Predictive Criteria for Success in Higher Education — the Saudi Aramco Experience

Abstract

Saudi Aramco has been supporting the development of its human resources for several decades. Education and training were not limited to developing the industrial workforce, but included university education, advanced degree programs and specialty training. All of these programs required the application of rigorous methods for assessing the readiness of candidates for their target educational assignments. In this paper, Saudi Aramco will share its experience in using empirical data to identify and validate screening and selection metrics that predict high performance both in future studies and in the workplace.

Saudi Aramco selects high school graduates with high potential to join its corporate college degree program for non-employees. Several hundred top high school graduates are selected every year and are prepared through the Saudi Aramco College Preparatory Program (CPP) to join universities in North America, Europe and the Far East to qualify in majors that are critical to Company operations. Furthermore, high-performing university undergraduates are offered places in the Company’s scholarship program. Qualified employees are also given opportunities to pursue advanced degrees and specialty training.

To support the effective selection and screening of candidates, Saudi Aramco’s Employee Relations and Training (ER&T) department developed and validated several assessment scenarios to ensure that candidates have optimum chances of success in their programs. For example, high school graduates are screened using four predictors of success. These include the external measures of cumulative math and science averages, and measures of general aptitude such as QIYAS scores. Selected students are then screened further using internal assessment of English language proficiency and math competence.

This paper will outline the studies that were conducted to validate these four factors as good predictors of success. It will also attempt to demonstrate that the complete HR development process — from pre-college assessment to performance in the CPP, performance in college and finally performance on the job — is streamlined and well connected.