

# **E.S.A.T.Y.C.B. POLICY STATEMENT ON LABORATORY INSTRUCTION**

January 1991

Science in general and biological science in particular provide insight into of the social and environmental problems that we face today. Consequently scientific literacy is crucial for today's students and laboratory experience is essential for such literacy. Part of the purpose of science education is to develop understanding methods by which scientists work and by which scientific knowledge advances. This cannot be accomplished without laboratory instruction.

Laboratory experiences require students to collect and evaluate data gained from observation and experimentation, not to just memorize cold information. Students do not all learn in the same way. For many the experiential focus of the laboratory provides an opportunity for acquiring enduring knowledge that might otherwise be denied them. Scientific literacy requires first hand experience with the tools and techniques of science. The laboratory is the environment where this experience is achieved.

There are those who believe that laboratory experience is too expensive and time-consuming to be supported. This view is contrary to the essence of science. The conduct of science and the learning of science are processes, beyond the collection of information. To teach science properly, adequate resources are necessary. This means that sufficient time, space, and budgetary support for a variety of activities and experiences, laboratories included, must be made available. In order to ensure the scientific literacy of future generations, it is essential that the laboratory component of science education at all educational levels not be sacrificed in the name of efficiency.

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[Accepted final draft Fall 1990 to be distributed January 1991]  
[Transcribed February 25, 2006]