



Application of Theme-based Approach and Blended Teaching Model in College Medical English Teaching

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Abstract: As a branch of ESP (English for Specific Purposes), Medical English has become an important course for medical colleges and universities in China. However, the present teaching quality of Medical English is far from satisfaction. How to increase students' motivation in learning medical English and improve their medical English proficiency remain big challenges for most medical colleges and universities. This paper aimed to discuss how to apply theme-based approach and blended teaching model in college medical English teaching. A case of teaching Medical English on the theme of renal failure in Youjiang Medical University for Nationalities is demonstrated and analyzed to ascertain the feasibility and effectiveness of adopting theme-based approach. Effective theme-based teaching is highly demanding on teachers in planning and in implementation. While theme-based approach is adopted, selecting proper themes, collecting suitable materials from various sources, choosing online or offline channels, designing and organizing interesting activities of various kinds are vital in implementing effective teaching.

Keywords: Medical English Teaching; Blended Teaching Model; Theme-based Approach

I. Introduction

In most medical colleges and universities of China, Medical English is a required course for students. This course is based on the knowledge of professional medicine and college English. Studying Medical English can not only help medical students master English language in medical area, but also helps them obtain up-to-date information of medicine from international academic researches or conferences, which is conducive to lay a good foundation for their future scientific research and career development.

Nowadays, Medical English teaching quality in our country has already improved greatly and related researches on Medical English teaching have been conducted. However, the effectiveness of medical English teaching in some universities and colleges is still far from satisfaction. Traditional teaching methods and models used in Medical English teaching resulted in low efficiency of teaching, which thus failed to improve students' medical English proficiency^[1]. Besides, it was common that there were a large number of students in a Medical English class. Consequently, teacher failed to pay attention to the individual differences of students and was unable to achieve effective interaction with students^[2]. The traditional teacher-centered teaching model emphasizes teachers' explanation and imparting of medical English knowledge at lexical, syntactic or semantic level rather than focus on students' classroom performance and participation. Passive knowledge learning lowers students' interest and most students showed little enthusiasm in class activities. Moreover, a rather large number of textbooks related to Medical English are outdated, which do not include the latest medical information and development.

[Received 08 July 2022; Accepted 18 Aug 2022; Published (online) 30 Sep 2022]



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With the development of multimedia and Internet technologies, the educational concepts have changed greatly. The way students are being taught at schools has been altered. Online learning apps and Online teaching platforms emerge in large quantities, which facilitates teacher's teaching and student's learning without limitations on time and space. Teaching and learning can be carried out anytime and anywhere as long as there is a connected network. The implementation of online and offline blended teaching performs a pivotal guiding role and has innovative significance for the development of English education and teaching^[3]. This teaching model realizes face-to-face interaction between teachers and students in traditional classroom teaching and ensures teachers' roles as a supervisor and a guide^[4]. Meanwhile, it enables students to learn autonomously online, which is beneficial to advance the reform of Medical English teaching^[5]. This paper aimed to explore the application of theme-based approach in Medical English teaching under online and offline blended teaching model. It is hoped that the findings of this study can contribute to the teaching of Medical English in colleges and universities in China.

Difficulties in Learning Medical English

Medical English is different from College English. Medical English consists of a large number of medical terms with long spelling, difficult pronunciation and specific meanings. For instance, medical terms concerning blood disorders include thrombocytopenia, hemophilia, disseminated intravascular coagulation, aplastic anemia, hemolysis, etc. Unlike words of college English, most medical terms seem strange in spelling and pronunciation. Therefore, for the majority of students, there naturally will be a fear of learning medical English terminologies. Besides, some words in college English contain different meanings in medical context. For example, the verb *contract* usually means making a legal and formal agreement with somebody in college English while in a medical text, it may refer to developing a disease or catching a infectious agent. To some extent, learning medical English is like starting to learn a new language from scratch for most Chinese students. The complexity of spelling, pronunciation and meaning dampens student's learning enthusiasm and undermines their learning confidence.

Theme-based Approach

Theme-based teaching (also termed theme-based instruction or topic-based teaching) is one of the approaches within the broader model of content-based instruction (CBI) in which the emphasis is on exposing students to a "highly contextualized" second language environment by using the subject matter as the content of language learning^[6]. The application of theme-based approach in language teaching have many advantages. First, theme-based teaching provides learners with motivating and meaningful uses of the language^[7]. This teaching model selects themes on account of teaching objectives, which can make students become more motivated in language learning and teaching procedures more interesting, informative and contemporary. It can also effectively promote students' understanding of what they have learned^[8]. Second, theme-based role-play is an alternative in developing EFL learners' communicative competence^[9]. Moreover, theme-based CBI plays a positive role in improving five sub-skills of critical thinking ability, especially recognition of assumptions, induction and deduction^[10].

To sum up, theme-based approach in language teaching centers on choosing specific themes and creating different contexts for students to practice their language. New words and expressions can be learned easily because themes can provide a meaningful context for understanding. Teacher guides students to explore, discuss, comprehend, and internalize the language materials from multiple perspectives and different dimensions in a specific artificially-constructed situation, so that they can learn, understand and master the language through learning materials of a specific theme.

Theme-based Approach in Medical English Teaching

Theme-based teaching stresses the integration of different areas of the curriculum. Medical English belongs to ESP (English for Specific Purposes), which can be defined as a specific language used by medical personnel in the practice of medicine or other medical-related contexts. It is a language that is highly concerned with medical settings. Theme-based approach is suitable for Medical English teaching because it focuses on themes and contexts, making close connections between language learning and language use in medical world.

Construction of the Thematic Teaching Mode

Under the guidance of theme-based approach, choosing themes properly, enriching theme content diversely and organizing them logically are critical for medical English teaching in the the initial stage of constructing the thematic teaching mode. The theme content is supposed to bring students new learning experience, broaden their horizons and improve efficiency of medical English learning. In view of these, in the process of constructing an effective thematic teaching mode, teachers must break the limitations of textbook content and traditional teaching framework, supplement latest learning materials and resources which can motivate students' learning and develop their language proficiency.

Themes should be selected according to the characteristics of medical English and students' majors. The chosen themes ought to be relevant to their professional courses and academic researches. For instance, the learning content of Medical English for students majoring in medical laboratory technology should be targeted on clinical laboratory techniques like automated blood count, urine and stool examination, sputum examination and collection techniques of arterial blood gas sample, which is oriented to students' foreign language mastery, professional growth and career development. The above topics are regarded as an important part of thematic teaching of Medical English, so as to ensure that students can study and explore multiple topics on the grounds of their own professional development. In addition, the interest and potential of students need taking into consideration. Students are also given chances to select appropriate themes. Teachers should constantly search and update the learning materials in accordance with themes, introducing suitable and high-quality learning materials in forms of texts, audios or short videos to students. Related learning courses or resources at home and abroad are conveniently available on Internet. Teachers should foster students' ability of searching information and resources online, enhance their capacity for processing information, turn what they found into suitable teaching and learning materials based on students' current language level. Theme-based learning supports different learning needs. Students can achieve intensive and extensive learning on account of sufficient and valuable learning materials.

In addition, providing students with opportunities to experience the given theme in a well-designed learning scene is of great importance. In essence, the thematic teaching mode of medical English transforms the process of English knowledge construction into a dynamic process of experience, perception, communication, interaction and development, which places students in a more self-motivated learning scene by conducting a collection of medical English language learning activities centered on specific themes or topics. It requires teachers to reform the past teaching models, establish a student-centered learning framework, create corresponding learning scenes according to the needs of students and the course, so that students can actively participate in the acquisition, exploration, application and consolidation of medical English in a specific context.

Students' involvement in constructing theme-based language class will activate and motivate them to learn. Students can be classified into different groups with each being assigned different themes or topics. Teachers serve as a theme provider and an adviser, offering timely suggestions or assistance whenever students need. To arouse students' enthusiasm and perfect medical English theme content, teachers should encourage students to explore, construct and share the learning materials they have found with their classmates. By continuously completing the learning collections and perfecting theme selections, students learn to evaluate the corresponding materials and sort them into order under the guidance of teachers. With cooperative work of teachers and students, the self-shared high-quality teaching resources are added to the teaching content. During this process, a high sense of engagement and accomplishment in students' part will inspire them to discover and learn more consciously and intuitively.

Last, medical English language teachers should make an in-depth and comprehensive analysis of students' current professional development, connecting what students have learned in their professional courses with topics to be presented in Medical English course. After creating a theme and searching relevant materials, teachers who teach Medical English had better consult and cooperate with teachers who teach professional medical courses to design thematic language projects for students. Students are encouraged to fall into groups and work as a team to complete those thematic language projects at the expected time. By this way, students can connect Medical English course with their professional medical knowledge, which certainly will stimulate their inner learning motivations and promote their autonomy.

A Case Analysis of Implementing the Theme-based Approach in Medical English Teaching

A theme-based teaching of Medical English requires students to strengthen autonomous learning ability. Teachers play a role of a prompter and an organizer in the classroom , giving instructions and offering assistance when necessary. In order to demonstrate how to carry out Medical English teaching based on theme-based approach and blended teaching model, a

practical teaching case on the theme of renal failure in Youjiang Medical University for Nationalities is taken as an example to be analyzed.

Both students and teacher made before-class preparations. Teacher collected relevant learning materials, sorted them properly and uploaded them to Xuexitong platform, an well-known Chinese free APP which integrates mobile teaching, mobile learning, mobile reading and mobile social interaction together. These learning materials included a series of videos entitled *Medical Terminologies of Urinary System*. Students were required to watch them before class and made notes on key terms. Then they summarized a list of vocabulary related to urinary system and shared it on online brainstorming part. The Xuexitong APP then created automatically word cloud based on students' shares, which provided a reference for further study and teaching. For better evaluation of students' mastery of medical terms, an online test concerning medical terms of urinary system had been designed and students were demanded to pass it before class. In a word, students acquired and accumulated basic medical terms they might use in the class activities by means of video watching, term sharing and vocabulary testing. Questions, what the structure of urinary system is and what the common disorders of the urinary system are, were posed as a preview task for students' further exploration. The theme *Renal Failure* were also presented to students. This theme can be subdivided into smaller topics as follows: functions of kidneys, causes of renal failure, clinical manifestations of renal failure, diagnosis of renal failure and possible methods of treatment for renal failure. Students then were encouraged to be divided into groups and searched materials online and offline on the topic that they were interested in. Apart from selecting the topics that teacher had advised, they had a freedom of creating and choosing their own topics as long as these topics were in relation to renal failure.

During the class, teacher and students explored and experienced the theme together. In the leading-in part, the life of George Mikan, one of the first superstars of the NBA, was told to attract student's attention to the class and aroused their interest of the theme. George Mikan died of renal failure in 2005. By this famous professional basketball player's story, students were attracted to the theme and got ready for the class. Then teacher explained some key medical terms and expressions, such as ureter, bladder, urethra, papilla, renal pelvis, nephron, sphincter, etc. to students from the perspective of word building so that students could have a deeper understanding of roots and affixes related to urinary system and better grasp word-building rules in medical English. After laying a foundation of medical terminologies in urinary system, group members made presentations, introducing their topics one by one. During this classroom activity, teacher acted as a listener and a recorder, evaluating each group's performance. The authoritativeness of materials, objectivity of presenters' expression and accuracy of statements were mainly taken into account in evaluation. Other listeners could post questions while the presenter with his/her group members managed to answer the questions. If them had failed to answer the questions, teacher could have offered some hints or recorded the questions down for future after-class discussion. Teacher and students used English to communicate with each other in classroom from beginning to end, aiming at expressing and exchanging ideas. After presentation, teacher created an virtual hospital scene for students to practice their oral English. In the scene, one student played as a patient who was suffering from renal kidney and complaining of his/her symptoms, one as a outpatient doctor who inquired the patient and one as a nurse who was in charge of medical records. After diagnosis, the patient was guided to go through medical examinations. Next, a group of students played as consultant doctors who were attending a meeting to discuss the patient's case and provided proper treatment recommendations. In this role-play activity, students got the opportunity to use their medical English in a virtual hospital setting and practiced their oral English with medical terms. Students could experience the theme almost authentically and learned to communicate with patient, collaborate with colleagues, along with solving potential problems that might occur during their work. After role play, students were required to read an academic paper entitled *Chronic Renal Failure* which was written by Melissa K Slate in 2021. Teacher gave some suggestions on how to write an abstract for medical papers and emphasized details needing attention. Then students were asked to write an abstract based on the paper they had read. Later, they translated ten English sentences excerpted from the paper into Chinese and posted their translation on Xuexitong learning platform. All the students could appreciate the translation versions of their classmates, offer advice on improvement, make comments on them or give a like. For this part, reading, writing and translating activities are organized logically. Those activities aimed to improve students' medical English language proficiency and cultivate their consciousness of scientific research. They learned how to collect data and information, how to write an abstract for an academic paper and how to perfect translations from peers. Offline class was ended by making necessary supplement and drawing some conclusions of the theme on the part of teacher. After class, teacher assigned a task of video shooting to students. Students worked in their own team, shot a short video of 3 to 5 minutes and uploaded it online. The specific requirement for the video was that students should make it a popular science video which helped the public to learn about renal failure more systematically and more thoroughly. The public is expected to have a better understanding of renal failure and know some effective ways to prevent it. This assignment was designed to enhance students' linguistic performance and organizing ability along with arousing their awareness of social responsibility as medical personnel. After students submitted their videos,

teacher evaluated students' assignments online, and the score would be included in the final score for the Medical English course. If needed, teacher would send messages to students in private through internet in the cloud class and supervised them in time. Teacher also summarized and analyzed students' online homework, pointed out the problems, selected some excellent videos to share in the following offline class, supported and encouraged students to do better in the future.

Conclusion

The integration of theme-based approach and blending teaching model into Medical English language teaching is beneficial to teaching and learning. It can guarantee the quality of Medical English teaching. Students can master medical terminologies on specific themes by repeating terms and using them in created medical contexts. They can improve their language proficiency by participating in class activities like role play, presentation, translation and writing. All these classroom activities are connected by a theme which runs through the whole class. It can increase students' motivation and promote effective teaching. In order to carry out an effective theme-based teaching of Medical English, teacher needs to carefully weight the options as selecting proper themes, collecting suitable materials, choosing effective channels, designing and organizing interesting activities of various kinds.

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