

Thesis Title	A Study of Job Characteristics in Industries for Developing Automotive Technology Courses at the Diploma Level : A Case Study of Krabi Technical College
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#### Abstract

The objectives of this research were to study the general conditions of the workplace, job characteristics of automotive diploma holders, and the congruence between the knowledge and skills utilized at the workplace and automotive diploma level courses of Krabi Technical College. The population of the study was 69 automotive diploma holders who graduated during the academic years of 1993-1995. The instruments administered in the study were note taking, a structure-interview, and questionnaires. The statistics used for analyzing the data were percentage (%) and content analysis.

The result of the study were as follows:

1. Most of the automotive diploma holders graduated in the 1993 academic year and worked as maintenance services with medium-size private companies of automotive dealers and car service centers located outside of Krabi province. Their salaries were between 5,001-6000 baht/month. Actually, they would work as a team and their general knowledge was English. Their working habits required by the companies should be honesty and punctuality. The tools of their communication/coordination among employers, subordinators and co-workers would be discussing and telephoning.
2. The positions of the automotive diploma holders were maintenance, service advisor, and car parts keeper.

### 3. Knowledge and skills utilized at the workplace were as follows:

#### 3.1 Knowledge

1) Advanced knowledge could be classified as principles, theories, system, and techniques of working that could be applied into problem solving, analyzing and setting up the steps of complex operations; for example, the principles of cooling and lubrication, ignition system, fuel system, automate gear, electrical instruments, break systems, and automotive air condition system.

2) Intermediate knowledge could be classified as comprehension of the facts, and principles. This would also include the ability of identifying or translating the concepts. Thus, the process of working could not be complicated; for example, automotive engine system, automotive electrical circuits, equipment in systems and automotive body.

3) Basic knowledge could be classified as basic or generic knowledge that helps support the quality as well as improve the effectiveness of work; for example, the names of engine parts, battery, electrical equipment, and material accessories such as fuel, lubricants, coolant, refrigerant and compressor oil.

#### 3.2 Skills

1) Advanced skills could be classified as the ability to apply different kinds of knowledge and techniques appropriate for each work. The steps of operation should be complex and/or complicated; for example, analyzing conditions and problems of the system, checking and modifying equipment as well as removing the parts.

2) Intermediate skills could be classified as the ability to master the work with skill and experiences. The steps of operation could not be complex and/or complicated; for example, checking, changing and tune-up.

3) Basic skills could be classified as the ability to imitate the models, to follow the orders without setting up the rules or steps; for example, removing and changing, maintenance, cleaning and preparing.

4. There was a congruence between the knowledge and skills utilized at the work place and automotive diploma level courses of Krabi Technical College.

5. The unrelated courses and/or unspecified contents on the automotive diploma level courses could be inserted in other subject areas and/or courses had already been taken at the vocational certificate level.

6. The unrelated courses and/or unspecified contents for the automotive diploma level courses of Krabi Technical College were human relationship, materials and/or equipment operation, writing report, and filing

Keywords : Diploma holders / Job / Knowledge / Skills / Congruence