Global Problems in Higher Education

Avdhesh K. Tyagi
Professor of Civil and Environmental Engineering
Oklahoma State University

Abstract

The author has taught the same course across three countries in order to collect data on male to female ratio, academic dishonesty, and academic integrity. The research is mainly focused on differences between the educational cultures of these three countries and the behavior of students responding to the education system. This paper also indicates the male to female ratio of students in the classroom.

Keywords

Global problems; Higher education; Engineering students; Engineering professors; Academic integrity.

Introduction

This paper presents an educator’s perspective of in-class behavior of engineering students while taking a course related to Contemporary Issues of Water Resources Engineering. Similar courses were taught in China, India, and the United States. The class sizes consisted of a similar number of students, generally 30-40 students. The students were generally seniors and graduate level.

Students generally paid attention in the classroom and were found to be very smart. In this course, students had to do the homework pertaining to the class material. They had to do less than ten problems in each homework. On the negative side, they behaved differently while doing the homework at home. In fact, the level of plagiarism was so bad that an entire class submitted the same assignment in one country.

Twenty-seven years ago, the author served as chair of Academic Appeals Board at Oklahoma State University for a period of four years and came across many examples of Academic Dishonesty in homework, class quizzes, and exams. Currently, Oklahoma State University is actively involved in forming an Academic Integrity Panel. The author is involved at this time in collecting Academic Integrity examples from different universities in the United States.

In spring 2017, the author took sabbatical leave to visit China and India for the purpose of teaching and research and partly to work on collecting materials on the problem of Academic Integrity. At Oklahoma State University, academic dishonesty information is provided in a syllabus attachment at the beginning of each semester.

The performance of students from different countries in Higher Education indicates that differences in cultures may be responsible for the behavior of students when completing homework and exams.
Research Approach

The research experiment consisted of the same course, professor, homework, and exams, but cultural differences occurred due to students being from different countries. This experiment included three different cultures and countries, including China, India, and the United States.

Students coming from Chinese culture are polite, very smart, and hardworking, but some enjoy taking short cuts in their performance. Problems arise when they work on homework and exams. For example, some Chinese students in American classrooms copy homework and some cheat using calculators. In the Chinese educational system, male to female ratio is 60:40[1].

![Photo 1. Potential Ph.D. students for Oklahoma State University](image)

Indian students in Indian classrooms perform well, but the cultural system seems to interfere with their learning process. Climatic and environmental conditions also sometimes play an important role in the productivity of students. There were 34 graduate and undergraduate students in the short course. Out of 34 students, 8 students were female and 26 were male. The ratio of male to female is about 3:1. Over the course of the first few homeworks, all of the students had the same solutions including the writing. This amazed the instructor[2].
The number of American students in American classrooms in Civil Engineering varies from 19 to 28, including 10-20 percent female students. For the same course, about 10 percent of the students used similar solutions in certain homeworks. Academic Dishonesty policy is widely publicized in the syllabus, covered on the first day of classes by the Instructor, and repeated three to four times during the semester. This action influences the students to use fair means in the classroom\cite{3}.

Photo 2. Indian students in a classroom

Photo 3. American students on a field trip
Conclusion

The following conclusions can be drawn based on this research:

1. All students from the three cultures, China, India, and the United States, are found to very smart and hardworking.

2. The male to female ratio of classes in the three cultures currently is 60:40 in China, 75:25 in India, and 85:15 in the United States.

3. The students from China, India, and the United States need to be careful in homework and exams. Academic Dishonesty and Academic Integrity are taken very seriously in American classrooms. These items are published in a class syllabus and advertised time to time in the class.

References


Dr. Avdhesh K. Tyagi, Oklahoma State University, Stillwater, OK

Avdhesh Tyagi, P.E. is a professor in Civil and Environmental Engineering and Director of Oklahoma Transportation Consortium at Oklahoma State University. He finished his Ph.D. in Civil Engineering from the University of California- Berkley in 1971. He teaches and conducts research in Water Resources Engineering. He has taught water courses for 47 years. This study was supported by sabbatical leave in China, India and the United States.