Mahmoud Mohammed Ghanem, M.A., University of Jordan
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The Optimal Time for Giving the Feedback

Inspite the well spread fact in the psychology of learning that immediate feedback enhances learning and promotes retention, yet the studies of More, 1969; Sturges, 1969; Sassenrath and Yonge, 1968; and Sturges, 1972, showed that delayed feedback gives better results in this respect.

Feedback is highly important in class teaching because much of class-room time is given to exam questions and students responses to them.

The present study has been designed to find out the optimal time for giving feedback, and specifically, to test the following hypotheses:

1- Groups that take feedback will perform better than groups that don't, on tests of long memory.

2- Groups that take delayed feedback will perform better than groups that take immediate feedback on tests of long memory.

3- The optimal time for giving feedback is two days.

4- The optimal time of giving feedback is the same for science and history.

To test these hypotheses, 266 Ss in the third prep. Class were chosen from two Schools in Amman. One half of the Ss were males and the other half were females. The Ss were divided into seven groups according to their School grades in the year 1976-1977.

The learning materials presented to them consisted of two articles (One in history entitled "Hajas's Religions Before Islam" and the other in Science entitled "Food") together with amultiple choice test on each article consisting of 20 items. The articles and the tests were constructed by the writer through the help of experts from the Ministry of Education.

The procedures of the study consisted of three stages. First the subjects were asked to read the article and then were immediately tested on its content by using the related test. Secondly, the Ss were given the appropriate feedback according to the schedules specified by the study, ie. immediate, after half an hour, one day, two days, three days and four days. The seventh group were not given any feedback. Thirdly, the Ss were retested aweek later following the time of giving the feedback, with the same test items but with different order.

Findings and Discussion

a) The Science Experiement:

The results of the Science experiement were as follows:

1- Groups that were given feedback achieved higher than groups that were not given such feedback.

2- The froup that was given the feedback after two days achieved higher than the other groups, and the differences were particulary significant between this group and those that recieved feedback either immediately, afterhalf anhour or after one day.

3- The group that received immediate feedback achieved less than the other groups that received such feedback at later times.

b) The History Experiement:

The group that was given the feedback after two days achieved higher than the other groups, and the finding in this case were similar to the results in the case of the Science experiement. The finding also showed that the timing of feedback is independent of the subject-matter taught.

In short, the writer summerizes his findings by saying that the optimal time for feedback is two days, and that giving feedback enhances and promits learning and retention better than not giving it. Also the results showed that delayed feedback is better than immediate feedback.

In addition, the study showed similar findings in the case of science and history materials.

The findings of this study made the writer question the idea of giving immediate feedback and of the usefulness of educational technology based on it.