

Classroom Revolution under Background of Big Data: Integration of College English Curriculum and Course Ideological and Political Education in Five Dimensions through Task-Driven Method

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Abstract: Under the background of big data of a survey conducted on teaching and learning English in modularized classroom activities, this study aims to localize the five components of English teaching in vocational college classrooms by integrating the college English curriculum with course ideological and political education and thus revolutionize classroom teaching. English teaching in vocational college is divided into five dimensions, namely: listening, speaking, reading, writing, and translation. Then, in each dimension, ideological and political education are integrated with language materials and designs to create different tasks for students to complete before, during, and after the classroom teaching. The purpose is to let students obtain ideological and political education and excellent traditional cultural education in English language teaching by a task-driven method.

Keywords: Classroom revolution, Big data, Integration, Course ideological and political education, MCAs, Task-Driven Method

1. Introduction

As a foreign language course, students who are taking the college English curriculum need to learn the culture and tradition of the native-speaking country. However, English teachers are supposed to have a dialectical awareness and the awareness and vision of patriotism and affinity for the party and Chinese traditional culture to localize English teaching and learning and focus on cultivating socialist builders and successors. They need to be rooted in the land of China, adhere to the direction of socialism, develop in an all-around way in morality, intelligence, physique, beauty, and labor, and become a “powerful generation” for the realization of the great rejuvenation of the Chinese nation.

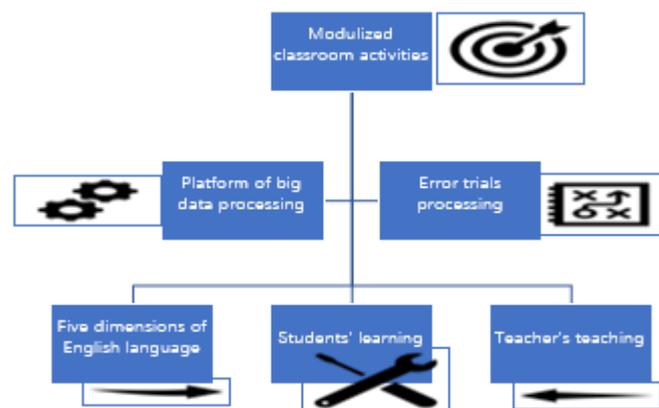


Figure 1: Process of MCA generation through big data processing.

Based on big data and college English teaching in vocational colleges, English teaching in most vocational colleges in China can be divided into five dimensions which are essential stepping stones of the English classroom revolution. It is English teachers' task to fully excavate the potentials of these five dimensions and sufficiently integrate the ideas of the construction of ideology and politics and patriotism for the Communist Party into English language learning materials. For the subjective initiatives of the

English teachers, modularized classroom activities [1] can be designed in corresponding to normal classroom teaching. Each modularized classroom activity (MCA) lasts 20–30 min and the content of the activity is deeply related to the topic and learning materials of each unit in the textbook ranging from new words, phrases, expressions, language focus, translation, and word building to structure analysis and writing. Each unit in the textbook can be categorized into five modules that correspondingly have their MCAs. In actual classroom teaching, English teachers can take the liberty of choosing from the data bank and inserting the appropriate MCA into their classes according to their actual teaching arrangement. (see Fig. 1)

2. Task-Driven Method under Background of Big Data

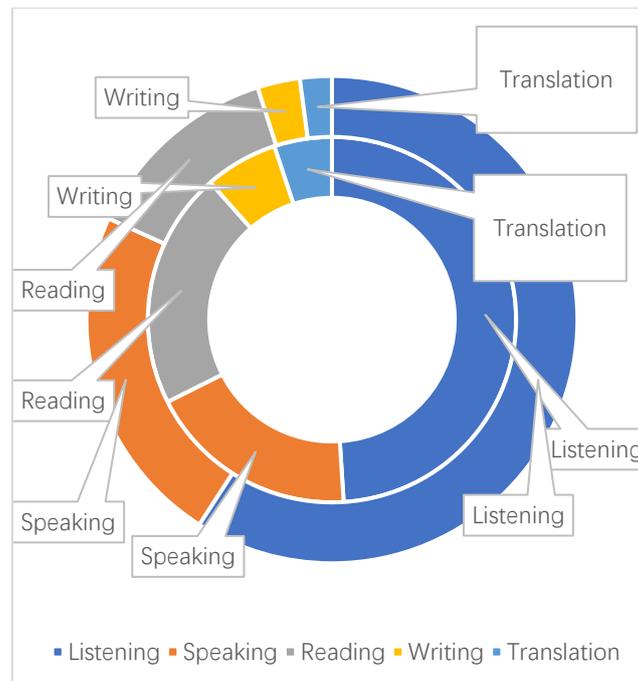


Figure 2: Priority of learning in freshman and sophomore English class.

In the era of big data, the teaching and learning activity can be quantified by using the relevant technology of education analysis. Through big data analyzing and processing, the internal connection between students' activities and between students' learning and teaching process are easily identified and used by the teacher involved. Therefore, the teacher can design targeted teaching materials and methods. Not concentrating on a textbook but on students' differences, a task-driven method in English teaching and learning is proposed.

With the help of teachers, students are closely centered on a common task (MCA), driven by strong problem-solving motivation, the active application of learning resources, self-exploration, and interactive collaborative learning in the completion of the established tasks. At the same time, how finishing the MCA can guide students to produce a successful learning practice activity.

The most fundamental feature of the task-driven teaching method is "task-based, teacher-leading, and student-centered", which has changed the passive teaching mode of "teacher speaks, and students listen" in which teaching determines students' learning and creates a teaching mode based on students' learning. Students take the initiative to participate, cooperate independently, and explore new learning models innovatively.

In a survey conducted in this study, 582 out of 600 students answered the question "What aspect do you mostly want to improve in English class?" Among them, 296 are freshmen and 286 are sophomores. Figure 2 shows that most students wanted to improve their listening and speaking ability, with freshman students accounting for 49 and 19% and sophomore students taking up 59 and 23%, respectively. Therefore, MCA design and content should be based on listening and speaking modules.

3. Content of MCAs

Based on each unit in the textbook and big data online, different materials and documents are downloaded, differentiated, and classified into five categories i.e. reading, writing, listening, speaking, and translation. In each category, all materials are ranked into three levels according to their degree of difficulty and reference [2]: easy, moderate, and difficult. Materials relating to the ideas of patriotism and affinity for the Communist Party and Chinese traditional cultures are prioritized, which needs to be embodied in the MCAs.

MCA can be designed and used in one or different dimensions and units as long as corresponding materials are substituted in different units. Through big data analysis of students and references [3], the following MCAs are ranking the top five among ten options. 582 out of 600 students attended the survey (Fig. 3). The students were divided into three groups according to English final exam scores in the previous term, namely, students with 80+ points, students with 60–79 points, and students with lower than 59 points. Students with moderate English competence prefer MCAs such as Matchmaker, Relay Porter, Charade, and Spot Dictation, while students with higher English competence like Shadow Repeating, Matchmaker, Spot Dictation, and Charade. According to the results of the survey, these five MCAs are listed and used in English classroom teaching in vocational colleges to boost English teaching and learning through big data processing.

3.1. Shadow Repeating

■ **Description:** Students play the required listening audio on their mobile phones or other devices and repeat what they have heard. The repeating process takes place simultaneously with the listening process. Both teachers and students can check on a one-to-one basis, and teachers rate the student who has done the activity.

■ **Dimension Range:** Listening and speaking

■ **Degree of Difficulty:** Moderate or difficult according to different materials.

■ **Advantages:** Students' listening and speaking competence can be improved in a short period if appropriate materials are chosen.

■ **Disadvantages:** It needs a lot of time for students to practice and for the teacher to check the outcomes.

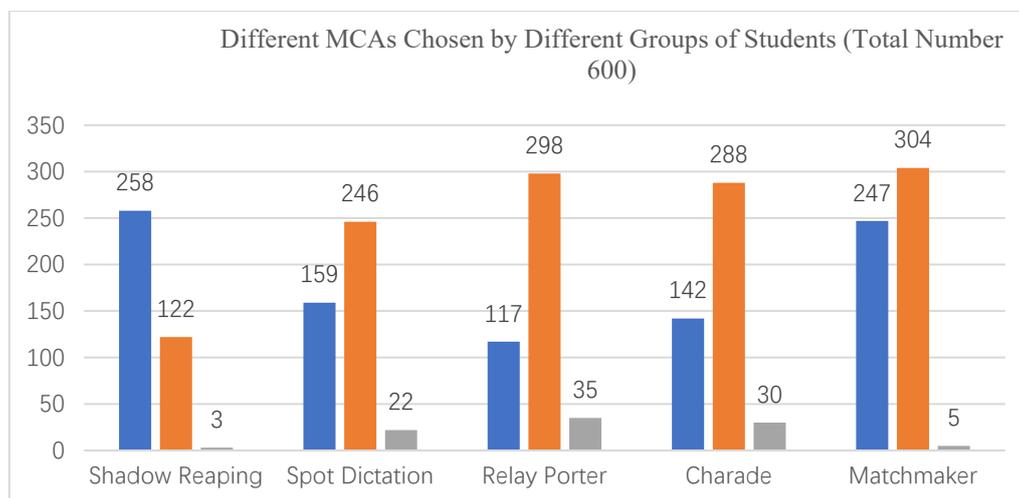


Figure 3: Different MCAs chosen by different groups of students with 582 valid samples.

3.2. Spot Dictation

■ **Description:** Students are given a passage that lacks keywords, phrases, or sentences. Students listen to the audio of the passage and write out the missing keywords [4]. If it is in the speaking class, students can repeat orally the missing parts. The teacher can use teaching APPs to rate and record students' performance. The materials of this MCA comes from data bank online or offline (Fig. 5).

■ **Dimension Range:** Listening and speaking

- Degree of Difficulty: Easy or moderate according to different materials.

- Advantages: Students' learning interests can be aroused if they can fill in the missing parts successfully. They obtain their listening and speaking competence that is improved in a short period if appropriate materials are chosen.

- Disadvantages: With students' listening ability improving, the degree of difficulty of the language materials must be enforced accordingly.

3.3. Relay Porter

- Description: Students are grouped with 5–10 members. They must pass either words or phrases or sentences orally in relay mode. The last member of the group writes what he/she has heard on the blackboard or screen. The teacher can use teaching APPs to rate and record students' performance in this activity [5]. All the members of can have the same score according to their performance in their group (Fig. 4). The materials of this MCA comes from data bank online or offline (Fig. 5).

- Dimension Range: Listening, speaking, and reading

- Degree of Difficulty: Easy or moderate according to different materials.

- Advantages: Team spirits are required in this activity, and students work out strategies to win the game or obtain higher scores. The classroom atmosphere can be aroused if incidents are happening during the relay.

- Disadvantages: There may exist free riding students. Mistakes in the middle of the group relay may affect the rest of the members to have the same mistakes. It is also time-consuming.

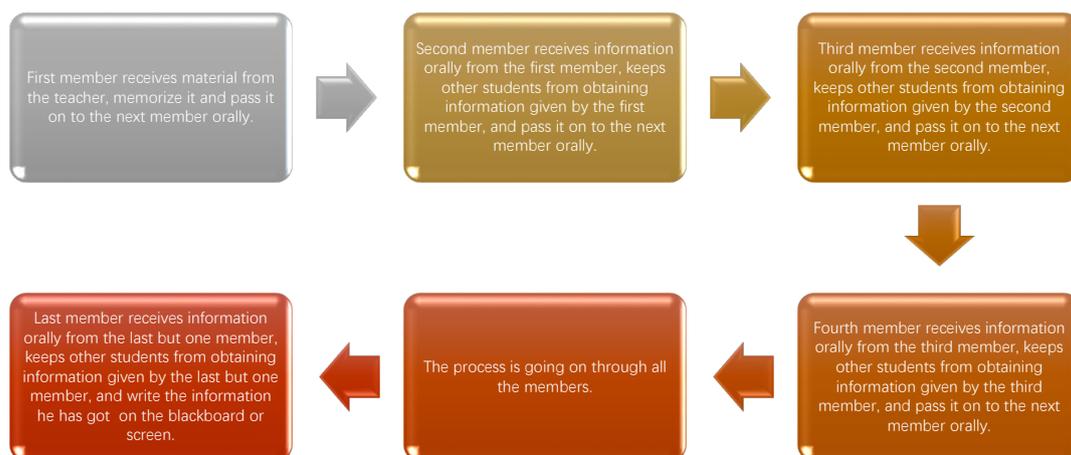


Figure 4: Procedure of relay porter and requirements of different players.

3.4. Charade

- Description: Two students or two groups of students match up to take part in this activity. One individual or one group faces the screen where the required word or phrase is shown and describes the word or phrase they see in English, but they cannot speak the word directly, and the other student or group of students with their back toward the screen guess the word or phrase on the screen according to the description of the students in front of them. If there are any doubts, they can ask the students in front of them any question in English to narrow down to answer. The materials of this MCA comes from data bank online or offline (Fig. 5).

- Dimension Range: Listening, speaking, and reading

- Degree of Difficulty: Easy or moderate according to different materials.

- Advantages: Team spirits are required in this activity, and students work out strategies to win the game or obtain higher scores. The classroom atmosphere can be aroused if incidents are happening during

the relay.

■ **Disadvantages:** There may be free riding students. Mistakes in the middle of the activity may draw other students interests to watch. It is also time-consuming. Only one or several students who are good at English language may dominate the whole activity.

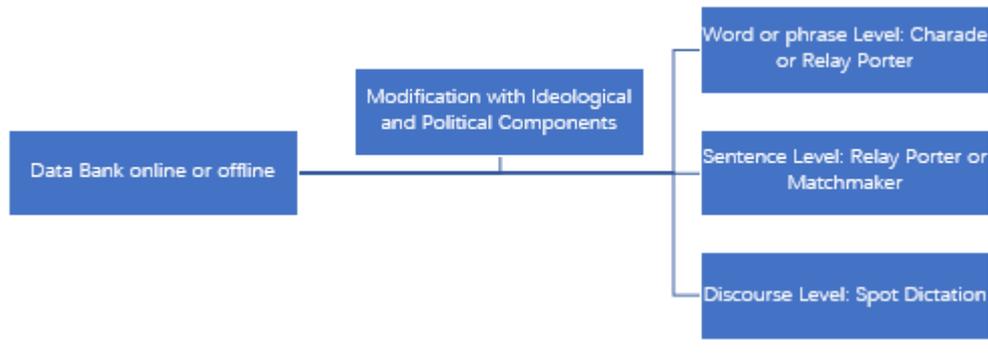


Figure 5: Procedure of materials processing in different MCAs from data bank.

3.5. Matchmaker

Table 1: Information of Participants’ Son or Daughter That Can Be Cut into Smaller Slips

Your son, Miguel , is a math teacher at Shandong University. He is muscular and handsome. When he is free, he likes playing soccer with his friends.	Your daughter, Fiona , is a computer science student at the University of Canberra. She loves going to the movies. She is tall and has long blonde hair.
Your son, Tim , is an airline pilot in his 30s. He travels a lot and earns a lot. He is a bit rude to strangers but kind to family members.	Your daughter, Kathy , is a short, slim girl who has blue eyes and long, straight, brown hair. She is the president of a big company and earns a lot of money. She loves traveling and reading.
Your son, Brad , is a short, shy art student at Peking University. He likes to compose music and has composed several songs for famous singers.	Your daughter, Sabrina , is tall, muscular, and tan. She is 24. She is a professional tennis player. She travels a lot and wants to be a teacher at a university in the future.
Your son, Andrew , is a 22-year-old hairdresser. He has blond hair and Beckham’s good looks. He also makes money as a Beckham double. He likes traveling and making friends.	Your daughter, Sara , is a doctor working at a hospital. She is pretty tall and has hazel-colored eyes. She enjoys reading and doing work-out in gyms.
Your son, Kevin , is a taxi driver. He thinks his job is too tiring and he wants to go back to college to study engineering. He likes to listen to music.	Your daughter, Tara , is a plain girl who wears big glasses. She is very smart and is writing her Ph. D. dissertation now. Her long-term goal is to be a top scientist in nuclear energy.
Your son, Jacky , is a moneybag who has his yacht and plane. He is short, tan, and thin, but he is very humorous. He is a skit actor.	Your daughter, Sophie , is a bus driver. She wants to be a writer. She enjoys watching movies, surfing, and snowboarding.
Your son, Daniel , is an amateur boxer who dreams of winning the championship in boxing. He trains a lot and he is very strong and tall. He loves swimming and climbing mountains.	Your daughter, Veronica , is an excellent lawyer. She is very thin and eloquent. She is a bit on the plain side. Her favorite pastime is going hiking and fishing.

■ **Description:** In this activity, the teacher may tell the students that they have time-traveled 30 years later. During the time-traveling, the students may have forgotten what had happened in the 30 years, and the teacher is ready to provide them with important information. The materials used in this MCA are drawn from the data bank online or offline with the procedure as shown in Fig. 5. They have returned to the classroom with one important task to help one of their grown children to find a suitable spouse from classmates’ family. As they have forgotten the information about their children, the teacher provides the information about one of their children (Table 1). With the information, students need to memorize the information by heart and return the sheet of information to the teacher. Then, they need to walk around the classroom to ask other students for their information about their child. If they can find a suitable spouse for their child, they can team up and prepare their report together about their children’s

information, the reason they can be together, and the prospects for their future. Finally, they can make an oral presentation in front of the whole class about their matchmaking.

- Dimension Range: Listening and speaking
- Degree of Difficulty: Moderate or difficult according to different materials.
- Advantage: Each student has a chance to report in class.
- Disadvantage: It is also time-consuming.

4. Feasibility Analysis and Implementation of MCAs based on Big Data

The MCAs can be used in different class slots according to the teachers' actual English class arrangement to arouse students learning interests and boost their language learning competence. If it is in reading class, the new words have been learned and explained in class in 20 min, the teacher can have a Charade MCA using the words just learn to make the students boost their mastering of the new words. If it is in speaking class and how to describe a person has been just explained, then the teacher can use the Matchmaker MCA to let the students practice how to describe a person.

Figure 6 shows the mentioned 582 students' rating of each MCA in five aspects: a form of organization, selection of content, degree of participation, degree of accomplishment, and sense of gain. In each aspect, they are required to select five choices such as very unsatisfactory, unsatisfactory, moderate, satisfactory, and very satisfactory. These five ratings correspond to 10, 30, 60, 80, and 100 points respectively. Generally speaking, the students are satisfied with these five MCAs except that there are flaws or defects in one or two aspects that can be improved in later activities.

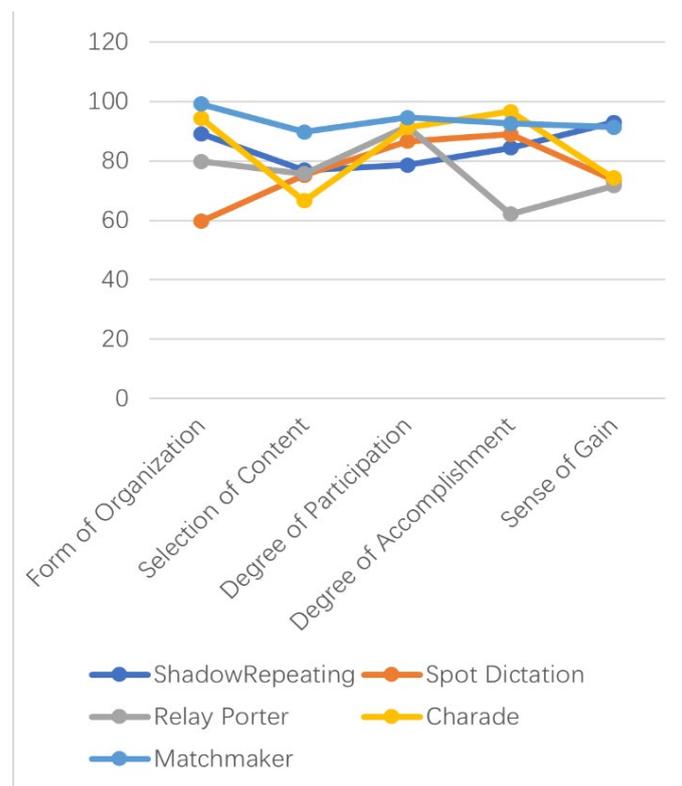


Figure 6: Students' rating of each MCA in five aspects.

5. Outcomes of Implementation of MCAs

5.1. Implementation and promotion of MCAs to deepen students' love for college English courses

MCAs can motivate students to actively participate in classroom teaching and fully mobilize their enthusiasm for participation. It can transform the “duck-stuffing” type of teaching dominated by the teacher into the classroom of teacher-student interaction, peer collaboration, and immersive English

contextual communication [6].

5.2. Implementation and promotion of MCAs to improve students' comprehensive English quality

MCAs are conducive to teaching students according to their aptitude and to their different English foundations. Students can check and fill vacancies in a targeted manner according to their actual needs, and can maximize students' autonomous learning.

5.3. Implementation and promotion of MCAs to improve the school's English teaching level thoroughly and in every aspect

The large-scale promotion of MCAs can create a group of high-level professional groups with foreign-related capabilities for the school, thereby improving the school's overall level of running school and significantly enhancing the school's international influences.

5.4. Implementation and promotion of MCAs to achieve a high degree of integration of vocational skills and professional spirit training

MCAs seamlessly integrate the ideological and political education and socialist core value education into English classroom teaching and build an ideological and political work pattern of all-around education for all staff and education in English teaching.

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