# English-assisted Teaching Pertaining to Pulp and Paper in Chinese Universities: An Undergraduate Perspective

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Currently, about 20 universities in China offer undergraduate courses related to pulp and paper. This large number is congruent with the rapid development of the Chinese pulp and paper industry in the past several decades. In the context of ever-increasing internationalization and global cooperation, English-assisted teaching in Chinese universities has much potential. The wide-spread implementation of English-assisted teaching would promote the career development of students and help foster the advancement of the Chinese pulp and paper industry.

Keywords: Pulp and paper; Chinese Universities; Undergraduate students; English-assisted teaching

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#### Undergraduate Education Pertaining to Pulp and Paper in China

Pulp and paper, an important discipline that is closely associated with chemical engineering, is essentially related to the utilization of lignocellulosic resources (*i.e.*, woody and non-woody materials) for the production of cellulosic pulp and paper products. In the case of current undergraduate education in Chinese universities, pulp and paper is mainly affiliated with the so-called "light chemical engineering" major. Here, "light" has nothing to do with visible/invisible light; rather, it is related to light industry, which is usually less capital intensive in contrast to heavy industry. The "light chemical engineering" mainly encompasses four disciplines: 1) pulp and paper; 2) leather; 3) dyeing and finishing; and 4) fine chemicals.

Currently, many Chinese universities can offer the pulp/paper-related "light chemical engineering" undergraduate program. These include Changsha University of Science & Technology, Dalian Polytechnic University, Fujian Agriculture and Forestry University, Guangxi University, Hubei University of Technology, Jiangnan University, Kunming University of Science and Technology, Nanjing Forestry University, Northeast Dianli University, Northeast Forestry University, Qilu University of Technology (with former names of Shandong Polytechnic University and Shandong Institute of Light Industry), Qingdao University of Science and Technology, Qiqihar University, Shaan University of Science and Technology, Sichuan University of Science & Technology, South China University of Technology, Tianjin University of Science and Technology, Zhejiang University of Science & Technology, and Zhejiang Sci-Tech University. It is noted that the above universities are in alphabetical order. On the other hand, pulp and paper can also be affiliated with the major of "chemical processing of forest products", and in this regard a representative example is Beijing Forestry University.

Regarding undergraduate education pertaining to pulp and paper, there are many pulp/paper-related courses involving such aspects as plant fiber chemistry, pulping engineering, papermaking engineering, pulp and paper testing, papermaking additives,

pulp and paper machinery, and specialty paper products. Many of these courses may sometimes overlap each other, but each has a distinct focus.

## Significance of English-assisted Teaching in Chinese Universities

It is evident that papermaking is one of the four great inventions of ancient China. On the other hand, people from the western world have played a significant role in the industrialization of wood pulping and papermaking. Basically, many terms and processes pertaining to pulp and paper can be better understood when English is taken into consideration. This may be partly due to the fact that English is the most widely used language around the globe. By referring to the English versions, the accuracy of the terms and processes would be better maintained.

For many Chinese undergraduate students, pulp and paper has not been considered as one of the most popular disciplines in universities. This may be partly related to the students' impression on the pollution issue of the industry. For this reason, some students may not have a strong interest in learning the terms and processes pertaining to pulp and paper. In this case, English-assisted teaching in Chinese universities would help attract the students' interest, as learning English can be one of the tasks regardless of their major. Good English skills can be a huge advantage in terms of job-hunting and future academic career development.

For the state-of-the-art pulp and paper machinery/technologies, many terms and introductions are in English. It would be important to understand these besides their Chinese versions. Thus, English-assisted teaching would be important in facilitating the career development of the students in the industry.

English-assisted teaching in Chinese universities can also facilitate the intercommunications and co-operations of Chinese technologists/experts/scientists with their foreign partners. Due to the fact that most of the important technical/scientific publications are now in English or have English versions (at least in the form of abstracts or summaries), English-assisted teaching would be imperative in the advancement of the Chinese pulp and paper industry.

### Possibilities

Indeed, the significance of English as a tool has been well-recognized in Chinese universities in terms of both teaching and research. This recognition is in close agreement with ever-increasing internationalization of all corners of life in China. The benefits associated with English-assisted teaching call for positive action. Many universities are making efforts in this regard. Indeed, the Chinese universities need well-trained faculty and teaching staff, so that the students can benefit from English-assisted teaching/learning. Moreover, the universities may consider frequently inviting native English-speaking professors/specialists in the area of pulp and paper to give lectures/courses to undergraduate students. The Chinese language is popular and great; however, the combination of Chinese with the powerful language of English in teaching would be strategic in the internationalization of undergraduate education in China.

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