
DISCUSSION TOPICS

**CONCRETE
OPERATIONS**

Narration By

DAVID ELKIND, Ph.D.
(25 minutes)



DAVIDSON *films*

Expanding the Mind's Eye since 1955

735 Tank Farm Road, Suite 210 San Luis Obispo CA 93401
Tel: 805.594.0422 Fax: 805.594.0532
dfi@davidsonfilms.com www.davidsonfilms.com

INTRODUCTION

Between ages of five to seven, most children's thinking undergoes important changes. Formal education becomes possible. **Jean Piaget's** studies revealed differences between the thinking of younger children and somewhat older ones and he developed a set of descriptions of the stages. This video examines the intellectual attainments of **transitivity, reversibility** and the **concept of a unit**. Children from ages four to nine are seen in interview situations and applications of these attainments are seen in a lively first grade classroom.

1. Jean Piaget was a biologist before he was a psychologist. His biological interests were in what we now would call ecology, how organisms interact with their environment. What reflection of this early interest do you see in his later work in the area of child development and cognitive psychology?
2. The two processes of **accommodation** and **assimilation** are basic to Piaget's work. Obviously, they have links to his understanding of biological processes. Sometimes using biological examples help students remember the terms better. Taking in food is a basic biological operation. The body **accommodates** the food by grinding it with teeth, moving muscles to swallow, and emitting acids to break it down, etc. **Accommodation** is about changing in response to environmental demands. The body **assimilates** nutrients from the food. **Assimilation** is about dealing with an environmental event in terms of current structures. What examples can your students come up with for these two parts of adaptation?
3. One of the criticisms of Piaget's work is that children's minds grow in different dimensions and that the stages he proposed thus don't reflect the great variety of individual experiences. Are the stages useful?
4. Dr. Elkind seems to stress the importance of the attainment of the unit concept to the process of learning to read. Do you think this is warranted? What are other attainments that you think crucial?
5. Piaget's clever use of simple materials in his clinical interviews is legendary. This video includes adaptations of some of them. Discuss how geniuses often look carefully at commonplace occurrences what others have overlooked. (Other possible examples would be Jenner's discovery that people who had had cowpox did not get smallpox or Rachel Carlson's realization of the terrible power of DDT.
6. David Elkind defends Piaget against contemporary criticism. Would these be the same defenses you would make? Would these be the criticisms you think most important?

NOTE:

The 9 year old Nwmaka whose logic is so clearly concrete operational in this video is seen as a fourteen year old in the next video in the series, **ADOLESCENT COGNITION: THINKING IN A NEW KEY** easily dealing with the proverbs that stump her in this one.

Margy Wong is the teacher of this engaging first grade class. Most of the students are children of Hmong refugees. Ms Wong, with a previous class, is profiled in another video featuring David Elkind entitled **USING WHAT WE KNOW: APPLYING PIAGET'S DEVELOPMENTAL THEORY IN PRIMARY CLASSROOMS**.

RELATED FILMS

Also Available from Davidson Films

GROWING MINDS: COGNITIVE DEVELOPMENT IN EARLY CHILDHOOD
(1996) 25 minutes

ADOLESCENT COGNITION: THINKING IN A NEW KEY (1999) 31 minutes

HOW CHILDREN LEARN (1997) 23 minutes

USING WHAT WE KNOW: APPLYING PIAGET'S DEVELOPMENTAL THEORY IN PRIMARY CLASSROOMS (1991) 35 minutes

SCAFFOLDING SELF-REGULATED LEARNING IN PRIMARY CLASSROOMS
(1996) 35 minutes
