Semantic differences in understanding of English words of senior high school students: frequent questions and teaching suggestions

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Abstract. This research demonstrates the English words' understanding due to semantic differences, together with further teaching advice and frequent questions. Because of the cultural differences, the expression of English and Chinese meanings is different. Consequently, it can be easy for learners to confuse and understand the intended meaning incorrectly. There are several negative results of students having weak knowledge of polysemous words: lower academic performance, and passage understanding, together with a weaker lexical foundation. In order to explore thus address the situation of mastered weak polysemy knowledge, this essay will investigate students and teachers who come from high schools in various cities in China their knowledge of polysemy as well as the following learning difficulties; the research found that (1) the universality of polysemy learning, academic performance; (2) the teaching pertinence, importance of foundation and teaching method. From those findings, this research supposes that the approach of increasing reading amount, fostering English literacy, and using a preferred vocabulary memorization method can be used so as to improve and solve the issue.

Keywords: senior high school students, context, semantic differences, polysemous words.

1. Introduction

Polysemy is one of the difficulties in language teaching. Polysemy represents the word form with more than one meaning (Cambridge Dictionary, n.d.) [1]. In English, there are lots of words that contain various meanings within one word. In other words, students might misunderstand the words under specific contexts. In the learning process, the limited context created by instructors in English teaching led to a narrow word understanding, which can potentially lead to word confusion as people do not know the word expression in many contexts. Learners might find memorizing polysemous words challenging because individuals have to memorize more expression forms of a word. On the contrary, researchers have rare systematic investigations of tools to make strategies for learning difficulties, influential factors, as well as teaching proposals. This investigation will indicate the situation due to polysemy, along with providing further improvements.

In recent decades, English has become one of the compulsory courses in schools in China. Meanwhile, because of language differences, the understanding of vocabularies' meaning might be different under different contexts, especially when those words carry various meanings. Many frequently used words have more than one meaning; for example, state has meanings of 'condition,' 'form,' 'declare,' 'narrate,' 'province,' and 'country,' etc. Learners easily misuse this type of words due to its meaning variability under different contexts.

Furthermore, in English teaching, examining and considering polysemous words is imperative since it plays a crucial role in using four English skills (listening, reading, speaking, writing) and English text understanding. Also, in high schools, the teaching and learning synonyms are important in English subjects because that can help promote the mastering of polysemous words; by knowing a broader range of words with the same meaning, students can be easier to remember and use the words more effectively.

2. Literature review

Context is quite crucial for semantic words understanding. Context means language surrounding, including external factors such as the time, location and individual differences during communication (Li, 2021) [2]. To be immersed in context is an effective way to improve English skills for more accurate communication, and easier for teachers to teach learners vocabulary, as well as translation between different languages. Learners have to connect the information through words according to context (Yuan, 2020) [3], which is the foundation of vocabulary memorization and efficient learning. Sometimes, it is easy for students to misunderstand the meaning of polysemous words in some contexts as a consequence of their inadequate knowledge. For instance, if an individual says, 'Did you see the crane in the garden? It is huge.' It is easy for the other person to be confused about the actual object without the extra specific information since 'crane' means a kind of bird, along with construction equipment. It is also helpful to understand the object with the knowledge of the previous context created. Therefore, context is quite significant in polysemous words' understanding.

With the enough knowledge of established context, students can easier master the polysemous words. Context learning is more efficient than rote learning in conventional teaching mode (Li, 2021) [2]; since learners can understand the words' meaning with immersion in the context, the surroundings can provide more relevant clues about the words, and learners' memories can be awakened via those evidences. For example, "current" refers to what is happening now and the movement of water in a river or the ocean. When you go on a summer vacation beside the sea and surfing, the coach tells you that it is crucial to manage the current direction to get a better surfing experience; then, after you get back to the hotel, you read the current international states and weather forecast, and you realize that these are the things that happened currently. Hence, when you surf again and read the updated news, you can use "current" to describe those phenomena. Students can enhance the information understanding by using context, then the vocabulary can be improved through context.

Moreover, translations due to cultural differences is one of the factors that influence word meaning understanding. Learners have to know the implicit meaning of words to correctly use the vocabulary in the actual translation (Wang, 2021) [4], otherwise, there will be some errors produced. People with a lack of knowledge of the words' meaning from different cultures might have a misunderstanding of the text and expression under contexts. The implicit meaning of the language in one culture exists but non-existent in another culture. For instance, according to Wang (2021) [4], "yellow" represents the color itself and also the implicit meaning of "corruption" and "porn" in Chinese; nevertheless, in English, these words also implicitly mean "cowardly," which is not exists in Chinese. Hence, for people who are not familiar enough with other cultures, it is easy for them to misunderstand the meaning.

3. Research design

3.1. Research questions

In recent years, English has become one of the compulsory courses in Chinese schools. However, due to language differences, there may be differences in understanding the meanings of words in different contexts, especially those with multiple meanings. Many common words have more than one meaning. For example, "address" has meanings such as "address," "speech," "handle," "call," etc. Such words are very likely to be misused by learners because of their diverse meanings in different contexts.

Moreover, in English teaching, the exploration and thinking of polysemous words are highly crucial because they play an important role in the four skills of English (listening, reading, speaking, and writing) and the understanding of English texts. At the high school stage, teaching and learning synonyms in the English subject are also crucial because they promote the mastery of polysemous words. Knowing more synonymous words enables students to remember and use words more freely and effectively.

The researchers identified the following three research questions:

1) The correlation between students' academic performances, personal characteristics in English learning, and their learning difficulties of polysemous words.

2) Students' mastery of different types of polysemous words in learning and the difference analysis.

3) Teaching suggestions regarding polysemous words.

3.2. Research object

The object of the research is for high school students and teachers in China. The reason why I chose the age group of high school students is that those individuals are learning a large number of vocabularies in classes for preparation for the college entrance examination. Also, high school teachers have more experience in teaching vocabulary, including polysemous words, to that specific target group; hence, choosing high school teachers and students to be the research object can provide more effective and direct advice to address the situation of the learning problem than other groups.

3.3. Research tools

This research uses a quantitative method. This method highlights the numerical value measurements; the data have been gathered through experiments and surveys ("Qualitative vs. quantitative data: What's the difference?" 2021) [5], and there will be a particular questionnaire used to discover the current learning conditions from students. There are generally three parts to the questionnaire.

The first part of the questionnaire asks for learners' basic personal information, including their gender, schools, and grades. From the set of questions, learners' background and conditions can be known, providing a foundation for the further test analysis. Furthermore, the second part investigates learners' self-evaluation. Those questions can help teachers to find the real improvement needed in teaching and assignment. For example, academic performance, extent of passion for English, help from reading, learning methods, and learning difficulties. As a result, students' learning conditions and needs can be found.

Moreover, the third section requires learners to complete a series of multiple-choice questions, in which the questions test individuals' knowledge of polysemous words. There are a total of 22 words. This part is composed of multiple-choice questions of "choose all the meanings of some polysemous words", and choose the meaning of a polysemous word that is appropriate to the information that a sentence conveyed (Table 1).

Table 1. polysemous words for this research

Inspection Point / Context	Part of Speech	Meaning
Non-contextual	Chip, strike, harbour, submission, trigger	
In a specific context		Cell, view, master, pattern, Address, flood, regular, practice, Shelter, introduce, reflect, matter, Major, incidents, review, premier

4. Data analysis

According to the data, there are 92 people participated this questionnaire in general, including 44 males and 48 females. There are 37 participants who are 18 years old, 27 people who are 17 years old, 20 individuals who are 16 years old, and 8 participants who are beyond 18 years old. Students in year 11 account for at least half the proportion, 49 students; then the year 12, for 27 learners; and there are 16 individuals in year 10.

According to the gender, there is an obvious difference between the two groups. The correct rate of group 1 (males) is 61.36%, and the correct rate of group 2 (females) is 39.58%. The performance of Group 1 is apparently better than Group 2.

There is a large difference between the age difference of the third and the ninth question compared with other questions, in which the former one p=0.013 and the latter one p=0.042. Besides, the correct rate of the sixth question (M=12.50%) in the third age group (year 12) is much higher than that of the other group, (M=0); and the correct rate for the ninth question is 70%, which is higher than the other groups, where the mean value is between 32.43% and 42.39%.

In addition, the twenty-first question shows a significant difference among different year groups, with p=0.023, less than 0.05. The correct rate of the first year-group, where the mean equals to 56.25%, much higher than other groups, where other groups' mean is between 20.41% and 29.63%.

4.1. English learning interest

Data analysis results demonstrate that learners have higher self-evaluation in English academic performance ranking and the "preferred English level;" the highest result is from the self-evaluation of English performance ranking, in which the mean is 3.30. Learners' English learning interest has no apparent difference indicated in gender and age. Nevertheless, a huge difference of students' English learning interests is shown in different grades, where P=0.035, less than 0.05.

As seen from the in-class English ranking results, participants chose the fourth option, "high" level, occupying the highest proportion, which is 30.4 percent. The second most frequent choice, the "middle" level, 26 people chose it, and it accounts for 28.3%, two percent less than the "high" level. Meanwhile, people who select the first option, "low" level, represent the lowest proportion, where only 7 learners chose it and accounts for 7.6 percent.

In addition, regarding the results from the question of the extent of English preference, the percentage of people who chose the second (kind of like) and the fourth option (quite like it) accounts for the highest two proportions, 31.5%, and 28.3%, respectively. At the same time, people who selected the first option (do not like) represent the least proportion, only 6%.

4.2. Ways of vocabulary learning

According to the vocabulary learning methods, the first method is rote learning. There are 28 learners who chose the third option, often used, representing the highest proportion, 30.4 percent. Besides, the proportion of people who selected the fifth choice, always use, occupies the most minor proportion, which is only 12 percent; nevertheless, the second least chosen option, sometimes use, accounts for 14.1 percent, in which 13 people chose it.

Memorizing words according to their prefixes and suffixes is the second vocabulary learning method in this investigation. Twenty-six people selected the third choice, and that accounted for 28.3%. Meanwhile, the number of participants who chose the second, fourth, and fifth options did not differ too much, which is 21, 20, and 19 learners, respectively; and their proportions are 22.8%, 21.7%, and 20.7%, respectively. The choice that the least people chose is the first choice; only 6 people chose it, and that occupies 6.5 percent.

The third learning method is context learning, in which people learn the polysemous words according to the given situations. The second highest proportion does not differ too much. There were 28 people who chose the fourth option, and 27 individuals who selected the third choice, occupied 30.4% and 29.3%, respectively. Least people chose the first option, which only accounts for 5.4%, much less than the highest two.

Association method is the fourth vocabulary learning way. From this method, people who chose the first and the fifth options were the same; both occupied 8.7%, respectively. Meanwhile, learners selected the third option represented the highest proportion, 38%. Besides, the percentages of the second and the fourth options do not differ too much, with 22.8% and 21.7%, respectively.

4.3. How reading helps you learn vocabulary

Reading can help learners to enforce words meaning understanding. There are 30 people selected the fourth option, very helpful, and that accounted for 32.6%, the largest proportion in this question. At the same time, seven people chose the first choice, little help, represented 7.6%. Twenty-four participants chose the third option, relatively helpful, and accounted for 26.1 percent.

Reading can help expand the vocabulary amount. There are 32 people chose the third option, helpful, which accounted for 34.8%, the largest proportion. Meanwhile, the percentage of people who chose the first option represents the lowest proportion, with only 5.4% and five people selecting it. The second highest proportion is 28.3%, is the fourth option, which 26 people chose it.

In addition, about the help of predicting the meaning of unknown words' and then checking the supposed meaning by using a dictionary is another gain from the readings. As can be seen from the data, the proportion of the third-choice accounts for the highest percentage, which is 30.4%, and meanwhile, the first-choice represents the lowest proportion, which is 9.8 percent. The second-highest and the third highest proportions have not differed much, with 30.4% and 28.3%, respectively.

Moreover, about using polysemous words to express intended information when practically using English, the percentage of the third option occupies the highest percentage, which is 33.7%. The proportions of the first, second, fourth, and fifth options do not differ too much, which are 16.3%, 18.5%, 17.4%, and 14.1%, respectively.

4.4. Cognitive approach to polysemous word learning

According to the question about the importance of mastering polysemous words, the proportion of the first choice, not important, accounts for the lowest proportion, 5.4%, and there were five people chose it. Meanwhile, the percentage of the highest (the fourth option, very important) and the second highest choice (the third option, important) do not differ so much, 29.3% and 28.3%, respectively. The second choice, less important, its proportion occupies 22.8%, and the percentage of fifth option, most important, represents 14.1%.

Furthermore, in terms of the question of whether polysemous words is the difficulty of English learning, the first option, not difficult, accounts of the least percentage, which is 8.7%. At the same time, the proportion of the fourth choice, more difficult, accounts for the highest percentage, which is 28.3%, and that does not differ so much when compared with the second highest proportion, the second option, little difficult, and that represents 27.2%, roughly one percent less than the highest proportion.

4.5. Time spent on vocabulary learning

According to the focused time on learning words on a daily basis, from the results, the number of participants who chose the fourth option (very suits) is the highest, the third choice (suits) is the second highest, and the third highest choice is the second option (roughly suits). The percentage of the first, second, and third highest proportions have not differed so much, which is 27.2%, 25.0%, and 23.9%, respectively. Meanwhile, the proportion of the fifth option (completely suits) accounts for the lowest percentage, which is 8.7%, and only 8 people chose it.

In addition, about the situation of learning words at irregular intervals every day, the first option, not suits, only account for 4.3%, approximately seven times less than the highest proportion, which is 30.4%, the third option (suits). Besides, the second and the third highest percentages are 28.3% for the fourth choice and 26.1% for the fifth option.

Finally, from the question of "focus time on learning words on a weekly basis", the highest proportion is 29.3%, and 27 individuals chose that, is the third option. At the same time, the lowest proportion is from the first choice, that is 8.7%, and 8 people chose it. The second highest percentage is 25.0% from the second option, and 23 learners chose that.

4.6. Correct rate of polysemous words test

The overall correct rate is 29.74%, which means the general performance of the test needs to be improved. The question with the highest correct rate is question 22 (61.96%), which asks for the correct meaning of "premier" under a given context. The other relatively higher correct rate is from question 10 (55.43%) examine the word "pattern," question 17 (54.35%) examines the word "reflect," and question 12 (50%) examines the word "flood." From those questions, question 10 and 12 both ask people to select the correct meanings in a word form from some meanings under a context, and the type of question 17 is the same as question 22; both ask learners to choose the correct meaning in definition form under a provided context. Meanwhile, the lowest correct rate is question 2, which examines the word "chip," and question 3 examines the word "strike." Both questions simply ask individuals to choose the correct meanings from a list of meanings.

5. Research conclusion and discussion

5.1. Research conclusion

In general, the survey result illustrates the correct rate from the three main question types with 22 questions. From the survey's results, it can be suggested that students' knowledge of polysemous words needs further improvement since the average mark is relatively low. Questions with a higher correct rate examines the meaning of polysemous words under a given context, and it can be supposed that the provision of context is helpful for individuals to learn and predict the word's correct meaning.

5.2. Discussion

According to the data, the proportion of options chosen by various students reflects that reading and using appropriate learning methods play important roles in vocabulary learning, and individuals can improve their performance through massive reading. Besides, people can find a vocabulary learning method that suits their learning progress and habits, hence maximizing the extent of vocabulary learning. Furthermore, try to nurture learners' English literacy and the passion for English is also a way to enhance their performance; individuals are willing to pay more attention on learning English, thus, learn more vocabulary and able to understand the polysemous words under different contexts. Specific approaches to foster a passion for English include introducing English native language countries' culture, playing English movies and songs, playing competitive games in English, which can be implemented and boost the progress form of passion.

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