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AN ANALYTICAL SURVEY OF IN-SERVICE TRAINING NEEDS OF SECONDARY LEVEL BIOLOGY TEACHERS IN KUWAIT

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

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ABSTRACT


Purpose
The purpose of this study was to describe and to analyze the perceived needs of secondary level biology teachers in Kuwait, in order to determine the overall effectiveness of in-service training programs and to formulate concrete recommendations for the improvement of future in-service training for biology teachers.

Problem
Unique educational problems exist in Kuwait which demand a high quality program of in-service training. Among the most pressing problems are:

1. A widespread shortage of skilled educational manpower.

2. A high proportion of understaffed schools and underqualified biology teachers.

This study was undertaken to answer the following major questions:

1. What are the major instructional and content area needs of secondary level biology teachers?
2. What are the most desirable in-service topics for secondary level biology teachers?

3. What are the demographic and professional backgrounds of secondary level biology teachers?

**Population**

The original population of the study consisted of 274 secondary level biology teachers in Kuwait. The respondents numbered 261 teachers or 95.3 percent of the original population. These 261 were considered the final population of the study; 124 or 47.5 percent were male, and 137 or 52.5 percent were female.

**Procedure**

The Survey of In-Service Needs of Biology Teachers (SINBT), a teacher-designed questionnaire, was employed as the instrument of the study. The instrument consisted of 28 items which were subdivided into the following areas:

A. Personal Information
B. Professional Education
C. Professional Experience
D. Instructional Needs

A high and significant \( r = 0.86, \alpha = 0.01 \) reliability was obtained by using the test-retest method. The content validity of the instrument was judged to be very satisfactory.

Descriptive statistics such as percentages, frequencies, ranks, weighted averages, and correlation coefficients
were employed for presenting and analyzing the obtained data.

**Conclusions**

Among the major conclusions drawn from an analysis of the data were the following:

1. The population of the study lacked in academic background preparation, both in terms of quality and quantity of biology and teaching methods courses.

2. A majority of the respondents reported that they had not received high quality in-service training since they had commenced their teaching careers.

3. The most desirable in-service topics reported by the population were Curriculum Development and Methods and Techniques of Instruction.

4. The majority of the population employed whole classes as their sole method of instruction.

**Recommendations**

As a result of the findings of the study, the following recommendations are made:

1. The Ministry of Education should establish definite and demanding criteria for all biology teachers in Kuwait. The Ministry should insist on a major in biology and an absolute minimum competency in the methods of teaching biology.

2. The Ministry of Education should, at all times, maintain extremely close ties with the College of
Education and the College of Science of Kuwait University. In order to evolve effective evaluation measures, a final follow-up study should be developed for more productive in-service training programs.

3. Curriculum Development and Methods and Techniques of Instruction should be employed in the in-service programs.

4. It is imperative that surveys be conducted to compare the effects of different instructional methods, both from the perspective of student achievement and from the perspective of teacher performance.