

Thesis Title : Competencies of Elementary School Teachers Who Teach the Life Experiences in Science Subject under the Office of Buri Ram Provincial Primary Education

Author : Miss Nussara Chamninog

M.Ed : Science Education

Examining Committee :

Prof. Suwat Niyomkar	Chairman
Assoc. Prof. Nilobol Nimkingratana	Member
Assist. Prof. Chalong Intasian	Member
Assist. Prof. Supote Subhakul	Member

Abstract

This research was designed to survey and examine existing and desired knowledge, technical and characteristic or attitudinal competencies of primary school teachers teaching science in the life experiences group of the primary education curriculum administered by the Buri Ram Provincial Office of Primary Education. Informants included supervisors, school administrators, life experiences group academic teachers and teachers teaching science in life experiences group. At the same time, existing competencies were compared based on teachers' different academic background, i.e., those with chemistry, biology, physics, general science and other science-related majors. Study sample comprised 18 supervisors, 161 administrators, 20 group academic teachers and 100 science teachers.

Data collection instrument was a competency survey form constructed by the researcher with high degree of validity and 0.82

reliability. The researcher undertook part of the survey while the rest was mailed to the informants/respondents. Data analysis included the use of arithmetic mean and standard deviation for each competency while the comparison relied on one-way ANOVA and the paired difference test, Scheffe's test.

Findings were as follows :

In the knowledge area it was found that teachers teaching science possessed a high degree of knowledge. However, when each competency in this area was examined, it was discovered that they had a high degree of knowledge in the following 6 matters in descending order : physical-biological science contents, instructional media, teaching principles, curriculum, educational and developmental psychology. At the middle level the following 2 matters, again in descending order, were those of which the teachers had knowledge : measurement and evaluation and nature of science. As regards those competencies needing improving it was found that all respondents rated the improvement need category at a high level. They felt every competency needed improving. In descending order, they were nature of science, measurement and evaluation, educational and developmental psychology, instructional media, curriculum, instructional principles and physical-biological science contents.

As regards technical competency it was found that in general the teachers possessed a high degree of it. But when competencies were examined case by case the following 3 topped the list in descending order : necessary teaching skills and activities, instructional planning and teaching techniques. As regards those technical competencies teachers were found to fairly possess they

featured those having to do with, again in descending order, science process skills, measurement and evaluation and instructional media. At the same time, all respondents expressed a high degree of desire that technical competencies of teachers be upgraded. When examined case by case, they were the following : instructional media, measurement and evaluation, science process skills, instructional planning, teaching techniques and necessary teaching skills and activities competencies, in descending order.

As far as characteristic competencies were concerned, teachers were also found to possess a high degree of these competencies. When examined case by case, the 3 competencies or 3 sets of attitudes were ranked in the following descending order : those towards teaching profession, primary school teachers' work performance and science. However, they, the respondents, felt the improvement need in this area was at a middle level. The 3 were then reranked when improvement need was asked as follows : those attitudes towards science, teachers' work performance and teaching profession.

As regards the comparison of competencies of teachers with different academic background it was found that knowledge, technical and characteristic (attitudinal) competencies of teachers with chemistry, biology, physics, general science, other science-related and non-science majors were not significantly different.