

## Research on Style B, C

In a recently completed study (Gerney, 1979) the effects of two teaching styles, selected from Mosston's Spectrum of Teaching Styles, were compared on the psychomotor skill acquisition of fifth grade learners. Subjects (Ss) were randomly assigned to either a "practical style" treatment (PS) or a "reciprocal style" treatment (RS). The essential theoretical difference between these two treatments is in (1) the frequency of feedback and (2) who provides this information.\* In the PS feedback about performance is provided by the teacher at irregular intervals. (For this study, to simulate classroom conditions, feedback was provided after every fifth trial). In the RS the students form pairs and as one partner does the task the other provides feedback, based on criteria supplied by the teacher, after every trial.

In this study, which employed a pretest/posttest control group design, data were analyzed utilizing a CANOVA model. It was found that both groups learned the task; i.e. both had significant pre-post gain scores. When comparing the two treatment groups following training (with the pretest serving as a covariate), no significant differences were found on the major DV; i.e. motor skill acquisition.

This finding is particularly noteworthy since the RS group exhibited comparable gains in psychomotor performance, when compared to the PS group, with the benefit of half the number of practice trials. This apparent discrepancy was built into the design to simulate real classroom conditions. In most school situations the length of a class period is controlled. In this study it was decided that both treatment groups should received the same amount of time-on-task practice. Based on baseline data from a pilot study, 60 trials was selected as the criterion for skill acquisition. Since Ss in the RS group spend half the

time-on-task providing feedback to their partner, it was decided that this group receive only 30 trials.

This finding has particularly far reaching implications for further research. Several research questions which come quickly to mind include:

- 1) To investigate the benefit of “mental practice” gained by the “observer” under RS conditions while reviewing the task criteria and providing feedback to his/her partner.
- 2) To examine the importance of descriptive feedback following each practice trial (particularly during initial learning trials). What is the good of practice without knowledge of results?
- 3) To study the contribution of the affective dimension of receiving feedback from a peer instead of the teacher. Does “who” provides knowledge of results make a difference?

Summary prepared by Michael Goldberger (1/27/79)

\*For a more detailed description of the “Spectrum of Teaching Styles”, the reader is referred to Muska Mosston, Teaching From Command to Discovery, (1972), Wadsworth Publishing Company. Belmont, CA