AN ASSESSMENT OF A MODULE ON
FOOD AND DIGESTION DEVELOPED
FOR INSTRUCTION AT AMMAN TRAINING CENTER

BY
REEM BARGHOUTY DAMEN

Submitted in partial fulfillment
of the requirement of the degree of Master
of Education in Yarmouk University

Thesis Committee
Dr. F. Abu Zaine
Dr. M. Ghazzawi
Dr. T. Miri'

Chairman
Member
Member

May, 1982
ABSTRACT

The primary purpose of this study was to assess the effectiveness of a module prepared by the researcher for the use of science students at Amman Training Center. Furthermore, the present study was also interested in evaluating the time needed by the students to complete the material of the module and the teacher's time as compared to that time allocated to that same unit had it been taught in the traditional method of instruction.

The sample of this study consisted of 43 second year science students enrolled at Amman Training Center for the academic year 1980/81.

The procedure of the study involved the following steps:

- The module on Food and Digestion was prepared by the researcher during the summer months of 1979/80. Upon completion, the module was given to the UNESCO expert in science and the chemistry instructor at Amman Training Center for their suggestions and recommendations.

- The module was given to all 43 science students during the first week of May 1980/81.

- A four-week period was given to the students to study the material of the module depending on the fact that the time allotted in the curriculum for that same unit is four weeks with three hours of instruction per week.

- Weekly laboratory sessions were scheduled for the purpose of carrying out the practical part of the module.

- A record of the time spent by the students both in the laboratory and in performing other activities of the module was kept. Similarly, a record of the time spent
by the researcher whether in preliminary preparation of the laboratory or in minor discussions with the students was kept for the purpose of the study.

- Posttest A was administered to all participating students during the first week of June 1980/81.

- The unit on Blood and Circulation was taught to all participating students in April 1980/81 by means of the lecture-laboratory method. Upon completing that unit, posttest B was administered in the first week of May 1980/81.

- Both posttests A and B were given to five judges to set a criterion score to be obtained by the subjects. The score agreed upon was 70%.

- Scores on both posttest A and B were obtained and kept for further calculation of the percentages of students who obtained criterion score.

Results of the study had indicated that two-thirds of the students had attained the criterion score of 70% on the module since the percentage of the students who attained that score was 67.4%. The mean and standard deviation of the results on posttest A were 18.7 and 2.9 respectively while the mean and standard deviation of results on posttest B were 22.9 and 2.6 respectively.

On the other hand, results of the study revealed that the average time spent by the students in studying the module was much less than the time which is ordinarily scheduled for this unit. The use of the module has saved 25% of the student's time in studying the module while it has also saved 36% of the teacher's time. Hence, results of the study had led the researcher to same conclusions such as:

1. The attainment of second year science students on the
module of food and digestion was quite acceptable with respect to the criterion score set by the judge.

2. The use of the module was time saving as compared to the time that was ordinarily scheduled for that same method of the module.

3. Instruction by means of modules gives chance to self-pacing and learning by doing.

It was recommended to use module at other teacher training programs to examine the students attitudes toward the use of modules as one approach of individualized instruction. It was also recommended that teacher training instructors are to get well acquainted with the procedures involved in constructing modules in order to be able to use them in their instructional strategies in the various subject.