AN APPROACH TO THE TEACHING OF ELEMENTARY SCHOOL SCIENCE AND WRITTEN MATERIALS FOR TEACHERS AND CHILDREN

AN ABSTRACT OF
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The main part of this thesis is an original booklet for teachers and children, called "Drops, Streams and Containers." Its subject is the behavior of liquids in general and water in particular. The booklet is designed to help fill a need for science experiences with some of the basic aspects of the behavior of liquids usually passed over or forgotten in most texts and guides.

The form of "Drops, Streams and Containers" is such that it could be used in many different ways, allowing for a wide range of styles and needs. It might serve as a source book or as a unit. It could be used by older children to stimulate their curiosity or by teachers looking for starting points. The activities presented in the booklet are in a format which lends itself to re-ordering and selecting. It could accompany equipment provided either by a commercial organization or it could be used with odds and ends brought to school from home.

The uses of "Drops, Streams and Containers" suggested in this thesis are consistent with the philosophy of science education that relies heavily on the growth of the individual child's interests through his questions and activities. It is essential to the use of "Drops, Streams and Containers" that the importance of children's interests as starting points be understood and utilized.

While this thesis does say that the styles or methods discussed may not be adopted by the teacher using the booklet, they nevertheless can serve as goals to work toward. This thesis does not propose a solution but rather a direction in which to move. Intrinsic to "Drops, Streams and Containers" is the presentation of choices both to the teacher, already forced to meet curriculum guide criteria and various conceptual schemes, and to the children involved in their own learning.

To aid the teacher interested in independently developing materials and in innovation an annotated bibliography of resource material is provided as an appendix. It includes American and English information as well as sources of written help and personal help. This appendix is meant to stimulate, rather than to be comprehensive.

Another appendix discusses how important it is for children to use their own words and to understand the words they do use. Included in this appendix is a glossary of scientific terms relating to "Drops, Streams and Containers."

In brief, it is hoped that supervisors, directors, or teachers who may read this thesis will be encouraged to go still further with <u>their</u> ideas of instruction and of materials innovation which would truly involve children.