

Analytic Thinking for Children: Review of the Research

Philosophy for children has received many personal endorsements from teachers, parents, administrators, and children who have been involved in such programs in the Fort Worth area. These have been amply reported in the Newsletter: Analytical Thinking. But "testimonials" are not always the kind of data one needs to support the inclusion of such programs in already over-crowded curricula. "Hard" data is needed to convince skeptical administrators and parents that such programs are beneficial to the children involved. Following is a review of the research that has been conducted in this area which provides just that kind of "hard" data.

In 1970, a field experiment was conducted in the Rand School, Montclair, New Jersey, to determine the effect of a nine-week, ninety minutes-per-week program in philosophy for children. The class was taught by Professor Matthew Lipman, Department of Philosophy, Montclair State College. Results indicated a twenty-seven months' gain in logical reasoning on relevant portions of the California Test of Mental Maturity, and significant gains on all factors of the Iowa tests except spelling. In 1979, Nancy Cummings Perry, Department of Philosophy and College of Education, North Texas State University, replicated the original 1970 field experiment in Bedford, Texas, and corroborated Lipman's original findings. (See "Improving the Logical Skills of Fifth Graders," Thinking, Vol. 1, Nos. 3 & 4, pp. 90-92.) Perry found a significant

difference in the means of the experimental and the control groups which suggested that the experimental treatment enabled the subjects to improve significantly their scores on tests of logical thinking.

Similar projects have been successfully carried out elsewhere. In 1978-79, a project titled The Philosophical Reasoning Program (PRP), conducted in the Lexington Public Schools in Lexington, Massachusetts, concluded "that a specific place for philosophical reasoning eventually be provided in the curriculum for all elementary students" (Thinking, Vol. 1, Nos. 3 & 4, p. 26). PRP seems to have significantly improved students' abilities in the use of formal and informal logic. While the Lexington PRP program was under way, a similar experiment was conducted in six elementary schools in the Hilo, Hawaii area. Findings there generally conformed with those in Lexington. Throughout both of these programs, which were taught by regular classroom teachers, the teachers received extensive concurrent instruction in seventeen one and one-half hour seminars conducted by professional philosophers. In these seminars both the content and methods of teaching reasoning skills in formal and informal logic, epistemology, ethics, and aesthetics were examined. Conducting formal philosophical discussions with students and providing written and other classroom activities were stressed.

Numerous smaller programs have also been conducted in various places. For example, at the Devereau Day School in Scottsdale, Arizona, the Hardy School in Beverly, Massachusetts, Bruce-Guadalupe Community School in Milwaukee, Wisconsin, the University of Missouri-Columbia Laboratory School, Margarita de Escocia School in Anahuac, Mexico, and the Hua-hsing Elementary School in Taipei, Taiwan. In addition, the Department of Philosophy and the School of Education

at the University of Minnesota at Morris have received a three-year grant from the Minnesota Council on Quality Education to conduct a philosophy for children program in five rural communities in western Minnesota. As a result of a 1977 grant of \$100,000 from NEH, three members of the Queens College School of Education and two members of the Queens Department of Philosophy have conducted pre-college philosophy workshops for some seventy-five New York teachers. As a result, a number of teachers in Brooklyn and Queens have begun implementing programs in grades 5-8. Approximately twenty-five Chicago teachers of the gifted, each from a different school, participated in the spring of 1978 in a training workshop conducted by George Dalin, of the Department of Research and Evaluation, Chicago Board of Education. Virtually all of those trained are continuing to use the program in their classes. And since September, 1979, the School of Education of Texas Wesleyan College has been sponsoring, with the Fort Worth Independent School District, a Program for the Advancement of Analytic Thinking for Children. To paraphrase the administrators of two elementary schools where the program is being implemented, "The Program does everything it sets out to do."

Nancy Cummings Perry