Thesis Title	A Study of Electronics Technicians' Competencies as Specified by Electronics Industries
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Abstract

The purposes of this research were to study the general conditions, knowledge, skills, and attitude of the technicians as specified by electronics industries. The samples of this study were entrepreneurs, managers, and supervisors of 50 electronics industries. The instruments used for data collection were a questionnaire and a structured-interview. The data collected were analyzed by using Percentage (%), Ranking, Means ($\overline{X}$), Standard Deviation (S.D.), and Content Analysis.

The results of the research were as follows:

1. Most of the electronics industries were classified into three groups: consumer products, industrial equipment, and components and devices. Most of the staff graduated from secondary schools (M.1-M.6). The staff who held vocational certificate and diploma majored in electronics. The significant problems of electronics industries were technicians' competencies and communication.

2. The knowledge and skills of electronics staff while working at electronics industries could be concluded as follows : the basic knowledge and skills identified by the industry at less level were writing and reading circuit diagram and the much level were the principles of automatic control system, quality control system and safety. At the most level was Q.C. (quality control) system. For the specific knowledge and skills, the less level were transducers which were used in sound, metal, non-metal, and distance sensor including design of speed in AC. motor and at the much level were pneumatics control system, transducers which

were used in temperature sensor, selecting safety electrical equipment to prevent danger, PLC. control programming, the application, maintenance and troubleshooting of mechanic control equipment and semiconductor including products quality testing. General knowledge and skills at the much level were language usage, basic computer, technical terms, service manual, writing and reporting.

3. The instrument/equipment application skills identified by the industries at less level were plastic welding equipment and curve tracer instruments and at the much level were vernier and multimeter.

4. The desirable personal characteristics of staff were responsibility and diligence.

5. When classifying electronics industries by category, size and capital investment, it could be concluded that the medium-size industries acquired knowledge and skills at less level while the electronics industries consumers were at the much level. The desirable personal characteristic of the components and devices industries and the 100-million baht investment industries was the accuracy and precision of work while the medium-size industries was honesty.

Keywords : Knowledge / Skills / Personal Characteristics / Instrument / Equipment / Electronics Industry.