David Klahr

List of Publications by Year
in descending order

64 papers	6,165 citations	117453 34 h-index	168136 53 g-index
67 all docs	67 docs citations	67 times ranked	2715 citing authors

#	Article	IF	Citations
1	Dual Space Search During Scientific Reasoning. Cognitive Science, 1988, 12, 1-48.	0.8	786
2	The Equivalence of Learning Paths in Early Science Instruction: Effects of Direct Instruction and Discovery Learning. Psychological Science, 2004, 15, 661-667.	1.8	622
3	All Other Things Being Equal: Acquisition and Transfer of the Control of Variables Strategy. Child Development, 1999, 70, 1098-1120.	1.7	586
4	Strategies of Knowledge Acquisition. Monographs of the Society for Research in Child Development, 1995, 60, i.	6.8	275
5	Studies of scientific discovery: Complementary approaches and convergent findings.. Psychological Bulletin, 1999, 125, 524-543.	5.5	265
6	Hands on what? The relative effectiveness of physical versus virtual materials in an engineering design project by middle school children. Journal of Research in Science Teaching, 2007, 44, 183-203.	2.0	249
7	Span and rate of apprehension in children and adults. Journal of Experimental Child Psychology, 1975, 19, 434-439.	0.7	243
8	Formal assessment of problem-solving and planning processes in preschool children. Cognitive Psychology, 1981, 13, 113-148.	0.9	219
9	Childrenâ€™s scientific curiosity: In search of an operational definition of an elusive concept. Developmental Review, 2012, 32, 125-160.	2.6	213
10	Guided Play. Current Directions in Psychological Science, 2016, 25, 177-182.	2.8	207
11	Cognitive objectives in a LOGO debugging curriculum: Instruction, learning, and transfer. Cognitive Psychology, 1988, 20, 362-404.	0.9	183
12	A monte carlo investigation of the statistical significance of Kruskal's nonmetric scaling procedure. Psychometrika, 1969, 34, 319-330.	1.2	180
13	Point and Click or Grab and Heft: Comparing the Influence of Physical and Virtual Instructional Materials on Elementary School Students' Ability to Design Experiments. Cognition and Instruction, 2003, 21, 149-173.	1.9	178
14	Instructional Complexity and the Science to Constrain It. Science, 2013, 342, 935-937.	6.0	136
15	The role of quantification operators in the development of conservation of quantity. Cognitive Psychology, 1973, 4, 301-327.	0.9	119
16	Educational Interventions to Advance Childrenâ€™s Scientific Thinking. Science, 2011, 333, 971-975.	6.0	98
17	Knowing about Guessing and Guessing about Knowing: Preschoolers' Understanding of Indeterminacy. Child Development, 1996, 67, 689-716.	1.7	79
18	Bridging Research and Practice: A Cognitively Based Classroom Intervention for Teaching Experimentation Skills to Elementary School Children. Cognition and Instruction, 2000, 18, 423-459.	1.9	79

#	Article	IF	Citations
19	Developing elementary science skills: Instructional effectiveness and path independence. Cognitive Development, 2008, 23, 488-511.	0.7	74
20	Knowing about Guessing and Guessing about Knowing: Preschoolers' Understanding of Indeterminacy. Child Development, 1996, 67, 689.	1.7	71
21	Assessing Children's Logo Debugging Skills with a Formal Model. Journal of Educational Computing Research, 1986, 2, 487-525.	3.6	69
22	Error Matters: An Initial Exploration of Elementary School Children's Understanding of Experimental Error. Journal of Cognition and Development, 2003, 4, 67-98.	0.6	69
23	Cognitive Research and Elementary Science Instruction: From the Laboratory, to the Classroom, and Back. Journal of Science Education and Technology, 2005, 14, 217-238.	2.4	68
24	The Interaction of Domain-Specific Knowledge and Domain-General Discovery Strategies: A Study with Sinking Objects. Child Development, 1996, 67, 2709.	1.7	67
25	The Interaction of Domain-Specific Knowledge and Domain-General Discovery Strategies: A Study with Sinking Objects. Child Development, 1996, 67, 2709-2727.	1.7	67
26	Sequential effects of high and low instructional guidance on childrenâ€™s acquisition of experimentation skills: Is it all in the timing?. Instructional Science, 2013, 41, 621-634.	1.1	67
27	Psychologyâ€™s role in mathematics and science education.. American Psychologist, 2009, 64, 538-550.	3.8	66
28	An information processing analysis of some piagetian experimental tasks. Cognitive Psychology, 1970, 1, 358-387.	0.9	64
29	Solving Inductive Reasoning Problems in Mathematics: Not-so-Trivial Pursuit. Cognitive Science, 2000, 24, 249-298.	0.8	55
30	Instructionless learning about a complex device: the paradigm and observations. International Journal of Man-Machine Studies, 1986, 25, 153-189.	0.7	53
31	Overcoming the Positive-Capture Strategy in Young Children: Learning About Indeterminacy. Child Development, 2003, 74, 1275-1296.	1.7	52
32	The Representation of Children's Knowledge. Advances in Child Development and Behavior, 1978, 12, 61-116.	0.7	51
33	Finding Oneâ€™s Place in Transfer Space. Child Development Perspectives, 2011, 5, 196-204.	2.1	48
34	Dual space search during scientific reasoning. Cognitive Science, 1988, 12, 1-48.	0.8	48
35	THE DEVELOPMENT OF SERIAL COMPLETION STRATEGIES: AN INFORMATION PROCESSING ANALYSIS. British Journal of Psychology, 1970, 61, 243-257.	1.2	43
36	Solving Problems with Ambiguous Subgoal Ordering: Preschoolers' Performance. Child Development, 1985, 56, 940.	1.7	35

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37	What Have Psychologists (And Others) Discovered About the Process of Scientific Discovery?. Current Directions in Psychological Science, 2001, 10, 75-79.	2.8	35
38	Invention Versus Direct Instruction: For Some Content, Itâ€™s a Tie. Journal of Science Education and Technology, 2017, 26, 582-596.	2.4	35
39	Decision Making in a Complex Environment: The use of Similarity Judgements to Predict Preferences. Management Science, 1969, 15, 595-618.	2.4	31
40	When to trust the data: Further investigations of system error in a scientific reasoning task. Memory and Cognition, 1996, 24, 655-668.	0.9	27
41	QUANTIFICATION PROCESSES. , 1973, , 3-34.		24
42	A PRODUCTION SYSTEM FOR COUNTING, SUBITIZING AND ADDING11This paper presents a detailed description of production systems; there are several background papers that are required to fully understand the methodology and the particular substantive problems to which it is applied. For the general theoretical orientation, see Newell and Simon (1972); for the details of production systems and the rules of a production system interpreter, see Newell (1972). For the problems of cognitive development involving quanti. , 1973, , 527-546.		22
43	Remote Transfer of Scientific-Reasoning and Problem-Solving Strategies in Children. Advances in Child Development and Behavior, 2008, 36, 419-470.	0.7	20
44	What do we mean? On the importance of not abandoning scientific rigor when talking about science education. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14075-14080.	3.3	20
45	Detecting, Classifying, and Remediating. , 2012, , 137-180.		20
46	Data-Driven Belief Revision in Children and Adults. Journal of Cognition and Development, 2017, 18, 87-109.	0.6	17
47	Investigating the mechanisms of learning from a constrained preparation for future learning activity. Instructional Science, 2013, 41, 191-216.	1.1	16
48	SCIENTIFIC THINKING ABOUT SCIENTIFIC THINKING. Monographs of the Society for Research in Child Development, 1995, 60, 137-151.	6.8	15
49	Early Science Instruction: Addressing Fundamental Issues. Psychological Science, 2005, 16, 871-873.	1.8	12
50	Nonmonotone Assessment of Monotone Development: An Information Processing Analysis. , 1982, , 63-86.		10
51	Error Matters: An Initial Exploration of Elementary School Children's Understanding of Experimental Error. , 0, .		10
52	Questions â€“ And Some Answers â€“ About Young Childrenâ€™s Questions. Journal of Cognition and Development, 2020, 21, 729-753.	0.6	9
53	Predictors of Transfer of Experimental Design Skills in Elementary and Middle School Children. Lecture Notes in Computer Science, 2010, , 198-208.	1.0	9
54	Improving Studentsâ€™ Scientific Thinking. , 2019, , 67-99.		6

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55	Effects of terminological concreteness on middle-school studentsâ€™ learning of experimental design.. Journal of Educational Psychology, 2016, 108, 547-562.	2.1	4
56	Virtual vs. Physical Materials in Early Science Instruction: Transitioning to an Autonomous Tutor for Experimental Design. , 2008, , 163-172.		4
57	Comparison of a Computer-Based to Hands-On Lesson in Experimental Design. Lecture Notes in Computer Science, 2010, , 408-410.	1.0	3
58	Childrenâ€™s developing ability to create external representations: Separating what information is included from how the information is represented. , 2019, , 1044-1044.		3
59	Commentary: new kids on the connectionist modeling block. Developmental Science, 2004, 7, 165-166.	1.3	2
60	A Computational Account of Children's Learning About Number Conservation. , 1991, , 423-462.		2
61	Rages over stages. Behavioral and Brain Sciences, 1978, 1, 191-192.	0.4	1
62	Children, Adults, and Machines as Discovery Systems. Machine Learning, 1994, 14, 313-320.	3.4	1
63	Conceptual Change When Learning Experimental Design. , 0, , .		1
64	Directions to "Eureka!". Science, 2001, 292, 2009-2010.	6.0	0