

# Cognitive Research on the Cultivation of Interdisciplinary Talents for English Majors in the New Liberal Art —Based on the Learner's Perspective

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## Abstract

Previously, English major learning research and curriculum design were usually based on the perspective of teachers and educators, which were adjusted from top to bottom under the social needs. Although it is in view of social needs, it inevitably lacks the demands of English majors themselves. This research shifts the perspective to English majors, surveying the curriculum design from the perspective of English majors, collecting their career plans and demands through questionnaires, and using SPSS (Statistic Package for Social Science) to integrate and analyze the data, so as to take advantage of learners' ideas to promote educational innovation. Different from the traditional top-down training scheme planning of discipline designers, it will be conducive to adding more practical effects to discipline design from bottom to top by exploring learners' cognitive degree of three factors— "New Liberal Arts", "English Major" and "Talent Training".

**Keywords:** Interdisciplinary talents English majors New Liberal Art Learner's perspective.

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## 1. INTRODUCTION

New Liberal Arts (the integration of new technology into philosophy, literature, language, and other such courses, to provide students with comprehensive interdisciplinary learning) is in response to the needs of the times: First, the new needs of the new scientific and technological revolution and industrial transformation for the construction of Chinese liberal arts; Second, the new needs of the high-quality development of China's higher education for Chinese liberal arts education; Third, the new needs of the construction of national discourse for the construction of New Liberal Arts in China.

To discuss the construction of New Liberal Arts in China, we need to return to the realistic context of China. Relevant research holds that the new scientific and technological revolution and industrial transformation, the high-quality development of China's higher education, and the new demand of national discourse construction for liberal arts in the new era have promoted and formed the objectives, tasks, and internal logic of the construction of New Liberal Arts in China.

Then, the high-quality development of higher education in China proposes new demands for English

majors. Traditional English majors seldom understand science and engineering knowledge, and only a few learners are willing to learn science and engineering-related English, which leads to the fact that the learning of academic English in professional fields is not very profound, and there is little space for learners to try and develop personalized academic English.

Finally, as far as the training of English majors is concerned, the demands of learners need to be taken into account in the discipline construction. At present, most of the related research is from the perspective of discipline designers to meet the requirements of New Liberal Arts, lacking survey and analysis of learners' cognitive of New Liberal Arts. "Learner's perspective" is the core factor of this research. The exploration from the learner's perspective varies from the top-down training scheme planning of subject designers. By investigating learners' cognitive degree of "New Liberal Arts", "English Major" and "Talent Training", it might add more practical effects to discipline design from bottom to top.

English majors belong to language majors. In language learning, the most important thing is to learn and use flexibly and divergent thinking. Therefore,

instead of using the same model to train English majors, it is better to change our thought, make this major "alive", and give English majors more autonomous learning and personalized choices.

## 2. Construction of English major based on New Liberal Arts

The construction of New Liberal Arts covers two connotations, one is from differentiation to integration, and the other is to trigger the educational reform of traditional liberal arts majors. Learners majoring in e-commerce, foreign trade, journalism, and communication need to constantly improve their language skills such as listening, speaking, reading, writing and translation, and also master the integration of English knowledge and other professional skills, so as to be better qualified for their working positions in the future. The educational reforms are incrementally being advanced. In the current teaching system in Chinese universities, English is a basic subject, which is both instrumental and humanistic. Under the New Liberal Arts, we should pay more attention to college English teaching and vigorously promote its innovation and reform. (Li Chuangjin, 2022).

Summarizing the relevant research in China, it is apparent that most of the relevant research at present meets the requirements of the construction of New Liberal Arts from the perspective of discipline designers, following the general path of discipline training, understanding, and adjusting the training scheme from top to bottom through the perspective of educators.

However, with the increasing number of educated people in China, and the increasingly

diversified technical platforms involved in teaching and training, learners' cognition of discipline training is particularly important. To a great extent, the existing research results lack the cognitive investigation and analysis from the perspective of learners. Based on the existing research, this survey will use SPSS to conduct empirical investigation and research from the perspective of learners, and explore the relevant demands of English majors, so as to provide instant feedback to middle and high-level educators and drive the reform of English major construction in universities.

## 3. RESEARCH DESIGN

### 3.1 Research objects

This research selected English major learners in some universities as the objects. It was conducted in the form of questionnaires. A total of 609 questionnaires were distributed. After strict selection, 511 valid questionnaires were identified, with an effective rate of 83.9%.

According to the results of the relevant information, the proportion of males is 16% and females are 84%, so the focus of this research is skewed towards female English major learners. And the main research subjects are mainly first-year learners.

It can be seen from the proportion of attending university survey, this research mainly focuses on comprehensive universities and polytechnic universities. Among them, the largest percentage of learners is from comprehensive universities and the smallest percentage is from liberal arts universities, which is 12.9%. As shown in the figure below:

Options	Variables	Sample Size	Percentage
Grade	Freshman	230	45.0%
	Sophomore	149	29.2%
	Junior	59	11.5%
	Senior	73	14.3%
Gender	Male	82	16.0%
	Female	429	84.0%
Types of University	Comprehensive University	286	56.0%
	Liberal Arts University	66	12.9%
	Polytechnic University	159	31.1%

### 3.2 Questionnaire survey

The direction of this research is the cognition of interdisciplinary talents of English majors from the perspective of learners. The survey was conducted by means of questionnaires, which were self-compiled. Before the data was formally collected, a pilot analysis of the size of 90 people was carried out. Based on the results of the pilot analysis, the original questionnaire was modified and the collected data has been collected.

The measured questionnaire consists of three parts. The first part mainly collected the basic

information of English majors. The second part consists of 31 items to investigate the cognition of English majors to interdisciplinary talents in the context of "New Liberal Arts". A six-point Likert scale (1=strongly disagree; 2=comparatively disagree; 3=disagree; 4=agree; 5=comparatively agree; 6=strongly agree) was used for this part.

The third part is some open-ended questions, which mainly discussed the employment advantages of interdisciplinary talents in English majors, as well as the

deficiencies and suggestions for the cultivation of interdisciplinary talents in some university.

### 3.3 Data analysis

The basic information section of this questionnaire includes gender, grade level attended, and the type of universities. The results show that there is no significant difference in the level of agreement of English major learners of different genders on the relevant dimensions. That is, male and female English major learners have roughly equivalent levels of cognition. However, there are greater differences in the perceptions of English major learners at different stages and in different universities. Moreover, the level of learners' perceptions of one or more dimensions affects their perceptions of another dimension.

After data collection, the structural validity of the questionnaire was first tested by exploratory factor analysis using SPSS. Among the results, for the 31 items in the second part of the questionnaire, the KMO index reached 0.927 and the approximate chi-square value of the Bartlett's test of sphericity reached 10277.72, which indicates that the overall validity is very good, thus the data is suitable for factor analysis.

Reliability test is to analyze the reliability of the questionnaire. In this survey, Cronbach's alpha consistency coefficient test was used. Since it is necessary to analyze the different dimensions of English major learners' perception of interdisciplinary talents in English majors, it is necessary to analyze the reliability test of the extracted metrics separately, and this survey is based on the Likert scale, so the reliability test adopted is Cronbach's coefficient method (Cronbach's alpha). According to the results of the analysis, the standardized reliability coefficient of the sample of this questionnaire as a whole is 0.919, thus indicating a high level of reliability among the question items.

## 4. RESEARCH RESULTS

### 4.1 Prospective cognition of interdisciplinary from the perspective of learners

According to the research results, there are significant differences between different grades of learners on the current situation of interdisciplinary prospective cognition. In the interdisciplinary status of some universities, the cognitive level of freshmen is higher than that of sophomores and less than that of juniors. As far as some college English majors are concerned, the cognitive level of freshmen is less than that of junior and senior, and that of sophomore is less than that of senior;

The interdisciplinary talent policy directly affects the learners' cognition of the interdisciplinary status of some universities, and some universities are lacking in the cultivation of the learners' interdisciplinary cognition. Therefore, some upper and middle level educators in universities need to fully understand the

learners' demands, and formulate corresponding policies and measures to seek a balance and optimal understanding in cultivating talents and promoting employment.

### 4.2 Cognition of talent in some universities from the perspective of learners

Liberal arts universities and polytechnic universities lack a more complete system of disciplinary training compared to comprehensive universities. As a result, learners in comprehensive universities have higher perceptions of the status of interdisciplinary training than learners in polytechnic universities. Learners in comprehensive universities have a higher level of awareness than those in polytechnic universities on the status of English major training in universities.

This survey investigates the current status of English major training from three perspectives: curriculum, curriculum objectives, and specialized textbooks, reflecting the professional training strategies of universities and the current learning status of learners themselves, in order to promote the cross-circularization of curricula and the diversification of English textbooks.

Regarding the perception of barriers to employment of English majors, the survey mainly focuses on the employment situation to research the barriers to employment of graduates of English majors, such as the lack of a professional match. The problem of employment difficulties is used to give some strategies on the design of the subject so as to stimulate learners to change from cognitive level to action level.

### 4.3 English construction in some universities from the learner's perspective

In the feedback collected from this questionnaire, most English major learners believe that:

First, add courses that are within the learner's ability and interests, such as courses in law, journalism, and other related subjects. Some universities could offer optional courses, choosing to teach English in conjunction with the strengths and characteristics of the university. At the same time, policies should be accelerated to utilize the resources of other majors in the university to combine English with other professional knowledge and to supplement it through the curriculum.

Secondly, educators need to give up the traditional teaching mode, learn courses that are truly beneficial to English majors in the context of the times, and give learners internship opportunities to experience different positions, and learn the skills needed for the corresponding target positions on the basis of the basic compulsory courses.

Thirdly, interdisciplinary orientation training cannot focus only on exam-oriented education. It also needs to take into account the international trend of considering the ability of speaking and listening as the

top priority for English majors instead of theoretical knowledge as well as grammar learning, and improving course interests so as to increase efficiency.

Finally, linguistics and stylistics courses need to be the top priority for senior learners. Therefore, it is necessary to cut practical courses that serve no practical purpose. There is no peak in language learning, it is an accumulative process. Only by becoming interdisciplinary can one be competitive in employment.

Nowadays, the English proficiency of many non-English majors is on a par with or even exceeds that of English majors, and these majors have professional knowledge and are very good at English at the same time. It can be imagined that enterprises are more inclined to cross-type composite talents when employ someone, which is undoubtedly a big impact and challenge for English major learners.

#### 4.4 Perceived barriers to employment for English majors from the learner's perspective

In recent years, the English major has faced unprecedented challenges. Based on feedback from questionnaires completed by English major learners, the reasons can be broadly categorized into the following sections:

Firstly, the threshold for English majors is lower, and there are many universities offering the major. According to incomplete statistics, there are over 1,000 university and universities across the country offering English majors, and the number of students is increasing each year, which lowers the threshold for entering the major.

Secondly, the rise of artificial intelligence has made the English major more competitive. With the rapid development of translation software, English majors are facing competition from advanced translation software that saves time and labor and has more comprehensive functions. Many enterprises are using this translation softwares instead of hiring translation personnel, which saves costs and brings great economic benefits to the enterprise. This has had a huge impact on the English major.

Thirdly, the epidemic has affected global economic exchanges, further aggravating the employment obstacles for English major learners. Communication is essential, but the epidemic has led to a reduction in the introduction of talent by foreign trade enterprises, and the number of international jobs related to tourism has also decreased.

To address the problems found in the research, appropriate reforms and adjustments should be made to the cultivation of English majors. These should be based on the real needs of English major learners and should focus on the needs of the field of research under the

current circumstances , which will help to fundamentally solve the major problems of talent cultivation objectives, curriculum design, education system, and so on.

## 5. SUMMARY

This research highlights the shortcomings and deficiencies of the English major in meeting the needs of comprehensive human development. Factors such as professional foresight, practicality of courses, and learners' interests play a crucial role in determining the choice and actual needs of courses. Learners' knowledge and understanding of interdisciplinary cultivation also greatly influence their future planning and direction. Therefore, educators at the top level of comprehensive universities, as well as liberal arts universities and polytechnic universities, should design different interdisciplinary cultivation paths for different grades to meet the demands of learners while adapting to the construction of the New Liberal Arts construction. Additionally, the traditional pedagogical methods and teaching mode of English majors should be re-evaluated and reformed in the context of the "New Liberal Arts".

Future research should delve deeper into issues related to teaching materials and training programs for English majors. The research groups should also be expanded to include graduate and doctoral students, in order to more comprehensively apply research theories to the actual construction and reform of English majors. This will provide better reform ideas for the cultivation of English majors and fully utilize the positive impact of English majors' cognition on the top-level design of teaching.

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