Piagetian Theory, Research and Practice: An Abstract Bibliography.

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Age Differences; *Annotated Bibliographies; *Cognitive Development; Cognitive Processes; *Concept Formation; Conservation (Concept); *Early Childhood Education; *Elementary Secondary Education; Higher Education; Language Development; *Learning Theories; Logical Thinking; Moral Development; Research; Special Education; Teaching Methods; Teaching Techniques; Thought Processes
*Piagetian Theory

This selective bibliography cites recent ERIC documents and journal articles focusing on Piagetian theory, research and practice. Entries include title, author and descriptors. Also included are an abstract and ordering information for each ERIC document and an annotation and journal citation for each journal article. Entries are drawn from "Resources in Education" ("RIE"), December 1975 through December 1976, and from "Current Index to Journals in Education" ("CIJE"), February 1976 through December 1976. (MS)

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PIAGETIAN THEORY, RESEARCH AND PRACTICE:
AN ABSTRACT BIBLIOGRAPHY

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INTRODUCTION

This selective bibliography cites recent ERIC documents and journal articles focusing on Piagetian theory, research and practice. Entries include resumes from Resources in Education (RIE), December 1975 through December 1976, and citations from Current Index to Journals in Education (CIJE), February 1976 through December 1976.

Most ED-numbered documents are available on microfiche and hard (paper) copy from the ERIC Document Reproduction Service (EDRS). (See order information at the end of this publication.) Journal articles are available only in the journals cited, not through the ERIC system. CIJE provides a list of the complete titles and ordering addresses for all journals indexed.
1. CITATIONS FROM CURRENT INDEX TO JOURNALS IN EDUCATION

SAMPLE CITATION:

EJ141703 SE516995
Concrete and Formal Thinking Abilities in High School Biology Students as Measured by Three Separate Instruments
Lawson, Anton E.; Blake, Anthony J. O. Journal of Research in Science Teaching; 13: 3; 227-235 May 76
Identifiers: *Piaget (Jean)/ Research Reports
Students were classified as formal or concrete-operational using a battery of Piagetian tasks, a biology content examination, and a non-science content examination. Based on the results it was concluded that Piagetian tasks are relatively content-free and can serve as realistic indicators of concrete and formal thinking abilities. (MLH)

EJ141799 SE516991
An Empirical Derivation of Hierarchies of Propositions Related to Ten of Piaget's Sixteen Binary Operations
Benefield, K. Elaine; Capie, William Journal of Research in Science Teaching; 13: 3; 193-204 May 76
Identifiers: *Binary Operations/ *Piaget (Jean)/ Research Reports
A group of students from grades four through twelve were tested on ten binary operations in four truth conditions. It was found that propositional operations which had greater inclusiveness or breadth of concepts were more difficult to comprehend. (MLH)

EJ141756 PSS04925
Moral Judgment as a Function of Role-Playing Instructions
Vikan, Anne Journal of Genetic Psychology; 128: 1; 109-121 Mar 76
Identifiers: *Piaget (Jean)
This study investigated the effect of manipulating social factors by role playing instructions in a moral judgment task administered to children aged 7-10 years. (GO)

EJ14177 PSS04916
The Relationship Between Children's Performance on Concept Attainment and Piagetian Conservation Problems
Wright, Robert J.; And Others Journal of Genetic Psychology; 128: 1; 41-48 Mar 76
Descriptors: *Elementary Education/ *Conservation (Concept)/
The work of Jean Piaget stresses the point that intellectual functioning and growth from one stage of cognitive development in the next depends more on the quality of one's experience than on exposure to factual knowledge. Piaget's theoretical model and its implications and applications for the classroom are reviewed. (Editor/RK)

Descriptive: *Cognitive Development/ Learning Theories/ Thought Processes/ Intelligence Tests/ Educational Strategies/ Learning Experience/ Concept Formation/ Logical Relations
Identifiers: Piaget (Jean)

Encouraging Logical Thinking In Selected Pre-Engineering Students
McKinnon, Joe W. Engineering Education; 66: 7; 740-744 Apr 76

Descriptive: *Disadvantaged Youth/ Engineering Education/ Higher Education/ Learning Theories/ Logical Thinking/ College Science/ Educational Research/ Instruction
Identifiers: Piaget (Jean)/ Research Reports

Describes a six-week summer program in which a group of inner-city, high school graduates participated in activities designed to promote logical thinking. Four Piagetian tasks were used as pre- and post-tests and showed that the course promoted significant improvements in logical thought. (MLH)

The Effects of Training in the Proportional Reasoning Associated with the Concept of Speed
Boulanger, F. David Journal of Research in Science Teaching; 13: 2; 145-154 Apr 76

Descriptive: *Concept Formation/ Educational Research/ Elementary School Science/ Ratios (Mathematics)/ Elementary Education/ General Science/ Instruction/ Science Education
Identifiers: Piaget (Jean)/ Research Reports

A group of third graders trained in the proportional reasoning associated with converting distance and elapsed time into speed scored significantly higher on an immediate retention test than the control group (no instruction). But there was no difference between groups on a delayed retention test. (MLH)
Observational Learning of Quantity Conservation and Piagetian Generalization Tasks
Charbonneau, Claude; And Others Developmental Psychology; 12; 3; 211-217 May 76
Descriptors: *Elementary Education/ *Conservation (Concept)/ *Observational Learning/ *Cognitive Processes/ Grade 1/ Adults / Cognitive Development
Identifiers: *Piaget (Jean)
Twenty first-graders observed an adult model perform a quantity conservation task. The children were then tested on a series of generalization tasks immediately, after one week, and after three months. The results suggested that the social experience of observation appeared to activate a cognitive restructuring of the children's mental operations. (JMB)

Class Inclusion and Multiple Classification in Middle and Old Age
Denney, Nancy Wadsworth; Cornelius, Steven W. Developmental Psychology; 11; 4; 521-522 Jul 75
Descriptors: *Older Adults/ *Middle Aged/ *Classification/ *Cognitive Ability/ Age Differences/ Institutionalized Persons / Adult Development
Identifiers: *Piaget (Jean)
This study examined the performance of middle-aged and elderly adults on the Piagetian tests of class inclusion and multiple classification. (GO)

A Cognitive Developmental Study of Metaphor Comprehension
Billow, Richard M. Developmental Psychology; 11; 4; 415-423 Jul 75
Descriptors: *Elementary Education/ *Cognitive Development/ *Comprehension Development/ *Metaphors/ Elementary School Students/ Age Differences/ Pictorial Stimuli/ Classification
Identifiers: *Piaget (Jean)
Metaphors of similarity and proportionality, together with a pictorial form of similarity metaphors, proverbs, and several Piaget-type cognitive tasks, were given to 50 boys aged 5 through 13 years. Results indicated that metaphor comprehension is a type of classificatory behavior, the development of which is related to maturing cognitive operations. (GO)

Stage Development of Blind Children: A Piagetian View
Gottsmann, Milton New Outlook for the Blind; 70; 3; 218-221 Mar 76
Descriptors: *Blind/ *Cognitive Processes/ *Cognitive Development/ *Actual Perception/ Exceptional Child Research/ Visually Handicapped/ Maturation/ Age Differences
Identifiers: *Piaget (Jean)
Two studies using the concepts and research techniques of J. Piaget were conducted to compare cognitive processes in 45 blind children (2-to-12-years-old) and a random sample of sighted children. (SB)

Significant Physics Content and Intellectual Development--Cognitive Development as a Result of Interacting with Physics Content
Renner, John W. American Journal of Physics; 44; 3; 218-222 Mar 76
Descriptors: *Cognitive Development/ *College Science/ *Learning Theories/ *Physics/ Higher Education/ Instruction/ Science Education/ Science Activities/ Undergraduate Study
Identifiers: *Piaget (Jean)
Supports the hypothesis that a student must engage a subject in a manner appropriate to his or her present stage of development if he or she is to advance to the next stage of development. Advocates the practice of having introductory physics students observe physical phenomena while they are manipulating equipment in order to foster cognitive development. (Author/CP)
Assessment of Cognitive Requirements of Instructional Materials
Hartford, Fred; Good, Ron
School Science and Mathematics; 76; 3; 231-237
Mar 76
Identifiers: *Chemical Education Materials. Study/ Piaget (Jean)
Evaluates the CHEM study topics of kinetic theory of gases, phase changes, chemical bonds, and equilibrium as to the level of cognitive development required for an understanding of each subject. Advocates an assignment of topics within the range of a student's cognitive ability in an individual study format of instruction. (CP)

EJ136158 EC081340
Learning Disabilities: A Developmental Approach. Symposium No. 11: Response
Adams, Ruth R.
Journal of Special Education; 9; 2; 159-65
Sum 75
Descriptors: *Learning Disabilities/ *Reading/ *Classification/ *Diagnostic Teaching/ *Cognitive Development/ Exceptional Child Education/ Teacher Role/ Theories
Identifiers: *Piaget (Jean)
In response to J. Lerner's paper (EC 081 334) on differences between the fields of reading and learning disabilities, the author stresses the importance of a developmental view of reading based on the theories and findings of J. Piaget. (DB)

EJ136017 CS071046
A Critical Age Model of Language Learning
Golub, Lester S.
Language Arts; 52; 8; 1097-1103
Nov/Dec 75
Descriptors: *Language Development/ *Nucleation (Language Learning)/ *Language Research/ *Concept Formation/ Language Learning Levels/ Student Writing Models/ Vocabulary Development
Identifiers: *Piaget (Jean)
No language acquisition theory has yet proved to be the correct one.

EJ135887 CS076956
Inferring from the Conditional: An Exploration of Inferential Judgments by Students at Selected Grade Levels
Klein, Marvin L.
Research in the Teaching of English; 9; 3; 157-93
F 75
Descriptors: *Logic/ *Cognitive Processes/ *Logical Thinking/ Intellective Ability/ Deductive Methods/ Philosophy/ Persuasive
This study investigated the ability of middle school children to perform Euclidean transformations mentally. The results indicated that the tasks were more difficult than Piagetian theory would indicate. (SD)

A Test with Selected Topological Properties of Piaget's Hypothesis Concerning the Spatial Representation of the Young Child


Identifiers: *Piaget (Jean)/ Research Reports

Research designed to determine whether the phenomena observed by Piaget were task specific was performed. The results did not confirm Piaget's notion that topological concepts develop prior to the concepts of Euclidean geometry. (SD)

An Analysis of Some of Piaget's Topological Tasks from a Mathematical Point of View


Identifiers: *Piaget (Jean)/ Research Reports

Piaget's theories concerning the child's development of spatial concepts are considered in comparison with related mathematical concepts. The analysis yielded discrepancies between Piagetian and mathematical use of terms. (SU)
Physics Teaching: Does it Hinder Intellectual Development?
Griffiths, David H. American Journal of Physics; 44; 1; 81-86 Jan 76
Descriptors: *Cognitive Development/*College Science/ *Physics/ Educational Research/ Higher Education/ Instruction/ Learning Theories/ Science Education/ Undergraduate Study
Identifiers: *Piaget (Jean)/ Research Reports
Describes an experiment in which physics students were assigned to groups according to Piaget's stages of cognitive development and members of each group were asked to solve an elementary mechanics problem. Analysis revealed that the majority of students, those who were not operating at a formal level of development, have done more harm than good in attempting to "learn" physics. (CP)

Piagetian Perspective on Science Teaching
Phillips, Darrell G. Science Teacher; 43; 2; 30-31 Feb 76
Identifiers: *Piaget (Jean)
Reviews Piaget's stages of development and describes types of educational activities which are appropriate for specific levels of cognitive development. (CP)

Relationship of Formal Reasoning to Achievement, Aptitudes, and Attitudes in Preservice Teachers
Lawson, Anton E.; And Others Journal of Research in Science Teaching; 12; 4; 423-431 Oct 75
Descriptors: *Achievement/ *College Science/ *Intellectual Development/ *Science Education/ Educational Research/ Higher Education/ Learning/ Preservice Education
Identifiers: *Piaget (Jean)/ Research Reports
Showed that Piagetian measures of formal reasoning ability are significantly related to achievement, aptitude, and knowledge of the processes of science in a sample of college freshman and sophomore elementary education majors. (MLH)

Relationships of Science Subject Matter and Developmental Levels of Learners
Lawson, Anton E.; Renner, John W. Journal of Research in Science Teaching; 12; 4; 347-358 Oct 75
Cognitive Development and Processes: Review of the Philosophy of Jean Piaget
Mallon, Elizabeth J. American Biology Teacher; 38; 1; 28-33, 1 Jan 76
Identifiers: Piaget (Jean)

Suggests that science teachers provide the student with materials in abundance that are appropriate to his stage of cognition. (LS)

Teaching the Concept of Speed
Boulanger, F. David School Science and Mathematics; 76; 1; 3-8, 1 Jan 76
Identifiers: *Piaget (Jean)

Presents a series of activities intended to enable teachers to determine if children are ready to be introduced to the concept of speed. Reviews Piaget's theories and the empirical evidence on which the sequence is based. (Author/CP)

Production Deficiency in Children's Moral Judgments
Berson, David J.; Isaacs, Leora Developmental Psychology; 11; 6; 732-737, Nov 75
Descriptors: *Elementary Education/ *Moral Development/ *Cognitive Processes
Identifiers: *Piaget (Jean)

This study was designed to determine why children at the transitional stage of operational development base their moral judgments on the objective consequences of another's act rather than on the other's intentions. The results confirmed the existence of a production deficiency as opposed to a mediational deficiency. (JMB)

Intentionality, Degree of Damage, and Moral Judgments
Berg-Cross, Linda Gail Child Development; 46; 4; 970-974, Dec 75
Descriptors: *Primary Education/ *Moral Development/ *Cognitive Development/ *Research Methodology
Identifiers: *Piaget (Jean)

Piagetian moral judgment problems were simplified and tested on first grade children to ascertain whether the simplification would affect the subjects' perceptions of intentionality and punishment. (JMB)
Toward an Integration of Piaget and Vygotsky: Bilingual Consideration
Bain, Bruce Linguistics; 160: 5-20 Sep 75
Descriptors: *Child Development/ *Bilingualism/ *Psycholinguistics/ *Language Development/ *Bilingual Students / Child Language/ Child Psychology/ Language Fluency/ Speech Habits/ Cognitive Development/ Bilingual Education
Identifiers: Piaget (Jean)/ Vygotsky (Lev)
Two studies which examined the effect of bilingual cultural/educational experience on competence are presented. The language/educational matrix of the child is an influential factor in development. Bilingual children tended to have greater "cognitive plasticity" than monolingual children. A comprehensive theory of human development is sought. (SCC)

From Noise to Order: The Psychological Development of Knowledge and Phenocopy in Biology
Piaget, Jean Urban Review; 8: 3; 200-218 F 75
Descriptors: *Cognitive Development/ *Cognitive Processes/ *Knowledge Level/ *Biological Influences/ *Intellectual Experience/ Developmental Psychology/ Genetics/ Language Development/ Learning Experience/ Sensory Experience
Identifiers: Piaget (Jean)
Shows that one of the most general processes in the development of cognitive structures consists in replacing exogenous knowledge by endogenous reconstructions that reconstitute the same forms but incorporate them into systems whose internal composition is a pre-requisite. Biologically equivalent process is discussed. (Author/AM)

Student Assessment and Evaluation of Their Own Work
Boudry, Elizabeth South Australian Science Teachers Journal; 753: 14-15 Sep 75
Identifiers: Piaget (Jean)

Piaget's Complaint--and Mine: Why Is There No Science of Education?
McKenna, F. Raymond Phi Delta Kappan; 57: 6; 405-409 Feb 76
Descriptors: *Educational Philosophy/ *Educational Theories/ Instruction/ Educational Research/ Sciences/ *Elementary Education
Identifiers: Piaget (Jean)
Children's Cognitive Development—Or How Children Draw "Maps"
Weis, Diane P. Child Welfare; 54; 8; 567-580 Sep-Oct 75
Descriptors: Cognitive Development/ Early Childhood Education/ Perceptual Development/ Stages/ Thought Processes/ Maturation
Identifiers: Piaget (Jean)
Children's cognitive and perceptual development is explained in Piagetian stage theory.

The Relationship of Area Conservation to Area Measurement as Affected by Sequence of Presentation of Piagetian Area Tasks to Boys and Girls in Grades One Through Three
Taloumis, Thalia. Journal for Research in Mathematics Education; 6; 4; 232-242 Nov 75
Descriptors: Conservation (Concept)/ Elementary School Mathematics/ Geometric Concepts/ Measurement/ Research/ Cognitive Development/ Elementary Education/ Learning Theories/ Mathematics Education
Identifiers: Piaget (Jean)/ Research Reports
Area and measurement tasks representative of those used by Piaget were administered to 168 primary students. Data were analyzed to determine effects of sex, age, and task sequence.

Physics Problems and the Process of Self-Regulation
Lawson, Anton E.; Wallman, Warren T. Physics Teacher; 13; 8; 470-75 Nov 75
Descriptors: Critical Thinking/ Physics/ Problem Solving/ Secondary School Science/ College Science/ Higher Education/ Science Education/ Secondary Education
Identifiers: Piaget (Jean)
Cites shortcomings of typical physics homework problems and encourages the assignment of open-ended problems to extend and combine patterns of reasoning. Provides examples of thought-provoking problems.

Plaudits for Piaget—And Some Implications for Teachers
Creager, Joan C., Ed. American Biology Teacher; 37; 8; 463 Nov 75
Descriptors: Behavior/ Cognitive Processes/ Elementary Secondary Education/ Instruction/ Learning Theories/ Behavioral Science Research/ Cognitive Development/ Learning/ Education
Identifiers: Piaget (Jean)
Briefly explains Piaget's theory of intellectual development and its implications for teachers.

Intelectual Development and Elementary Science: Some Implications from Piagetian Research
Howe, Ann; Johnson, Janice Science and Children; 13; 2; 30-31 Oct 75
Descriptors: Concept Formation/ Elementary School Science/ Intellectual Development/ Cognitive Development/ Discovery Learning/ Elementary Education/ Learning Theories/ Learning Processes/ Science Education
Identifiers: Piaget (Jean)
Suggestions are given relating to having plants and animals in the classroom to stimulate development of the understanding of the concept of being alive, a concept not really understood by children under age nine. The research reviewed promotes firsthand experiences to help form concepts of living and nonliving, of identity and causality.

Provocative Opinion: Perspectives on Curricula: Qualitative Analysis Revisited
Brookes, David W.; And Others. Journal of Chemical Education; 52; 9; 581-582 Sep 75
Descriptors: Chemistry/ College Science/ Curriculum/ Opinions/ Student Reaction/ Curriculum Evaluation/ Higher Education/ Science Education/ Student Motivation
Identifiers: Piaget (Jean)
States that college chemistry teachers can best assess a curriculum by observing how much reinforcement it provides to the students. Also urges that curricula should offer opportunities to instruct the concrete operational student in formal operational thought.
Cognitive Functioning in Middle and Old Age Adults. A Review of Research Based on Piaget's Theory
Papalia, D. E.; Bielby, D. Del Vento Human Development; 17; 6; 424-443 74
Descriptors: •Adults/ •Older Adults/ •Age Differences/ •Cognitive Ability/ •Demography
Identifiers: *Piaget (Jean)
A review of literature on Piagetian cognitive functioning generally noted lower levels of functioning for elderly subjects than for comparison groups of adults. Several possible interpretations for these age differences were offered. The effects of certain demographic variables on performance were also reviewed and inconsistent results were noted. (JMB)

Can preschool children form concepts?
Povey, R. M.; Hill, E. Educational Research; 17; 3; 180-92 Jun 75
Descriptors: •Educational Research/ •Preschool Children/ •Concept Formation/ •Measurement Instruments/ •Educational Testing/ •Definitions/ •Tables (Data)/ •Test Reliability
Identifiers: *Piaget (Jean)
Fifty-six children between the ages of two years four months and four years ten months were given tests relating to the acquisition of both 'specific' and 'generic' concepts. (Author)

Piaget and Art Education for the Young Child
Ives, S. William; Ives, Katherine C. Orbit 28; 6; 19-21 Jun 75
Descriptors: •Art Education/ •Art Activities/ •Art Expression/ •Children/ •Elementary Education
Identifiers: *Piaget (Jean)

More on the Problem of Physics Enrollments
Bates, Gary C. Science Teacher; 42; 8; 29-30 Oct 75
Descriptors: •Enrollment/ •Grading/ •Instruction/ •Physics/ •Secondary School Science/ •Abstraction Levels/ •Enrollment Trends/ •Science Education/ •Secondary Education
Identifiers: *Piaget (Jean)
Advocates (1) breaking the lock-step sequencing of courses which places physics at the end of a three-year sequence, (2) adjusting grading procedures to bring them in line with other school courses, and (3) translating abstract concepts into analogies in order to increase physics enrollment.
scholastic grades in science in junior and senior high school students and ability of students to perform formal operational tasks. The findings indicated that at certain grade levels and in certain subject areas, public school science students who demonstrate formal operational logic tend to receive higher grades than non-formal operational students. (MLH)

Group Tests for Distinguishing Formal From Concrete Thinkers
Rowell, J. A.; Hoffmann, P. J. Journal of Research in Science Teaching; 12; 2; 157-164 Apr 75
Identifiers: *Piaget (Jean)/ Australia/ Research Reports
High school students in South Australia were administered in group fashion the pendulum and the chemical color change developmental tasks. The major conclusion of this study is the fact that it is possible to translate into group form, administer, and assess rapidly with considerable reliability Piagetian problem indicators of developmental level. (MLH)

Evaluation of a Child-Structured Science Curriculum Using the Intellectual Models of Piaget and Guilford
Espejo, Mila; And Others Journal of Research in Science Teaching; 12; 2; 147-155 Apr 75
Descriptors: *Curriculum/ *Elementary School Science/ *Learning Theories/ Educational Research/ Elementary Education/ Science Education
Identifiers: *Child Structured Learning in Science/ CSLS/ Research Reports/ Piaget (Jean)/ Guilford
First graders who had been exposed to the Child-Structured Learning in Science curriculum (CSLS) were compared according to their achievement on a cognitive test instrument to two groups who had not had the CSLS treatment. Results revealed that a greater percentage of children in the CSLS treatment group performed on a concrete-operational level, rather than a pre-operational level. (MLH)

This investigation explored the relationship between...
It is argued that the usefulness of specific models of stages of psychological development in informing the teacher's task are open to question. The author notes evidence that uncritical acceptance of Piaget's theories has served to exert a depressing effect on teachers' expectations of the competence of young children. (UT)

Conservation of weight is known to be achieved at a conceptual level at about 9 years of age. Infant behavior seems to indicate that between 6 and 18 months of age they develop a sensorimotor form of conservation. (Author/RC)
SAMPLE RESUME:

ED107680 95 TM004504
Title
The Effects of a Schools Without Failure Program Upon Classroom Interaction Patterns, Pupil Achievement and Teacher, Pupil and Parent Attitudes (Summary Report of First Year of Program).

Author(s)
Masters, James R.; Laverty, Grace E.

Bureau No.: BR-2-C-070
Grant No.: DEG-3-72-0051
Publ. Date: Feb 74
Note: 250 for related documents, see
TM 004 495-503
EDRS Price MF-$0.76 HC-$1.58 PLUS POSTAGE

Descriptors: Academic Achievement/ Academic Failure/ Behavior Change/ Classroom Observation Techniques/ Comparative Analysis/ Decision Making/ Skills/ Discipline/ Elementary Education/ Elementary Schools/ Students/ Humanistic Education/ Inservice Teacher Education/ Parent/ Attitudes/ Program Evaluation/ School Attitudes/ Student Attitudes/ Student Teacher Relationship/ Teacher Attitudes/ Teacher Education/ Tests

Identifiers: Glasser (William)/ New Castle Pennsylvania School District/ Schools Without Failure

This document summarizes an evaluation of William Glasser's Schools Without Failure (SWF) program carried out during the program's first year of operation in the New Castle, Pa. School District. Ten elementary schools were paired on the basis of size, socioeconomic status, and pupils' past achievement. One school of each pair was randomly assigned to begin teacher training and implementation of SWF; the other school of each pair became a control school. Pre- and posttesting was used to assess pupil achievement and attitudes toward self, school, and others and teacher and parent attitudes toward educational issues. Instructional session and SWF school classroom meeting interactions were measured by the Expanded Category System and the Reciprocal Category System. Results indicated that the program had its major impact on teachers. Little difference existed in the achievement of pupils in SWF and control schools. Some positive changes in SWF school primary pupil attitudes toward being in school and toward doing difficult school work were found. Also, positive changes occurred in SWF school intermediate pupil attitudes toward the importance of doing assignments and learning. In SWF schools the number of pupils referred to principals for disciplinary reasons was reduced. (Author/RC)

Johnson, Theodore M.; Attko, Dorothy

Publ. Date: Apr 76 Note: 22p.; Paper presented at the annual meeting of the National Association for Research in Science Teaching (49th, San Francisco, California, April 23-25, 1976); Contains some broken type

EDRS Price MF-$0.83 HC-$1.67 Plus Postage

Descriptors: *Classification/ *Cognitive Development/ *Educational Research/ *Elementary Education/ Elementary School Science/ Learning Theories/ Science Course Improvement Project/ Science Education

Identifiers: *Piaget (Jean)/ Research Reports/ *Science A Process Approach

The purpose of this study was to investigate whether success in the Science-A Process Approach (SAPA) process of classification designed for primary grade children is contingent upon the children's developmental level as defined by Piaget's theory. The investigators sought to determine whether children who had reached the concrete operational stage of intellectual development are more likely to succeed on SAPA exercises requiring multi-classification ability than their primary classmates who are at the defined pre-operational level. Thirty children were assigned to either pre-operational or concrete operational on the basis of two diagnostic instruments and their mental ages were determined with another instrument. Matched pairs, one from each developmental state, were formed with each child having a mental age score within one standard error of one another. These matched pairs were assigned randomly to one of two teacher instructional groups and taught nine sequentially-arranged classification exercises as prescribed by SAPA. A two-factor analysis of variance with developmental level crossed with teachers was used to analyze the scores from the nine individually administered competency measures accompanying the SAPA classification exercises. The concrete operational group performed significantly better than the pre-operational group in three exercises requiring hierarchical classification and in four exercises requiring exhaustive sorting. (Author/WH)

We Like to Make Pictures: Maintaining Creative Expression in Primary Level Pupils. Research Monograph No. 16.

Henderson, Linda Levy; And Others


Publ. Date: Feb 76 Note: 76p.

Available from: P. K. Yonge Laboratory School, 1080 S. W. 11th Street, Gainesville, Florida 32611 (no charge)

Price MF-$0.83 HC-$4.67 Plus Postage

Descriptors: *Art Education/ Art Materials/ *Creative Expression/ Creative Tests/ *Egocentrism/ Elementary Education/ Elementary School Students/ Humanistic Education/ Kindergarten Children/ *Primary Education/ *Teaching Methods/ Thought Processes/ *Verbal Communication/ Verbal Stimuli

The purpose of this study was to examine the effects of verbal experience on children's creative expression and to develop more precise means for interpreting and evaluating children's art. Two questions were of interest: (1) Does the experimental approach described here enable children to resist forces tending to cause stereotyped artistic expression? and (2) Does verbal stimulation help children express artistically concepts of greater complexity? Subjects were eighty-five 5- and 6-year-olds who were divided into an experimental and a control group. Each group had art instruction once a week for a year; the control group was provided with a humanistic discussion-based art program and the experimental group was exposed to an intense verbal experience specifically designed to encourage the child to state his egocentric thought as verbal symbols. Results suggested that children could learn to resist forces tending toward stereotyped art expression. Other results, relative to expression of concepts, were not statistically significant. Included with the study is a detailed discussion relating creative expression to the levels of child development. An appendix describes the program used with the control group, titled the Humanistic Approach to Art Education in the Elementary School. (MS)
Piaget's Theory to the Teaching of Elementary Number.

Kamii, Constance; DeVries, Rheta
National Association for the Education of Young Children, Washington, D.C.
Publ. Date: 76 Note: 52p.

Available from: National Association for the Education of Young Children, 1834 Connecticut Avenue, N.W., Washington, D.C. 20009 (Paper, $2.00, plus $.20 for postage and handling)

Document Not Available from EDRS.

Descriptors: Classroom Games/ Concept Formation/ Conservation (Concept)/ Early Childhood Education/ Mathematical Logic/ Music Activities/ Number Concepts/ Set Theory/ Teaching Techniques

Identifiers: Piaget (Jean)

This paper proposes a method for teaching number applying the conservation theory of Piaget in the classroom. It is suggested that number facts cannot be taught by social transmission, since there is a fundamental distinction between logico-mathematical and social knowledge. Conservation cannot be taught to non-conservers, but there are ways to utilize and guide children's natural interest in number. Workbook exercises, math time and cuisenaire rods are not among these. Recommended teaching techniques include: (1) teach number concepts when they are useful and meaningful to a child, when the child feels a need and interest in number arising out of his daily activities; (2) use language that illustrates logical quantification or the comparison of groups (i.e., "Bring enough straws for all the children"); (3) encourage children to verify an answer among themselves; (4) encourage children to make sets with movable objects; (5) figure out how children are thinking; and (6) encourage children in a general way to put all kinds of objects, events, and actions into relationships. Snack time, distribution of materials, group games, etc. can be utilized in the teaching of elementary number concepts. (MS)

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Doob, Heather Sidor

Publ. Date: 76 Note: 88p.

Available from: Educational Research Service, Inc., 1815 North Fort Myer Drive, Arlington, Virginia 22209 (Paper, $8.00, payment must accompany orders of less than $10.00)

Document Not Available from EDRS.

Descriptors: Cognitive Measurement/ Disadvantaged Youth/ Handicapped Children/ Home Programs/ Intelligence Tests/ Intervention/ Migrant Child Care Centers/ Mobile Classrooms/ Preschool Education/ Preschool Evaluation/ Preschool Programs/ Preschool Tests/ Readiness/ Research

Identifiers: Project Head Start/ Project Home Start

This analysis of current research on prekindergarten programs for the disadvantaged covers more than 40 evaluative studies drawn from public school systems, program developers and federal agencies throughout the U.S. Findings from most of the studies included were made public between 1970 and 1975, although some earlier research is included. A tabular summary of each study is presented, describing program type, evaluation instruments used and results. This is followed by fuller descriptions of the individual studies which comprise the main section of the volume. School and home-based programs, migrant education and mobile classrooms are covered, as well as programs for the learning disabled and mentally retarded. A brief introduction discusses problems in the evaluation of research on prekindergarten education. An extensive bibliography, of both published and unpublished literature, is furnished for in-depth study of specific aspects of preschool education. (BF)
ED127034# PS000766
Early Childhood Education: It's an Art? It's a Science?
Andrews, J. D., Ed.
National Association for the Education of Young Children, Washington, D.C.
Publ. Date: 76 Note: 215p.; Outstanding presentations presented at the Annual Conference of the National Association for the Education of Young Children (Dallas, Texas, November 12-15, 1975).
Available from: National Association for the Education of Young Children, 1834 Connecticut Avenue, N.W., Washington, D.C. 20009 (Paper, $4.00; discount on quantity orders).
Document Not Available from EDRS.
Descriptors: Affective Behavior/ American Indians/ Art/ Biculturalism/ Bilingual Education/ *Child Development/ *Conferences/ Day Care Services/ *Early Childhood Education/ *Educational Change/ Family Involvement/ Mathematics Instruction/ Mental Health Programs/ Parent Education/ Pediatrics Training/ *Preschool Education/ Public School Systems/ Spanish Speaking/ Values
Identifiers: *Child Development Associates/ *Plaget (Jean)/ Project Head Start
This booklet contains selected presentations from the 1975 Annual Conference of the National Association for the Education of Young Children (NAEYC). The collection is addressed to people who are interested in improving the quality of growth-supporting services available to children and their families in the United States. Titles are: 'Head Start: Not a Program but an Evolving Concept'; 'Education: A Family Responsibility' (concerned with American Indian education); 'Seminars in Parenting Preschoolers'; 'Plaget's Affective System--An Appraisal'; 'When Children Talk Back--LISTEN'; 'Preschool and Early Math Instruction: A Developmental Approach'; 'Bilingual/Bicultural Education: Separating Facts from Fiction'; 'Should the Public Schools Control Child Care Services?'; 'Values Examination: A Crucial Issue in Early Childhood Education'; 'Training Pediatricians in Mental Health Aspects of Early Child Care'; 'The Child Development Associate Consortium's Assessment System'; 'Early Childhood Education--It's a Science'; and 'Early Childhood in Art.' (MS)

ED126522 CS02853
Developmental Structures in Fantasy Narratives.
Sutton-Smith, Brian; And Others
Publ. Date: 75 Note: 21p.; Paper presented at the Annual Meeting of the American Psychological Association (83rd, Chicago, August 30-September 3, 1975); Not available in hard copy due to marginal legibility of original document
EDRS Price MF-$0.03 Plus Postage. HC Not Available from EDRS.
Descriptors: *Child Development/ Children/ Early Childhood Evaluation/ Evaluation Methods/ *Fantasy/ *Folk Culture/ Ination/ Mythology/ Social Development/ *Socialization/
Practical Applications of Piagetian Theory to College Reading Instruction.

Chaplin, Miriam T.


EDRS Price MF-$0.83 HC-$1.67 Plus Postage.

Descriptors: *Abstract Reasoning/ *College Instruction/ Concept Formation/ *Content Reading/ Higher Education/ Reading Assignments/ Reading Comprehension/ Reading Improvement/ *Reading Instruction

Identifiers: *Piaget (Jean)/ *Piagetian Theory

It is generally assumed that students possess the ability to apply abstract reasoning to content material in a variety of disciplines when they enter college. Yet many college students have not reached the level of formal operations defined by Jean Piaget; thus they experience difficulty in coping with their work. A solution to this dilemma can be found in the provision of content-reading activities based upon the principles found in Piagetian theory. Suggestions are made for practical applications of aspects of this theory to college reading instruction. (Author/AA)

The Developmental Dependency Between Two Piagetian Spatial Operations.

Guay, Roland B.


EDRS Price MF-$0.83 HC-$1.67 Plus Postage.

Descriptors: *Age Differences/ *Child Development/ *Developmental Tasks/ *Learning Processes/ *Mental Development/ *Neurological Organization/ Research Projects/ Sex Differences/ *Space Orientation

Identifiers: *Piaget (Jean)

Piaget and Inhelder, in The Child's Conception of Space (1956), described the coordination of viewpoints (CV) spatial operation as one of the prerequisites to the development of the rotation and development (RD) spatial operation. This study investigated this developmental dependency notion and also evaluated the effects of age and sex on the development of the CV and RD operations. Two 16-item instruments, one for each operation, were administered individually to 112 children, eight females and eight males at seven age levels, 7 through 13. In contrast to Piaget's and Inhelder's writings, the data revealed that some of the components of an RD operation seem to be among the major prerequisites to the development of the CV operation. Further analysis indicated that the capacity for CV and RD operational functioning appears to be greater in older children than in younger children and in males than in females. (Author)

Poulsen, Marie K., Ed.; And Others
Publ. Date: 76 Note: 407p.
Available from: Mail Order Department, Bookstore, University of Southern California, Los Angeles, California 90007 (Paper, $8.50).

Document Not Available from EDRS.
Descriptors: *Piaget (Jean) / *Weikart (David) / *Program Development/ Program Effectiveness/ Program Evaluation

The Cognitive Curriculum, which serves children from 3 to 6 years of age, was initially supplied in support of a critical period for the acquisition of language. The main focus of this paper is the consideration of Piagetian cognitive developmental theory in general, and the development of the symbolic function in particular as it relates to the problem of second language acquisition. The suggestion is offered that the onset of formal operations may well mark the beginning of the end of a critical period for the acquisition of language. (Author)
ED124926 CS002773
Reading in Mathematics and Cognitive Development.
Bye, M. P.
EDRS Price MF-$0.83 HC-$1.67 Plus Postage.
Descriptors: *Cognitive Development/ *Content Reading/ Educational Research/ Mathematical Concepts/ *Mathematical Vocabulary/ *Reading Ability/ *Reading Comprehension Reading Difficulty/ Reading Instruction/ Reading Skills/ Secondary Education.
Identifiers: Piaget (Jean)
Reading difficulties in mathematics may stem more from the abstract and highly symbolic nature of the subject than from inability to recognize or comprehend the words. A review of Piaget's model of cognitive development suggests that many seemingly simple mathematical terms assume cognitive processes which may not be available to many secondary school students. Preliminary research with tenth-through-twelfth grade students has supported this analysis. In order to overcome the resultant reading problems in mathematics, teachers may provide students with a broader set of experiences, centered on the difficult concepts, in order to generate deeper and more specific meanings for the words causing difficulty. (AX)

ED124416 SE020046
A Representative Series of Piagetian Concrete Operations Tasks: Theoretical Paper No. 57.
Hooper, Frank H.; And Others
Report No.: WDCCL-TP-57
Contract No.: NE-C-00-3-0085
Publ. Date: Sep 75 Note: 100p.; Report from the Project on Children's Learning and Development
EDRS Price MF-$0.83 HC-$4.67 Plus Postage.
Identifiers: *Piaget (Jean)
As an integral step in a comprehensive, four year longitudinal analysis of concept development, a series of logical concept tasks based upon Piagetian theory, and suitable for administration to individuals five years of age or older, are described. The developmental focus was the logical groupements associated with the concrete operations period of middle-childhood. Sixty-four binary choice items were devised: one half of these assessed the operation of set composition while the remainder assessed the inverse operation and reciprocal operation. In addition, complimentary concrete operations tasks, adapted from the procedures of previous normative investigations, were administered. These included dichotomous sorting, somer-all understanding, class inclusion, cardinality, combinatorial reasoning, serial ordering, addition, and correspondence, transitive inference, and conservation of length, weight, and number. A sample of 180 children (equal numbers of kindergarten, and third and sixth grade male and female subjects) received the concept task series. Significant sex differences and order of presentation effects were generally absent. As anticipated, grade-level main effects were significant for the great majority of the tasks. Psychometric analyses were conducted, and it was concluded that the task series was a generally reliable assessment of logical reasoning. (Author/SD)

ED123144 SD009000
Suska, Ronald; Whelan, Maureen
Pub. Date: 75 Note: 128p.
Available from: Paulist Press, 400 Sette Drive, Paramus, New Jersey 07652 ($3.95)
Document Not Available from EDRS.
Descriptors: Child Development/ Egocentrism/ Interpersonal Relationship/ *Moral Development/ Moral Values/ Personal Growth/ Personality Development/ Social Development/ Theories/ *Values
Identifiers: Kohlberg (Lawrence)/ *Piaget (Jean)
This book discusses the moral development theories of Piaget and Kohlberg and presents practical applications of these theories for teachers and parents. The author's purpose in writing the book is to present an exposition of the work of these men to the general reading public. Chapter titles are Introduction to Developmental Theories, presenting Piaget's theory; Kohlberg's Theory of Moral Development; Moral Development from a Christian Perspective; and Practical Applications of Moral Development Theory. Included in the appendices are Piaget's stories for moral development, Kohlberg's moral judgment situation, and a bibliography of books, papers, and journal articles. (Author/RM)

Identifiers: *Piaget (Jean)/ Research Reports/ Shipley Test of Abstract Reasoning

Investigated, within a Piagetian framework, was the degree of abstract preferences exhibited by five different grade levels of science students as they completed eighteen problem solving tasks. Three hundred twenty-nine randomly selected students from five grade levels, ranging from eighth grade to college seniors, were given the Shipley Test of Abstract Reasoning. Groups of concrete and formal operational students were identified as were groups based on sex and grade level. Solutions for each task were ranked according to degree of abstraction represented. Correlations were completed to determine, for each group, the relationship between abstract ability and abstract preferences. Older groups demonstrated greater abstract reasoning ability. No significant differences were found between grade levels with respect to abstract preference scores. This study supported the assumptions that a student's level of reasoning is often below his capacity and that a student's preference toward a specific solution may, in part, be responsible for his below-capacity functioning. (LS)
ED122951 PS006584
Wade, Sandra Byford, Comp.; And Others
ERIC Clearinghouse on Early Childhood Education, Urbana, Ill.
Sponsoring Agency: Children's Bureau (DHEW), Washington, D.C.
Contract No.: ODC-CB-2
Publ. Date: Aug 71 Note: 142p.
EDRS Price MF-$0.83, HC-$7.35 Plus Postage.
Descriptors: Adolescents/ +Annotated Bibliographies/ +Child Development/ +Children/ Classification/ Conservation (Concept)/ Cultural Factors/ Delinquency/ Educational Research/ Exceptional Child Research/ Family Relationship/ Health Services/ Infant Behavior/ Longitudinal Studies/ +Research Methodology/ +Research Projects/ Social Services/ Socioeconomic Influences
Identifiers: Concrete Operations/ +Developmental Stages/ Piaget (Jean)

This research bulletin includes reports of research on children in progress or recently completed from March through August, 1971. Each entry includes information concerning the investigator, purpose, subjects, methods, duration, cooperating groups, and findings (if available). The reports are listed under several topical headings: (1) long-term research, (2) growth and development, (3) special groups of children, (4) the child in the family, (5) socioeconomic and cultural factors, (6) educational factors and services, (7) social services, and (8) health services. In addition to the reports on research, an extensive review paper entitled "Stage Sequence and Correspondence in Piagetian Theory: A Review of the Middle-Childhood Period" is included. The paper discusses the developmental stages of mathematical-logical thinking (i.e., classification, seriation, and conservation) and the longitudinal, cross-sectional, and training studies in this area. (BRT)

ED122554 EC082932
Rodriguez Brown, Flora V.
EDRS Price MF-$0.83, HC-$1.67 Plus Postage.
Descriptors: Bilingualism/ Cognitive Development/ +Ethnic Groups/ Exceptional Child Research/ Infancy/ +Language Development/ Language Patterns/ +Puerto Ricans/ Spanish Speaking
Identifiers: Piaget (Jean)

...were some cognitive aspects of the language development of a 2-year-old Puerto Rican boy who had been on S. mainland 1 month. A neo-Piagetian approach (developed

By K. Witz and J. Easley) was used to study: language behavior as being embedded in more complex, unified systems; productivity of different structures and language patterns; and the increasing complexity of utterances. (LS)

ED122400 EC082858
Meeting Inservice Teacher Education Needs Through Special Projects: Changing Curriculum for Exceptional Children and Special Education for Regular Teachers.
Smith, Richard E.; And Others
Publ. Date: Apr 76 Note: 13p.; Paper presented at the Annual International Convention, The Council for Exceptional Children (54th, Chicago, Illinois, April 4-9, 1976); For related information, see EC 082 857
EDRS Price MF-$0.83, HC-$1.67 Plus Postage.
Descriptors: +Cognitive Development/ +Educational Methods/ Elementary Secondary Education/ Exceptional Child Education/ Handicapped Children/ +Inservice Teacher Education/ Regional Programs/ +Regular Class Placement/ State Programs/ Teachers
Identifiers: Piaget (Jean)/ Project CCEC/ Project SERT/ Texas

Described are a Texas special education regional activities within the 3-year Project CCEC (Changing Curriculum for Exceptional Children) which provides training in the application of the theories of J. Piaget to the education of exceptional children, and with Project SERT (Special Education for Regular Teachers) which trains regular classroom teachers in the competencies needed for mainstreaming handicapped children. Briefly described is the training program format of CCEC including the following modules: "Exceptional Learners - A New Approach," "Developmental Theory - Cognitive Development in Children," "Assessment - Piaget's Clinical Model," "The Classroom - Where the Interaction Is," Described for Project SERT are the following instructional modules: "Comprehensive Special Education," "Formal Appraisal," "Team Planning for Student Program Management," "Informal Assessment," "Organizing Content for Individual Differences," "Materials Selection," "Classroom Management," and "Evaluation of Instruction." (DB)
ED122259 CS002621

Reading Comprehension: Piagetian Assessment and Instruction.

Della, Vicki Ann Holt


EDRS Price MF-$0.83 HC-$2.06 Plus Postage.

Descriptors: Elementary School Curriculum/ Physical Environment/ Primary Education/ Reading Comprehension/ Reading Development/ Reading Failure/ Reading Instruction/ Reading Readiness/ Reading Readiness Tests

Identifiers: *Piaget (Jean)

Many young children are being placed in a formal reading program before they are cognitively ready. Jean Piaget's developmental theory challenges educators to begin viewing learning and cognitive development from the child's point of view. Interpreters of Piaget's theory have addressed themselves to the teaching of math and science concepts, but little information is available for the use of the reading specialist. This presentation summarizes the logical thinking processes which are integral parts of "learning to read." In addition, simple assessment tasks for determining cognitive level, a curriculum model, and physical arrangements which would facilitate thinking processes are outlined. (Author/KS)

ED122458 CS002607

A Comparison of Piagetian Seriation Operations and Sequencing Skills in Learning Disabled and Normal Students.

Kaleta, Edward Joseph

Pub. Date: 75 Note: 91p.; Ed.D. Dissertation, Northern Illinois University

Available from: University Microfilms, P.O. Box 1764, Ann Arbor, Michigan 48106 (Order No. 76-9861, MFilm $7.50, Xerography $15.00)

Document Not Available from EDRS

Descriptors: *Academic Ability/ Doctoral Theses/ *Educational Diagnosis/ Educational Research/ Exceptional Child Research/ *Learning Disabilities/ Primary Education/ *Student Evaluation

Identifiers: *Piaget (Jean)

The purpose of this study was to determine whether performance on Piagetian seriation tasks discriminated better than sequencing tasks between learning disabled and normal six-, seven-, and eight-year-old students. In addition, both techniques were examined with regard to prediction of academic achievement and differentiation between age levels and groups. One hundred and fifty normal and disabled students participated in testing of seriation operations, measured by requiring students to arrange objects along some dimension such as length or size. Sequencing skills were evaluated by the Sequential category of the Wechsler Intelligence Scale for Children--Revised Edition (WISC). Academic skills were measured by subtests of the Metropolitan Achievement Tests. Findings of this study indicated that seriation tasks
Developmental Mathematics and the Young Child: A Piaget Rationale.

Yawkey, Thomas Daniels
Publ. Date: 75 Note: 12p.
EDRS Price MF-$0.83 HC-$1.67 Plus Postage
Identifiers: Developmental Stages/ Piaget (Jean)

This article discusses the challenge mathematics educators face in deciding what and how mathematics is to be taught, and offers some suggestions for teachers of young children based on Piaget's developmental theory of mathematics. Piaget's cognitive stages are briefly described and the concrete stage, which spans the age range included in early childhood education, is singled out for detailed examination. Within this stage, three areas of knowledge are dealt with: (1) physical, (2) spatial-temporal, and (3) logico-mathematical. Physical knowledge is described as deriving from the observations of physical phenomena in the environment. The primary recommendation for fostering this type of knowledge in the classroom is to provide plenty of opportunity for object manipulation. Spatial-temporal knowledge is described as thinking structures reflecting concepts of space and time and topological activities are suggested to foster its development in the classroom. Logico-mathematical knowledge is described as dealing with the study of relationships between and among objects. Activities involving classification, seriation, number concepts, and arithmetic operations are recommended at the classroom level. Finally, four benefits of a developmental view of mathematics are noted. (JMB)

Categorization Styles in Older Children and Adolescents.
Davis, Albert J.
Publ. Date: 75 Note: 19p.; Paper presented at the Biennial Meeting of the Society for Research in Child Development (Denver, Colorado, April 11, 1975); Not available in hard copy due to marginal legibility of original document
EDRS Price MF-$0.83 HC-$1.67 Plus Postage. HC Not Available from EDRS.
Descriptors: Egocentrism/ Interaction Process Analysis/ Observation/ Peer Relationship/ Play/ Preschool Education/ Research/ Social Relations
Identifiers: Piaget (Jean)/ Role Taking

A measure of role-taking skill was administered individually to 12 male and 8 female preschoolers. In addition the children were observed during free play on 30 consecutive school days, and their behaviors were coded according to Parten's social interaction categories. Significant negative relationships found to exist between the role-taking task and the incidence of parallel and onlooker-unoccupied activity. Role-taking skill was positively related to associative play. The results provide correlation support for Piaget's belief that peer interaction leads to a decline of egocentrism in childhood. (Author/UM)
A Pre-Reading Program for Kindergartens Based upon Piagetian and Montessorian Models for Instruction: A Descriptive Study of Its Installation and Implementation.

Authors: Capie, William, Ed.; Fox, Fred W., Ed.

Descriptors: Beginning Reading/ Doctoral Theses/ Inservice Teacher Education/ Kindergarten Children/ *Pre-reading Experience/ Primary Education/ Program Evaluation/ *Reading Programs/ *Reading Readiness/ Reading Research/ *Teaching Methods/ Teaching Models

Identifiers: Montessori (Maria)/ Piaget (Jean)

A kindergarten pre-reading program was designed based upon Piagetian and Montessorian theory. During the pilot study, pre-reading experiences, materials and games were created to encourage individual diagnosis and specific pre-reading skills assessment. The following year the investigator conducted a descriptive study of the program's implementation in two kindergartens of different socioeconomic populations. The program's execution was evaluated by means of behavioral observations of teachers, aides and pupils, formative and summative pre-reading assessments, and the teacher interviews. The results showed similarities and differences in the two teachers' applications. It was concluded that the program was implemented and had effected a higher percentage of individualized kindergarten instruction, but it appeared that the program's capacity to improve pupils' pre-reading skills depended upon several factors. Large-scale testing of the program focusing on teacher, aide and pupil behaviors and the Piagetian and Montessorian Models for Instruction was recommended. (Author/LL)
The results of the study support Piagetian theories of cognitive development.
Experimental Test of the Effects of Internal and External Equilibrium on Spatial Reasoning Development.


Price: MF-$0.83 HC-$2.06 Plus Postage

Study investigated several levels of internal and external disequilibrium and their interaction. Subjects were third graders assigned to three groups according to their level of internal disequilibrium. Internal disequilibrium was based on the amount of "level mixture" tendency to respond positively to events at a several different reasoning levels rated on a map drawing pretest. Within each internal equilibrium group subjects were assigned to low, medium, or high external disequilibrium conditions, in which they trained on maps drawn at their own modal level, one level above, or two levels above. Post testing was done using the map drawing task, two spatial reasoning and a delayed posttest. Findings suggest that: (1) disequilibrium determines primarily the direction of change between existing and presented cognitive modes and therefore an important factor influencing the direction of change; (2) internal disequilibrium relates to instability and therefore primarily affects the amount of change; and (3) conditions conducive to progressive change bias choices between subjects likely to advance in modal and those likely to undergo further elaboration and elaboration of the current level. (Author/GO)

Concept of Structure in Cognitive-Developmental Theory.


Price: MF-$0.83 HC-$1.67 Plus Postage

Theoretical paper discusses (1) the meaning of structure, how the concept of structure is used by logists and how the concept can be defined, and (2) the role of the concept "structure" in cognitive development with reference to Piaget's vision of intellectual growth. The meanings of the term structure in structural psychology, in gestalt psychology and in the structuralist movement are described, and it is emphasized that the concept of structure is a purely logical notion. Adjectives like 'grammatical' serve only to modify rather than define the generic concept. Treating structure in this way implies that structural isomorphism has useful implications for work in new areas. Such analytical uses of structure are contrasted with Piaget's conception of cognitive structure which it is alleged, has been used as grounds for his stages. The possible fallacy of assuming a relation between cognitive structures and cognitive stages in Piagetian theory is explained. Predictions concerning timing and sequence of stages based on this assumption are contrasted with Piaget's findings. (GO)
This paper reports the findings of an investigation into the development of the use and understanding of locative and temporal prepositions in 94 children aged from 18 months to 8 years. The research was carried out as part of the Project "Language Development in Pre-School Children," directed by Gordon Wells, at the University of Bristol, School of Education. The research represents an attempt to integrate the theoretical and methodological orientations of linguistic semantics and Piagetian theory in the study of the acquisition of a limited domain of word-meanings. Detailed analyses are presented of particular strategies utilized by children at various ages and stages of development in the comprehension and production of spatial and temporal relational terms. It is suggested that such strategies result from specific interactions between the developing systems of language, cognition and perception, the overall forms of which are determined by the socio-cultural context of the use of the relational terms. In conclusion, partial critiques are presented of one-sided applications of semantic features theories and Piagetian theory in previous explanations of the acquisition of spatial and temporal relational terms. (Author)
Plagiar for Regular and Special Physical Educators and Recreators.

Winnick, Joseph P., Ed.; French, Ronald W., Ed.
State Univ. of New York, Brockport. Coll. at Brockport.
Publ. Date: 75 Note: 66p.; Papers selected from the National Symposium on Piaget for Regular and Special Physical Educators and Recreators (Brockport, New York, October 7-9, 1974)
Available from: The Bookstore, State University College, Brockport, New York 14420
EDRS Price MF-$0.83 HC-$4.67 Plus Postage
Descriptors: Adapted Physical Education/ Child Development/ Conference Reports/ Exceptional Child Education/ General Education/ Gifted Children/ Motor Development/ Physical Education/ Play/ Recreation/ Teaching Methods/ Theories
Identifiers: Piaget (Jean)
Included are the following papers: "Piaget: Overview and Perspective" (H. Humm); "Piaget's Theory of Memory Development: Implications for Motor Skill Learning" (L. Ziechnakowski); "Piaget Theory and Its Implication to Teaching Styles, Techniques and Strategies" (R. Mueller); "Piaget and Play" (S. Suttle); "Piaget-Based Early Developmental Experiences in Physical Recreation and Physical Education" (J. Winnick); "Application of Piagetian Concepts to Physical Recreation and Physical Education" (R. French et al); "Piaget, Self-Concept and Physical Education" (J. Hayes); "On the Applicability of Piagetian Theory to Motor and Affective Dysfunction" (G. Patrick); and "Piaget and Special Physical Education" (R. Begel). (CL)

Callahan, Leroy G.; Glennon, Vincent J.
Association for Supervision and Curriculum Development, Washington, D.C.
Publ. Date: 75 Note: 210p.; For the Third Edition, see ED 026 123
Available from: Association for Supervision and Curriculum Development, Suite 1100, 1701 K Street, N.W., Washington, D.C. 20006 (Stock Number 611-75056, $5.00; discounts on quantity orders)
EDRS Price MF-$0.76 Plus Postage. HC Not Available from EDRS.
Identifiers: Piaget (Jean)

Four sections of this monograph review current research related to mathematics education from the points of view of studies concerning (1) the curriculum, (2) the child, (3) the learning environment, and (4) teaching methods. Topics addressed in part one include the sources of mathematics curricula, the curricular validity of "new math" curricula, the curricular implications and applicability of Piagetian theory, and several specific projects related to mathematics curriculum and assessment. Part two addresses cultural and sex differences in mathematics achievement, effects of disabilities (learning disabilities, deafness, blindness, mental retardation) and personality factors on mathematics learning, and attitudes toward mathematics. Individualization of instruction, grouping, class size, and use of mathematics laboratories are discussed in part three, together with various aspects of pre-service and in-service teacher education. Part four is devoted to discussion of a variety of instructional approaches and practices (discovery, drill, use of physical models, homework, hand-held calculators, computer assisted instruction), and to the selection of algorithms. (SD)
behavior in children 1 1/2 - 2 years of age are described and analyzed. Striking changes in pretend behavior are shown to occur during the second year of life. Pretend play is treated as a paradigm for understanding how children represent objects and relations. It is argued that the child can pretend that one thing is another when he can represent objects (or object activities) as prototypes and when he can use the core properties of prototypes to transform representations of immediate physical stimulation. The analysis suggests a three-phase sequence in the development of pretending based on a progression from the analogue mapping of representations to the selection and, eventually, the production of the core properties of object representations. (Author/ED)

ED116776 PS008195
Light, Donald W., Jr.
Sponsoring Agency: National Center for Educational Research
Bureau No.: 1-0529
Grant No.: DGO-2-71-0529
Publ. Date: Nov 73 Note: 119p.; Not available in hard copy due to marginal legibility of original document
EDRS, Price MF-$0.76 Plus Postage. HC Not Available from EDRS.
Identifiers: Erikson (Erik H.)/ Freud (Sigmund)/ Piaget (Jean)/ Stage Theories

Similarities and differences between Erik H. Erikson's and Jean Piaget's theories concerning social development and the process of identification are explored in this report. The first part of the report is a synthesis of Erikson's concept of the developmental processes of personal growth and societal development. The second part integrates Piaget's theory of affective development and Erikson's theory of childhood psychosocial development. The third part compares major theories of identity formation, including: (1) the psychoanalytic conceptions of ego, self, and identity, (2) the theories of identity formation advanced by B. F. Skinner, Carl Rogers, and George H. Meza, and (3) the different conceptions of the relationship between self and society in these theories of identity. A reformulation of the concept of identity is suggested. (BRT)
The performance of 75 congenitally blind and 75 sighted subjects (6- to 18-years-old) was compared on 32 Piagetian measures of reasoning, moral judgment, and moral conduct. Among major findings were that blind Ss did not achieve the reasoning processes characteristic of concrete operational thought with the facility or completion that would be expected for persons of their age and IQ (an average delay of 8 years noted) and that few significant differences occurred between the blind and sighted groups on measures of moral judgment and moral conduct. Deficiencies found in the reasoning of blind Ss indicated a need to provide these persons with opportunities to interact and reason in ongoing situations. (Author/LS)
The purpose of this study was to use an information theoretic memory model to quantitatively investigate classification sorting and recall behaviors of various groups of students. The model provided theorems for the determination of information theoretic measures from which inferences concerning mental processing were made. The basic procedure involved a comparison of several sets of contrasting groups of students formed by the use of recognized psychological phenomena. Students were separated into groups of concrete and formal operational as defined by Piaget and further subdivided on the basis of sex. Data revealed that concrete operational children benefited most from conceptualization while formal operational students benefited most from a self-designed sorting task. The importance of this study may not lie as much in the originality of the findings as in the quantitative methods used. (Author/CP)

ED115451# SE017680
An Information Theoretic Analysis of Classification Sorting and Cognition by Ninth Grade Children within a Piagetian Setting.

Dunlop, David Livingston
Publ. Date: 73 Note: 265p.; Ph.D. Dissertation, University of Pittsburgh

Available from: University Microfilms, 300 North Zeeb Road, Ann Arbor, Michigan 48106 (Order No. 74-2081, MF-$7.50, Xerography-$15.00)

Document Not Available from EDRS


Identifiers: Piaget (Jean)/ Research Reports

The purpose of this study was to use an information theoretic memory model to quantitatively investigate classification sorting and recall behaviors of various groups of students. The model provided theorems for the determination of information theoretic measures from which inferences concerning mental processing were made. The basic procedure involved a comparison of several sets of contrasting groups of students formed by the use of recognized psychological phenomena. Students were separated into groups of concrete and formal operational as defined by Piaget and further subdivided on the basis of sex. Data revealed that concrete operational children benefited most from conceptualization while formal operational students benefited most from a self-designed sorting task. The importance of this study may not lie as much in the originality of the findings as in the quantitative methods used. (Author/CP)

ED115449# SE017659
The Effects of Instruction in the Concept of Speed and Proportions on Children in the Third Grade.

Boulangier, Ferdinand David
Publ. Date: 73 Note: 155p.; Ph.D. Dissertation, University of Washington

Available from: University Microfilms, 300 North Zeeb Road, Ann Arbor, Michigan 48106 (Order No. 74-2243, MF-$7.50, Xerography-$15.00)

Document Not Available from EDRS


Identifiers: Piaget (Jean)/ Research Reports

The purpose of this study was to investigate the effects of systematic instruction in the concept of speed and simple proportions on the performance of concrete operational children in the third grade. A screening test was administered select a population of children who could perform simple proportion and who were concrete operational in the conception of time, space, and speed. From the group attained, 51 were randomly selected and randomly assigned to 2 instructional treatment groups and a control group. The training and comparison treatment consisted of problems, questions, and demonstrations interwoven with training in the concept of speed and simple proportions. The comparison only treatment dealt only with problems, questions, and demonstrations. Both control and experimental groups were individually measured on retention, transfer, and transfer to two Piagetian tasks immediately after training and three weeks later. Among the findings were: the training and comparison treatment group scored significantly higher than the control group on immediate retention, but this difference fell below the significant level on the delayed retention measure. (Author/CP)
ED14289 SE019657
Lessons Designed to Teach Fifth Grade Students the Concept Tree at the Formal Level of Attainment. Practical Paper No. 15.
Feldman, Katherine V.; And Others
Report No.: WRCCL-PP-15
Contract No.: NE-C-00-3-0055
Publ. Date: Jun 75 Note: 73p.; Report from the Project on Conditions of School Learning and Instructional Strategies, ED14182 P5008139
Egocentrism and Peer Interaction: Testing Piaget's Hypothesis.
French, Doran; And Others
Publ. Date: 75 Note: 12p.; Filmed from best available copy
EDRS Price MF-$0.76 HC-$1.58 Plus Postage
The autoinstructional activities included in this booklet were designed to be used to teach fifth-grade students the science concept "tree" at the formal level of attainment. The instructional strategies used in the lessons had been shown in previous studies to facilitate concept learning when used singly or in combination with one another. The strategies used are: (1) use of a definition, (2) empirical selection of concept examples through an instance probability analysis, (3) use of rational sets of examples and nonexamples, (4) pairing of examples with nonexamples, (5) emphasis of relevant attributes, (6) teaching of strategy, (7) immediate feedback, and (8) active involvement by the student. Instruction was divided into two parts, each part being a lesson. The first lesson presents the defining attributes and teaches children labels for defining attributes. The second lesson presents the definition of "trees," presents a rational set of examples and nonexamples, and teaches a strategy for evaluating whether or not an instance is an example of the concept. Active involvement and immediate feedback are provided for the student in both lessons. (Author/CP)

ED14195 P5008154
Prior Knowledge of Rules in Concept Learning.
Brainard, Charles J.
EDRS Price MF-$0.76 HC-$1.58 Plus Postage
Identifiers: *Cognitive Development/ Compensation (Concept)/ *Concept Formation/ *Conservation (Concept)/ *Early Childhood Education/ *Learning Processes/ Retention/ Theoretical Criticism/ Training Techniques/ Transfer of Training
The paper briefly reviews the literature concerning the Piaget-Bruner debate over the roles of identity and reversibility rules in conservation acquisition, and describes an experiment designed to determine whether one group of rules is more closely related to conservation than the other. A group of children, aged 4-6 years, received tests of inversion, reciprocity, qualitative and quantitative identity, and conservation of liquid, weight, and length. A total of 75 of these children, who showed no evidence of conservation but exhibited considerable variability on the four rule tests, were selected for the experiment. Of these, 50 experimental subjects were trained to acquire liquid quantity conservation via an elementary feedback procedure. The 25 control subjects received the same liquid quantity problems during training trials, but feedback was omitted. In a posttest one week later, subjects were readministered the liquid, weight and length conservation tasks. Performance of the trained subjects in all areas was far superior to their controls. It was determined that prior knowledge of Piaget’s inversion rule was an excellent predictor of conservation learning, and that neither Bruner’s nor Piaget’s analyses of conservation appears to be entirely correct. (ED)
ED113874 ED008108
Comparison of the Theoretical Constructs of Piaget and Kephart.
Wadsworth, Barry
EDRS Price MF-$0.76 HC-$1.58 Plus Postage
Identifiers: *Kephart (Newell)/ *Piaget (Jean)
Outlined are similarities between the developmental system of J. Piaget and the system of N. Kephart. Considered are views of the two men in areas such as organization and adaptation, early development, and mental structures. The author concludes that for learning disabled children, Kephart's conceptions lead more clearly to educational programs and specific instruction than Piaget's. (LS)

ED113140 ED018780
Rowe, Mary Budd, Ed.; DeTure, Linda, Ed.
ERIC Information Analysis Center for Science, Mathematics, and Environmental Education, Columbus, Ohio.
Publ. Date: 75 Note: 93p.
Available from: John Wiley and Sons, Inc., One Wiley Drive, Somerset, New Jersey 08873 ($4.95)
EDRS Price MF-$0.76 HC Not Available from EDRS.
Descriptors: Curriculum/ *Educational Research/ Handicapped/ Instruction/ Learning Theories/ Physics/ Preservice Education/ Research Reviews (Publications)/ *Science Education/ Surveys/ *Teacher Education/ Testing
Identifiers: *Piaget (Jean)
The editors of this review have focused on four purposes: (1) to portray the state of knowledge in science education, (2) to describe any existing trends, (3) to identify areas which need to be researched, and (4) to provide tentative answers to pertinent problems, if any seem to emerge from the research. Research studies reviewed have been divided into the main categories of learning; education; characteristics and behaviors of teachers; values and philosophy; and surveys. Also, an index and bibliography are provided in order that the reader may make easy reference to the 307 research studies listed. (CP)

ED113046 ED009108
Preoperational Graphic Representation: From Intellectual Realism to Visual Realism in Draw a House-Tree Task.
Kalyan-Masih, Violet
EDRS Price MF-$0.76 HC-$1.58 Plus Postage
Identifiers: Decentering/ Developmental Stages/ *Piaget (Jean)
In a pilot study of children's drawings of "a house with a tree behind it," Piagetian sequence (scribbling, tortuous realism, failed realism, intellectual realism, and visual realism) was tentatively supported. Children's strategies in decentering from intellectual to visual realism were noted. The study reported in this paper was undertaken to investigate: (1) the developmental sequence in House-Tree task; (2) its relationship with Stanford Binet, Peabody, and four Piagetian measures; and (3) synchronous development among these measures. Data from 49 subjects aged 3 1/2 to 6 1/2 years were used for analysis. Developmental sequence for House-Tree task and relationship among these measures was confirmed. Some evidence for synchronous development at a younger age level was found. The House-Tree task, because of its simplicity, ease, and economy in administering and scoring, has potential for assessing the cognitive development of young children. (Author/ED)
This investigation examined strategic and semantic aspects of the answers given by preschool children to class inclusion problems. The Piagetian logical formalism for class inclusion was contrasted with a new, problem processing formalism in three experiments. In experiment 1, it was found that 48 nursery school subjects nearly always performed better on percept inclusion than on concept inclusion. This result supports problem processing formalism and contradicts logical formalism. Experiment 2 used 11 of the same subjects to investigate three questions: whether the children's counting strategies would produce the same response patterns as in experiment 1, whether the answer "the same number" (essential to any correct coextensional comparison) was available in their response repertoire, and whether expected responses to coextensional problems in concept and in percept sets would be obtained. Results offered consistent experimental support for SCAN and MATCH components of the problem processing model. Experiment 3 utilized 48 new subjects and a design which crossed four categories with four problem types, to clarify the reasons for the differences observed between the difficulty of percept and concept problems. Interpretations of the results are discussed in terms of the children's semantic strategies and counting strategies. The general conclusion offered is that problem-solving strategies, not logical deficits, are the source of young children's inclusion of errors. (GD)

Falmagne, Rachel Doffe

Publ. Date: Apr 75 Note: 15p.; Paper presented at the Biennial Meeting of the Society for Research in Child Development (Denver, Colorado, April 10-13, 1975) EDRS Price MF-$0.76 HC-$1.58 Plus Postage

Descriptors: *Abstract/ Reasoning/ Adolescence/ *Childhood/ *Cognitive Processes/ Developmental Tasks/ Linguistic Competence/ *Logical Thinking/ *State of the Art Reviews

Identifiers: *Piaget (Jean)

This theoretical paper reevaluates the Piagetian tradition in the study of propositional reasoning. Piaget's assertion that children's logic, prior to the stage of formal operations, is structurally adequate for dealing with objects and their properties, but is inadequate for fully competent propositional reasoning, is challenged on three grounds: (1) the data base from which Piaget's theory about formal reasoning has been developed comes from a scientific task domain with its specific task requirement and associated psychological factors; (2) the theory cannot, a priori, be extended to other propositional task domains, and empirical support for generalizing it has not been provided; (3) findings from adult studies show that adults tend to rely on empirical (rather than propositional) reason whenever it is possible to do so. Therefore, there are interesting similarities between child and adult reasoning which the Piagetian outlook has de-emphasized. A linguistically oriented view on the development of propositional reasoning is proposed, based on the idea that acquiring propositional competence is an achievement of the same nature as acquiring competence in grammar or syntax. The theoretical and methodological consequences of this view are examined. (GO)
transitional "readiness" was found in ten-, eleven-, and some twelve-year-olds indicating that the full concept requires the Piagetian formal operational stage before behavioral recognition can be made. Factors such as ethnic background, type of school community, sex or basic interest seem not to be significant in the concept development. (Author/PS)

ED111515 PS006054
Problem Solving and Concept Formation: An Annotated Bibliography.
Stern, Carolyn
Southwest Regional Laboratory for Educational Research and Development, Los Alamitos, Calif.
Report No.: EOE-4117-SWRL-SR-6
Publ. Date: June 68 Note: 120p.
EDRS Price MF-$0.50 HC-$5.70 Plus Postage
Identifiers: *Piaget (Jean)
This bibliography, made up of approximately 350 entries concerned with many aspects of problem solving and concept formation in young children, has been designed for use by people primarily involved in experimental research in these areas of child development. Entries include experimental journal articles, conference papers, unpublished research papers, books (and specific book chapters), dissertations and literature reviews, which date from 1955 through 1968, and several earlier articles by Piaget. The wide variety of specific topics include: conservation studies and experimental research dealing with Piaget's theories: intelligence, achievement, memory and learning processes; socialization; learning theories; disadvantaged children and minority group differences; handicapped children; conceptual styles; verbal learning; cognitive development; discrimination learning; personality; research methodology; etc. (ED)
This paper reviews studies in which scores on Piagetian tests of logical thought were correlated with IQ, mental age (MA) and chronological age (CA), and examines the possible effects of the size of the age range and mean age of subjects on these correlations. The data included 44 groups of subjects obtained from 36 studies in which Piagetian and intelligence tests were administered to intellectually normal children (mean IQ=109) from the preoperational through formal periods (40 to 216 months of age). Results revealed that averaged correlations between Piagetian tests and MA were consistently higher than the corresponding correlations for IQ and CA. The mean age of the subjects and no effect on the size of correlations between Piagetian tests and IQ, MA and CA, but the size of the age range was found to significantly affect the IQ and CA correlations (Piagetian tests/CA correlations were higher within a narrow age range; Piagetian tests/MA correlations were higher within a wide age range). It was concluded that MA scores yield higher and more consistent correlations with Piagetian tests than either IQ or CA scores, and are not affected by the age range or mean age of the subjects sampled. (Authors/ED)
in such skill areas as language, reading, and math. The children are said to be functioning in Piaget's preconceptual and intuitive stages. Emphasized is the need for an approach which includes raised social and academic expectations along with instruction in independence and self-direction. An appendix lists suggested Montessori materials and activities for handicapped children. (CL)

ED110338* CS02088

Relationship Between Reading Achievement and Piaget's Conservation Tasks for Beginning Second Grade Students.

Stanfill, James Wesley

Publ. Date: 75 Note: 113p.; Ed.D. Dissertation, University of Southern California

Available from: University Microfilms, P.O. Box 1764, Ann Arbor, Michigan 48106 (Order No. 75-15,581. MFilm-$5.00, Microfiche-$1.00)

Document Not Available from EDRS

Descriptors: *Beginning Reading/ *Cognitive Development/ *Conservation (Concept)/ Doctoral Theses/ Grade 2/ Primary Education/ Reading Achievement/ Reading Processes/ Reading Readiness/ Reading Research

Identifiers: Piaget (Jean)

In order to determine if there is a relationship between reading achievement and the ability to conserve as measured by replications of Piagetian conservation tasks, 160 beginning second-grade students were identified as achievers or low achievers according to reading and intelligence test scores, and their performance on the Piagetian tasks was correlated with their achievement scores, years of formal school, sex, chronological age, and socioeconomic status. A significant relationship between the ability to conserve and reading achievement was found for the achiever group (N = 121) and the combined sample (N = 160). A significant relationship was found between the ability to conserve and socioeconomic status and between the ability to conserve and sex for both the achiever group and combined sample. The ability to conserve was found to be significantly related to socioeconomic status for the low-achiever group. The following were among the conclusions drawn: a conservation task seems to be an appropriate measure to use in diagnosing a student's readiness to read if used in conjunction with other data, and it would appear that the formal teaching of reading should not precede the child's ability to conserve. (Author/MMK)
Description of the instructional program was obtained through participant observation, photography, and audio tape analyses of teaching skills which facilitated children's social and cognitive development. Participant observers concentrated on interaction patterns among children and between children and teachers. The description reveals that the predominant instructional skills were telling, explaining, clarifying, and questioning (these terms are defined). Student outcomes were assessed using the Denver Developmental Screening Test and the Cognitive, Speech and Language sections of the Evanston Screening Packet. Prekindergarten children did significantly better on two of the 32 tasks of the DOST; while children without prekindergarten did significantly better on four of them. It was felt that the program successfully modified and reduced deficiencies that may have existed in the experimental children. Recommendations are made. Appendixes (nearly one-half of the report) include a rationale for descriptions of the instructional program and copies of the screening instruments used. (Authors/ED)

Bingham-Newman, A. M.; And Others
Wisconsin Univ., Madison. Div. of Early Childhood Education.

Publ. Date: 30 Aug 74 Note: 132p.; Summary of dissertations by Ann Bingham-Newman and Ruth Saunders, University of Wisconsin; for the interim report, see LD 078 912

EDRS Price MF-$0.76 HC-$6.97 PLUS POSTAGE


Identifiers: *Piaget (Jean)

This study attempted to develop, implement, and evaluate an experimental preschool education program based on Piaget's theory of cognitive development. A further goal was to examine Piaget's theoretical assumptions and postulated cognitive developmental trends for a 2-year period of the preoperational substage. A total of 48 3- to 5-year-olds participated in the project for the full 2-year period. Half the children attended the experimental Piagetian preschool and half attended a conventional preschool program. Evaluation measures used were the Peabody Picture Vocabulary Test, the RAVEN Coloured Progressive Matrices, and eight representative Piagetian tasks on seriation, classification, transitivity, conservation, measurement, and class inclusion. Normative longitudinal and cross-sectional analyses were used to examine data within the general area of the acquisition of cognitive abilities: within-stage intraindividual performance correspondences, developmental sequences in task performances, experimental/control group comparisons, and sex differences in task performance. The results suggested that although Piagetian theory provided a very workable and stimulating foundation for a preschool curriculum, program effects in this research were overshadowed by the large degree of individual variation in the rate and sequence of cognitive developmental acquisitions in the preoperational stage. (WMB)
DeVries, Rheta; Kamii, Constance
ERIC Clearinghouse on Early Childhood Education, Urbana, Ill.
Publ. Date: Aug 75 Note: 31p.
EDRS Price MF-$0.76 HC-$1.95 PLUS POSTAGE
Descriptors: *Children's Games/ Cognitive Development/
*Educational Theories/ *Egocentrism/ Emotional Development/
Group Activities/ Learning Motivation/ Logical Thinking/
*Mental Development/ Moral Development/ *Preschool Education/
*Social Development
Identifiers: *Piaget (Jean)

A Piagetian perspective is used to build a rationale to explain why group games are good for young children. Three major areas in which group games might foster children's development are discussed. In the socioemotional area, the rationale is that moral development, personality development, and autonomy are enhanced by the social context of peer cooperation which group games necessitate. In the cognitive area, group games are said to contribute to the development of logical thinking by forcing children to come out of their egocentricity and to coordinate different points of view. In the area of motivation, the rationale is that children spontaneously engage in group games so that such games must be naturally motivated and can therefore be powerful classroom tools. Several competitive and noncompetitive games are discussed specifically and five criteria for good games are suggested. (JMS)
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