

Study on the Model of Cultivating Applied Talents in College English Teaching

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Abstract: Based on the national advocacy and requirements for strengthening the innovation and entrepreneurship work of ordinary colleges and universities, this paper summarizes the innovation and entrepreneurship education model for English majors of several private colleges and universities including the Hubei Institute of Commerce, through literature review, verbal interviews, and experience summarization, analyses the innovations of these models, and on this basis, proposes a new approach to the cultivation of applied talents for English majors in private colleges under the background of "Innovation and Entrepreneurship".

1. Introduction

English majors belong to liberal arts majors. Compared with science and engineering or other liberal arts majors, English majors are relatively weak in the integration of production and education, and it is difficult to discover effective innovation and entrepreneurial achievements. In order to highlight the characteristics of applying technology-based universities, the English majors of private colleges and universities must also develop talent training models that suit their own development and social needs. Innovation and entrepreneurship require students to possess the qualities of innovation and entrepreneurship, the ability to integrate new ideas and new technologies, and the spirit of originality and truth-seeking. This is complementary to our quality education. At present, innovation and entrepreneurship education has only begun to spread across the country. The focus of all colleges and universities is centered on the establishment of entrepreneurial colleges and the establishment of specialized organizations (Evans & Williams, 2005). It has not been able to deeply integrate into professional personnel training programs and professional curriculum systems. Professional education is the foundation of entrepreneurship education. At present, the application of English teaching is still centered on passing examinations, blindly pushing the progress of teaching and passing grades, and failing to incorporate innovation and entrepreneurship education into the agenda teaching. At the same time, higher vocational college students generally have poor English learning foundation and boring English teaching environment. Students are not interested in learning English. Over time, some students lose confidence in learning English. Most of the English majors use the traditional teaching methods. They do not need to set up courses according to the actual tasks of the relevant posts (Gilbert, 2009). There are too many professional courses, which cannot highlight the training of professional core abilities and cannot adapt to the first posts. The practice teaching link still stays in written practice. As a means of communication, English has a wide range of use. It is very difficult for students to find social practice posts. Most of the internships and trainings are in a form that cannot meet the needs of enterprises.

Under the background of innovation and entrepreneurship, the application of English majors in higher vocational colleges should be demand-oriented, and establish a new talent training model of "professional knowledge + innovative spirit + entrepreneurial skills" English applied talents. Construct theoretical teaching system and practical teaching system centered on "double-creation" ability and English application ability to improve comprehensive quality (Naser & Nematoalah, 2010). Focus on the training of professional skills, with relevant qualifications for international business secretaries, business English, on-site translation, and other practitioners. Take the path of integration of government, industry, research and development, strengthen the construction of

training bases inside and outside the school and the construction of teaching staff, and increase the number of students applying for English majors to participate in innovation and entrepreneurship activities. Students in Applied English majors in higher vocational colleges must not only have general foreign language abilities such as listening, speaking, reading, writing, and translation, but also have the ability to work in certain secretarial, trade, and tour guides. Relying on professional education to develop entrepreneurship education is the only way for the development of higher vocational education (Tran & Hoai, 1998). According to the requirements of professional training objectives and training specifications, the “double-creation“ element is integrated and a theoretical and practical teaching system of basic quality modules, vocational technology modules, and elective modules is constructed. The basic quality module consists of public basic courses. The vocational technology module consists of English basic knowledge and English application ability courses. The elective modules cover courses related to innovation, entrepreneurship and qualifications. The reform of the curriculum system should establish the concept of innovation and entrepreneurship education based on professional education, and integrate innovation and entrepreneurship education into the professional education process.

2. Teaching ability

2.1. Failed to integrate with professional education

First, compulsory courses and elective courses for the establishment of innovation and entrepreneurship guidance are included, and credit management is included. The second is to create a diversified teaching method of creating a new atmosphere for entrepreneurship and innovation education. Case studies, task teaching methods, and communicative teaching methods are taken as the carriers to integrate innovation and entrepreneurship scenarios to stimulate students' initiative thinking and cultivate their entrepreneurial awareness in all directions. In order to adapt to the development of the new era, the application of English majors must change the traditional teaching philosophy, and further implement teaching reform from the perspectives of student independent innovation, independent learning, and personalized development (Yoshida, 2006). Personalize the training and assessment content to form a training and assessment system that is truly suitable for the application of English majors' operability and exciting potential. Medical English is a basic discipline. With the emergence of "double-creation" education, the goal and educational aims of medical English for private colleges and universities need to be reformed. Traditional teaching methods need to be reversed to attract diverse disciplines. Transforming the teaching methods into a unity of knowledge and practice, cultivating high-quality talents with innovative consciousness, and constructing subject teaching featuring medical English. The content and style of the teaching materials should be taken into account, focusing on students' reading, writing and listening and speaking skills.

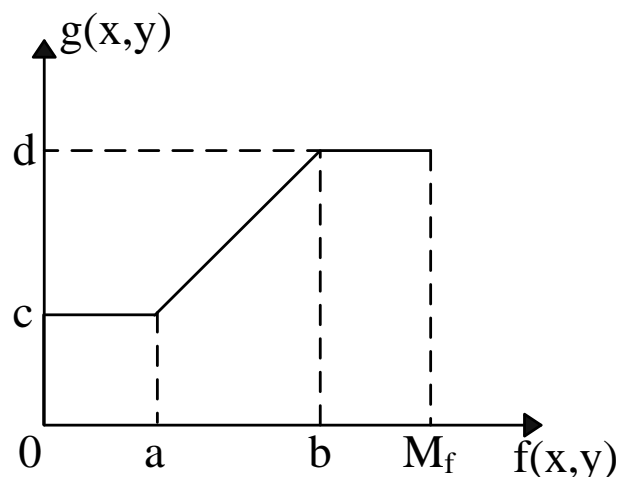


Figure 1. Linear transformation diagram

2.2. Insufficient awareness of innovation and entrepreneurship

The existence of medical English as "Science and Technology English" led to the deviation of the college's curriculum setting. Basic English has always played a leading role in the sophomore year. English has always been a service for students to study English at the national level 46 or higher. Having a qualified English certificate for class 46 or higher has opened the door to employment for them. Students believe that learning English is for examinations, examinations, and certificates. After the test, students no longer have the interest in learning English. Therefore, the medical English courses offered by the college in the third year do not attract students' attention and interest. As the college's system is being perfected, all teaching work is in the phase of exploration. Medical English teaching is currently taught in the form of large classes. The level of students' levels varies. Most of them are mainly filled with lectures and explanations by teachers.

In addition to classroom teaching, the college also purchased an online teaching system. Students can communicate with teachers through online resources to cultivate students' independence. Textbooks are an important basis and tool for teaching and an important source of knowledge. Because of the late development of medical English, the system is not mature enough, the teaching materials for medical English are relatively scarce, and the quality of teaching materials in the market is uneven and mixed. It is very difficult to select textbooks. In order to select teaching materials, the Department of Foreign Languages in our school organized professional staff to analyse and select teaching materials, and emphasized the systemization and integration of teaching materials.

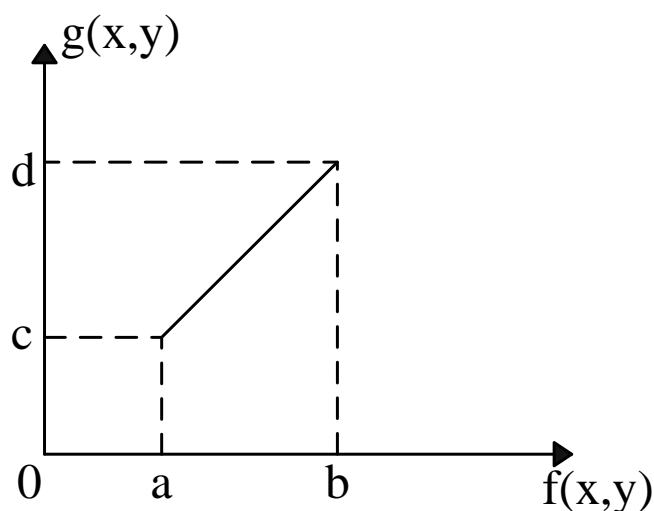


Figure 2. Piecewise linear transformation diagram

3. English applied talents training system

3.1. Applied talent cultivation

Students are passive recipients rather than active learners. Such a teaching model is not conducive to the cultivation of students' creative thinking, divergent thinking and critical thinking. It is also not conducive to the cultivation of innovative and practical dual talents. Teaching quality and teaching efficiency are not guaranteed. Students are the subject of cognition, and constructing a learning model is very important for students to develop autonomous initiative.

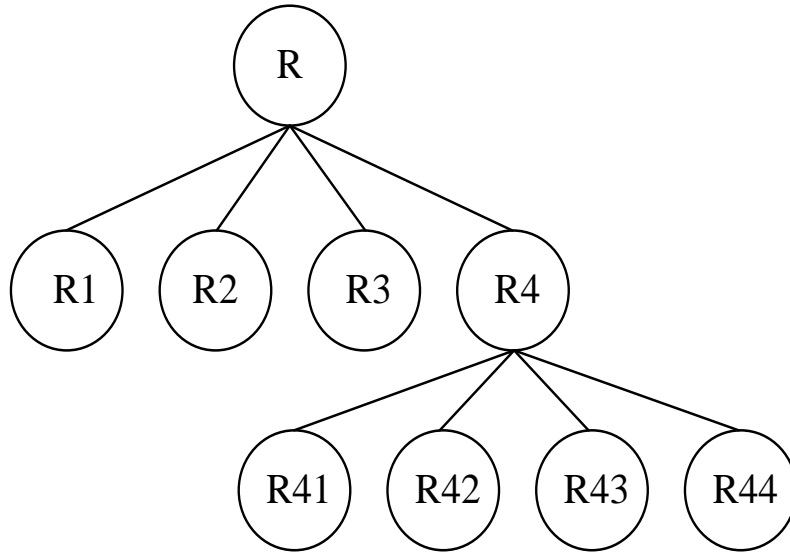


Figure 3. Image segmentation and its corresponding quad tree

Innovation is the soul of a nation's progress. English teaching is a creative and practical activity. The important goal of medical English teaching reform in current colleges and universities is to cultivate innovative English talents. Innovative talents must have solid professional knowledge, skilled language skills, and innovative abilities. Innovative medical English teachers must have new teaching concepts and teaching models.

Online training adaptive neural controller for industrial tracking control applications:

$$\delta_k = \frac{\partial E_N}{\partial net_k} = \sum_n \frac{\partial E_N}{\partial X_p} \text{sign}\left(\frac{\partial X_p}{\partial up}\right) \frac{\partial up}{\partial O_n} \frac{\partial O_n}{\partial net_k} \quad (1)$$

Provide the required symbol information:

$$\text{sign}(\partial X_p(N) / \partial up(N)) = -1 \quad (2)$$

Combining linear differentiation of errors and errors:

$$\frac{\partial E_N}{\partial O_k} = K_3 e + K_4 \frac{de}{dt} \quad (3)$$

Therefore, the formula can be converted into the following form:

$$\delta_k = \frac{\partial E_N}{\partial net_k} = \sum_n \frac{\partial E_N}{\partial X_p} \frac{\partial X_p}{\partial up} \frac{\partial up}{\partial O_n} \frac{\partial O_n}{\partial net_k} = \sum_n \left(K_3 e + K_4 \frac{de}{dt} \right) \frac{\partial O_n}{\partial net_k} \quad (4)$$

The first-order dynamic model of the DC servo motor is:

$$M(S) = \frac{10000}{S+1} \quad (5)$$

A nonlinear third-order controlled object is used to prove:

$$X_p(n) = f(up(n-1), up(n-2), up(n-3), X_p(n-1), X_p(n-2), X_p(n-3)) \quad (6)$$

The reference model is as follows:

$$\frac{X_R}{X_r} = \frac{\omega_n^2}{s^2 + 2\zeta\omega_n s + \omega_n^2} \quad (7)$$

Here's the error energy function:

$$\hat{E}(n) = \frac{1}{2}(X_R(n) - X_P(n))^2 = \frac{1}{2}e_1(n)^2 \quad (8)$$

Gradient change:

$$\frac{\partial \hat{E}(n)}{\partial \hat{W}_{kj}(n)} = \frac{\partial \hat{E}(n)}{\partial n\hat{t}_k(n)} \cdot \frac{\partial n\hat{t}_k(n)}{\partial \hat{W}_{kj}(n)} = \hat{\delta}_k(n) \cdot \hat{O}_j(n) = \hat{\delta}_k(n) \cdot f(n\hat{t}_j) \quad (9)$$

$$\hat{\delta}_k(n) = \frac{\partial \hat{E}(n)}{\partial n\hat{t}_k(n)} = \frac{\partial \hat{E}(n)}{\partial X_P} \cdot \frac{\partial X_P(n)}{\partial up(n)} \cdot \frac{\partial up(n)}{\partial \hat{O}_k(n)} \cdot \frac{\partial \hat{O}_k(n)}{\partial n\hat{t}_k(n)} = -e_1(n) \cdot \frac{\partial X_P(n)}{\partial up(n)} \cdot \frac{\partial up(n)}{\partial K_k} \cdot 1 \quad (10)$$

The Jacobi ratio of the controlled object:

$$\frac{\partial X_P(n)}{\partial up(n)} \approx K_B \cdot \sum_{j=1}^8 \frac{\partial f(n\bar{t}_k(n))}{\partial n\bar{t}_k(n)} \cdot \bar{W}_{kj}(n) \cdot \frac{\partial f(n\bar{t}_j(n))}{\partial n\bar{t}_j(n)} \cdot \bar{W}_{ji}(n) \cdot \bar{K}_1(n) \quad (11)$$

A single input single output control system:

$$= \frac{1}{3} \begin{bmatrix} 2(-1)^k + 5^k & (-1)^{k+1} + 5^k & (-1)^{k+1} + 5^k \\ (-1)^{k+1} + 5^k & 2(-1)^k + 5^k & (-1)^{k+1} + 5^k \\ (-1)^{k+1} + 5^k & (-1)^{k+1} + 5^k & 2(-1)^k + 5^k \end{bmatrix} \quad (12)$$

The matrix is represented as:

$$\begin{bmatrix} x_n \\ x_{n-1} \\ x_{n-2} \\ \dots \\ x_{n-k+1} \end{bmatrix} = \begin{bmatrix} a_1 & a_2 & \dots & a_{k-1} & a_k \\ 1 & 0 & \dots & 0 & 0 \\ 0 & 1 & \dots & 0 & 0 \\ \dots & \dots & \dots & \dots & \dots \\ 0 & 0 & \dots & 1 & 0 \end{bmatrix} \begin{bmatrix} x_{n-1} \\ x_{n-2} \\ \dots \\ x_{n-k} \end{bmatrix} \quad (13)$$

1) Apply English teaching reform goals: the innovative teaching philosophy should be people-centered, and it needs to completely change the traditional teacher-led teaching model. It is necessary to establish a student-centered and innovative teaching philosophy to change the situation of students who have weak application abilities and lack of interest in English learning. Innovative classroom teaching requires the initiative of the classroom to be delivered to students. All teaching methods and teaching purposes must be student-centered and can stimulate students' interest in learning so as to cultivate students' medical English application ability, innovation ability, and personal improvement. Teachers should be clear about their role in providing guidance for students. Their own sense of innovation and professional theoretical knowledge need to be continuously improved and strengthened.

2) Suggestions for the training of English majors: the cultivation of innovative talents is inseparable from a good campus environment, and the encouragement of innovative campus atmosphere can create a harmonious teacher-student relationship. Only in this atmosphere can students actively participate in teaching. The cultivation of innovative medical talents must adapt to the modern compound talent model, work hard to remove or change the factors that may affect the cultivation of innovative talents. The innovative model for the cultivation of English majors in private universities should focus on the creation of an innovative team, effectively advance the practice training base, faculty and curriculum construction, and create good external conditions for students' innovation and entrepreneurship.

3.2. Research tools and methods

The state encourages college students to start their own businesses, and regards college students' entrepreneurship as the main measure to alleviate the increase in employment pressure after college expansion. Therefore, the state has promulgated a series of policies to support the entrepreneurship of college students. Local governments have also successively created college students' entrepreneurial parks, organized entrepreneurship trainings, and launched entrepreneurial competitions for college students. Although the country has introduced many favorable policies, many organizations have not actively implemented them. Schools also emphasize theoretical education and do not actually introduce relevant national policies. Therefore, when it comes to entrepreneurship, many college students will not make reasonable use of relevant laws and regulations to protect themselves, nor will they make reasonable use of relevant policies to apply for subsidies to relevant departments. In addition, college students lack the relevant legal knowledge and basic knowledge of entrepreneurship, making entrepreneurship difficult. Entrepreneurship education mostly uses classroom-based education, which is mainly taught by teachers. Examinations and classroom names are also the main assessment methods, resulting in innovation and entrepreneurship education becoming a general basic theory class.

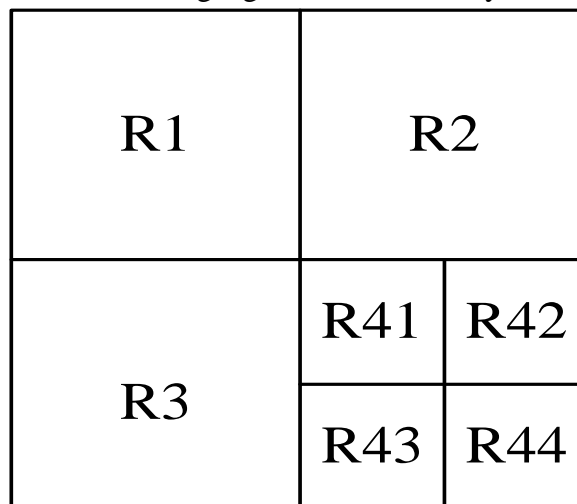


Figure 4. Region split merge algorithm based on quad tree data

3.3. Formalization of entrepreneurship education

In response to the Education Department's call, some colleges and universities have opened up entrepreneurial areas in schools to encourage college students to start their own businesses. However, some of the shops opened in these school business parks are not in line with actual life, and their operating efficiency is not very good. They have been closed for a long period of time or are only operating in the name of college students. In response to the Education Department's call, some colleges and universities have opened up entrepreneurial areas in schools to encourage college students to start their own businesses. However, some of the shops opened in these school business parks are not in line with actual life, and their operating efficiency is not very good. They have been closed for a long period of time or are only operating in the name of college students. In addition, some preferential policies for campus entrepreneurial shops lack continuity. For example, shop rental is only a time-based relief, and it does not provide long-term sustainable benefits. At the same time, shop decoration and product purchase have to invest a lot of money, which increases the entrepreneurial pressure for college students. Among the teachers who teach in entrepreneurial classrooms in a number of higher vocational colleges, except for a handful of related business experience, most of them graduated from college to teach at the end of their studies. There is no corporate experience, not to mention entrepreneurial practice. Entrepreneurship courses can only be based on the text.

$$y \xrightarrow{f(x|y) = i} f(x + aby + b) = j$$

Figure 5. Visual texture features

4. Empirical analysis

4.1. Old teaching concept

Talent cultivation in colleges and universities is to meet the needs of professionals in the industry. To carry out practical innovation in business English teaching, it is necessary to analyse the job requirements of the industry and analyse the talent gap in the industry. In particular, we should refer to the employment situation of the recent five-year graduates in this major. From the investigation and analysis, the professional companies of vocational English majors in business English are mainly foreign trade companies, freight forwarding companies, and sales agencies. After graduation, they are engaged in international posts, translators, foreign trade clerk, and English education. Innovation and entrepreneurship education in colleges and universities involves the innovation and reform of various disciplines, which naturally involve the curriculum of English teaching, teaching methods, assessment methods, and the ranks of teachers.

Table 1. Deepen innovation and entrepreneurship education reform

10	0	9	14	6	3	15	5	1	13	12	7	11	4	2	8
13	7	0	9	3	4	6	10	2	8	5	14	12	11	15	1
13	6	4	9	8	15	3	0	11	1	2	12	5	10	14	7
1	10	13	0	6	9	8	7	4	15	14	3	11	5	2	12
10	0	9	14	6	3	15	5	1	13	12	7	11	4	2	8
13	7	0	9	3	4	6	10	2	8	5	14	12	11	15	1
13	6	4	9	8	15	3	0	11	1	2	12	5	10	14	7
1	10	13	0	6	9	8	7	4	15	14	3	11	5	2	12
1	10	13	0	6	9	8	7	4	15	14	3	11	5	2	12
10	0	9	14	6	3	15	5	1	13	12	7	11	4	2	8
13	7	0	9	3	4	6	10	2	8	5	14	12	11	15	1

4.2. The effectiveness of business English in dual-instruction practice education

Table 2. The guiding significance of English language training

58	50	42	34	26	18	10	2
60	52	44	36	28	20	12	4
62	54	46	38	30	22	14	6
64	56	48	40	32	24	16	1
57	49	41	33	25	17	9	1
59	51	43	35	27	19	11	3
61	53	45	37	29	21	13	5
63	55	47	39	31	23	15	7
60	52	44	36	28	20	12	4
62	54	46	38	30	22	14	6
64	56	48	40	32	24	16	1
57	49	41	33	25	17	9	1
59	51	43	35	27	19	11	3
61	53	45	37	29	21	13	5
63	55	47	39	31	23	15	7

According to the new situation and new requirements of economic and social development, it is not that colleges and universities can perfect their innovation and entrepreneurship education.

Instead, they should continue to develop and continuously improve the quality and level of innovation and entrepreneurship education for college students, so as to provide more intellectual support and guarantee for economic transformation and development. Innovation and entrepreneurship education is a systematic project that should be included in the education content of various disciplines and run through all stages of education. For any subject, it is particularly important to develop popular innovation and entrepreneurship education in everyday teaching, especially the cultivation of innovative spirit. Colleges and universities are important positions for personnel training. The state and society are increasingly in need of innovative and entrepreneurial talents, and university education is required to enhance practical ability, creative ability, and employment and entrepreneurship.

4.3. Double-innovation measures to enhance hatching efficacy

Students' quality test results in Table 7, were significantly increased compared with the implementation of new evaluation scheme for the end of the school year three quality test scores and the beginning of the semester diagnostic test results, statistically significant differences, the author thinks that although there are many reasons to improve the quality of students, but the main reason is after the implementation of new sports learning evaluation methods, physical education promotes the students' personality and interests play, also for each student to provide varying degrees of success experience, has greatly promoted the students in and out of the PE curriculum of physical education and exercise actively and consciously.

Table 3. Strengthen English quality education

X	Y	Z	TRP	TIP	TTP
32	1	2	3	4	5
4	5	6	7	8	9
8	9	10	11	12	13
12	13	14	15	16	17
16	17	18	19	20	21
20	21	22	23	24	25
24	25	26	27	28	29
28	29	30	31	32	1
30	13	14	15	16	17
32	17	18	19	20	21
34	21	22	23	24	25
36	25	26	27	28	29
38	29	30	31	32	1

5. Conclusion

The core is to cultivate students' innovative thinking and entrepreneurial ability in English learning. In order to achieve socialist modernization and the goal of building a well-to-do society and fostering more innovative and entrepreneurial talents, colleges and universities must pay attention to the effectiveness of innovation and entrepreneurship education for college students and improve the quality and efficiency of innovation and entrepreneurship education. Colleges and universities need to change the traditional teaching methods and teaching models, meet the requirements of the economic society for talent skills in the new era, and improve the effectiveness of college students' innovation and entrepreneurship education. The outdated teaching concept leads to the college English teaching aiming at cultivating the consciousness of innovation and entrepreneurship training not as a total and systematic education and teaching reform project, and it lacks a major transformation of the traditional talent training model. The traditional teaching model does not have the spirit of cross-disciplinary collaboration and integration of teaching. It did not incorporate the new requirements of the era for English teaching into teaching management in a

timely manner, and failed to build a new mechanism and a new system for the cultivation of innovative and entrepreneurial talents.

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