An Analysis of Learning Strategies of Medical English Terms for Medical Students Based on Questionnaire Data

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Abstract. In today's international context, there are more and more opportunities for medical workers to communicate with the international community. As an important part of ESP, the importance of medical English is self-evident. The teaching of vocabulary is a difficult point in medical English teaching. This paper takes medical college students as research objects and analyzes medical English vocabulary learning strategies with data collected from questionnaires.

Introduction

Most medical English terms come from Greek and Latin. Compared with ordinary English, medical English terms are long and difficult to remember, and students will inevitably lose interest in learning them in the learning process. Therefore, the research on teaching strategies of medical English terms has always been the key and difficult point in medical English teaching. Without sufficient medical vocabulary, it is impossible to read related medical journals and magazines smoothly, and it is difficult to use English as a tool to obtain professional information [1]. The research tool of this paper is questionnaire. The research methods include questions, objects, tools, process and data collection.

1. Questions of Investigation

The purpose of this study is to explore the learning strategies for medical college students to learn medical English terms. The research direction will stick to the next a few questions:

- (1) There are 187 students in Qiqihar medical college in the past three years, all of whom have passed cet-4. What is their use of medical English terminology learning strategies?
- (2) How often are various learning strategies used in the learning strategies of medical college students?

2. Investigation

There are 187 students in Qiqihar medical college in the past three years, aged between 21 and 22, covering six majors, namely clinical medicine, psychiatry, preventive medicine, medical technical examination, stomatology and pharmacy. They have good English foundation, English learning life have in 10 years or more, 2018-2019 academic year studying for medical English courses, all passed the CET - 4 before three, there are certain to continue learning motivation, they use the purpose of medical English is foreign language literatures, medical paper writing, continue to higher degree or go abroad for further study and main aspects such as academic conference communication. In the stage of university accumulation, they need to have a more solid knowledge reserve and use medical English terms as the language medium to acquire international cutting-edge medical knowledge. For their future development, they will insist on learning medical English terms and try a variety of learning strategies to improve learning efficiency and achieve good learning results.

3. Research Tools

Ouestionnaire

This survey mainly refer to self-report SILL language learning strategy Scale (Oxford, 1989), using Likert (Likert Scale) of five scoring method, combined with the actual situation of Qiqihar

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medical college student, from memory strategies, cognitive strategies, compensation strategies, metacognitive strategies and social/affective strategies six dimensions, making questionnaire, survey research.

The questionnaire is mainly divided into three parts. The first part briefly introduces the purpose, significance and personal information of students in this questionnaire (the statement will not reveal personal information). Surveyors must fill in information such as years of learning English, English level and subject specialty. In the second part, surveyors were asked to select 29 questions by using the five-point scoring method according to the real learning situation. (Five-point system: 1. I have hardly any; 2. I usually don't. 3. Kind of like me; 4. I usually do. 5. I always have.

The 29 questions in the second part involve different vocabulary learning strategies. They fall into six sub-dimensions: memory strategy, cognitive strategy, compensation strategy, metacognitive strategy, and social/emotional strategy. Q1-8 belongs to memory strategy, Q9-13 to cognitive strategy, Q4-17 to compensation strategy, Q18-23 to metacognitive strategy, Q24-28 to social strategy and Q29 to affective strategy [2-4].

Data Analysis of Questionnaire

1. Analysis of basic learning situations

In the first part of the questionnaire, there are five multiple-choice questions and one subjective question. The multiple-choice questions included the main content of learning medical English, the meaning of learning terms, difficulty, purpose and frequency of learning strategies. The subjective questions asked them to write down the first three learning strategies frequently used.

In addition to textbook contents, 43.5% of students chose to read reference articles, 29.4% chose oral communication, 23.5% chose to memorize medical terms, and only 3.5% chose written exercises. Therefore, it can be seen that students' learning of medical English mainly focuses on the static and applied learning content, and it is no longer a simple practice of special language ability to find out their own learning deficiencies in the application and then make supplementary learning.

As for the meaning of learning terms, 38.5% of the students chose "very necessary", 39.3% chose "necessary", and 17.6% chose "certain necessary". That is to say, 95.4% of the students held a positive attitude towards learning medical English terms. Without words, nothing can be transmitted. This is especially true of medical English terms and the English vocabulary of this particular field. As for the difficulty of learning terms, no one thinks that learning medical English terms is easy, only 15.3% of students think that the terms are not difficult, 36.5% think that the terms are very difficult, which is beyond their ability, and 48.2% think that the terms are difficult. Some people give the reasons why the terms are very difficult: the terms are too long, hard to remember, difficult to pronounce, the word is polysemous, I do not know how to choose the right word to apply in the specific context, strong logical relationship, difficult to master the word-formation method, etc. [5].

As for the difficulty of learning terms, no one thinks that learning medical English terms is easy, only 15.3% of students think that terms are not difficult, 36.4% think terms are very difficult, which is beyond their ability, and 45.9% think terms are difficult. Some people give the reasons why the terms are very difficult: the terms are too long, hard to remember, difficult to pronounce, the word is polysemous, and I do not know how to choose the right word to apply in the specific context, strong logical relationship, difficult to master the word-formation method, etc.

Table 1 Describes the Difficulty of Medical Students in Learning Medical English Terms

	Select Frequency	Percentage	Effective Percentage	Accumulation Percentage
Very difficult	68	36.4%	36.4%	36.4%
Hard	85	45.4%	45.4%	81.8%
General	34	18.2%	18.2%	100%
Easy	0	0	0	0
Total	187	100	100	

As for the purpose of learning terms, the proportion of each option is: 92.1% students choose the school teaching requirements, 89.4% students choose to write medical papers (SCI), 87.4% and

83.2% students choose to understand cutting-edge information and read literature. 23.4% of the students chose the need for clinical practice, and the last two choices: 5.1% of the students chose to study abroad, and 7.9% chose personal interests. For medical colleges and universities, therefore, the motivation of students to learn medical terminology, external cause is greater than the internal cause, very few people really interested in medical English, they considered medical English terms in order to meet their demands some kind of school teaching and personal development language tools, they study purpose is very clear, belong to Oxford's (1990) classification of learning strategies of metacognitive strategy, and O 'Malley & Chamot (1990) of metacognitive strategy in the classification of learning strategy concept match [6-8]. At the same time, in addition to the school's teaching task arrangement, medical college students tend to choose the three aspects of writing medical papers (SCI), understanding cutting-edge information and reading literature [9]. Due to the remote location of Qiqihar and the relatively small number of foreign patients, there are few opportunities to communicate with foreign patients in clinical work and write English medical records, so the selection rate of clinical practice needs to be low. In addition, the proportion of students studying abroad in our school is low over the years, so there are few students studying abroad for the purpose.

As for the frequency of using learning strategies, 75.9% of students always use learning strategies, 15.5% of students often use learning strategies, 4.81% of students occasionally use learning strategies, and only 2.6% of students never use learning strategies. Because all the students are basically at cet-4 or even cet-6 in English, and the medical course tasks are very busy, there are many temptation factors to interfere with the learning, and the medical English terms are complicated and logical, which are difficult to master [10]. Therefore, it is very necessary for medical college students to use certain learning strategies suitable for them, which can improve learning efficiency and enhance learning effectiveness.

Table 2 Describes the Frequency	CTT	CT ·	a	3.6 12 1.0 11 0.1
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	Select Frequency	Percentage	EffectivePercentage	Cumulative Percentage
Always	142	75.9	75.9	75.9
Often	29	15.5	15.5	91.4
Occasionally	9	4.8	4.8	96.2
Never	7	3.7	3.7	100
Total	187	100	100	

2. The Six Learning Strategies Based on the Analysis of Using \square

According to table 3, six learning strategies were ranked according to their comprehensive use level in this study: cognitive strategy (Mean=3.7325), > emotion strategy (Mean=3.63412), > memory strategy (Mean=3.4627), > memory strategy (Mean=3.2434), > metacognitive strategy (Mean=2.9156), and > social strategy (Mean=2.8258). The above findings are basically consistent with the results of relevant studies at home and abroad, but there are some special conclusions of this study. The results of this questionnaire show that the three strategies most commonly used by foreign language learners are cognitive strategy, affective strategy, memory strategy, followed by compensation strategy, and the two strategies least used are metacognitive strategy and social strategy.

In this questionnaire, the signers investigated the purpose of medical students' learning of terms, and the results showed that the external causes of their learning motivation were greater than the internal causes. The teaching purpose of medical English proofreading course is to cultivate students' ability of listening, speaking, reading, writing and translating, especially the ability of reading medical literature. No matter in the study and training of medical colleges, or in the practical application of writing medical papers and understanding cutting-edge information, students have "instrumental" learning motivation, which is likely to prompt medical students to use more cognitive strategies. Ranked second in this investigation, the emotional strategy, the author thinks that the study of medical students in their daily life, can have more or less to eliminate all kinds of pressure, they can this medicine optimism migrated to medicine in the course of English

learning, of course, to prevent too lax, no stress state of learning, because the medicine is a rapidly developing discipline, if someone is lack of study motive, mental state, in the mediocre is not qualified for the future work. As for memory strategy and compensation strategy, all kinds of teaching models in China attach great importance to memory strategy at present. Most people believe that if you want to learn English well, you must spend time memorizing vocabulary. It can be seen that the traditional teaching mode has a subtle influence on medical students' concept of learning medical English. The questionnaire statistics also prove to some extent that residents spend a lot of time memorizing terms and figuring out how to memorize terms efficiently. In the questionnaire survey, metacognitive strategy and social strategy were ranked in the last two places, which also confirmed the results and analysis of the interview, and the author will not elaborate here.

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Strategy	The variable name	The average	The standard deviation	The order
Direct strategy	Memory strategy	3.4627	0.5232	3
	Cognitive strategies	3.7325	0.6103	1
	The compensation strategy	3.2434	0.6471	4
Indirect strategy	Metacognitive strategy	2.9156	0.6143	5
	Emotional strategy	3.6412	0.5319	2
	Social policy	2.8258	0.6843	6

Table 3 Comprehensive Use of Six Learning Strategies

Summary

In the questionnaire, 81.8% of the students think it is difficult or very difficult to learn medical English terms. For medical students, their motivation to learn terms is more external than internal, and few of them are really interested in medical English. 91.4% of medical students believe that learning strategies are important and frequently used. The three strategies most commonly used by medical students are cognitive strategy, affective strategy and memory strategy, followed by compensation strategy, and the two strategies least used are metacognitive strategy and social strategy.

This research will help medical students to find out the deficiencies in their learning, improve their learning efficiency and achieve good learning results, which will provide some enlightenment for medical English teaching.

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