



# Strategies of English Teaching in Higher Vocational Colleges Based on Different Dimensions of Kaplan Matrix

Yu Jiang<sup>(✉)</sup>

Urban Vocational College of Sichuan, Chengdu, Sichuan, China  
447108247@qq.com

**Abstract.** In this research process, it is necessary to design the teaching system based on the cognitive dimension of Kaplan matrix, which is mainly to build the teaching model based on the levels of knowledge, understanding, application and analysis. At the same time, the unit of "receiving and visiting warships" in higher vocational English is taken as the main object to explore the specific application effect of Kaplan matrix. In actual teaching, it is necessary to take the syllabus as the core, strengthen process teaching and target teaching, and establish short-term and long-term teaching objectives based on specific teaching indicators. The analytic hierarchy process is used to divide the teaching process, and information technology is applied to the teaching design process, and the specific teaching data is statistically analyzed to obtain more reliable application value of Kaplan matrix. In addition, it is necessary to divide the teaching content in detail to make it a step-by-step teaching system at different levels, and use Kaplan matrix to optimize and sort the teaching objectives to improve the teaching efficiency and quality.

**Keywords:** Kaplan Matrix · English Teaching in Higher Vocational Colleges · Application Strategy

## 1 Introduction

Based on the basis of Bloom's classification theory, Kaplan matrix classifies teaching plans into six levels, and helps teachers to plan teaching activities and teaching progress according to the cognitive field, so as to realize the multi-level of teaching activities and achieve the completion of multiple target levels. This paper mainly explores the idea of higher vocational English teaching based on different dimensions of Kaplan matrix.

## 2 Overview of Kaplan Matrix

In 1950s, Benjamin Bloom, an American educationist, put forward the classification theory based on teaching objectives. This theory has a profound influence on China's educational practice. In the process of applying this theory, it is necessary to focus

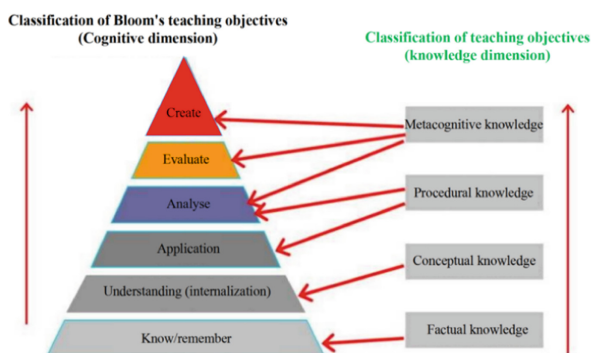
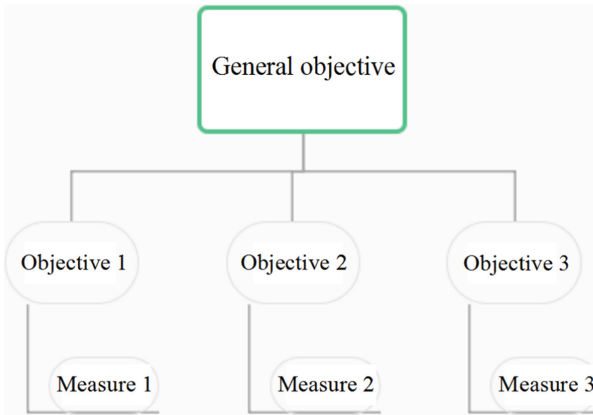


Fig. 1. Teaching objective classification theory cognitive field

on teaching objectives, and classify them into different fields of cognition, emotion and psychology. Among them, cognitive field is an important link in setting teaching objectives, and the division of cognitive field mainly includes knowledge, understanding, application and analysis, evaluation, creation, etc. (Fig. 1). Making teaching plans from these levels shows the relationship between different teaching objectives, and can also make scientific evaluation for each level of teaching [6].

English teaching in higher vocational colleges should adapt to the talent training plan of the school, and improve the teaching content through reform and innovation. Based on Bloom's classification theory, Kaplan matrix classifies the teaching plan into six levels, helps teachers plan teaching activities and teaching progress according to cognitive fields, realizes multi-level teaching activities, and achieves the completion of multiple target levels. English teachers in higher vocational colleges should give full consideration to classification levels, scientifically and reasonably regulate and control the types of teaching activities, balance every piece of knowledge, and realize the enrichment and diversification of skill types. Kaplan matrix needs to achieve the goal of cultivating students' English language ability in higher vocational colleges in English teaching, and innovate ways and means of English teaching, so as to effectively improve their English language application ability on the basis of solid basic knowledge and professional needs of higher vocational students. Kaplan matrix can guide English teachers in higher vocational colleges. It can not only help to make teaching plans and realize the gradual completion of teaching goal sequence, but also realize students' autonomy in mastering knowledge and regulating goal levels. In the process of cultivating students' language application ability in higher vocational colleges, Kaplan matrix can provide students with cognitive structure and learning mode, and realize the scientific and reasonable allocation of students' time and experience. With the information environment of modern quality education, the value of multimedia technology can improve teachers' teaching ability. In the process of applying multimedia technology, teachers can use CAI courseware to achieve illustrated, clear and intuitive teaching effect, provide students with a variety of information in the flip class, and enrich various multimedia devices to enhance students' thinking ability training effect and strengthen students' thinking ability in higher vocational English class.



**Fig. 2.** Application of target analytic hierarchy process in Kaplan matrix

Based on the classification theory of teaching objectives, Sandra Kaplan put forward Kaplan matrix. This matrix is mainly to further divide the teaching target activities of Bloom Classification. It is of great practical significance in the process of making teaching plans and teaching activities. Using the teaching plan can prevent the teaching activities and evaluation work from simply staying at the level of knowledge understanding, and enable teachers to actively explore the teaching plan and teaching objectives from other classification levels. Kaplan matrix mainly plans teaching objectives, teaching activities and teaching evaluation. Teachers can determine the target levels that students need to master according to their specific needs, and plan the teaching activities at each level to prevent students from over-learning certain aspects of knowledge and affecting their comprehensive level. In the process of English teaching in higher vocational colleges, teachers can carefully design from different levels such as knowledge, understanding, application and analysis to improve the rationality and comprehensiveness of teaching plans and teaching schemes, which will help students to flexibly use English language, prevent over-reinforcement in grammar, difficult words and sentences, and improve the English teaching effect in higher vocational colleges from a comprehensive and systematic point of view. In addition, in actual teaching, the teaching process should be divided into different levels, and teaching should be conducted according to the target level, sub-target level and measure level, so as to improve the application effect of Kaplan matrix (Fig. 2).

### 3 Analysis of English Teaching Status in Higher Vocational Colleges

#### 3.1 Students' Interest in Learning Is Not High

In the process of the development of higher vocational education in China, different enrollment sources will lead to relatively large differences in English proficiency of higher vocational students. But among the main students, some students come from

ordinary high schools, some students are secondary vocational schools, and some students are technical school students. There are some differences in students' training objectives among the three types of schools. In some schools, students' English foundation is relatively weak, and there are serious deficiencies in English listening, speaking, reading and writing. In the process of English teaching in higher vocational colleges, some students' incorrect habits and methods of learning English will hurt their confidence in learning English, lead to students' low enthusiasm for learning English and affect the effect of English teaching in higher vocational colleges.

### **3.2 Unreasonable English Curriculum**

At present, in the process of English teaching in higher vocational colleges in China, the unreasonable and unscientific English curriculum is one of the important reasons for the poor English teaching effect. The mode of Industry-University-Research cooperation in running schools in higher vocational colleges will impact the basic curriculum setting effect in higher vocational colleges to a certain extent. At present, most higher vocational colleges are more inclined to cooperate with factories and enterprises to carry out the teaching process, emphasizing the promotion of students' professional skills [2]. Especially under the training mode of Industry-University-Research or combination of work and study, the class hours of basic courses in higher vocational colleges will be severely squeezed, which will lead to the weakness of students' cultural basic courses and affect their cultural accomplishment. English is a basic cultural course, with fewer class hours and a high proportion of specialized class hours in the course setting, which will affect the English teaching effect in higher vocational colleges to some extent. In addition, the English examination system has not been reformed and innovated, and it is still dominated by the traditional college entrance examination English model, which will affect the initiative of students in higher vocational colleges to learn English to a certain extent, and cannot adapt to the current English teaching practice in higher vocational colleges.

### **3.3 The Teaching Objectives Are Unclear**

In the process of English major teaching in higher vocational colleges, the unclear teaching objectives will directly affect the English teaching effect in higher vocational colleges. In the process of implementing English teaching objectives, the basic knowledge of English teaching objects in higher vocational colleges is generally poor, especially under the influence of China's education system, the students who enter higher vocational colleges have a weak cultural knowledge base, which will lead to a relatively low overall English level of students. There are many problems in the teaching process of English major in higher vocational colleges, which can't give full play to the positive advantages of English major teaching in higher vocational colleges. Using the traditional teaching mode will lead to students' boredom and negative effects when learning English courses, and it is difficult to achieve the goal of English course teaching in higher vocational colleges.

### **3.4 The Level of Teaching Material Construction and Teaching Staff Construction Is Not High**

At present, the main problems in English teaching in higher vocational colleges are the shortage of teachers and the low level of English textbook construction in higher vocational colleges, which will directly affect the final effect of English teaching in higher vocational colleges. At present, in the process of English teaching in higher vocational colleges, most of them are books of Foreign Language Education Research Publishing House, which adopt the abridged version of undergraduate textbooks, and do not compile English textbooks suitable for the English level of higher vocational students according to their specific conditions. In addition, English teachers in higher vocational colleges are newly hired teachers in the process of rapid development of higher vocational education in recent years. These teachers have little work experience and can't take effective measures to deal with problems quickly in the teaching process [4]. The low level of teaching staff construction will affect the English teaching effect in higher vocational colleges to a certain extent.

## **4 Application Strategies of Kaplan Matrix in English Teaching in Higher Vocational Colleges**

### **4.1 Determine Reasonable Teaching Objectives**

In the process of using Kaplan matrix to carry out English teaching reform in higher vocational colleges, it is necessary to determine reasonable teaching objectives and optimize teaching contents. Teaching content is the main carrier to reflect teaching objectives. When making teaching objectives, we should make more reasonable and scientific educational objectives based on relevant standards and considering the specific situation of students, and combining with corresponding learning resources. Only in this way can we ensure that English teaching activities are adapted to the actual situation of students [3]. Teaching goal is not only the ultimate requirement of English teaching, but also an important starting point of English teaching. In the process of determining the teaching objectives, we need to consider from the following angles: First, we should ensure that the teaching objectives are instructive. In the process of English teaching in higher vocational colleges, teaching objectives should be scientifically formulated according to the specific situation of students. If the determined teaching goal is unreasonable, it may lead to improper selection of teaching methods and affect the teaching effect. Second, we should ensure that the teaching objectives have a clear direction and enhance their orientation function. Clear teaching objectives can make students have a stronger direction in learning, ensure the pertinence of teaching activities and improve teaching efficiency and effect. Third, we should ensure that the teaching objectives have the evaluation function.

### **4.2 Innovative Forms of Teaching Activities**

In the process of English teaching in higher vocational colleges, it is necessary to innovate the forms of teaching activities in order to stimulate students' enthusiasm and interest

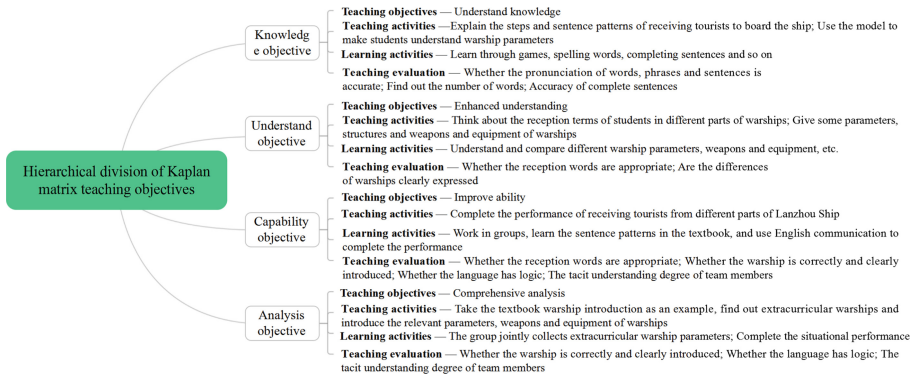
in learning. Generally, we can start from the following angles: First, we should innovate the teaching mode and enhance students' interest in learning. In the process of English teaching, it is necessary to innovate the teaching mode based on the actual situation of students, change the traditional indoctrination teaching, and enable students to actively participate in English classroom teaching. With the continuous improvement of the quality of life, students' ideas and opinions are becoming more and more diverse. In higher vocational English teaching, we should not only focus on improving students' test scores, but also innovate and improve the traditional teaching model [5]. Second, we should make full use of modern teaching technology. In the development of education industry, the application of modern teaching technology is becoming more and more common. In the process of English teaching in higher vocational colleges, it is necessary to make full use of modern teaching equipment to give full play to the positive advantages of new equipment, improve the interest of classroom and enhance students' learning enthusiasm and initiative [1]. At the same time, targeted training can be carried out according to students' specific differences, so as to improve students' self-confidence in learning and ensure the quality of English classroom teaching. In the process of English teaching in higher vocational colleges, English teachers can make use of multimedia to prepare lesson plans in advance, make related teaching videos or courseware, and find video clips related to teaching, which can concentrate students' attention, enrich teaching content and play a positive role in enhancing students' English listening and speaking ability.

### **4.3 Carry Out Comprehensive and Diversified Teaching Evaluation**

In the process of English teaching in higher vocational colleges, when Kaplan matrix is applied, it is necessary to improve the traditional teaching evaluation methods and carry out comprehensive and diversified teaching evaluation. The use of network and computer technology can enhance the interaction between teachers and students in the teaching process. In the specific evaluation process, different forms of teacher-student evaluation and student-student evaluation can be used as the core to carry out the teaching evaluation, which makes the teaching evaluation more diversified and objective, and helps to improve the teaching quality and teaching effect. At the same time, it can enhance students' learning enthusiasm and initiative. This evaluation method is more inclined to evaluate the whole learning process of students, which can ensure the scientificity and rationality of the evaluation results, and can break through the limitation of traditional evaluation with test scores as the core.

## **5 Taking “Receiving and Visiting Warships” as an Example to Carry Out Practical Teaching**

In the process of English teaching in higher vocational colleges, in order to give full play to the advantages of Kaplan matrix, different levels of teaching objectives should be determined when taking the unit of “receiving visiting warships” as an example to carry out practical teaching. The hierarchy of teaching objectives is shown in Fig. 3.



**Fig. 3.** Schematic diagram of Kaplan matrix teaching objectives hierarchy with “receiving visiting warships” as an example

### 5.1 Teaching with the Goal of Mastering Knowledge

When teaching activities are carried out with knowledge as the teaching goal, the main goal of this level is to ensure that students can master the corresponding knowledge points. In the specific teaching process, it is necessary to explain to students the specific steps and corresponding sentence patterns of receiving tourists to visit the ship, and the model can be used to make students understand some parameters, general structure, weapons and equipment of the 170 ship. At the same time, students should master the terminology and sentence patterns related to warships. We can improve the interest of classroom teaching through games, spelling words, completing sentences according to parameters and other activities. When carrying out teaching evaluation, we mainly examine students’ pronunciation of words, phrases and sentences, find out the specific number of words, complete the accuracy and reading level of sentences, etc.

### 5.2 Teaching with the Goal of Strengthening Understanding

When teaching activities are carried out with the goal of strengthening understanding, it is necessary to take 170 Lan Zhou Destroyer as the main research object, so that students can think about the reception terms in different parts of the warship and give corresponding data. Students compare and analyze the parameters, specific uses, weapons and equipment of 170 Lan Zhou Destroyer and 881 Hung-tse Lake Replenishment Ship. In the specific learning process, students need to be able to speak specific reception English in different parts of warships, and make a comparison to explain the specific parameters and weapons and equipment of 170 Lanzhou Ship and 881 Hongze Lake Supply Ship. When carrying out teaching evaluation, it is necessary to scientifically evaluate the appropriateness of the students’ reception words, and at the same time, evaluate the specific contents of the students’ comparison of the differences between the two warships to determine whether the students have clearly explained them.

### 5.3 Teaching with the Goal of Improving Application Ability

When teaching is carried out with the goal of improving students' application ability, situational performances can be used to receive tourists from different parts of Lanzhou Ship for a visit. Using situational performances, we show the specific links of 170 Lan Zhou Destroyer and 881 Hung-tse Lake Replenishment Ship receiving tourists to visit the ship. During the performance, students can be divided into different study groups. Each group member can get a role, perform by using the sentence patterns learned in the textbook, communicate in English and perform on stage to complete the whole task of receiving and visiting. When evaluating students, it is necessary to judge whether they are properly using the reception language. Whether they can correctly introduce warships. Whether they can complete the off-script performance. Whether the language in the performance is in line with English logic. And they also need to evaluate the tacit understanding of team members.

### 5.4 Comprehensive Analysis Teaching

In the process of comprehensive analysis teaching, the relevant knowledge of other warships outside the classroom should be collected and investigated through group cooperation. Each group should choose a warship to introduce it in Chinese, and then complete the reception and visit task on this warship. This learning process is mainly completed after class. In the specific learning process, each study group can pay attention to a warship, use reference materials or movie materials and other learning resources, master the specific parameters, structures, weapons and equipment of warships, and receive tourists to complete the task of visiting warships. In the process of learning and evaluation, it is necessary to comprehensively analyze and evaluate whether students can correctly introduce warships, whether they can complete the off-script performance, whether the language expression is logical, and the tacit understanding of team members.

In order to guide students to think more effectively, English teachers in higher vocational colleges can bring into play the value of modern educational technology by applying information technology to assist teaching, and use computer-assisted teaching to realize visualization, richness and interest of English teaching. Multi-media teaching techniques can develop students' observation ability, language application ability and thinking ability in English teaching, output a large amount of teaching information to students through multimedia technology, and enhance English teaching quality with scientific and reasonable multimedia-assisted teaching. For example, students majoring in tourism management in higher vocational schools can have a deep understanding of the culture, customs and taboos of English-speaking countries and other factors related to their major in the multimedia classroom, and understand the inseparable relationship between English language and culture. While understanding the cultural connotation, realize the value of language teaching and modern information technology, and understand the exotic customs in the process of applying multimedia technology and network technology. Tourism management majors can cultivate their professional quality and cultural background while perceiving and understanding language materials and foreign cultures, so as to make English learning reasonable and life-oriented.



## 6 Conclusions

To sum up, in the process of cultivating English language ability of higher vocational college students, it is necessary to constantly improve English teaching methods and teaching modes in higher vocational colleges according to the current social development situation, and to ensure that students can master solid basic knowledge and cultivate students' English language application ability. In the application process of Kaplan matrix, teachers can make more reasonable and detailed teaching plans according to the actual situation of students, and students can gradually master the corresponding English knowledge according to the target sequence from easy to difficult. In the specific teaching process, students can consciously adjust and optimize the target level according to their actual situation, so as to strengthen students' language application ability. At the same time, it can provide students with new cognitive structure and learning methods, and enable students to distribute their energy based on their own reality, which is of positive significance to ensure the learning effect.

**Acknowledgements.** Special topic of ideological and political research on foreign language teaching courses in vocational colleges in 2020 - Research on the Professional Development of Foreign Language Teachers in Vocational Colleges from the Perspective of Curriculum Ideological and Political Education (No. WYJZW-2020-2043).

## References

1. Fang, Chenghong. 2015. Discussion on the Teaching of Matrix Theory Course. *Neijiang Technology* 36(3):2.
2. Gao, Yuan. 2017. Application of Kaplan Matrix in English Teaching in Higher Vocational Colleges - Map-based Teaching Plan for Teaching Activities. *English on Campus* 24:1.
3. Li, Yanhua. 2017. Problems and Countermeasures of English Teaching in Higher Vocational Colleges. *Overseas English*, 24:2.
4. Lv, Yan. 2019. Research on the Application Approaches of Mixed Teaching Mode in English Teaching in Higher Vocational Colleges. *Journal of Baotou Vocational & Technical College*, 20(1):54–56.
5. Wan, Dong. 2016. Analysis of English Teaching Problems in Higher Vocational Colleges and Its Solutions. *Education* 5:205.
6. Wei, Xin. 2019. Research on the Optimization Method of Curriculum System Based on Competence Target Matrix - Taking Intelligent Product Development Specialty as an Example. *Modern Vocational Education*, 36:2.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

