Study Abstract

Study Title:
The Directions of Higher Studies Science Education Theses Performed at Ummul Qura and Al-Yarmouk Universities in Light of the Significance of the Academic Areas and Against some General Scientific Criteria over the Period from 1990 M to 2008 M.

Study Problem:
The problem investigated in this inquiry was formulated in the following main question:
What are the directions (orientations) of science education thesis research in light of the importance of learning fields and according to some research and general criteria applied in conducting higher studies (graduate studies) theses at Ummul Qura and Al-Yarmouk Universities over the period from 1990 m to 2008 m?

Study Objectives:
1. Determining some significant science education areas that need the attention of scientific research at higher studies (graduate studies) stages.
2. Determining the current status of the directions of the university thesis research (master & doctoral) in the field of science education in light of these academic areas at the Universities of Ummul Qura and Al-Yarmouk.
3. Specifying some general scientific criteria associated with research topics in the field of science education, and the extent to which such criteria had been observed (met) in carrying out master’s and doctoral theses at Ummul Qura and Al-Yarmouk Universities.
4. Specifying some important scientific research criteria and ascertaining their presence (implementation) in a sample of science education research constituting master’s and doctoral theses and dissertations at Ummul Qura and Al-Yarmouk Universities.

Study methodology: sample;instrument
This research work followed the descriptive method that is based upon content analysis procedure. The sample of the study was comprised of (235) master's theses and doctoral dissertations of which (126) masters and doctorates were done at Ummul Qura University, and (109) masters and doctorates at Al-Yarmouk University. The study utilized the content analysis card as a tool to gather needed data to answer the questions posed in the study. For statistical analysis purposes and to answer the research questions, the study employed Holisti’s equation to calculate the reliability of the study's tools; in addition, frequencies, percentages, arithmetic means, and standard deviations were used.

Results of the Study:
1. Science education research at Ummul Qura and Al-Yarmouk Universities was focused on some academic subjects with little or no attention being given to other learning areas.
2. General scientific criteria relevant to all significant science education subjects constituting topics studied in the master's and doctoral research theses done at Ummul Qura University had been satisfied at a medium degree.
3. General scientific criteria related to all important science education subjects constituting topics of inquiry in the master’s and doctoral research theses done at Al-Yarmouk University had been met at a medium degree.
4. The scientific research criteria associated with areas specified in this study in respect of science education subjects investigated in the master's and doctoral theses performed at Ummul Qura University had been satisfied at a medium degree.
5. The scientific research criteria associated with areas determined in this study and addressing science education topics investigated in the master's and doctoral theses done at Al-Yarmouk University had been satisfied at a medium degree.

Recommendations:
1. Instructing higher studies (graduate studies) students to engage in research subjects that had received little attention as well as topics never had been researched before through university theses as revealed in this study.
2. The observance (satisfaction) of the general scientific criteria specified in this study when selecting areas of investigation for the university theses.
3. The need to pay attention to the scientific research criteria determined in this study when writing and finalizing the university theses undertaken by the higher studies students.