

mentary instruction. (2) Giving further supplementary examples made a significant improvement even after the number of examples in the original film had been doubled. (3) The "rate" of improvement diminished as the number of examples increased, suggesting a "saturation point," dependent on the difficulty of the material, after which further examples would fail to produce more gain. (4) Common mistakes were less often made when supplementary instruction was used to emphasize the more difficult material. (5) The more intelligent men benefited even more from additional examples than did the less intelligent men.—*E. Faison*

MICHAEL, D. N. "Some Factors Influencing the Effects of Audience Participation on Learning from a Factual Film." Memo Report No. 13A Human Resources Research Laboratories, Bolling Air Force Base, Washington 25, D. C.

*Purpose:* To investigate the effects of several factors on learning from a film employing "audience participation." Specifically, what differences are there when participation is *overt* (observable) or *covert* (mental)? Is there greater learning when the subjects have "*knowledge of results*" following participation? Are the gains produced by participation due primarily to increased *motivation* or to straight *practice* effects?

*Procedure:* Eight experimental groups (about 640 high school subjects) were shown a film on civil defense against the atom bomb under conditions of "audience participation;" that is, the film was stopped periodically and the audience was asked certain questions on what they had just seen. Half of these groups participated "covertly," *i. e.*, "thought" the answers, while the other half wrote their answers. Half the groups were provided with "feedback," *i. e.*, knowledge of the correct answers to the questions just given, while the other four received no "feedback." It was announced to half of the groups that they would have a test after the film. This was intended to produce higher motivation for these groups. Fifty per cent of the items in the test given at the end of film had been used on the earlier participation periods. The purpose of this was to investigate the influence of motivation (*set*) *vs.* sheer practice. Sheer practice would be expected to improve test scores only on items practiced while superiority on *non-practiced* items would be attributed to motivation factors.

*Results:* (1) Audience participation, whether *overt* or *covert*, and with or without knowledge of results, resulted in considerable improvement in learning verbal material as compared to simple viewing of the film. This improvement seems to be due to practice effects and not changes in motivation since gains were found only on points covered in the participation sessions. (2) The most important single factor was *knowledge of correct response*. (3) There was no significant difference between the level of learning achieved under *overt* practice conditions and under *covert* practice. (4) Warning that a test would follow did not produce significantly different learning.—*E. Faison*