Chapter 21

Capacity Building Through Cross Cultural Skills Among Engineering Graduates of India: A Case Study of Cross Cultural Skills Course at BITS Pilani

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Abstract Multiculturalism being a global reality of the present world, it has become imperative to develop Cross-Cultural Competence (CCC) to become successful as a professional and function effectively as an individual in personal and social interactions. Considering the fact that India with 60 percent of its population being under 25 years of age, it must educate its young generation to succeed in a globalized world. Another vital fact that endorses the need for change is revealed in a study, which states that about 20–33% of the 1.5 million engineers who pass out every year in India, run the risk of not getting a job at all. Among the multiple reasons for their being unemployable, one of the strongest is their lack of exposure to “other” cultures and their nuances that makes it hard for the leading MNCs to hire them. Keeping these facts in mind the present study argues the need for capacity building of engineering graduates through cross cultural skills. This paper recommends a course on Cross Cultural Skills to be offered to engineering students in order to inculcate in them the desired global competency among them. Besides this, the paper also discusses the different types of activities and tasks that are done in Cross Cultural Skills (CCS) classroom at BITS Pilani with a view to grooming students as effective University ambassadors. It also shares the feedback given by students to highlight the need for developing cross cultural skills and the success of the training during the course.

Keywords Engineering education • Global competence • Cross cultural skills

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21.1 Introduction

In the changing times of digital era, engineers and technocrats are expected to be globally competent, which means the ability to work knowledgeably and live comfortably in a transnational engineering environment and global society (Lohmann et al. 2006). The most significant underpinning for the need of developing intercultural competence (IC) is the multicultural reality that we live in today. Our society has become “increasingly international, with abundant intercultural encounters through tourism, trade, diplomacy, exchange and the mobility of people” (Larzen 2005; Weaver 1993; Woodin 2001; Lata 2017). Consequently, cultural diversity puts a demand on our contemporary society for timely education-based responses for a change in perspective concerning ‘the others’ and ‘ourselves’ (Cheh 2015). Daft and Dorothy too seem to endorse similar idea suggesting that if we look at the business world around where the students of today might operate in future, we find that there is a drastic change in the desirable traits of professionals and managers. In the post globalization era the market has now crossed trade borders of the nations bringing a shift towards a more integrated and interdependent world economy. As part of a global workforce, the need for personal learning and growth are crucial while managing business affairs with a hybrid team (Daft and Marcic 2006). The recent innovations and development in information and communication technology have changed the way we communicate and do businesses. This change has further prompted a transformation in the role of engineers in the society and, consequently, the nature of engineering practice (Loftus 2003). Further, the Hart Research Associates study too seems to augment the above stated fact when their report reveals that 78% of the surveyed employers unambiguously emphasized on the need for all the students gaining intercultural skills (Hart Research Associates 2015). Therefore, in order to stay relevant, higher education institutions must take charge of their internationalization and produce graduates who will excel in the global work (Fellows 2014). So, for making their graduates culturally competent, it becomes imperative for universities across the globe to explore effective and suitable teaching and learning approaches in a cross-cultural education environment.

Similarly, the universities in India too need to incorporate this international preparation into engineering curricula by introducing courses related to Intercultural Communication or Cross Cultural Skills and prepare their engineers for transnational practice and help them become part of global society. As of February 2017, there are 789 universities, 37,204 colleges and 11,443 stand-alone institutions in India, as per the UGC website (<https://www.ugc.ac.in/oldpdf/Consolidated%20list%20of%20All%20Universities>) and there are 4,282 engineering institutes in India approved by AICTE (AICTE approved Institutes for the academic year 2017) and a preliminary study suggests that except for a couple of IITs (Indian Institutes of Technology) and a few management schools, no course or training is being provided in these academic institutes to make their graduates aware of intercultural skills that will enable them to adapt and work smoothly in a multicultural setting. The author also conducted a study on 226 university students and the results of the survey reflected that 64.1% of

the respondents strongly felt the need for such kind of training in cross cultural skills, which has spurred due to the increased heterogeneity both in educational setting and the professional work environment (Lata et al. 2018).

The ensuing section entails briefly about how the course on Cross Cultural Skills develops intercultural understanding among students.

21.2 Methodology

For this study the course plan of CCS Course offered at BITS Pilani and the assignments and activities that are done during the semester, have been explored and discussed to show how a structured course at the university level can help in training the students for developing global competence. Besides, the data base of the course and the feedback given by the students have also been referred to for supporting the arguments positioned in the paper.

21.3 Cross Cultural Skills Course at BITS, Pilani

Cross Cultural Skills is being offered as an elective course at BITS Pilani to its engineering students since 2013. The objective of the course is to help students understand the need of cross-cultural skills and provide insights into intercultural communication by familiarizing them as to how to deal with ethnocentrism, personal biases and self-reference, which may hinder their appreciation of the cultural diversity prevalent in communities worldwide and operate successfully. It aims at helping the students discover the kinds of barriers and challenges individuals confront while working beyond cultural boundaries. It also aims at training and imparting those necessary skills so that they know how to overcome culture shock and successfully negotiate the cultural alienness, adapt its nuances and integrate cultural heterogeneities while working in a multicultural team. Besides, it provides a comprehensive understanding of how and why cultural groups differ and how their impact determines success or failure of international businesses.

The following table describes the course content, the teaching methodology adopted and the kind of assignments are conducted in the course (Table 21.1).

Students are also taken to the nearby villages for helping them develop a practical understanding into the similarities and dissimilarities in people, places and their activities when they belong to different caste, class, religion and culture. They are asked to create a fact sheet about their field visit in which they are also asked to share at least two interesting incidents/anecdotes so as to share with others their minute findings and observations during survey along with the shaping factors they could comprehend during their visit.

Besides these hands on experiences, discussions are held on the “Global Leadership and Organizational Behavior Effectiveness” (GLOBE) by House (House et al.

Table 21.1 Details of cross cultural skills course at BITS Pilani

Course contents	Teaching methods	Assignments
<ul style="list-style-type: none"> • Edward Hall's model • Geert Hofstede's cultural dimensions • Richard Lewis' cultural dimensions • Milton Bennett's developmental model of intercultural sensitivity (DMIS), (Bennett 2002) • Fons Trompenaars' seven cultural dimensions (Fons and Turner 1997) • Kluckhohn and Strodtbeck's dimensions • Robert J. House's global leadership and organizational behavior effectiveness (GLOBE) • Critical issue in intercultural communication: practice challenges and barriers • Managing global teams 	<ul style="list-style-type: none"> • Lectures • Pair work • Group work • Field work • Videos • Discussion over films and literary works 	<ul style="list-style-type: none"> • Creating cultural bag—knowing thyself and thy culture • Fact file—knowing the other based on field work • Role plays for cross culture communication barriers • Team presentations • Case study discussions • Concept JAM • Creative project/special project

1991) and Kluckhohn and Strodtbeck's dimensions (Hills 2002) and their influence on workplace policies. Several case studies are taken up and discussed at length. Business case studies such as Walt Disney in Paris, Wal-Mart in Germany, Daimler-Benz Chrysler, Coca Cola in India, McDonald in India, Snapdeal and Flipkart merger, Shree Renuka Sugars buyout of Brazilian Companies, Bharti Airtel–Zain and so on and so forth, are also taken up for analysis and discussion (Madhavan 2011).

For group assignment students are divided into different groups consisting of five students each and they are given different situations for performing the roles of different stakeholders in a business situation like some human resource issue, promotion decision, negotiation, marketing, and they are asked to discuss and create the whole dialogue and perform for about 10 min. After two-week time of preparation, the groups are asked to perform. This assignment helps students conduct in-depth research, decide on the situations, characters and create dialogues and finally perform as a team. This involves students in using their critical thinking and higher order thinking skills to analyze, evaluate and create as suggested by Revised Blooms taxonomy grid (Airasian et al. 2001).

The course also includes a choice of doing either Special Project Assignment or a Creative Project. Special Project Assignment allows the students to choose their own question in relation to the cultures and then they are supposed to write a short, analytical paper in 3,000 words. They are asked not to make that their question, issue or problem too general. They are supposed to come up with a thesis statement which

summarizes their argument about the question, theme or issue they grapple with in their paper. All their claims about the cultures are to be supported by evidence or case studies (using proper citation methods).

Alternatively, students may opt for doing creative project. In this project a lot of flexibility is given. They can shoot a film or make a video or create a photo collage or write a poem or prepare a short skit or take up a creative writing project. The fundamental requirement is that the creative project should relate to the themes of the course. They are to pick up at least two cultures as subject of study here. Again, it cannot be too general. For instance, they cannot just string together a few photographs titled Alienation. The creative project should reflect a thoughtful engagement with at least two cultures. In fact, they are also required to pose a question in relation to any culture (at least two) for their creative project, and attempt to explore it through the form they have chosen. They are required to follow the guidelines for the academic paper to ascertain a sense of rigorous engagement with the project. They are asked to submit a 500 word document, which describes their project, the questions raised from the cultures they choose as well as give them room for their creative expression, which culminates in their final submission.

In the last semester for the first time this assignment was introduced; 33 out of 90 students opted for creative project under which 13 students composed poems, 7 students shot videos, 6 students drew paintings, 3 tried writing skit and 4 students used photography to present their understanding into two different cultures. Based on the data collected through google form 86.4% appreciated the flexibility and the space, which enabled them to use the mode through which they could apply their knowledge of cultures.

Hence, the CCS course provides multifarious practical assignments to develop cultural intelligence to students and with the enhanced exposure into cultural revelations they can systematically deal with stereotypical and ethnocentric behaviours, which usually become major hurdles in intercultural communication environment.

21.4 Results

The database created for the course reflects that so far 448 students have done this course since 2013; only 11.9% had some kind of international exposure but rest 88.1% did not have any exposure at the outset of the course. During the first class of this course every semester, the students are asked about the problems they face while interacting with people from other cultures. Both the sets of students with or without international exposure have consensus regarding the fact that they encounter unnecessary conflicts and a feeling of otherness during interactions. The students with international exposure hence, show better conviction and clarity about the significance of doing a course like CCS. Students have started realizing that with Global Businesses and international work assignments are increasing at a breakneck pace in multinational corporations and as future professionals they need to develop global skill sets. The feedback collected at the end of the course reflects that 85% of the

students feel that after doing the course they have become more comfortable in interacting with people from other cultures. This reflects how the training helped the students in developing their interpersonal skills in multicultural environment. 76.7% of the students felt that course has developed better skills for working in multicultural teams. Since they were working in hybrid teams and collaborating on their assignments throughout the course, they could align both their communication and working style with that of their team members. Students after completing the course when they go for internships in companies they come and share how the training helped them.

21.5 Conclusions

In brief, it is time that Indian engineering colleges, institutes and universities recognized the need for providing enhanced exposure to their students into the cultural complexities of the professional world so as to make their students globally competent. Considering the example of the Cross Cultural Skills course at BITS Pilani, it can be suggested that a well-defined course on Intercultural communication or cross cultural skills can enhance their intercultural competence and help the nation reap the benefit of its demographic dividend. Further quantitative and qualitative studies can be done the effectiveness of the Cross Cultural Skills in the development of intercultural sensitivity in students.

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