



Study on the Interdisciplinary Talents Training Mode in British Universities—Take UCL as an Example

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Abstract: This paper mainly chooses UCL as the representative of the best universities of the UK, and make an introduction for the interdisciplinary talents training mode of this university. The aim of this analysis is to provide practical experiences and enlightenment for the interdisciplinary talents training of China.

Keywords: UK; Interdisciplinary; Talents Training Mode; UCL; Top Universities in the World

1. Interdisciplinary talent training model

The training of interdisciplinary talents at UCL is reflected in many aspects of teaching and research.

1.1 Set up interdisciplinary majors and offer interdisciplinary courses

This is the most direct reflection of interdisciplinary talent training, not a simple learning theoretical knowledge of other disciplines, is not a superficial, but according to the need to solve practical problems, combining several disciplines, integrate a contains multiple disciplines theory and practice of interdisciplinary professional.

In 2012, University College London added a new Bachelor of Arts of Sciences, cleverly combining the humanities with science. In addition, the school of social and history science of philosophy, politics and economics, Baetlett school of architecture interdisciplinary research, etc., are typical interdisciplinary major, from training objectives, curriculum structure, teacher configuration to learning evaluation and feedback, embodies the concept of multidisciplinary, thick foundation, wide caliber.

1.2 Small class size special seminar

From undergraduate to doctoral training, UCL is adhering to the objectives of broad foundation, broad caliber and multidisciplinary training objectives. Special seminars are widely used in the talent training of various colleges.

Undergraduate seminars are set up specifically for undergraduates to guide students from freshman to senior year to study together in small mobile classes with several students and teachers on their major or interests. At UCL, almost every college and major offers a wealth of workshops for undergraduates, which are open to all teachers and students, and discuss not only the major, but also the multidisciplinary knowledge of liberal arts and science.

Different from undergraduate seminars, graduate and doctoral seminars cover more knowledge and more diversified forms, and mostly use multi-college joint seminars. Institute of Advanced Studies (ISA), breaks discipline boundaries and departmental limitations, adopts joint training methods to provide space for inquiry between routine disciplines and interdisciplinary knowledge, and commits itself to the cultivation of interdisciplinary senior graduate and doctoral students.

UCL holds seminars on global concern throughout the year, which are not only open to undergraduate and graduate students, but also invite well-known researchers at home and abroad to give speeches and discussions. General global seminars are not held by independent colleges. The university has cooperated with all sectors of society, such as London

graphic seminars, law seminars, and regular lectures and speeches on related topics (see **Table 1**).

Table 1. Part of the Global Symposium Topics

Order number	The London Graphic Workshop Series	A Policy Seminar Series held by the ICLS
1	Probabilistic tree modeling and the generation of graphs	Alcohol and health
2	Smart Photo editor and smart brushes	Unemployment, economic recession, and health
3	Accelerate rendering using projection technology	Happiness
4	The pursuit of big data and visual realism	Early childhood health and development
5	Intelligent design: life and geometric complexity	Work-Life Balance
6	Realize an immersive and interactive viewing experience on the broadcast	Life, for the longitudinal analysis of the data
7	Dynamics scale of the lighting equipment	Education, education, education: from the perspective of life course

1.3 Establish a joint training mechanism for talents and strengthen joint education

In 2010, Yale University and UCL established a joint training program to develop more interdisciplinary talents to solve more complex problems; in 2014, it was merged into University College London, in order to better utilize the advantages of the two schools and promote the integration and communication between disciplines. The Centre for Eastern European Language Studies Centre, part of the Doctoral Training Centre (CDTs) run by University College London in collaboration with the University of Oxford, Cambridge and the University of Manchester, is committed to deepening the Russian language through joint training. Slavic languages and Eastern European languages.

1.4 Set up interdisciplinary research institutions and carry out interdisciplinary project research

UCL relying on the international community and life and health science research center (ICLS), carried out a variety of interdisciplinary research projects, ICLS as a multidisciplinary research center, funded by the economic and social research committee (ESRC), including university college London, the university of Manchester, five universities to epidemic and public health related research. The ICLS program is open to graduate students and postdoctoral fellows, with perennial student enrollment for a secondary longitudinal analysis of the project data. Students entering the program receive a separate ICLS academic scholarship, with the curriculum and teaching conducted under the supervision of the school's multidisciplinary team.

2. Characteristics of the interdisciplinary talent training mode of University College London

2.1 Clear and clear training objectives, and pay attention to the cultivation of practical ability

UCL's interdisciplinary talent training objectives are clear, reducing the blindness of students' learning. For example, the training objectives of the Bachelor of Applied Science Program include enabling students to master both professional knowledge of art and science during their undergraduate course, establishing a connection between the two, and cultivating their practical exercise ability. According to the training objectives for undergraduates each year of study have made a clear plan. The first year consists in four core courses, take a minor in addition to the core course, and the choice of the minor course should not belong to the same subject field as the major course. In the second year, in addition to taking the core courses and minor courses, to participate in the summer vacation internship. The third year of the graduation thesis writing and defense, pay attention to students' internship performance when evaluating students' interdisciplinary study, focus on cultivating and training students' practical ability. And every year, students are required to

participate in interdisciplinary group programs.

2.2 Highlight the status of interdisciplinary courses in major and curriculum setting

First, UCL can be able to improve the structure of interdisciplinary talent knowledge and ability, and pay great attention to the status of interdisciplinary majors and courses in the context of interdisciplinary disciplines and in the allocation of interdisciplinary courses and credits.

2.3 Focus on intercollegiate interaction and global experience

UCL interdisciplinary talent training is not limited to the college of interdisciplinary professional and departments between talent training, pay more attention to cultivate interdisciplinary talents, such as the above in Yale university and university college London interdisciplinary talent training cooperation program, and merged with the university education, this series of inter-school interaction can not only provide students with more professional guidance on interdisciplinary learning and research, and can promote the communication between universities and resources between schools. The School of Arts and Humanities has dozens of majors, and more than half of the students have the opportunity to go to foreign friendly and cooperative universities for one year, which also reflects the global concept of interdisciplinary talent training.

3. The enlightenment of the British interdisciplinary talent training mode to China

3.1 Clarify the concept of interdisciplinary talent training, and actively promote the tutorial system and credit system

Change the traditional “specialized” talent training concept, actively promote the interdisciplinary talent training of universities and the establishment of interdisciplinary research institutions, in the tutorial system, mentors should be more clear their responsibilities and obligations, lead by example to improve students’ ability of various disciplines of integration, actively find students’ interest in interdisciplinary learning, and help them to establish their own learning objectives and curriculum system,

3.2 Reduce the number of departments, and promote the enrollment of major categories

Appropriate reduce the number of college, further planning college setting, in the division of college and department according to the discipline correlation or subject group, reduce simply according to the level of college and department overall proportion, improve the integration and comprehensive disciplines and college, but not to erase university characteristics, can build part of the subject or on the basis of college and department according to the actual situation of interdisciplinary majors and courses, cultivate specialized interdisciplinary talents. In addition, we should strengthen the general education for the students, promote the students to understand both the arts and sciences, master more general knowledge, and lay a solid knowledge reserve for the future study and research.

3.3 Enrich the team of professional teachers in interdisciplinary talent training

Through the establishment of interdisciplinary projects or research center to attract foreign interdisciplinary teachers or committed to cultivate a group of interdisciplinary knowledge reserves and ability, through the establishment of interdisciplinary talent training platform for interdisciplinary talent training to provide a good external environment, through interdisciplinary academic exchanges and interdisciplinary projects to arouse the enthusiasm of teachers.

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