

## Chapter 84

# A Study of Problems Faced by Diploma of Associate Engineering Graduates on the Job in Pakistan

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### ABSTRACT

*Unemployment is one of the biggest problems of the modern world, and Pakistan is not an exception. Those who get jobs face a number of problems in their workplace. This chapter identifies various problems faced by Diploma of Associate Engineering graduates (DAE) on the job in Pakistan. The population of the study is comprised of DAE graduates and their managers/engineers. The findings of this study indicate that diploma engineers face a number of problems related to administration, working conditions, and professional development. Regarding promotion of diploma engineers, the promotion policy is not followed properly and there is a need to change it. From the analysis of narrative data, it is found that diploma engineers are not satisfied with family accommodation and pay scale. At the end of study, recommendations are made to overcome the above-mentioned problem areas.*

### BACKGROUND

The social and economic development of a country relies on education system of the country. The purpose of education is not only to perpetuate the culture but also to improve the society in which it exists (Gordon, 1971). Education is basic indicator of the national development. It develops the human resources, which is the most important factor of national development.

Education maybe classified as one of two types (i) General Education and (ii) Technical and Vocational Education. General education normally deals with theoretical and academic knowledge, attitudes and skills whereas technical and vocational education deals with practical and professional knowledge and skills. Education for work has its beginnings almost four thousand years ago. This earliest type of vocational education took the form of apprenticeship. Organized

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apprenticeship programs for scribes in Egypt are recorded as early as 2000 B.C. (Finch, 1999). Education especially technical education is crucial for human resource development (HRD) which improves the economic growth and productivity. It trains the people and develops the needed technical skills of individual, which is the demand of innovative industry. Rapid economic growth demands a mixture of skilled worker; technician, technologist, engineers, research personnel and innovative scientists trained in the areas linked with the national development and of the industries. Countries like Japan and South Korea who have very limited natural resources dominate in the world due to their technical educated and skilled manpower. Countries like Germany and Japan which were completely destroyed by allied forces in Second World War developed themselves very rapidly in few decades and now they are in top ranking of developed countries. They achieve all that because of technical educated work force. Hence, it is technical and vocational education, which can help individuals to generate income and contribute towards economic growth and social development of a country by acquiring knowledge and skills.

In a developing country like Pakistan, it is extremely important to realize that vast numbers of young people are outside the formal school system, requiring the integration of non-formal learning methodologies and literacy programs into national education programs. In the Human Development Index 2012, Pakistan ranks at the 145th position out of 187 countries due to its low per capita income; low literacy rate and poor health conditions (UNO, 2012). Pakistan is currently investing less than 2.0 percent of the Gross Domestic Product in education, which is considerably less, compared to the UMI reference level of 4.9 percent of the Gross Domestic Product (Kazmi, 2007). Pakistan Government should invest more on education and especially on technical and vocational education to make progress in the industrial development and technology advancement (Kazmi, 2007). The

nature of the work has changed with the rapid development of technologies and globalization. The profile of the Pakistani work force in 2005 showed 43.1 percent engaged in agriculture, 13.8 percent in manufacturing and mining, and 43.1 percent in services. Since 2000, there has been a shift of 5.3 percent employed labor force from agriculture sector to manufacturing /mining (UNESCO, 2009). In order to absorb the young people and maintain new technologies in industry, the role of technical vocational education and training is critical. To improve the quality of technical and vocational education and for administrative effectiveness different authorities are working in Pakistan at national and provincial level under Central Government and Provincial Governments.

The three year diploma of associate engineering program in Pakistan is quite impressive and imparting a lot in technical education and skill development of the individuals of the country. Diploma of Associate Engineering (DAE) program was started in 1955 (Shah, 2004); (Bengali, 1999). Presently there are more than 300 polytechnic college/institutes are run by Government and private sector. The three year DAE program is the only program of technical education which is most well-liked by the general public and the employers. The interest and enrollment of students in this program is increasing day by day.

As mentioned above huge number of students enrolled in 3 years DAE program of different technologies every year, so the number of graduates in every year are increasing rapidly, approximately more than 50,000 graduates per year. In year 2012, more than 20,109 students got the DAE diploma only from Punjab Board of Technical Education (PBTE, 2013). The DAE graduates are facing number of problems from the beginning but now it is worse because of huge number of graduates whose number is in lacs. These problems are related to different areas like (i) difficulties faced by the DAE graduates who want to get higher education (ii) difficulties in finding jobs (iii) different levels of pay scale for DAE graduates at the induction level

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