Curriculum Research

Column Editor: C. W. Hunnicutt
Contributor: John B. Bouchard

Continuing as editor of this column is C. W. Hunnicutt, professor of education, Syracuse University, Syracuse, New York. Guest contributor for this issue is John B. Bouchard, professor of education, Plymouth Teachers College, Plymouth, New Hampshire.

Suggestions for Research by Classroom Teachers

MANY classroom teachers are overawed by the word "research." They have visions of psychological laboratories, of large experimental groups from many schools, and of the use of intricate and puzzling statistics. While there is continued need for laboratory and large-scale investigations, there is also a critical need for research by classroom teachers. In the final analysis, the quality of the educational "pay off" is determined by the efforts of classroom teachers.

Classroom research may be simple or complex. The research may involve evaluation of any aspect of teaching techniques of courses of study. Most important, however, the individual teacher usually gathers data for an immediate purpose—to help pupils, while they are under his care, attain the greatest growth possible.

Many investigations have been made and are now being made by teachers working with their own children. When a teacher tries conscientiously to answer such a question as, "Why didn't this work for me?" he has developed the intellectual curiosity required in research.

Effects of Experimental Conditions Studied

Some important implications for classroom research in both curriculum development and techniques of teaching were brought out in a recent investigation. The responses of 216 sixth-grade children were analyzed to discover the effects of four experimental conditions. A few of the results are reported below together with some of their implications for typical classroom situations.

When children estimated in advance the scores they expected to make on arithmetic exercises, their average estimates were very similar to their averages of actual performances; but their ability to predict varied according to the nature of the task. Nearly all children in the investigation wanted their teachers to express judgment on their work, apparently feeling a need to reinforce their opinions. Teachers may gain considerable insight into children's attitudes toward themselves by encouraging them to predict their performance, either making item-by-item estimates, or over-all predictions. These responses may be used (a) to compare teacher-pupil estimates on any given task, (b) to compare the ability of children to estimate performance in one content area with their ability to estimate in another, and (c) to discover any relationship between ability to estimate perform-

ance and such factors as general confidence and work habits of children.

Consistent with finds in other investigations of "level of aspiration," great variations were found in the goals children set up for themselves as measured by questionnaire items. Children varied widely in their concepts of satisfactory work. Another measure of their goals appeared in the predictions of performance and in the actual performance. By comparing the scores children think they will get with the scores they actually receive, teacher may: (a) identify children who condemn themselves to feelings of failure by pursuing unrealistically high goals, (b) identify children who fail to challenge themselves adequately, (c) try to discover how children make predictions, and (d) try to discover why children predict as they do.

Attitudes toward competition differed signficantly between groups, and in one group the attitudes changed significantly during the period of investigation. Classroom teachers can discover the influences behind the performance of their children. Are children competing against their own previous achievements or against each other? Are the teaching techniques increasing or diminishing competitive spirit?

Great variations were found in the meanings children attached to various responses. Through simple questionnaire and interview they also revealed freely their attitudes toward school work. With equal directness teachers may be able to discover which subjects or activities particular children like or dislike and may learn why they feel as they do. Teachers may also discover what children really mean by the answers they give and the words they use.

Learning Difficult to Analyze

Classroom situations are exceedingly complex. Even where the material to be learned and the time for learning are rigidly controlled, with the groups of children equated on measures of significant factors, the same experimental condition may produce different results in the various groups. In the typical school day where controls are less rigid, the learning situation may be even harder to analyze. To be fully effective a teacher must be keenly aware of the classroom atmosphere and must note children's receptivity to different content and procedures through the day.

There is at least one very real danger. Teachers may be so aware of the complexity of classroom situations that they become inhibited in carrying on research. They may feel that the data collected lack precision, that the controls are inadequate. To help overcome these inhibitions, teachers can develop the experimental point of view, realizing that much fumbling usually precedes discovery of new techniques or refinement of the old. The greatest obstacle is a reluctance to begin. A teacher who overcomes this obstacle finds a sense of accomplishment in those techniques which work and a challenge, rather than a source of frustration, in those that do not.

These implications, then, are clear. Teachers can discover the goals children are establishing for themselves, and the estimates they are making of their work; teachers may gain further insight into children's attitudes and the meanings they attach to the activities going on in the various learning situations. Only by securing greater understanding of each individual child can the teacher become most effective in guiding children.