



Implementing Cooperative Education in an Industrial Engineering Program in the United Arab Emirates: Experience and Lessons learned

This research presents the cooperative (co-op) education experience in an industrial engineering and management program in the University of Sharjah, United Arab Emirates (UAE) and its role in achieving the students learning outcomes. Previous researchers found that students who choose a cooperative education achieve higher GPA and emphasized the role of student professional experience in meeting non-technical engineering skills criteria of ABET. In this research, an effort is made to show the degree of achievement of both technical and non-technical skills expected from the program graduates. The graduates' data are analyzed using descriptive statistics. We show the difference between the genders' choice of co-op or Senior Design Project (SDP) option as well as their Cumulative Grade point Average (CGPA) and the achievement of ABET criteria. The results show that more than 50% of the students choose the co-op over the SDP option and this number has been increasing the last few years. Knowing that the UAE society is composed mostly of Expatriates of many different nationalities, we have analyzed the choice of students based on their nationalities and found that the co-op is the favorite choice for Emirati students with overwhelming female majority (92%) while Expatriate students favored the SDP option. Our results confirm other findings in the literature in terms of CGPA and achievement of learning outcomes. For example, the CGPA was higher for students who choose the co-op (2.95 out of 4) than for the SDP students (2.70 out of 4). Students' achievement of the ABET criteria was almost 9% higher for co-op students compared to SDP students. Based on these results, we are recommending the implementation of cooperative education in other engineering programs in the University of Sharjah.

UAE to apply the smart evaluation system for student's performance

The growth happening in this region. According to the United Nations World Travel Organisation (UNWTO), the number of travellers in the Middle East more than doubled, from 24.1 million to 60.3 million between 2000 and 2010.

This level of growth is unique in the world and it happened despite the volatility experienced in certain parts of the region. As the world shrinks with increased connectivity, tourism and hospitality prospects are register an astonishing surge, with increasing numbers of new pathways and sub careers.

Students now think of tourism and hospitality as a 'safe bet'. Dubai, for example, welcomed 10 million visitors last year and keeps growing, with its ambitious plan to welcome 20 million visitors by 2020. This growth means investment, which allows innovation in building hotels, innovation in service, international mix and diversity. Factors like powerful branding campaigns on the part of governments to promote their countries and/or cities, religious tourism, and of course, the beauty of the region and the UAE's positioning as a thriving business hub renders this a sustainable tourism growth. The one that immediately comes to mind is the recent turmoil in the region. However, tourism has proven to be a quite resilient industry and countries affected by the Arab Spring, for example, are showing slow recovery in the last year. Countries which are stable remain very attractive destinations and pull other areas of the region as well - Dubai and Abu Dhabi have brought increased tourism to neighboring countries as a kind of domino effect. You may also note that intraregional travel accounts for 80 per cent of the total travel, with regional tourists also seeking to stay and enjoy the attractions in the area. The

curricula is divided into three sections — professional development, entrepreneurial competencies and general education — each one is focused on developing specific aptitudes in order for graduates to be fully prepared to lead and manage teams. They also look at developing self-confidence and discipline, and students are required to wear business attire to class, which is part of their preparation for successful entry into the professional world. Additionally, courses offer craft-based learning where students get hands-on practical experience to be able to understand the functions they will manage and the operational challenges they will face throughout their careers.

