Research on English Teaching in Sino-Foreign Cooperative Education Institute: Applying the Teaching Excellence Framework to the Case of ZJE

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Abstract: Sino-foreign cooperative education (SCE) has become one of the important ways of internationalization of higher education in China, and its English teaching is an essential link in SCE. However, there are some major sticking points in daily English teaching practice at SCE institutes. The curriculum is not entirely satisfactory in terms of course co-construction, teaching methodology and faculty training, etc. Therefore, this research, by taking Zhejiang University-University of Edinburgh Institute as an example, aims to explore the development status, problems and strategies of English teaching at Zhejiang University-University of Edinburgh Institute under the perspective of teaching excellence. This study was also conducted with a view to foster pluralism and provide useful references for the improvement of the quality of English teaching in SCE institutes.

Keywords: English teaching (ET), Biomedical sciences, Sino-foreign cooperative education, Teaching excellence framework (TEF), Student experience, Student outcome, Global Competence

1. Introduction

The importance of English teaching has been acknowledged in Sino-foreign cooperative education institutes in the field of biomedical sciences in China. English teaching in such institutes is confronted with the challenge of cultivating young talents who are adequately prepared for the complex biomedical sciences of the future. However, the average English level of students is considered intermediate, while their listening skills are still in the beginner levels. The unsatisfactory level of competence in English makes it difficult for students to adapt themselves to all-English-taught courses. The approach of using English to learn other subjects is an important part of the SCE model. Therefore, in this study, by applying the teaching excellence framework to the case study of Zhejiang University-University of Edinburgh Institute (ZJE), strategies of English Teaching (ET) at ZJE is analyzed including its student-centered ET course planning, design and delivery, course feedback channels, faculty teaching evaluation, syllabus revision and so on. Our findings will help to promote the excellent and diversified development of English Teaching in biomedical field at SCE institutes.

ZJE is a collaboration in the field of Biomedical Sciences between Zhejiang University of China and the University of Edinburgh, United Kingdom. ZJE offers two undergraduate programs in addition to four postgraduate programs: BSc Integrative Biomedical Sciences, BSc Biomedical informatics, MSc, Dual award PhD in Integrative Biomedical Sciences, UoE Single Award MScR Integrative Biomedical Sciences and UoE Single Award PhD Biomedical Sciences. The field of biomedical sciences covers the functioning of the human body at molecular, cellular, organ and systems levels in health and disease. The research carried out by biomedical scientists is fundamental for new developments and innovations in disease diagnosis, treatment and prevention.

2. The New Teaching Excellence Framework

The new Teaching Excellence Framework (TEF) was issued in October 2022 in UK. TEF, as one of the three excellence frameworks, is a national scheme run by the Office for Students (OfS) that aims to

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encourage higher education providers to improve and deliver excellence in the areas that students care about the most: teaching, learning and achieving positive outcomes from their studies [1].

The objectives of the TEF should be to assist HEIs and academics in raising the overall standard of teaching and learning in British universities by identifying best practice, understanding the environment, skills and training that allow innovation and teaching quality to flourish and helping disseminate those findings to institutions around the country, while recognizing that one size does not fit all in terms of institution, discipline or individual academic [2].

The new TEF made great adjustments to the indicator system, assessment methodology and procedure. In January 2022, the Office for Students (OfS) published a consultation to revise the OfS current approach to regulating student outcomes, to better achieve their regulatory objectives ^[2]. It should be noted that the new TEF draws attention to pluralism, as Egon Guba and Yvonna Licoln put it: The assessment process is not a simple statement of facts but a negotiation among different interest groups ^[3]. The mission and vision in different universities is outlined in its own distinctive features. Therefore, the connotation of "Teaching Excellence" differs from university to university. It is important that the teaching assessment aim for the greatest possible differentiation of the HEIs so as to avoid cultivating students with various backgrounds under the cloned education mode.

The new TEF is student-oriented as the previous three indicators (Teaching Quality, Learning Environment and Student Outcomes & Learning Gain) are changed into two new categories (Student Experience and Student Outcomes). The new rating indicators reflect to some extent that university or college should encourage innovation in teaching as a means of excellence rather than creating a culture of uniformity among both academics and students alike and that university or college should deliver an excellent experience and outcomes for its mix of students and across the range of its courses and subjects.

3. The practices of English Teaching at Zhejiang University-University of Edinburgh Institute in the Perspective of Teaching Excellence

3.1. Interactive and Student-centered English Teaching Course Planning, Design and Delivery

ZJE recognizes excellence in English teaching by launching student-centered English Teaching Course Structure. Undergraduate teaching at ZJE adopts a full English small class teaching mode, and all core courses within the cultivation plan are jointly constructed by the Chinese and British sides with their own teaching strengths. ET sessions are interactive and student-centered wherever possible. There are 3 sessions in each core courses: lecture, tutorial and practical sessions. Communication skills and professionalism will be delivered in lectures and reinforced in tutorials and practical sessions.

Taking BMI3 course as an example, the lecture session will cover algorithms used in biomedical informatics. Through ET, students will first get a command of English terms used in the bioinformatics, such as exhaustive search, graph algorithms, clustering and trees, image segmentation, pattern matching and so on. After the lecture sessions, tutorials will be based around critical analysis of paper related to lecture topics. Based on collaborative learning, tutorials involve 5 or more students working together to complete a task, solve a problem, make a presentation or prepare for the in-course assessments in discussion board on blackboard or face to face. Due to the time zone difference, the discussion board will be open 24 hours to reply student's questions after the tutorials. Finally in the practical sessions, students need to document their work done in a computer practical. Most of the programme tasks covered in these sessions will be completed with Python language.

Such ET seminar awakens students' creativity, provides students with all-English discussion and English thinking training, and lets students learn to think in English and reflect on their attitudes and feelings. Meanwhile, instructors use a variety of media technology and scientific research to integrate into ET, which fully enhances the students' enthusiasm for learning and achieves the application of learning. ET course structure goals are focused on all the components of communicative competence and not restricted to grammar. ET courses are designed to engage students in functional and pragmatic use of language for communication and academic research purpose. During the English teaching, course instructors guide students to independently choose a topic, search for literature, analyse data, and complete a research report in order to stimulate students' desire to start an exploration in research.

Apart from core courses, most of the general courses at the International campus also adopt English teaching. Taking general course English 116: Introduction to American literature and A Short History

of English Literature as an example, in a survey course of American literature from its Puritan origins to the present, and English Literature from Beowulf to Virginia Woolf and beyond, the instructor will guide the students to trace American and English literary culture from perspectives of political, intellectual, and social factors. Through group projects and international co-operative research, discussion board, and so on, students are able to actively participate in a discussion and fully experience the challenges of teamwork in different cultures and learn to respond flexibly to develop practical skills in teamwork.

Students will deal with texts by Washington Irving, Ralph Waldo Emerson, Herman Melville, Edgar Allan Poe, Emily Dickinson, Henry James, William Faulkner and Thomas Pynchon in American Literature Course and Chaucer, More, Marlowe, Ben Jonson, Milton, Dickens, Bernard Shaw, William Golding, Doris Lessing and etc in English literature. While dealing with English and American Literature between the Wars, the instructor will adopt fishbowl technique in order to allow for multiple perspectives and opinions from the students. The instructor will upload "The Death of the Hired Man", "In a Station of the Metro" and "Drooping Buds" into blackboard a week before the lecture. At the beginning of the lecture, there will be a few minutes for the students to prepare ideas and questions. During the English teaching, students inside actively participate in the discussion sharing their opinions, while students outside are the listeners. Students take turns and switch roles: the listener sitting inside taps a student in the "fishbowl" indicating role switch. This strategy guarantees an active discussion and is an excellent pre-writing classroom activity, helping the students unearth questions raised by the instructor and explore deeply and independently in an in-course assessment where critical viewpoints will be encouraged to strengthen students' reading and writing about English and American literature.

As the construction of "new liberal arts + new medical science" continues to advance in China, it is necessary to further promote the cross-fertilization of medicine and literature in biomedical sciences education. Liberal arts general course is the implementation of education in an aesthetic way, with the aim of improving students' aesthetic sensibility, creativity and interest, so as to promote the perfection of students' personality. ZJE strengthens the aesthetic education in English teaching by integrating medicine-related English Literature into the general course. For instance, during the intensive reading of "Drooping Buds", students can get a good sense of the social responsibility of the literary giant. Dickens devoted his life to improving environmental hygiene and advocated better labour protection for workers prone to occupational diseases. He was also one of the first to call for public investment in children's hospitals. On 3 April 1852, Dickens published an article in Household Words, describing an imagined picture of London, with the bodies of dead children littering the streets. Eventually, as a result of his vigorous appeals, Britain got its first children's hospital.

In addition to connecting the mechanisms of collaborative aesthetic education, ZJE also investigates the path to teaching excellence by the cultivation of correct aesthetics and noble moral sentiments in biomedical sciences major students. During the whole English teaching, students are guided to experience the profession of researcher in biomedical sciences through literature and art, so that they can develop professionalism via liberal education and tutor themselves the importance of empathy, altruism, patient care, clinical communication and observation skills.

3.2. Student Voice: Opportunity to Course Feedback

At ZJE, a great importance is attached to the student English learning experience and there are numerous ways for students to participate in the English teaching courses. Students can give their feedback directly to the course organizer (CO) at anytime by email. Student representatives (Student Reps) will be selected and their names announced in the first three weeks of the semester. Student Reps will collect students feedback about the English courses and pass on the feedback on hybrid English teaching approaches to CO early in semester 1. Around halfway through the English teaching courses, ZJE will give students an opportunity to give brief written feedback on the English teaching approaches so far including what is working on well and what could be improved. The CO will summarise the feedback from the whole class and explain if and how they will act on it.

Selected academic staff and Student Reps make up the Student-Staff Liaison Committee (SSLC). SSLC meets formally twice each year towards the end of Semester one and Semester two to discuss issues raised by staff and students. This is an opportunity to give feedback on the whole programme not just on individual courses. Near the end of the course, students will be invited to a formal and detailed online survey. It is another important source of student feedback and it allows ZJE to improve the learning experience for students in future years. In addition, a Course Assessments Group is set up on a

course-by-course basis, which organizes the teachers to optimize and adjust the content of the English teaching course structure based on the results of the course assessment and the feedback from the students at the end of the English teaching courses in each semester.

As a result, ZJE draws to Excellence in English Teaching by putting as much student voice into course design as it could. The institute encourages high levels of student engagement, including an embedded relationship with Student Reps, CO, course administrators, staff and faculty in order to support all our students to enjoy and benefit from the English teaching.

3.3. English Teaching Orientated Faculty Teaching Evaluation

ZJE regards ET as a consistent part of a faculty's career development. Firstly, at ZJE ET ability is a vital assessment criterion for faculty recruitment. All newly introduced faculty members are required to observe ET courses before they actually start their own lectures. The institute encourages faculty members to engage in ET workshops and discuss recent changes in the methodology of ET such the Socratic questioning, Open or Closed Fishbowl Technique, Communicative Language Teaching, Common European Framework and so on. Instructors can also get ET training methods in Faculty Traninng Programmes. Additionally, ZJE offers teacher training courses and seminars to promote the exchange of ET experience, such as Faculty Learning and Teaching Foundation Training Course, and the ZJU Qiushi Lecturer Training Course, with the aim of improving teacher's ability to design and implement ET curricula. Secondly, the quality of ET is one of the main requirements for faculty promotion. Thirdly, ET performance is a key indicator for faculty annual appraisal. There is a minimum requirement on contribution to English teaching for each faculty members and ET course evaluation will be conducted at the end of each year. Finally, ZJE and the university offers ET incentive scheme to all faculty members with solid academic knowledge and dedication to English teaching and educating people.

3.4. Ideological-political Classes Syllabus Revision

President Xi stressed during his visit in Renmin University of China in Beijing that ideological-political classes should play their due role in fostering morality, Xi called for tailoring such education to the needs of young people at different developmental stages. ZJE arranges COs and instructors to discuss and implement the revision and improvement of the syllabus for all postgraduates in light of the professional characteristics of the disciplines of Biology and Basic Medical Sciences. The ET team discussed the course content collectively in addition to revising the syllabus to optimize the teaching method and enrich the course content. ZJE ET team updates the knowledge base around the course objectives and incorporates new technologies, methods, processes, techniques, and materials currently used by industries into the teaching contents. Students can also expand their understanding of academic frontiers, cross-disciplinary topics, and new technologies. ZJE encourages students to actively participate in teaching activities, advocate inspirational, exploratory, participatory and other teaching methods, and widely use group seminars, case studies, team learning, practical research, simulation training and other teaching methods. This allows for an exploration of the elements of ideological-political class, further clarification of the course objectives for nurturing, scientific design of the ET cases, and the creation of innovative ways to integrate core courses and ideological-political courses.

These actions are necessary to realize the organic integration of core course teaching and the humanities cultivation objectives. The educational objectives of ET are inextricably linked to the aim of educating individuals. ZJE has integrated value shaping, knowledge transmission, and ability cultivation through the revision of postgraduate course syllabuses. It also comprehensively promotes the construction of postgraduate courses on ideological-political classes, provides helpful guidance in knowledge transmission and ability cultivation, and aids students in developing the proper worldview, outlook on life, and values.

4. Student Outcomes and Learning Gain

ZJE supports the students to successful outcomes by the optimization of the English teaching curriculum, innovative all-English teaching practices between Zhejiang University in China and the University of Edinburgh in the UK, all-English humanities course immersion, and the English teaching-orientated faculty teaching evaluation system. ZJE is able to enhance students' English presentation skill, leadership and global competence in all aspects.

4.1. Further Study and Employment

ZJE is in line with its benchmark for further study. There are 543 undergraduate students at ZJE as of November 2023. 19 of the 91 undergraduates in the Class of 2023 will graduate with distinction from the University of Edinburgh and 58 with merit. In addition, all students get the degree of Bachelor of Science from Zhejiang University.

ZJE annual placement survey enables us to track all graduates about their further educational experiences. Survey of successive cohorts confirms that students feel they reap the benefits of English teaching and academic training at ZJE and have good opportunities to purse further studies abroad. Student outcomes counts positively towards progression measures. Among the 91 graduates from ZJE in 2023, 84% of them choose to go on further studies. 28% of graduates who have continued studies got the National Postgraduate Entrance Examination Exempted qualifications, and 48% were accepted by awarded doctoral programmes. 44% of them were admitted into TOP 20 universities (QS2023). It is clear from the table, the further study rate is roughly at 85%, and around 50% of the graduates will embark on their journey on a PhD degree. ZJE witnessed an acceleration in the admission rate for Top 20 Universities and prepares the students for entry to a wide range of occupations. As residents near a thriving capital city in Hangzhou, ZJE students enjoy a wide range of job and internship opportunities. ZJE actively strengthens the Biomed-X innovation, and hosts a series of entrepreneurship lab and ACT seminars in order to achieve "whole-chain practice" cultivation, as engaging the private sector in biomedical education and training is critical in the light of the fact that most biomedical PhD recipients will pursue careers outside of academia [4]. By establishing a diverse practice base chain of 12 firms, such as ZJE-DIAN, ZJE-ADICON Practice Base, etc, ZJE gave students hands-on experience in practice and research while also fostering a more forward-thinking mindset for their future careers.

Year	Number	Further Study	Admission Rate of PhD	Admission Rate for Top 20
2020	17	100%	64.70%	35.30%
2021	60	82%	51%	46.70%
2022	78	91%	46%	53%
2023	84	87%	51%	53%

Table 1: ZJE Further Study Rate (2020-2024)

4.2. Communicative and Global Competence

ZJE encourages students to discover and recognize the power of language learning. Great benefits accrue to students as a result of English teaching. The institute offers ZJE students access to free IELTS training, Language Center Appointment, Academic Writing Workshop and English Revision Clubs. ET at ZJE equips students with not only the knowledge about language but also knowledge that enables the students to communicate functionally and interactively. ZJE English instruction is not classroomoriented. Grammar and cramming teaching is reduced, while face-to-face communication with people is encouraged since face-to-face exchange is more context-embedded. Through ET at ZJE, students can achieve cognitive and academic language proficiency, mastering the linguistic code of language. Students get a command of understanding of the social context: the information they share and the function of the interaction; and the knowledge of sociocultural rules of language and discourse enhances the effectiveness of communication. After all, the acquisition of vocabulary, discourse and grammar rules results in nothing if the learner cannot use those forms for the functional purpose of transmitting and receiving thoughts, ideas, and feelings between speaker and hearer or writer and reader. ZJE ET goals are focused on all the components of communicative competence and not restricted to grammar. Courses are designed to engage students in functional, authentic and pragmatic use of language for communication purpose. In addition, in the course design, fluency may take more importance than accuracy in order to keep the students meaningfully engaged in language use. In the communicative classroom, students ultimately have to use English, productively and receptively, in unrehearsed contexts.

ZJE is extremely proud of its strong commitment to the training of biomedical sciences talents with intercultural and global competence. There are four key dimensions in global competence according to Asia Society OECD. They are the capacity to critically examine issues, the capacity to understand and appreciate different perspectives and worldviews, the ability to interact positively with people of various backgrounds, and the willingness to act constructively to address issues of sustainability and well-being [5]. The multilingual ecology at the international campus requires students to further understand diverse cultural realities, specific cultural differences and different cultural scenarios and to

collaborate in various globalization-related problems. Global competence workshop, interdisciplinary courses, consulting services and online MOOC are provided to ZJE students to support them to build the cognitive elements of perception. Winter school programme, WEHI programme, and other international cooperation programme further help ZJE students to keep abreast of current development and frontiers in science and technology at home and abroad. International Academic conference is held annually, providing a platform where scholars, faculty and students from all over the world can present their accomplishments, share academic achievements and try to explore cross-innovation trends at the forefront of the world. Globally competent ZJE students understand that the world is an inextricably interwoven web where top-notch biomedical students actions may have consequences across the globe in the field of one health. They are the creator of the era and writer of the history. They are attuned to differences and can walk into others' shoes. An open mind allows all voices and a frank exchange of views. Under the multilingual ecology and ZJE global competence model, ZJE students draws to excellence, adhere to the truth-seeking, and try to become a future leader in the field of biomedical sciences.

5. Conclusions

Integrative Biomedical Sciences is a multidisciplinary degree programme that provides opportunities to investigate biomedical sciences in the 21st century. In the new era of biomedical sciences, English teaching in SCE institute is facing new opportunities and changes. This study has outlined several important practices of English teaching at Zhejiang University-University of Edinburgh Institute. ZJE draws to teaching excellence by drawing on unique teaching strengths in biomedical sciences from the University of Edinburgh and Zhejiang University. The core elements of the English teaching provides ZJE students with knowledge, skills, professional development and global competence appropriate to meet the needs of a future career as a leader in biomedical sciences. Through the countermeasures proposed in the article, we aim to stimulate the innovation and foster pluralism of English teaching under the new teaching excellence framework. A sharing platform should be built to produce a successful student outcome and improve instructors' professionalism. In this way, we can facilitate student development in the key areas of biomedical sciences and better cultivate students who are academically solid and globally competent.

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