Increasing Emiratisation in Engineering Faculty Positions at The Higher Colleges of Technology

Sultan Hussain Karmostaji

Case Study Questions

1. What are the knowledge, motivation and organizational causes that prevent graduates from the HCT bachelor of applied science in engineering program from pursuing a masters degree in engineering in order to become faculty?

2. What are the recommended solutions to close the knowledge, motivation, and organization gaps that prevent graduates from the HCT bachelor of applied science in engineering from pursuing a masters degree in engineering in order to become faculty?

Key Literature

Clark, R. E., & Estes, F. (2008)
Rueda, R. (2011)
Rand Corporation (2008)

Methods and Data Analysis

Instrumentation in the form of surveys and interviews were used to measure if there is a gap in knowledge/skill, motivation or culture/organization.

1500 engineering students were sent the survey to at Abu Dhabi Colleges.
493 students participated in a survey. Student participation was: 37% first year, 26% second year, 18% third year and 19% fourth year. The gender ratio response to survey was 74% men and 26% women.

A total of 370 students completed the survey. In addition, 30 senior students were interviewed. These 18 men and 12 women are current engineering students at Abu Dhabi Colleges.

Significance & Findings

Knowledge and skills
• Students lacked factual knowledge about the requirement of becoming a faculty member in HCT and the salary scale of faculty member in HCT.

Motivation
• Students do not lack motivation in pursuing a master degree
• Students have a lack of interest in working in an educational environment or pursuing a career as a faculty.

Culture and organization
• Management at HCT does not have a clear Emiratisation vision, goal and ways to measure progress.
• The HCT has not emphasized the need for Emiratis to earn a masters and become faculty
• There is no strategic plan for increasing the number of Emiratis at different levels within HCT.

Assessment

In order to evaluate the effectiveness of the proposed solutions to close the Emiratisation gap in engineering faculty positions at HCT, an evaluation plan will be created. According to Kirkpatrick (2006), there are four levels of evaluation when assessing the success of an intervention and suggested solutions

• The first level of evaluation assesses participant reactions and motivation.
• The second level assesses learning or performance.
• The third level of evaluation assesses the application of new learning.
• The fourth level of evaluation examines impact and whether the performance gap has been closed.

Solutions

Knowledge and skills
• Provide information about the opportunity to be a faculty member at HCT.
• Information sessions for students by role models.
• Helping students apply to master programs.
• Goal alignment for engineering students.

Motivation
• Organize workshops and focus groups focused on increasing the value of a teaching career among engineering students.
• Give students specific, short-term teaching assignments by their faculty.
• Provide awareness sessions about persistence and working hard in order to achieve future goals.

Culture and organization
• Set clear goals for Emiratisation and position them as priorities.
• Provide encouragement for engineering students to become a faculty member by utilizing Emirati role models.
• Develop a teacher-training program to give the participants the chance to complete their masters degree and become faculty.
• Provide dedicated resources for implementation and measurement in order to implement above recommendations.

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