Mitchell J Nathan

List of Publications by Year
in descending order

56	5,175	147801 31	182427 51
papers	citations	h-index	g-index

59	59	59	3323
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Foundations of the Learning Sciences. , 2022, , 27-52.		2
2	Materialist epistemology lends design wings: educational design as an embodied process. Educational Technology Research and Development, 2021, 69, 1925-1954.	2.8	6
3	An Embodied Theory of Transfer of Mathematical Learning. Research in Mathematics Education, 2021, , 27-58.	0.3	4
4	Embodied geometric reasoning: Dynamic gestures during intuition, insight, and proof.. Journal of Educational Psychology, 2021, 113, 929-948.	2.9	16
5	The Future of Embodied Design for Mathematics Teaching and Learning. Frontiers in Education, 2020, 5, .	2.1	63
6	Learning from an avatar video instructor. Gesture, 2020, 19, 128-155.	0.2	8
7	Does restricting hand gestures impair mathematical reasoning?. Learning and Instruction, 2019, 64, 101225.	3.2	11
8	Embodied truths: How dynamic gestures and speech contribute to mathematical proof practices. Contemporary Educational Psychology, 2019, 58, 44-57.	2.9	14
9	Collaborative gesture as a case of extended mathematical cognition. Journal of Mathematical Behavior, 2019, 55, 100683.	0.9	25
10	Managing common ground in the classroom: teachers use gestures to support studentsâ€™ contributions to classroom discourse. ZDM - International Journal on Mathematics Education, 2019, 51, 347-360.	2.2	24
11	Making â€œconcreteness fadingâ€•more concrete as a theory of instruction for promoting transfer. Educational Review, 2019, 71, 403-422.	3.7	40
12	Teachersâ€™ attitudes about gesture for learning and instruction. Gesture, 2019, 18, 31-56.	0.2	5
13	Low agreement among reviewers evaluating the same NIH grant applications. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2952-2957.	7.1	111
14	Grounded and embodied mathematical cognition: Promoting mathematical insight and proof using action and language. Cognitive Research: Principles and Implications, 2017, 2, 9.	2.0	48
15	What We Say and How We Do: Action, Gesture, and Language in Proving. Journal for Research in Mathematics Education, 2017, 48, 248-260.	1.8	14
16	Threading mathematics through symbols, sketches, software, silicon, and wood: Teachers produce and maintain cohesion to support STEM integration. Journal of Educational Research, 2017, 110, 272-293.	1.6	15
17	â€˜Your comments are meaner than your scoreâ€™: score calibration talk influences intra- and inter-panel variability during scientific grant peer review. Research Evaluation, 2017, 26, 1-14.	2.6	40
18	ChapterÂ 8. One function of gesture is to make new ideas. Gesture Studies, 2017, , 175-196.	0.6	7

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19	A Review of Mathematics and the Body: Material Entanglements in the Classroom. Journal for Research in Mathematics Education, 2016, 47, 423-427.	1.8	0
20	Learning about Probability from Text and Tables: Do Color Coding and Labeling through an Interactiveâ€user Interface Help?. Applied Cognitive Psychology, 2016, 30, 440-453.	1.6	9
21	Learning About Posterior Probability: Do Diagrams and Elaborative Interrogation Help?. Journal of Experimental Education, 2016, 84, 579-599.	2.6	14
22	How readability and topic incidence relate to performance on mathematics story problems in computer-based curricula.. Journal of Educational Psychology, 2015, 107, 1051-1074.	2.9	24
23	Gesture as model enactment: the role of gesture in mental model construction and inference making when learning from text. Learning: Research and Practice, 2015, 1, 4-37.	0.4	16
24	Foundations of the Learning Sciences. , 2014, , 21-43.		76
25	How Teachers Link Ideas in Mathematics Instruction Using Speech and Gesture: A Corpus Analysis. Cognition and Instruction, 2014, 32, 65-100.	2.9	97
26	Actions speak louder with words: The roles of action and pedagogical language for grounding mathematical proof. Learning and Instruction, 2014, 33, 182-193.	3.2	53
27	BRIDGES AND BARRIERS TO CONSTRUCTING CONCEPTUAL COHESION ACROSS MODALITIES AND TEMPORALITIES:. , 2014, , 183-210.		11
28	Teachersâ€™ gestures and speech in mathematics lessons: forging common ground by resolving trouble spots. ZDM - International Journal on Mathematics Education, 2013, 45, 425-440.	2.2	50
29	Improving Studentsâ€™ Learning With Effective Learning Techniques. Psychological Science in the Public Interest: A Journal of the American Psychological Society, 2013, 14, 4-58.	10.7	1,980
30	Building Cohesion Across Representations: A Mechanism for <scp>STEM</scp> Integration. Journal of Engineering Education, 2013, 102, 77-116.	3.0	53
31	Students learn more when their teacher has learned to gesture effectively. Gesture, 2013, 13, 210-233.	0.2	66
32	Embodiment in Mathematics Teaching and Learning: Evidence From Learners' and Teachers' Gestures. Journal of the Learning Sciences, 2012, 21, 247-286.	2.9	418
33	Rethinking Formalisms in Formal Education. Educational Psychologist, 2012, 47, 125-148.	9.0	70
34	Constructing Graphical Representations: Middle Schoolers' Intuitions and Developing Knowledge About Slope and Yâ€intercept. School Science and Mathematics, 2012, 112, 230-240.	0.9	38
35	Learning sciences. Wiley Interdisciplinary Reviews: Cognitive Science, 2010, 1, 329-345.	2.8	40
36	Beliefs and Expectations about Engineering Preparation Exhibited by High School STEM Teachers. Journal of Engineering Education, 2010, 99, 409-426.	3.0	44

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37	Conducting Research in Schools: A Practical Guide. Journal of Cognition and Development, 2010, 11, 397-407.	1.3	44
38	Preâ€College Engineering Studies: An Investigation of the Relationship Between Preâ€college Engineering Studies and Student Achievement in Science and Mathematics. Journal of Engineering Education, 2010, 99, 143-157.	3.0	53
39	Representational disfluency in algebra: evidence from student gestures and speech. ZDM - International Journal on Mathematics Education, 2009, 41, 637-650.	2.2	36
40	Regulation of Teacher Elicitations in the Mathematics Classroom. Cognition and Instruction, 2009, 27, 91-120.	2.9	48
41	Preservice elementary teachers' views of their students' prior knowledge of science. Journal of Research in Science Teaching, 2008, 45, 497-523.	3.3	64
42	Tradeâ€Offs Between Grounded and Abstract Representations: Evidence From Algebra Problem Solving. Cognitive Science, 2008, 32, 366-397.	1.7	127
43	An embodied cognition perspective on symbols, gesture, and grounding instruction. , 2008, , 375-396.		29
44	To Disagree, We Must Also Agree: How Intersubjectivity Structures and Perpetuates Discourse in a Mathematics Classroom. Journal of the Learning Sciences, 2007, 16, 523-563.	2.9	46
45	Pattern Generalization with Graphs and Words: A Cross-Sectional and Longitudinal Analysis of Middle School Students' Representational Fluency. Mathematical Thinking and Learning, 2007, 9, 193-219.	1.2	25
46	A Framework for Understanding and Cultivating the Transition from Arithmetic to Algebraic Reasoning. Mathematical Thinking and Learning, 2007, 9, 179-192.	1.2	11
47	The Real Story Behind Story Problems: Effects of Representations on Quantitative Reasoning. Journal of the Learning Sciences, 2004, 13, 129-164.	2.9	281
48	A Study of Whole Classroom Mathematical Discourse and Teacher Change. Cognition and Instruction, 2003, 21, 175-207.	2.9	144
49	Expert Blind Spot Among Preservice Teachers. American Educational Research Journal, 2003, 40, 905-928.	2.7	208
50	The Symbol Precedence View of Mathematical Development: A Corpus Analysis of the Rhetorical Structure of Textbooks. Discourse Processes, 2002, 33, 1-21.	1.8	46
51	An Investigation of Teachers' Beliefs of Students' Algebra Development. Cognition and Instruction, 2000, 18, 209-237.	2.9	115
52	Teachers' and Researchers' Beliefs about the Development of Algebraic Reasoning. Journal for Research in Mathematics Education, 2000, 31, 168.	1.8	97
53	Connecting Research to Teaching: Moving beyond Teachers' Intuitive Beliefs about Algebra Learning. The Mathematics Teacher, 2000, 93, 218-223.	0.1	10
54	Knowledge and Situational Feedback in a Learning Environment for Algebra Story Problem Solving. Interactive Learning Environments, 1998, 5, 135-159.	6.4	52

#	Article	IF	Citations
55	Multimedia Journal Articles: Promises, Pitfalls and Recommendations. Educational Media International, 1994, 31, 265-273.	1.7	0
56	A Theory of Algebra-Word-Problem Comprehension and Its Implications for the Design of Learning Environments. Cognition and Instruction, 1992, 9, 329-389.	2.9	223