firstly, according to the data of the questionnaire, the overall quo of students' English learning attitude is analyzed. It can be seen that they have good learning attitudes. Then, the designing perspective of the questionnaire and corresponding questions are analyzed, finding whether there are differences in the dimension of cognitive, emotional experience and behavioral tendency of students. The results show that there is no significant difference in terms of cognitive level and emotional experience. But in terms of behavior, the difference is obviously shown. And according to the results, it can be seen that students' cognition is not always in keeping with their behaviors.

IV The Result and the Analysis of the Research.

After investigation, it can be concluded that the English learning attitude of high school students is affected by multimodal PPT. Next, the results are analyzed in this section, the problems, and the causes of them are explored, and finally reasonable suggestions are put forward.

4.1 Analysis of the survey results

In this part, there are two aspects of the analysis. First, the data of the questionnaire is clearly performed by the tables and according to these tables, the attitude of the students is analyzed. Second, the collocation of the modes in the PPT is listed to display the problem easily.

4.1.1 *Analysis of questionnaire survey results*

The questionnaire "Survey on the Status Quo of High School English Learning Attitude Under Multimodal PPT Assisted Teaching" used in the study mainly starts from three dimensions, namely, cognitive level, emotional experience and behavioral tendency. Under the three dimensions, six items are further detailed. Next, the research conducts the analysis about the data of the questionnaire survey.

Questions 1 to 4 of the questionnaire investigate the cognitive level dimension of English learning attitude, which includes the students' comprehension about the purpose and significance of learning, corresponding to question 1-2 in the questionnaire, and the understanding of academic achievement, corresponding to questions 3-4 in the questionnaire. Specific data are shown in the table below.

Table 4.1：The percentage of the questions in cognitive level

Question number	Item content	A	B	C	D	E
1	The audio and video materials of PPT help me connect English learning with the real life better, and let me realize the importance of English learning.	6.59	4.4	13.19	56.04	19.78
2	Teachers supplemented learning materials with PPT (current events, original movies, English poems, etc.), which make me feel that learning English can help me understand Western history and culture better.	3.3	6.59	12.09	52.75	25.27
3	The smile and eyes signal of my English teacher make me feel that I am been paid attention. I want to try my best to get good English grades.	4.4	3.3	16.48	47.25	28.57
4	Through group discussions, role plays, drama performances and other classroom activities in English class, I realize that listening and speaking scores are also important.	3.3	2.2	19.78	48.35	26.37

As can be seen from the table, 78.82% of students think that the combination of video and audio in PPT can help them realize the importance of learning English so that they can learn English in the authentical atmosphere. 78.02% of students think that teachers can help them understand the Western culture more impressively by using PPT to make up the learning

materials. Chang (2018) indicates that due to the knowledge in the textbooks is quite limited, teachers need to follow the current situation and supplement knowledge for students at any time. The supplementary materials can be displayed in the form of video, audio, animation and others to stimulate the enthusiasm of students towards learning. 75.82% of students are also affected by the teacher's body language in class. Jewitt (2009) points out that multimodal discourse includes not only images and audio, but also gestures, eyes contacts and words. The smile, eye contact and gestures of teachers belong to the non-verbal modes in classroom teaching, and students adjust their learning attitude based on the modes shown by teachers. More than 70% of students realize the importance of listening and speaking. Although oral English is not listed as a test item in the current Entrance Examination, most students are still aware of the importance of communicating in English.

The second part of the questionnaire investigates the dimensions of students' emotional experience, corresponding to questions 5-12. In this dimension, students' emotional experience in the process of English learning is detailed. The data is shown in the following table:

Table 4.2-1: The percentage of the questions in emotional experience

Question number	Item content	A	B	C	D	E
5	The PPT with pictures and videos makes me feel happy to have English class.	4.4	3.3	9.89	52.75	29.67
6	There are too many words in the PPT, the modes are monotonous, which makes me feel visual fatigue and it is difficult for me to keep focused.	5.49	7.69	28.57	36.26	21.98
7	In English class, PPT plays so fast that I don't have enough time to understand the key and difficult points, and I feel very anxious.	4.4	10.99	20.88	43.96	19.78
8	When the teacher presents knowledge with songs and animations related to the theme of the text, I feel very excited and full of curiosity for new knowledge.	4.4	7.69	15.38	51.65	20.88
9	I like the way teacher uses PPT to teach in class	2.2	4.4	23.08	46.15	24.18
10	In English class, I am able to write down the key points of teaching quickly according to the size of the font, the change of color, bold and so on in the PPT. After class, I am deeply impressed, having a sense of accomplishment.	4.4	8.79	20.88	50.55	15.38

Table 4.2-2: The percentage of the questions in emotional experience

Question number	Item content	A	B	C	D	E
11	In English class, the whole class uses PPT without any writing on the blackboard, I feel tired and lose interest in learning.	10.99	16.48	28.57	31.87	12.09
12	In English class, teacher presents knowledge clearly by using many tools through PPT, such as charts, mind maps, etc. I am impressed in class so that I can study easily	3.3	9.89	10.99	51.65	24.18

In these two tables, it can be seen obviously that most students prefer the teaching method of multimodal PPT courseware. Compared with traditional blackboard-writing teaching, multimodal PPT assisted teaching is more dynamic and it has a more active classroom atmosphere. More than 80% of students think that PPT with images and videos makes them have a better learning experience. 58.24% of the students do not like PPT with the mode of the single text, which make the whole PPT boring. It also causes the eyestrain and lack of the concentration of students. More than 60% of students are affected by the speed of displaying PPT. The faster the speed of PPT plays, the harder students understand the important and difficult knowledge. When teachers show the key points with songs, texts and animations related, 72.53% of students are more curious about knowledge and become more eager to learn. In the multimodal PPT assisted teaching mode, it is also an important factor to affect students' learning experience by whether PPT is paired with blackboard-writing. 43.96% of students expect that PPT teaching can be paired with blackboard-writing. In the class of only PPT teaching, without blackboard-writing, students have low interest in learning and feel bored in the class. Combined with questions 10 and 12, when the teacher uses various changes of font, charts and mind maps to mark the key points of teaching in PPT, more than 70% of the students believe that such teaching methods are conducive to give a good impression on knowledge, which makes their learning experience more relaxing.

The third part of the questionnaire is questions 13-30, which examines the behavioral tendency of students in the process of English learning. Under this dimension, three items are further detailed, among which questions 13-18 examine the initiative performance of students in learning, questions 19-24 examine the behavioral performance of students' will to learn,

and questions 25-30 examine the mastery of students' learning methods. Specific data are shown in the following table:

Table 4.3: The percentage of the question in learning initiative

Question number	Item content	A	B	C	D	E
13	By using the change of font and audio to highlight the important and difficult points in teaching, I will take the initiative to understand and memorize them.	3.3	8.79	10.99	57.14	19.78
14	When teachers present knowledge points with songs and animations related to the theme of the text, I will be more active in understanding and memorizing	3.3	15.38	8.79	47.25	25.27
15	I used to wait when the teacher presented exercises on the PPT, the answer will come out soon.	14.29	36.26	27.47	16.48	5.49
16	In English class, I used to take notes on PPT instead of thinking more deeply.	18.68	32.97	26.37	19.78	2.2
17	In English class, the smile and eye contacts of the teacher make me very relaxed and I will speak actively.	3.3	16.48	18.68	43.96	17.58
18	In English class, I take the initiative to write down key teaching points quickly according to the size of font, the change of color, bold to review after class.	5.49	7.69	23.08	46.15	17.58

In the questions of investigating students' initiative (questions 13-18), 76.92% of students think that when the teachers use various forms of font, audio and others flexibly to mark teaching key points in PPT, they are willing to take the initiative to understand and memorize the key points. When the teacher uses songs and animations related to the text to demonstrate the knowledge, to some extent the efficiency of listening of most students can be improved. When making PPT, teachers usually consider adding exercises into the courseware to test the grasp of the key points of students. When it comes to this aspect, 50.55% of students say they will think before the answer presents, but 21.97% of students are used to waiting for the answer. And a few students are not sure what they will do in such a situation. Since the knowledge is presented in the form of multimodal PPT, the key points in the courseware are marked by changing fonts, students write down the notes on the notebook according to their needs. 21.98% of students say that they don't think while taking notes, and 51.65% of students think actively while writing notes. Combined with 18 questions, 63.73% of students still review their notes after class. 61.54% of the students show that when they receive the

encouragement and the body language with inspiration of the teacher can develop their self-confidence and speak more actively.

Table 4.4：The percentage of the question in learning willingness

Question number	Item content	A	B	C	D	E
19	In English class, the font size on the PPT is too small and the color is mismatched, so I can't see it clearly. I will find it difficult to learn English, so I don't want to learn English.	6.59	8.79	19.78	39.56	25.27
20	The unrelated Animations, pictures and font changes in PPT courseware distract my attention.	8.79	8.79	24.18	39.56	18.68
21	According to the vivid interpretation of knowledge points in PPT, I will try my best to understand the important and difficult points in English learning.	5.49	7.69	16.48	57.14	13.19
22	The animation and audio inserted in PPT courseware can help me concentrate better in English class.	6.59	8.79	24.18	41.76	18.68
23	Whenever I encounter difficult sentences, according to the group of different colors, underline and other key marks, I will divide sentence components and try my best to understand long and difficult sentences.	10.99	13.19	21.98	40.66	13.19
24	When reviewing after class, I recall knowledge points and overcome English problems according to the pictures and audio-visual materials in the PPT.	15.38	27.47	18.68	28.57	9.89

Questions 19 to 24 investigate students' willingness to learn. Combined with the data, 64.83% of the students argue that inappropriate collocation of font in PPT affects their interest in learning and make them reluctant to learn English. If there are elements unrelated to the text in the PPT, 58.24% of the students say their attention is distracted and 17.58% say that it is not affected. However, when some animation and audio are inserted into the PPT duly, 60.44% of the students are more focused, but 15.38% of the students are still distracted. When there are difficulties in learning, 70.33% of students try to understand the important and difficult points by means of the interpretation of them in PPT, 53.85% of students try to understand the long and difficult sentences by using different colors, underline and other tools.

Table 4.5：The percentage of the question in the mastery of learning methods

Question number	Item content	A	B	C	D	E
25	I download relevant videos and audio on the Internet to learn English。	19.78	31.87	24.18	16.48	7.69
26	In English class, I usually study according to the rhythm of playing PPT, and learn how to play it.	17.58	30.77	28.57	14.29	8.79
27	Through the audio and video materials inserted in the PPT, I can connect English learning with real life, and I am more impressed.	2.2	14.29	28.57	45.05	9.89
28	In English class, according to the size of font, the color of change, bold and so on in the PPT, I write down key teaching points quickly for review after class.	2.2	19.78	24.18	38.46	15.38
29	When reviewing English after class, I recall what the teacher said in class again according to the key clues and framework shown by the teacher in the PPT to strengthen my memory.	10.99	10.99	23.08	39.56	15.38
30	Before revising for the examination, I will focus on reviewing the key points of knowledge, especially marked by different fonts and colors on the PPT courseware.	8.79	8.79	23.08	40.66	18.68

The last item subdivided from the dimension of behavioral tendency is the mastery of learning methods, which corresponds to questions 25-30 in the questionnaire. It can be seen from question 25 that there are less people who download various learning materials on the Internet to learn English after class. Chang (2018) thinks that the reason is that high school students have few holidays and little rest time. Most of their time is spent on doing tests and reviewing, and they don't have any extra time to study on the Internet. 48.35% of the students don't rely on PPT too much, because the rhythm of the presentation doesn't affect their study plan. 54.94% of students review their notes after class according to the framework shown by the teacher in the PPT. Before reviewing for the exam, 59.34% of the students also focus on reviewing the fonts which are highlighted by different colors in the PPT.

4.1.2 *Multimodal PPT courseware sample analysis*

In this part, the study explores and analyzes the PPT courseware collected from the following modes.

According to the 64 PPT collected in the research, the types of modal collocation include

pure text, pure picture, the video and the collocation of text and picture. The study extends the description from four modes. The collocation ratio is shown in the Figure 4.1.

Figure 4.1: The collocation ratio
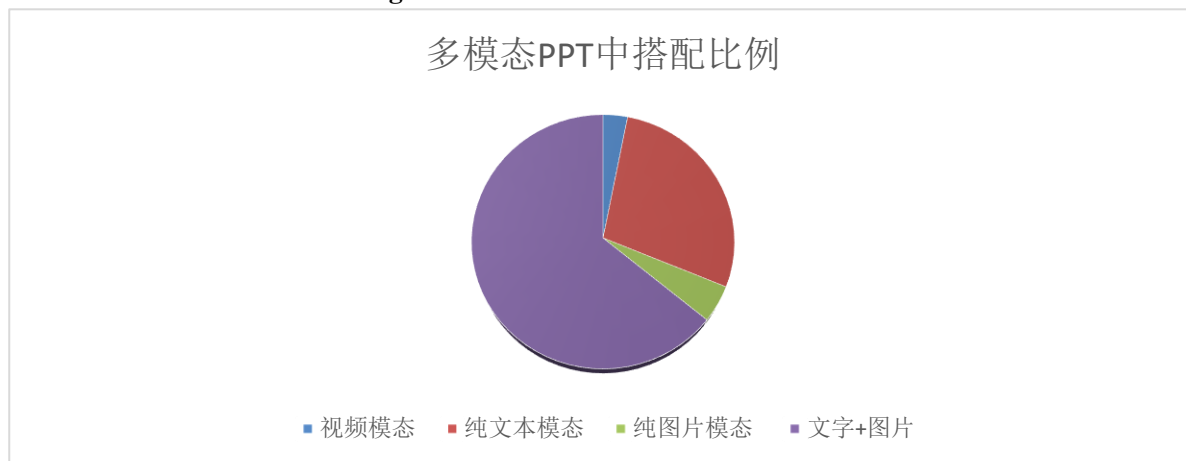
The first mode is the text. According to the data in the chart, it can be seen that the text is the most frequently used by the teacher, but actually it is not the most popular mode among the students. Text can construct meaning clearly. In the PPT, it mainly has the following usages: introducing topic; showing the teaching steps; displaying the key points; listing the examples; presenting the past exam paper and showing exercises. The specific content is shown in the figure.


Figure 4.2: The topic

Figure 4.3: Teaching step

Figure 4.4: key points

Figure 4.5: Examples
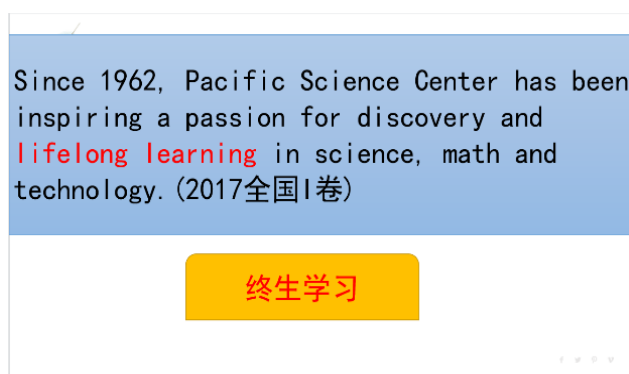
Figure 4.6: The past exam paper
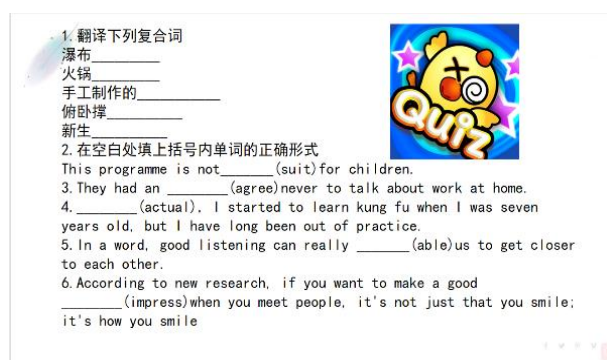
Figure 4.7: Exercises

The second mode is the font. In the PPT, the size of fonts is mainly 116, 44, 40,32 and 28. Font No. 116 which is mainly placed in the first page and the last page, is used for topic introduction. Font No. 44 and No. 40 are used for the introduction of the teaching content. Font No. 28 and No. 32 are used to show the teaching content and give examples of knowledge points. The colors of fonts mainly use champagne, black, orange, red, blue. When the English teacher displays the teaching content, she mainly uses the black font. To show the example clearly, she chooses orange as the appropriate color. Red is used to mark the key point; blue is shown to mark the affixes in the point of the word formation and champagne is only placed in the introduction.

The third mode is the picture. According to the ratio of the collocation, it can be seen that the picture is the second favorite mode of the teacher. Picture presents the knowledge with words in most cases, compared with pure text, such collocation can help students understand abstract concepts more easily and make the teaching in the classroom more vivid.

In the PPT, the functions of the picture are: enlivening the atmosphere of the classroom, being the auxiliary explanation and presenting the abstract things concretely. The specific content is shown in the figure:

Figure 4.7: Enlivening the atmosphere

Figure 4.8: The auxiliary explanation

Figure 4.9: specific presentation

The last mode is the video. Video is the most popular mode among students in the PPT teaching mode. The video of the PPT only appears twice, and these two videos are used to attract the interest of students learning about the two words to be explained. Xiong Ting (2014) thinks that the reason why video appears less in the PPT is that the teaching time of the teachers design in the courseware is not enough, and they have no more energy. And there is another factor of the problem——the level of the teacher. Jiang (2021) indicates that the reason of that is related with the time of the class, and the energy of the teacher to make PPT. The function of these two videos in the PPT is to decrease the degree of visual fatigue from students which is caused by using the combination of words and pictures to explain key points easily.

4.2 Cause Analysis

According to the analysis of the data of the questionnaire and the PPT sample, the research explores that the causes can be analyzed from two dimensions—the dimension of the students and the multimodal PPT. The dimension of the students represents the subjective

reason, and the PPT is on behalf of the objective reason.

4.2.1 *Student dimension*

The first cause analysis is about the result of questionnaire data. The "Survey on the Status Quo of High School English Learning Attitude Under Multimodal PPT Assisted Teaching "conducted by the research mainly surveys students from the dimensions of cognitive level, emotional experience and behavioral tendency. After analyzing the questionnaire data, it can be concluded that there is no obvious difference in the cognitive level and emotional experience of high school students in English learning, but there is an obvious difference in their behavioral tendency. The behavioral dimension mainly examines their learning initiative, learning willingness and learning methods. In this dimension, they differ the most item of grasping of learning methods.

Tian (2017) thinks that English, as an important information carrier, has been the most widely used in daily life. Due to the influence of information technology in the social life and the development of economic globalization, the importance of English has become increasingly prominent, and it has become an essential skill to use English fluently. For this reason, the awareness of high school students has been basically built up, they can realize the significance of learning English well for their development in the future, so they have a clear understanding of their purpose in learning English.

High school is under great pressure in the study, because there are a lot of subjects. The classes investigated by the research are science classes. The foundation of English of most students in the science class is unsubstantial. What's more, many students tend to go overboard on one or some subjects. They spend most of their time in learning the science subjects, and do not put English learning in the same position as other subjects. The way they learn English is just listening to the English class without free time to review their notes. It is the first reason why they have difference in mastering learning methods.

Some students have a clear understanding of learning English in the English class and have a good emotional experience in the class. But they learn English just by memorizing words, doing quizzes, and they don't pay attention to sum up the methods of English learning. It is why they don't have a good way of learning English.

Finally, there are still a few students existing the language fossilization of learning

language without appropriate awareness of learning. They are very lazy to put forward further study. They don't think independently during the process of learning. As far as we all know, the learning of high school not only needs the supervision from teachers, but what is the most important is to learn consciously with the self-discipline. But they have formed the laziness, no matter which subject, they always keep the same attitude.

4.2.2 *Multimodal PPT sample dimension*

The analysis of PPT courseware sample is divided into two aspects, the designing and the using of PPT. There are four factors as listed.

First, the modal collocation of the PPT courseware is improper. From the PPT samples collected, it can be seen that the modal collocation of the text and pictures is used the most frequently by the teacher. However, some pictures in the PPT have no or less relation with the teaching content. Although this type of pictures can help enliven the atmosphere of classroom, use the pictures excessively may lead students abstracted in the teaching. As the questionnaire shown, many students are distracted when they see the irrelevant content. Moreover, the text in the PPT is not very rich, which is not helpful for the explanation of knowledge. When taking notes, students can't find the key point and learn what to remember.

Second, the layout of the PPT is not reasonable. Wang (2020) thinks that the density of the text and paragraph distribution in the PPT courseware has an important influence on the transmission of the teaching content. The relatively spacing of the words, lines and paragraphs can give students a relaxed visual experience, and the dense text can cause uncomfortable visual sense. When designing PPT, the teacher takes into consideration the background colors, the font of different sizes and the colors to highlight important and difficult points in the teaching. However, the layout of the page is not able to highlight the important and difficult points of teaching enough, because the position of fonts is placed random, lacking the sense of balance.

Third, the rhythm of displaying PPT courseware. The speed of displaying PPT also to some extent affects the learning attitude of students. Jiang (2021) indicates that the PPT slides playing with high speed causes a problem that students can't keep pace with the teaching progress, resulting in their poor efficiency of learning. It also affects students to take notes. Taking notes while thinking is conducive to students' understanding of knowledge. But if the

courseware is shown too quickly, students will gradually develop the habit of copying notes without thinking.

The last one is the collocation of PPT courseware and blackboard writing. If the teacher only uses PPT to teach English, the single and passive learning style of students will be developed. If the PPT slides only demonstrate the key and difficult points, students need to stare at the whiteboard for a long time, they may experience the visual fatigue, resulting in the lack of concentration. Moreover, there is no combination of PPT and blackboard writing, which is also the reason why students rely on PPT.

4.3 Pedagogical implication of multimodal PPT design

Multimodal PPT assisted teaching is widely used in English classroom teaching. Students' attitude towards English learning has a significant impact on their English learning. The good English learning attitude can help them get a good emotional experience in the process of learning English, and their English learning can be relaxing and interesting, while the negative English learning attitude makes them lose interest in English learning with passive learning awareness. From the perspective of teachers, combined with the three dimensions of the questionnaire, the study puts forward some suggestions about the design of multimodal PPT.

4.3.1 *Cognitive level*

The first is the dimension of the cognitive. According to the data of the questionnaire, when teachers add some audio, videos, pictures and others related to teaching content in PPT, most students can realize the importance of learning English, which can help them learn the teaching content in the real life, and understand the cultural differences between China and the West. Therefore, teachers should make full use of PPT to demonstrate the teaching content, but the content should not be limited to textbooks, which requires teachers to keep pace with current events in the teaching process, supplying extracurricular learning materials for students to help them understand the differences between Chinese and foreign cultures better. Chang (2018) indicates that teachers can get the relevant resources on the Internet as much as possible when preparing lessons, such as pictures, films and animation related to the topic. It is helpful to broaden students' horizon and improve their understanding of the culture and custom of the UK and the US. At the same time, when faced with a large number of available

learning materials, teachers should select the supplementary materials which are applicable in class and easy for students to understand.

4.3.2 *Emotional experience*

The second is the dimension of the emotion. In this dimension, there are two main factors affecting the emotional experience of the students. The first is the visual effect of the PPT and the second is the interaction between teachers and students. In terms of the designing of the PPT, first of all, the logicality can be shown by highlighting the important and difficult points. Therefore, before making PPT, teachers should be familiar with their teaching content first. They can use some changes in font size and color, and bullet points appropriately. Secondly, the layout of PPT courseware should be neat. The background color of the page should be contrasted with the color of the font. Otherwise, it affects the visual sense of students and the effect of the teaching. Finally, the modal collocation of the PPT is also an important part of designing PPT. The modal collocation in PPT should be various, instead of using the collocation of words and pictures only, some audio and videos should be inserted timely. It can attract students' interest about the coming teaching content, and also relieve the terrible moods of the students which are produced under the combination of the words and the pictures for a long time. Except for the designing of the PPT, the interaction of teacher and students also plays an important role in improving the emotional experience of the students. Wu (2023) thinks that the interaction between teachers and students can not only improve the effect of the English learning of the students, but also develop their various learning abilities and ameliorate their learning quality. High school learning is a process with high pressure, teachers give students some positive feedback timely so that students can have a good emotional experience, and strengthen their learning motivation.

4.3.3 *Behavioral tendency*

The last one is the dimension of the behavior. There are also two major factors, which are the speed of displaying PPT and its combination with blackboard writing. First of all, the PPT should be played at a moderate pace so that the time is enough for students to take notes and understand it in the process of transcription. It is beneficial for students to comprehend the teaching content, develop their positive learning behaviors and a good attitude in English learning. In addition, it is also an important factor that the appropriate combination of the PPT

and the blackboard writing. As we all know, multimodal PPT can store a huge capacity of information. Students have a certain cognitive burden if they only rely on the teaching PPT for a long time. What's more, it often happens that the students forget the teaching content after watching the PPT if the speed of it is not stable. In the classroom of the PPT teaching, using blackboard writing can help students construct the knowledge system clearly. Chang (2018) believes that the teachers should also take care of some underachievers, giving them time to understand the knowledge.

V Conclusion

The study investigates the 91 students of Jingwei Middle School from Class 1 and Class 3, Senior three for two months. During the process, the study adopts the literature research method, questionnaire survey and PPT sample analysis and analyzes the questionnaire data and the PPT samples. According to the research content the study reaches the following conclusions.

As for the first research content, according to the data of the questionnaire, the high school students have an excellent attitude in English learning under the multimodal PPT assisted teaching. Most students have a clear understanding to learn English, and they participate in English class with full spirit. When faced with the problem, they try their best to solve it. But a small number of students have the negative attitude without the self-discipline.

As for the second research content, it finds that the students do not differ much in terms of cognitive level and emotional experience, but the difference exists in the behavioral tendency. First of all, in terms of cognitive level, most students are aware of the significance of learning English clearly. From the result of the questionnaire, it can be seen easily that they expect that teachers can add some current situation in the PPT to help them understand the historical development and cultural differences between the China and the West better. As for the emotional experience, when the high school students are in the environment of the PPT with the diversified modes and the proper collocation, they can be more active to learn, having sufficient motivation and strong interest. According to the data of the questionnaire, it finds that in the aspect of the behavioral tendency, the result begins to show the obvious difference.

Especially in terms of the grasping of the learning methods, the half of the students do not have the excellent method to learn English. They take notes in class without thinking, and some students rely on PPT without learning initiative.

As for the third content, the study finds that the multimodal PPT assisted teaching has an impact on the English learning attitude of the high school students. On the whole, it is a positive teaching way to use multimodal PPT. There are four main influencing factors, which are the layout of the PPT, the collocation of the modes, the speed of displaying the PPT, and the combination of the PPT and the blackboard writing. It can make students have the wonderful emotional experience first in learning English when the layout of the PPT is reasonable and the modes are various. The time is enough for students to absorb the teaching content if the PPT is played in an orderly speed and properly combined with blackboard writing, which can also help them adjust their improper learning behaviors to learn English.

However, the research has some limitations, owing to the limited time and the space. And the author also has the limited academic competence. The number of respondents is too small to make the data more persuasive, the 91 students cannot on behalf of all the senior high school students in China. And the research methods are insufficient. Finally, the countermeasures which are about improving the designing of the PPT are just the exploratory suggestions from the author. It needs further verification whether the countermeasures are effective.

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Appendix 1: The Questionnaire

<div align="center">多模态 PPT 辅助教学下高中生英语学习态度调查问卷</div>

亲爱的同学：

您好!为了了解高中英语课堂中多模态 PPT 辅助教学环境下大家的学习态度现状，我们请您参加这次问卷调查，问卷采用的是不记名的方式，您的回答不存在对与错，调查资料仅在研究中使用。您的真实回答对我们的研究非常重要，十分真诚地感谢您的积极支持与合作！ 谢谢！

请根据您的真实情况，从每题的五个备选答案中选择一个

1. PPT 的音频和视频素材，会帮助我将英语学习与生活实际更好的联系在一起，让我认识到了英语学习的重要性。

   A 完全不符合　B 基本不符合　C 不确定　D 基本符合　E 完全符合

2. 教师通过 PPT 补充学习材料（时事热点、原声电影、英文诗歌等），让我觉得学习英语能够更好的了解西方的历史和文化。

   A 完全不符合　B 基本不符合　C 不确定　D 基本符合　E 完全符合

3. 英语老师的微笑、眼神示意等，让我觉得受到了关注，我想努力获得优秀的英语成绩。

   A 完全不符合　B 基本不符合　C 不确定　D 基本符合　E 完全符合

4. 通过英语课上的小组讨论、角色扮演、戏剧表演等课堂活动，我意识到听说成绩也很重要。

   A 完全不符合　B 基本不符合　C 不确定　D 基本符合　E 完全符合

5. 带有图像和视频的 PPT，让我觉得上英语课是一件很开心的事。

   A 完全不符合　B 基本不符合　C 不确定　D 基本符合　E 完全符合

6. PPT 上文字过多，模态单一，会让我感到视觉疲劳，很难持续专注。

   A 完全不符合 B 基本不符合 C 不确定 D 基本符合 E 完全符合

7. 英语课上，PPT 的播放节奏偏快，让我来不及理解重难点，我会感到很焦虑。

   A 完全不符合　B 基本不符合　C 不确定　D 基本符合　E 完全符合

8. 当老师用课文主题相关歌曲、动画呈现知识点时，我会感到很兴奋，对新知识充满了好奇。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

9. 我喜欢教师课堂使用 PPT 课件的教学方式

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

10. 英语课上，我能根据 PPT 上的字体大小、颜色变化、加粗等快速记下教学重点，课后印象深刻，我感到很有成就感。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

11. 英语课上，整堂课都用 PPT，没有任何板书，我会感到厌倦，失去学习兴趣。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

12. 英语课上，教师通过 PPT 呈现知识清楚明了，如图表，思维导图等。课堂上印象深刻，我学起来很轻松。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

13. PPT 上使用字体变化，声音等突出教学重难点，我会更主动地去理解记忆。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

14. 当老师用课文主题相关歌曲、动画呈现知识点时，我会更加主动地去理解记忆。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

15. 老师在 PPT 上呈现习题时，很快就会出答案，我习惯等待。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

16. 英语课上，我习惯于记录 PPT 上的笔记，不会进行更深入的思考。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

17. 英语课上，教师的微笑和眼神示意，让我很放松，我会积极主动发言。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

18. 英语课上，我会主动快速地根据 PPT 上的字体大小，颜色变化、加粗等，记下教学重点，以便课后复习。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

19. 英语课上，PPT 上字体字号偏小，颜色搭配不当，我看不清，我会觉得英语学习很困难，就不想学英语了。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

20. PPT 课件中与课文无关的动画、图片、字体变化会分散我的注意力。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

21. 根据 PPT 中对知识点生动形象的解读，我会尽力弄懂英语学习中的重难点。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

22. PPT 课件中插入的动画，音频等，能让我在英语课堂上更好的集中注意力。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

23. 每当遇到难理解的句子时，我都会通过不同颜色分组，下划线等重点标示划分句子成分，尽量去理解长难句。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

24. 课后复习时，我会据 PPT 课件上的图片和影音素材，回忆知识点，攻克英语难题。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

25. 我会在网上下载相关视频、音频等素材去学习英语。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

26. 英语课堂上，我通常是根据 PPT 的播放节奏学习，怎么播放怎么学习。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

27. 通过 PPT 中插入的音频和影音素材，我会将英语学习，与生活实际联系起来，学习印象更加深刻。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

28. 英语课上，根据 PPT 上的字体大小、颜色变化、加粗等，我会快速的记下教学重点，以便课后复习。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

29. 英语课后复习时，我会根据老师在 PPT 上展示的重点线索、框架等，把老师上课讲的内容再回想一遍，以此来加强记忆。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

30. 考试复习前，我会着重复习 PPT 课件上不同字体，不同颜色标出的知识重点。

A 完全不符合　　B 基本不符合　　C 不确定　　D 基本符合　　E 完全符合

Appendix 2: The Data of the Questionnaire

1.PPT的音频和视频素材，会帮助我将英语学习与生活实际更好的联系在一起，让我认识到了英语学习的重要性。 [单选题]

选项 ♦	小计 ♦	比例
A.完全不符合	6	6.59%
B.基本不符合	4	4.4%
C.不确定	12	13.19%
D.基本符合	51	56.04%
E.完全符合	18	19.78%
本题有效填写人次	**91**	

🥧 饼状 ⭕ 圆环 📊 柱状 ▭ 条形 〰 折线

2.教师通过PPT补充学习材料（时事热点、原声电影、英文诗歌等），让我觉得学习英语能够更好的了解西方的历史和文化。 [单选题]

选项 ♦	小计 ♦	比例
A.完全不符合	3	3.3%
B.基本不符合	6	6.59%
C.不确定	11	12.09%
D.基本符合	48	52.75%
E.完全符合	23	25.27%
本题有效填写人次	**91**	

3.英语老师的微笑、眼神示意等，让我觉得受到了关注，我想努力获得优秀的英语成绩。 [单选题]

选项 ♦	小计 ♦	比例
A.完全不符合	4	4.4%
B.基本不符合	3	3.3%
C.不确定	15	16.48%
D.基本符合	43	47.25%
E.完全符合	26	28.57%
本题有效填写人次	**91**	

🥧 饼状 ⭕ 圆环 📊 柱状 ▭ 条形 〰 折线

4.通过英语课上的小组讨论、角色扮演、戏剧表演等课堂活动，我意识到听说成绩也很重要。 [单选题]

选项 ♦	小计 ♦	比例
A.完全不符合	3	3.3%
B.基本不符合	2	2.2%
C.不确定	18	19.78%
D.基本符合	44	48.35%
E.完全符合	24	26.37%
本题有效填写人次	**91**	

5.带有图像和视频的PPT，让我觉得上英语课是一件很开心的事。 [单选题]

选项 ♦	小计 ♦	比例
A.完全不符合	4	4.4%
B.基本不符合	3	3.3%
C.不确定	9	9.89%
D.基本符合	48	52.75%
E.完全符合	27	29.67%
本题有效填写人次	**91**	

🥧 饼状 ⭕ 圆环 📊 柱状 ▭ 条形 〰 折线

6.PPT上文字过多，模态单一，会让我感到视觉疲劳，很难持续专注。 [单选题]

选项 ♦	小计 ♦	比例
A.完全不符合	5	5.49%
B.基本不符合	7	7.69%
C.不确定	26	28.57%
D.基本符合	33	36.26%
E.完全符合	20	21.98%
本题有效填写人次	**91**	

🥧 饼状 ⭕ 圆环 📊 柱状 ▭ 条形 〰 折线

7.英语课上，PPT的播放节奏偏快，让我来不及理解重难点，我会感到很焦虑。 [单选题]

选项 ♦	小计 ♦	比例
A.完全不符合	4	4.4%
B.基本不符合	10	10.99%
C.不确定	19	20.88%
D.基本符合	40	43.96%
E.完全符合	18	19.78%
本题有效填写人次	**91**	

🥧 饼状 ⭕ 圆环 📊 柱状 ▭ 条形 〰 折线

8.当老师用课文主题相关歌曲、动画呈现知识点时，我会感到很兴奋，对新知识充满了好奇。 [单选题]

选项 ♦	小计 ♦	比例
A.完全不符合	4	4.4%
B.基本不符合	7	7.69%
C.不确定	14	15.38%
D.基本符合	47	51.65%
E.完全符合	19	20.88%
本题有效填写人次	**91**	

9.我喜欢教师课堂使用PPT课件的教学方式
[单选题]

选项 ⇕	小计 ⇕	比例
A.完全不符合	2	2.2%
B.基本不符合	4	4.4%
C.不确定	21	23.08%
D.基本符合	42	46.15%
E.完全符合	22	24.18%
本题有效填写人次	91	

⬤ 饼状　◯ 圆环　▮ 柱状　▬ 条形　〰 折线

10.英语课上，我能根据PPT上的字体大小、颜色变化、加粗等快速记下教学重点，课后印象深刻，我感到很有成就感。 [单选题]

选项 ⇕	小计 ⇕	比例
A.完全不符合	4	4.4%
B.基本不符合	8	8.79%
C.不确定	19	20.88%
D.基本符合	46	50.55%
E.完全符合	14	15.38%
本题有效填写人次	91	

11.英语课上，整堂课都用PPT，没有任何板书，我会感到厌倦，失去学习兴趣。 [单选题]

选项 ⇕	小计 ⇕	比例
A.完全不符合	10	10.99%
B.基本不符合	15	16.48%
C.不确定	26	28.57%
D.基本符合	29	31.87%
E.完全符合	11	12.09%
本题有效填写人次	91	

⬤ 饼状　◯ 圆环　▮ 柱状　▬ 条形　〰 折线

12.英语课上，教师通过PPT呈现知识清楚明了，如图表，思维导图等。课堂上印象深刻，我学起来很轻松。 [单选题]

选项 ⇕	小计 ⇕	比例
A.完全不符合	3	3.3%
B.基本不符合	9	9.89%
C.不确定	10	10.99%
D.基本符合	47	51.65%
E.完全符合	22	24.18%
本题有效填写人次	91	

13.PPT上使用字体变化，声音等突出教学重难点，我会更主动地去理解记忆。 [单选题]

选项 ⇕	小计 ⇕	比例
A.完全不符合	3	3.3%
B.基本不符合	8	8.79%
C.不确定	10	10.99%
D.基本符合	52	57.14%
E.完全符合	18	19.78%
本题有效填写人次	91	

⬤ 饼状　◯ 圆环　▮ 柱状　▬ 条形　〰 折线

14.当老师用课文主题相关歌曲、动画呈现知识点时，我会更加主动地去理解记忆 [单选题]

选项 ⇕	小计 ⇕	比例
A.完全不符合	3	3.3%
B.基本不符合	14	15.38%
C.不确定	8	8.79%
D.基本符合	43	47.25%
E.完全符合	23	25.27%
本题有效填写人次	91	

15.老师在PPT上呈现习题时，很快就会出答案，我习惯等待。 [单选题]

选项 ⇕	小计 ⇕	比例
A.完全不符合	13	14.29%
B.基本不符合	33	36.26%
C.不确定	25	27.47%
D.基本符合	15	16.48%
E.完全符合	5	5.49%
本题有效填写人次	91	

⬤ 饼状　◯ 圆环　▮ 柱状　▬ 条形　〰 折线

16.英语课上，我习惯于记录PPT上的笔记，不会进行更深入的思考。 [单选题]

选项 ⇕	小计 ⇕	比例
A.完全不符合	17	18.68%
B.基本不符合	30	32.97%
C.不确定	24	26.37%
D.基本符合	18	19.78%
E.完全符合	2	2.2%
本题有效填写人次	91	

17.英语课上，教师的微笑和眼神示意，让我很放松，我会积极主动发言。 [单选题]

选项 ♦	小计 ♦	比例
A.完全不符合	3	3.3%
B.基本不符合	15	16.48%
C.不确定	17	18.68%
D.基本符合	40	43.96%
E.完全符合	16	17.58%
本题有效填写人次	91	

🥧 饼状　◯ 圆环　📊 柱状　📇 条形　📈 折线

18.英语课上，我会主动快速地根据PPT上的字体大小，颜色变化、加粗等，记下教学重点，以便课后复习。 [单选题]

选项 ♦	小计 ♦	比例
A.完全不符合	5	5.49%
B.基本不符合	7	7.69%
C.不确定	21	23.08%
D.基本符合	42	46.15%
E.完全符合	16	17.58%
本题有效填写人次	91	

21.根据PPT中对知识点生动形象的解读，我会尽力弄懂英语学习中的重难点。 [单选题]

选项 ♦	小计 ♦	比例
A.完全不符合	5	5.49%
B.基本不符合	7	7.69%
C.不确定	15	16.48%
D.基本符合	52	57.14%
E.完全符合	12	13.19%
本题有效填写人次	91	

🥧 饼状　◯ 圆环　📊 柱状　📇 条形　📈 折线

22.PPT课件中插入的动画，音频等，能让我在英语课堂上更好的集中注意力。 [单选题]

选项 ♦	小计 ♦	比例
A.完全不符合	6	6.59%
B.基本不符合	8	8.79%
C.不确定	22	24.18%
D.基本符合	38	41.76%
E.完全符合	17	18.68%
本题有效填写人次	91	

19.英语课上，PPT上字体字号偏小，颜色搭配不当，我看不清，我会觉得英语学习很困难，就不想学英语了。 [单选题]

选项 ♦	小计 ♦	比例
A.完全不符合	6	6.59%
B.基本不符合	8	8.79%
C.不确定	18	19.78%
D.基本符合	36	39.56%
E.完全符合	23	25.27%
本题有效填写人次	91	

🥧 饼状　◯ 圆环　📊 柱状　📇 条形　📈 折线

20.PPT课件中与课文无关的动画、图片、字体变化会分散我的注意力。 [单选题]

选项 ♦	小计 ♦	比例
A.完全不符合	8	8.79%
B.基本不符合	8	8.79%
C.不确定	22	24.18%
D.基本符合	36	39.56%
E.完全符合	17	18.68%
本题有效填写人次	91	

23.每当遇到难理解的句子时，我都会通过不同颜色分组，下划线等重点标示划分句子成分，尽量去理解长难句。 [单选题]

选项 ♦	小计 ♦	比例
A.完全不符合	10	10.99%
B.基本不符合	12	13.19%
C.不确定	20	21.98%
D.基本符合	37	40.66%
E.完全符合	12	13.19%
本题有效填写人次	91	

🥧 饼状　◯ 圆环　📊 柱状　📇 条形　📈 折线

24.课后复习时，我会根据PPT课件上的图片和影音素材，回忆知识点，攻克英语难题。 [单选题]

选项 ♦	小计 ♦	比例
A.完全不符合	14	15.38%
B.基本不符合	25	27.47%
C.不确定	17	18.68%
D.基本符合	26	28.57%
E.完全符合	9	9.89%
本题有效填写人次	91	

25.我会在网上下载相关视频、音频等素材去学习英语。[单选题]

选项 ⬍	小计 ⬍	比例
A.完全不符合	18	19.78%
B.基本不符合	29	31.87%
C.不确定	22	24.18%
D.基本符合	15	16.48%
E.完全符合	7	7.69%
本题有效填写人次	91	

🥧 饼状　◯ 圆环　📊 柱状　≡ 条形　📈 折线

26.英语课堂上，我通常是根据PPT的播放节奏学习，怎么播放怎么学习。[单选题]

选项 ⬍	小计 ⬍	比例
A.完全不符合	16	17.58%
B.基本不符合	28	30.77%
C.不确定	26	28.57%
D.基本符合	13	14.29%
E.完全符合	8	8.79%
本题有效填写人次	91	

29.英语课后复习时，我会根据老师在PPT上展示的重点线索、框架等，把老师上课讲的内容再回想一遍，以此来加强记忆。[单选题]

选项 ⬍	小计 ⬍	比例
A.完全不符合	10	10.99%
B.基本不符合	10	10.99%
C.不确定	21	23.08%
D.基本符合	36	39.56%
E.完全符合	14	15.38%
本题有效填写人次	91	

🥧 饼状　◯ 圆环　📊 柱状　≡ 条形　📈 折线

30.考试复习前，我会着重复习PPT课件上不同字体，不同颜色标出的知识重点。[单选题]

选项 ⬍	小计 ⬍	比例
A.完全不符合	8	8.79%
B.基本不符合	8	8.79%
C.不确定	21	23.08%
D.基本符合	37	40.66%
E.完全符合	17	18.68%
本题有效填写人次	91	

27.通过PPT中插入的音频和影音素材，我会将英语学习，与生活实际联系起来，学习印象更加深刻。[单选题]

选项 ⬍	小计 ⬍	比例
A.完全不符合	2	2.2%
B.基本不符合	13	14.29%
C.不确定	26	28.57%
D.基本符合	41	45.05%
E.完全符合	9	9.89%
本题有效填写人次	91	

🥧 饼状　◯ 圆环　📊 柱状　≡ 条形　📈 折线

28.英语课上，根据PPT上的字体大小、颜色变化、加粗等，我会快速的记下教学重点，以便课后复习。[单选题]

选项 ⬍	小计 ⬍	比例
A.完全不符合	2	2.2%
B.基本不符合	18	19.78%
C.不确定	22	24.18%
D.基本符合	35	38.46%
E.完全符合	14	15.38%
本题有效填写人次	91	

Appendix 3: The PPT sample