



Use of "First Semester Education" to identify and tackle the transitional challenges faced by Indian Graduate Students in the Construction department

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Abstract:

Over the past several decades there has been a major influx of international graduate students into the United States from many countries, especially from India. Though possessing an undergraduate degree from India, many Indian students enter a US construction graduate program with little to no exposure to the expectations and culture of the US higher education system. For these students, the transition to the education system in the United States has to be usually made within a four week period after arrival into the US. This short period of time can present some challenges for Indian students to acclimate to a new national culture and a new education system, in addition to gaining an understanding of the differences in construction lexicon, techniques, regulatory environment, and teaching methods between India and the US.

This paper focuses on identifying and analyzing the transition challenges faced by Indian graduate students in a large US construction graduate degree program. The study surveyed and interviewed thirty-four (34) Indian graduate students in the department. It was identified that language barriers, different construction terms, not knowing the proper culture norms for interacting with the faculty, and feeling of inferiority or “second class citizenship” were the major transition difficulties. In addition to an analysis of challenges, this paper also presents solutions and recommendations for “first semester education” construction-specific actions that will help US construction graduate degree programs increase the probability of success of their Indian graduate students in graduating and help them become a better construction professional in the US or whichever country they choose to realize their careers.

Introduction:

Globalization is affecting the construction industry and academia⁸. The United States higher education system has been in the forefront in international education⁵. In order to be competitive in a job market in a globalized world, the United States has seen an increase in the international students that voluntarily enroll in American higher education. According to the report by the Institute of International Education, there are 40 percent more international students in the U.S. than 10 years ago⁶. Moreover, the United States has seen a record number of first-time international students during the 2012 – 2013 academic years that welcomed around 800,000 undergraduate and graduate students from all around the world throughout the country⁴. The first-time enrollment of international graduate students increased by 8 percent compared to the last five years¹⁰. The research forecasts the increasing number of enrollment for the international graduate students in the future.

The increasing enrollment necessitates better education structure for the first-time enrolled international graduate students, especially from India. Most of the graduate students from India have their undergraduate degree from their home country and only have four weeks to transition to the education system in U.S. Since they have never attended U.S. educational institution before, many prospective Indian graduate students are unaware of the expectations of the U.S. graduate programs¹. Indian graduate students new to the United States have a bigger transition to make due to the different cultural norms, teaching methods and cross-cultural collaboration besides graduate school expectations. A series of challenges for Indian students can make student life stressful⁹ and in order to better guide the Indian students there is a need for universities to develop and execute educational programs that will help them transition².

This study focuses on identifying and analyzing the transition challenges faced by the Indian graduate students in a large U.S. construction graduate degree program. Use of the transitional challenges will help propose an education class and support structure for Indian graduate students that will ease the transitional challenges upon their arrival in the United States.

Methodology:

A study sample of the Indian graduate students enrolled in a large U.S. construction graduate degree program that arrived in the U.S. within the last three years was selected for the study. The study surveyed and interviewed the thirty-four (34) Indian graduate students in the department (out of a total graduate population of 276 construction students in the department). The survey was sent to the Indian graduate students using an online survey collector tool³. The results were analyzed to determine the overall experience and the transition challenges faced by Indian graduate students in US to develop a potential solution that will help alleviate those challenges. Moreover, a correlation analysis was performed on the transition challenges faced by the Indian graduate students in the construction department.

Results:

Based on the survey the education information, overall experience in the U.S. and the transition challenges in the U.S. for Indian graduate students were collected and analyzed.

Out of the surveyed respondents, 50% are currently pursuing the Master in Science degree whereas other 50% are currently pursuing the Doctor in Philosophy program. 25% of the respondents are currently enrolled in Construction Management program whereas 75% of the respondents are currently enrolled in Civil Engineering program.

The overall experience in the U.S. for the respondents is shown in Table 1. The transition period for the Indian graduate students is only 10 days. Only 8% of the respondents had a family support system that arrived with their spouse / children indicating that 92% of the respondents have no family support and have to get accustomed to the new social life within a very short period of time. Moreover, 42% of the respondents have felt lonely

during their stay in the United States.

Table 1: Overall life experience in the U.S.

Criteria	Data
Average number of days between the time the respondent arrived in the US to the day they began their first class	10 days
Percent of respondents that have spouse/ children	8%
Percent of respondents who have visited the U.S. before	42%
Average number of American friends	8
Percent of respondents who have never been to an American home	50%
Percent of respondents who have felt lonely in the U.S.	42%

The transitional challenges faced by the Indian students upon their arrival in U.S. are shown in Table 2. If the school offered an education class for tackling the transition challenges faced by the Indian graduate students, 75% of the respondents agreed to enroll in the class.

Table 2: Transitional Challenges

Transitional Challenges	Percent
Difficulty to socialize	58%
Feeling of inferiority or "second class citizenship"	42%
Interaction with the faculty	42%
Language Barriers	33%
Different Civil Engineering / Construction Terminology	33%
Different Cultural Norms	17%
Difficulty to make American friends	17%
Higher Academic Demand	8%

The correlation analysis was performed for the transition challenges in Table 2 to determine if there is any linear relationship between the challenges. Table 3 outlines the correlation coefficient and p-value for the challenges.

Table 3: Correlation Analysis

	Difficulty to Socialize	Interaction with the Faculty	Feeling of Inferiority	Language Barrier	Different Civil Eng. / Construction Terminology	Different Cultural Norms	Difficulty to make American
Challenge to socialize							
Interaction with Faculty	0.029 0.93						
Feeling of Inferiority	0.029 0.93	0.314 0.32					
Language Barrier	-0.314 0.32	0.314 0.32	0.314 0.32				
Different Civil	0.488 0.108	0.293 0.356	0.293 0.356	0.293 0.356			
Different Cultural Norms	0.378 0.226	0.076 0.815	0.529 0.077	0.076 0.815	0.775 0.003		
Difficulty to make American	-0.076 0.815	0.529 0.077	0.529 0.077	0.529 0.077	0.258 0.418	0.4 0.198	
Higher Academic Demand	0.255 0.424	-0.255 0.424	-0.255 0.424	-0.255 0.424	-0.174 0.588	-0.135 0.676	-0.135 0.676

Based on the correlation analysis “different cultural norms” and “different civil engineering / construction terminology” had a positive linear relationship ($r = 0.775$) with a p-value of 0.003 which is statistically significant. The other challenges did not correlate to each other and the results were not significant.

Discussion:

Based on the data, the Indian students arriving in the United States for graduate education have an average of 10 days between their arrival and the first day of classes. Within these 10 days, needed tasks like finding accommodation (housing), opening the bank account, getting accustomed to the city and the university, and submitting proper documentation to the university need to be accomplished before the start of the classes in order to be settled in the United States. Hence, there is no strategic effort to get accustomed to the new culture and learn the different cultural aspects of the United States. Due to the short amount of time span with necessary tasks to be accomplished and the higher demand for the graduate education after the start of the classes, the transition to the education system and the culture is difficult. Since 50% of the respondents reported that the culture has hindered their education in the United States it is essential that the Indian students understand and adapt to the new culture.

The respondents reported that difficulty to socialize with local American students and feeling of inferiority or “second class citizenship” are the top two transitional challenges faced by Indian graduate students. Interestingly, the top two transitional challenges are outside of the academic discipline and they need to be addressed and incorporated in the education programs to ensure the success in the graduate school.

Upon surveying, 75% of the respondents willingly agreed to enroll in the class that will focus on tackling the transitional challenges faced by the Indian graduate students in the Construction Management Department. Based on this result, the authors propose an education class that will teach the Indian students the various ways to cope up with the challenges and to decrease the transition time from the time of arrival to their graduation.

This one-credit education class will be offered during the first semester that will cover the topics of interacting with the faculty, various student organizations in the university, appropriate cultural norms, time management, stress management, and work-study-family life balance. Mentorship is also a great tool that aims to increase the student success through early connections to a positive peer network⁷. Keeping this in mind, the class will pair an Indian graduate student with an American graduate student in the construction department. This will help the Indian student to better understand the culture that will enable them to socialize with an American peer with proper cultural norms and eliminate the fear of being a second class citizen.

One of the challenges in implementing the first semester education class will be the recruit of the American graduate students to participate in the mentorship program. The participation of the entire faculty in the department to participate in this class will also be a challenge. However with proper education on the objectives of the class to the faculty and the American graduate students, the challenges could be overcome.

Conclusion:

The Indian graduate students have bigger challenges than just the academic challenges of graduate education. Though possessing an undergraduate degree from their home country, the Indian graduate students enter the U.S. construction graduate program with little or no exposure to the culture and the expectations of the United States. The university has observed that academic success is tied to the student’s ability to be accepted in the culture and feeling a sense of belonging.

The transitional challenges like challenge to socialize with American peers, feeling of inferiority or “second class citizenship” and interaction with the faculty affect the student’s ability to understand the new culture and socialize with American students. In order to help the first coming Indian graduate students in the construction department, the department not only needs to be involved in their academic career success, but also the success in student’s social life. This can be achieved by educating the first time Indian graduate students for a faster transition to the

new culture and education system.

In order to solve this problem, the authors propose a “first-semester” education class that focuses on tackling the transitional challenges faced by the Indian graduate student using a mentorship approach.

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