

## Curriculum Vitae

**Clark A. Chinn**

Department of Educational Psychology  
Rutgers University

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### *Academic Degrees*

1997 Ph.D. University of Illinois at Urbana-Champaign (Educational Psychology)  
1984 M.A. University of Kansas (Curriculum and Instruction)  
1983 B.A. University of Kansas (Psychology)

### *Employment History*

2017-present Associate Dean of Research, Graduate School of Education, Rutgers University  
2013-present Professor, Dept. of Educational Psychology, Rutgers University  
2013-2017 Chair, Dept. of Educational Psychology, Rutgers University  
2014 (summer) Interim Co-Dean, Graduate School of Education, Rutgers University  
2012 (fall) Vice-Chair, Dept. of Educational Psychology, Rutgers University  
2002-2013 Associate Professor, Dept. of Educational Psychology, Rutgers University  
2005-2008 Director of the Ph.D. Program in Education, Rutgers University  
1996-2002 Assistant Professor, Dept. of Educational Psychology, Rutgers University  
1989-1996 Research Assistant, Center for the Study of Reading, University of Illinois at Urbana-Champaign  
1992-1993 Teaching Assistant, Department of Educational Psychology, University of Illinois at Urbana-Champaign  
1985-1989 Instructor, Tokyo YMCA College of English, Tokyo. Also coordinator, 1986-1989, College Steering Committee, 1988-1989.  
1985 Instructor, English Language Education Council, Tokyo, Japan  
1984-1985 Instructor, Nipponi Gaigo Center  
1982-1984 Research assistant (computer programmer and statistician), University Counseling Center, University of Kansas

### *Editorships*

2009-2015 Editor / Outgoing Editor (in 2015) of *Educational Psychologist*. *Educational Psychologist* ranked #1 in Education and #1 in Educational Psychology in two-year impact factor (InCites Journal Citation Reports) for 2015 and 2016, which covered the articles published in the last years of my editorship.

***Grant Funding******Extramural***

- 2017 Modeling Epistemic Growth: A Microgenetic Study of the Development of Epistemic Cognition, \$75,000. United States-Israel Binational Science Foundation (co-PI, with Sarit Barzilai, PI).
- 2012 Interdisciplinary Conference on Epistemic Cognition, \$30,870. American Educational Research Association (Principal Investigator, with Jeffrey Green, University of North Carolina, co-PI).
- 2010 Emerging Research-Empirical--Investigating Scaffolding Strategies to Promote Reasoning and Conceptual Change in Science, \$1,497,543; National Science Foundation. (Principal Investigator, with Ravit Golan Duncan, co-PI). Award number 1008634.
- 2008 Research Experiences for Undergraduates Supplement to Promoting Conceptual Change in Reasoning; \$15,250.
- 2006 Promoting Conceptual Change in Reasoning, Supplement; \$183,149; National Science Foundation. (Principal Investigator with Richard A. Duschl & Ravit Golan Duncan, co-PIs). Award number 0529582.
- 2005 Promoting Conceptual Change in Reasoning; \$888,953; National Science Foundation. (Principal Investigator, with Richard A. Duschl & Ravit Golan Duncan, co-PIs).
- 2005 Research Experiences for Undergraduates Supplement to CAREER: Classroom Instruction to Promote Authentic Experimentation, \$13,800; National Science Foundation
- 2000 Microgenetic Studies of Learning During Collaborative Inquiry; \$45,000; National Academy of Education/Spencer Postdoctoral Fellowship (2000-2002).
- 2000 Research Experiences for Undergraduates Supplement to CAREER: Classroom Instruction to Promote Authentic Experimentation, \$13,800; National Science Foundation
- 1999 CAREER: Classroom Instruction to Promote Authentic Experimentation; \$499,885; National Science Foundation. Award number 9875485.

***Intramural***

- 2002 Board of Trustees Research Fellowship for Scholarly Excellence, \$2000, Rutgers University.
- 1998 Research Council Grant, \$1800, Rutgers University.

*Honors and Awards*

*Fellow*

- 2017 Fellow of the American Psychological Association, Division 15 (Educational Psychology)
- 2016 Fellow of the American Educational Research Association
- 2016 July, Fellow of the Center for Advanced Study, Ludwig Maximilians University
- 2000 National Academy of Education/Spencer Postdoctoral Fellowship

*Awards*

- 2017 Rutgers Graduate School of Education Alumni Association Award
- 2010 Undergraduate Research Mentor of the Year, Rutgers University
- 2007 Outstanding Service Award, Graduate School of Education Alumni Association, Rutgers University.
- 2004 Outstanding Research Award, Graduate School of Education Alumni Association, Rutgers University
- 2003 Selected as an outstanding teacher, Rutgers University chapter of Kappa Delta Pi.
- 2002 Board of Trustees Research Fellowship for Scholarly Excellence, Rutgers University.
- 2001 Richard E. Snow Award for Early Career Contributions, Division 15 (Educational Psychology), American Psychological Association
- 2001 Outstanding Teaching Award, Graduate School of Education Alumni Association, Rutgers University

## *Publications*

### *Journal Articles - Refereed Journals*

- Barzilai, S., & Chinn, C. A. (in press). On the goals of epistemic education: Promoting apt epistemic performance. *Journal of the Learning Sciences*.
- Ruppert, J., Duncan, R. G., & Chinn, C. A. (2017). Disentangling the role of domain-specific knowledge in student modeling. *Research in Science Education*. Currently in *First Online*.
- Chinn, C. A. (2017). Promoting systems understanding. *Instructional Science*, *45*, 123-135.
- Chinn, C. A., & Rinehart, R. W. (2016). Advances in research on sourcing--source credibility and reliable processes for producing knowledge claims. *Reading and Writing*, *29*, 1701-1717. DOI 10.1007/s11145-016-9675-3
- Rinehart, R. W., Duncan, R. G., & Chinn, C. A., Atkins, T., & DiBenedetti, J. (2016). Critical design decisions for successful model-based inquiry in science classrooms. *International Journal of Designs for Learning*, *7*, 17-40.
- Duncan, R. G., & Chinn, C. A. (2016). New directions for research on argumentation: Insights from the AIR framework for epistemic cognition. *German Journal of Educational Psychology*, *30*, 155-161. DOI: 10.1024/1010-0652/a000178
- Rinehart, R. W., Duncan, R. G., & Chinn, C. A. (2014). A scaffolding suite to support evidence-based modeling and argumentation. *Science Scope*, pp. 70-77.
- Rogat, T. K., Witham, S., A., & Chinn, C. A. (2014). Teachers' autonomy-relevant practices within an inquiry-based science curricular context: Extending the range of academically significant autonomy-supportive practices. *Teachers College Record*, *116*, 1-46.
- Chinn, C. A., Buckland, L. A., & Samarapungavan, A. (2011). Expanding the dimensions of epistemic cognition: Arguments from philosophy and psychology. *Educational Psychologist*, *46*, 141-167. DOI: 10.1080/00461520.2011.587722
- Pluta, W. J., Chinn, C. A., & Duncan, R. G. (2011). Learners' epistemic criteria for good scientific models. *Journal of Research in Science Teaching*, *48*, 486-511. DOI: 10.1002/tea.20415
- White, B., Stains, M., Escriu-Sune, M., Medaglia, E., Rostamjad, L., Chinn, C., & Sevian, H. (2011). A novel instrument for assessing students' critical thinking abilities. *Journal of College Science Teaching*, *40*, 102-107.
- Duncan, R. G., Freidenreich, H. B., Chinn, C. A., & Bausch, A. (2011). Promoting middle-school students' understanding of molecular genetics. *Research in Science Education*, *41*, 147-167. DOI: 10.1007/s11165-009-9150-0
- Chinn, C. A., & Samarapungavan, A. (2009). Conceptual change—multiple routes, multiple mechanisms: A commentary on Ohlsson (2009). *Educational Psychologist*, *44*, 47-57.
- Hmelo-Silver, C. E., Duncan, R. G., Chinn, C. A. (2007). Scaffolding and achievement in problem-based and inquiry learning: A response to Kirschner, Sweller, and Clark (2006). *Educational Psychologist*, *42*, 99-107.

- Chinn, C. A., & Malhotra, B. A. (2002). Children's responses to anomalous scientific data: How is conceptual change impeded? *Journal of Educational Psychology, 19*, 327-343.
- Chinn, C. A., & Malhotra, B. A. (2002). Epistemologically authentic reasoning in schools: A theoretical framework for evaluating inquiry tasks. *Science Education, 86*, 175-218.
- Chinn, C. A., & Hmelo, C. E. (2002). Authentic inquiry: Introduction to the special section. *Science Education, 86*, 171-174.
- Chinn, C. A., & Samarapungavan, A. (2001). Distinguishing between understanding and belief. *Theory Into Practice, 40*, 235-241.
- Chinn, C. A., & Brewer, W. F. (2001). Models of data: A theory of how people evaluate data. *Cognition and Instruction, 19*, 323-393.
- Chinn, C. A., Anderson, R. C., & Waggoner, M. A. (2001). Patterns of discourse in two kinds of literature discussion. *Reading Research Quarterly, 36*, 378-411.
- Chinn, C. A., O'Donnell, A. M., & Jinks, T. S. (2000). The structure of discourse in collaborative learning. *Journal of Experimental Education, 69*, 77-97.
- Chinn, C. A., & Anderson, R. C. (1998). The structure of discussions that promote reasoning. *Teachers College Record, 100*, 315-368.
- Chinn, C. A., & Brewer, W. F. (1998). An empirical test of a taxonomy of responses to anomalous data in science. *Journal of Research in Science Teaching, 35*, 623-654.
- Brewer, W. F., Chinn, C. A., & Samarapungavan, A. (1998). Explanation in scientists and children. *Minds and Machines, 8*, 119-136.
- Anderson, R. C., Chinn, C. A., Chang, J., Waggoner, M. A., & Yi, H. (1997). On the logical integrity of children's arguments. *Cognition and Instruction, 15*, 135-167.
- Chinn, C. A., & Brewer, W. F. (1996). Mental models in data interpretation. *Philosophy of Science, 63* (Proceedings), S211-S219.
- Waggoner, M. A., Chinn, C. A., Anderson, R. C., & Yi, H. (1995). Collaborative reasoning about stories. *Language Arts, 72*, 582-589.
- Chinn, C. A., Waggoner, M. A., Anderson, R. C., Schommer, M., & Wilkinson, I. A. (1993). Situated action in the small-group reading lesson: A microanalysis of oral reading error episodes. *American Educational Research Journal, 30*, 361-392.
- Chinn, C. A., & Brewer, W. F. (1993). The role of anomalous data in knowledge acquisition: A theoretical framework and implications for science instruction. *Review of Educational Research, 63*, 1-49.

### ***Edited Volumes***

- Chinn, C. A., Duncan, R. G., Goldman, S., & Kapur, M. (under contract and in progress). *International Handbook of Inquiry and Learning*. New York: Routledge.

Manalo, E., Uesaka, Y., & Chinn, C. A. (Eds.). (2018). *Promoting spontaneous use of learning and reasoning strategies: Theory, research, and practice for effective transfer*. New York: Routledge.

Hmelo-Silver, C. E., Chinn, C. A., Chan, C. K. K., & O'Donnell, A. M. (Eds.) (2013). *International Handbook of Collaborative Learning*. New York: Taylor & Francis.

One of three Associate Editors of: Anderman, Eric (Ed.) (2009). *Psychology of Classroom Learning: An Encyclopedia*, Detroit: Macmillan Reference USA. (Editor of the articles on Learning and Instruction.)

### **Chapters**

Chinn, C. A., & Sandoval, W. A. (in press). Epistemic cognition and epistemic development. In F. Fischer, C. Hmelo-Silver, S. Goldman, & P. Reimann (Eds.), *International Handbook of the Learning Sciences*.

Chinn, C. A., & Duncan, R. G. (in press). What is the value of general knowledge of scientific reasoning? In K. Engelmann, F. Fischer, J. Osborne, & C. A. Chinn (Eds.), *Scientific reasoning and argumentation: The roles of domain-specific and domain-general knowledge*. New York: Routledge.

Chinn, C. A. (2018). Modeling, explanation, argumentation, and conceptual change. In T. G. Amin & O. Levrini (Eds.), *Converging perspectives on conceptual change* (pp. 206-226). London: Routledge.

Chinn, C. A., Duncan, R. G., & Rinehart, R. W. (2018). Epistemic design: Design to promote transferable epistemic growth in the PRACCIS project. In E. Manalo, Y. Uesaka, & C. A. Chinn (Eds.), *Promoting spontaneous use of learning and reasoning strategies: Theory, research, and practice for effective transfer*. New York: Routledge.

Chinn, C. A., & Rinehart, R. W. (2016). Epistemic cognition and philosophy: Developing a new framework for epistemic cognition. In J. A. Greene, W. A. Sandoval, & I. Bråten (Eds.), *Handbook of epistemic cognition* (pp. 460-478). New York: Routledge.

Hmelo-Silver, C. E., & Chinn, C. A. (2016). Collaborative learning. In E. Anderman & L. Corno (Eds.), *Handbook of educational psychology* (3<sup>rd</sup> ed.) (pp. 349-363). New York: Routledge.

Chinn, C. A., & Sherin, B. L. (2014). Microgenetic methods. In R. Keith Sawyer (Ed.), *The Cambridge handbook of the learning sciences* (2<sup>nd</sup> Ed.) (pp. 171-190). New York: Cambridge University Press.

Chinn, C. A., Rinehart, R. W., & Buckland, L. A. (2014). Epistemic cognition and evaluating information: Applying the AIR model of epistemic cognition. In D. Rapp and J. Braasch (Eds.), *Processing inaccurate information: Theoretical and applied perspectives from cognitive science and the educational sciences* (pp. 425-453). Cambridge, MA: MIT Press.

- Chinn, C. A., Duncan, R. G., Dianovsky, M., & Rinehart, R. (2013). Promoting conceptual change through inquiry. In S. Vosniadou (Ed.) *International Handbook of Conceptual Change* (2<sup>nd</sup> ed.) (pp. 539-559). New York: Routledge.
- Chinn, C. A., & Clark, D. B. (2013). Learning through collaborative argumentation. In C. E. Hmelo-Silver, C. A. Chinn, C. K. K. Chan, & A. M. O'Donnell (Eds.), *International Handbook of Collaborative Learning* (pp. 314-332). New York: Taylor & Francis.
- Chinn, C. A., & Buckland, L. A. (2012). Model-based instruction: Fostering change in evolutionary conceptions and in epistemic practices. In K. S. Rosengren, S. K. Brem, E. M. Evans, & G. M. Sinatra (Eds.), *Evolution challenges: Integrating research and practice in teaching and learning about evolution* (pp. 211-232). Oxford: Oxford University Press.
- Sinatra, G. M., & Chinn, C. A. (2012). Thinking and reasoning in science: Promoting epistemic conceptual change. In K. R. Harris, S. Graham, & T. Urdan (Eds.), *APA Educational psychology handbook: Vol. 3. Application to learning and teaching* (pp. 257-282). Washington, DC: American Psychological Association.
- Chinn, C. A., & Buckland, L. A. (2011). Differences in epistemic practices among scientists, young earth creationists, intelligent design creationists, and the scientist creationists of Darwin's era. In R. Taylor and M. Ferrari (Eds.), *Epistemology and science education: Understanding the evolution vs. intelligent design controversy* (pp. 38-76). New York: Taylor & Francis.
- Chinn, C. A. (2009). Epistemological beliefs. In E. M. Anderman & L. H. Anderman (Eds.), *Psychology of classroom learning: An encyclopedia* (pp. 38-39). Detroit: Macmillan Reference USA.
- Chinn, C. A., & Chinn, L. M. (2009). Cognitive strategies. In E. M. Anderman & L. H. Anderman (Eds.), *Psychology of classroom learning: An encyclopedia* (pp. 209-214). Detroit: Macmillan Reference USA.
- Chinn, C. A., & Chinn, L. M. (2009). Collaborative learning. In E. M. Anderman & L. H. Anderman (Eds.), *Psychology of classroom learning: An encyclopedia* (pp. 214-219). Detroit: Macmillan Reference USA.
- Chinn, C. A., & Nguyen-Jahiel, K. (2009). Richard C. Anderson. In E. M. Anderman & L. H. Anderman (Eds.), *Psychology of classroom learning: An encyclopedia* (pp. 371-376). Detroit: Macmillan Reference USA.
- Chinn, C. A., & Samarapungavan, A. (2008). Learning to use scientific models: Multiple dimensions of conceptual change. In R. A. Duschl & R. E. Grandy (Eds.), *Teaching scientific inquiry: Recommendations for research and implementation* (pp. 191-225). Rotterdam, NL: Sense Publishers.
- Chinn, C. A. (2006). The microgenetic method: Current work and extensions to classroom research. In J. L. Green, G. Camilli, & P. Elmore (Eds.), *Handbook of complementary methods in education research* (pp. 439-456). Washington, DC: American Educational Research Association.
- Chinn, C. A. (2006). Learning to argue. In A. M. O'Donnell, C. Hmelo-Silver, & G. Erkens (Eds.), *Collaborative learning, reasoning, and technology* (pp. 355-383). Mahwah, NJ: Erlbaum.

- Chinn, C. A., & Malhotra, B. A. (2001). Epistemologically authentic scientific reasoning. In K. Crowley, C. D. Schunn, & T. Okada (Eds.), *Designing for science: Implications from everyday, classroom, and professional settings* (pp. 351-392). Mahwah, NJ: Erlbaum.
- Brewer, W. F., Chinn, C. A., & Samarapungavan, A. (2000). Explanation in scientists and children. In F. C. Keil & R. A. Wilson (Eds.), *Explanation and cognition* (pp. 279-298). Cambridge, MA: MIT Press.
- Chinn, C. A., & Brewer, W. F. (2000). Knowledge change in response to data in science, religion, and magic. In K. S. Rosengren, C. N. Johnson, & P. L. Harris (Eds.), *Imagining the impossible: Magical, scientific, and religious thinking in children* (pp. 334-371). Cambridge: Cambridge University Press.
- Chinn, C. A., & Brewer, W. F. (1998). Theories of knowledge acquisition. In B. J. Fraser & K. G. Tobin (Eds.), *International handbook of science education* (Vol. 1, pp. 97-113). Dordrecht: Kluwer.
- Chinn, C. A. (1998). A critique of social constructivist explanations of knowledge change. In B. Guzzetti & C. Hynd (Eds.), *Perspectives on conceptual change: Multiple ways to understand knowing and learning in a complex world* (pp. 77-115). Mahwah, NJ: Erlbaum.
- Anderson, R. C., Chinn, C., Waggoner, M., & Nguyen, K. (1998). Intellectually stimulating story discussions. In J. Osborn & F. Lehr (Eds.), *Literacy for all: Issues in teaching and learning* (pp. 170-186). New York: Guilford Press.
- Hughes, G., & Chinn, C. (1986). Building reading vocabulary through inference: A better classification of context clues. In B. Snyder, W. H. Bartz, & J. B. Goepper (Eds.), *Second Language Acquisition: Preparing for Tomorrow* (pp. 93-108). Lincolnwood, Illinois: National Textbook Company.

### ***Edited Proceedings***

- Chinn, C. A., Erkens, G., & Puntambekar, S. (Eds.) (2007). *The Computer Supported Collaborative Learning (CSCL) Conference 2007, Volume 8, Part 1*. New Brunswick, NJ: International Society of the Learning Sciences.
- Chinn, C. A., Erkens, G., & Puntambekar, S. (Eds.) (2007). *The Computer Supported Collaborative Learning (CSCL) Conference 2007, Volume 8, Part 2*. New Brunswick, NJ: International Society of the Learning Sciences.

### ***Conference Proceedings - Refereed***

- Duncan, R. G., Tate, C., & Chinn, C. A. (2014). Students' use of evidence and epistemic criteria in model generation and model evaluation. In J. L. Polman, E. A. Kyza, D. K. O'Neill, I. Tabak, W. R. Penuel, A. S. Jurow, K. O'Connor, T. Lee, & L. D'Amico, *Learning and becoming in practice: The International Conference of the Learning Sciences (ICLS) 2014, Volume 1* (pp. 615-622). Boulder, CO: International Society of the Learning Sciences.
- Chinn, C. A., Hung, L. C.-C., Zimmerman, R. M., & Duncan, R. G. (2014). How good is this evidence? Students' epistemic competence in evidence evaluation. In J. L. Polman, E. A.



- Kyza, D. K. O'Neill, I. Tabak, W. R. Penuel, A. S. Jurow, K. O'Connor, T. Lee, & L. D'Amico, *Learning and becoming in practice: The International Conference of the Learning Sciences (ICLS) 2014, Volume 2* (pp. 1122-1126). Boulder, CO: International Society of the Learning Sciences.
- Chinn, C. A., Duncan, R. G., & Rinehart, R. W. (2014). Epistemic criteria: How far does general knowledge get you? In J. L. Polman, E. A. Kyza, D. K. O'Neill, I. Tabak, W. R. Penuel, A. S. Jurow, K. O'Connor, T. Lee, & L. D'Amico, *Learning and becoming in practice: The International Conference of the Learning Sciences (ICLS) 2014, Volume 3* (pp. 1194-1195). Boulder, CO: International Society of the Learning Sciences.
- Rinehart, R., Duncan, R. G., Chinn, C. A., Dianovsky, M. T. (2013). Digital evidence and scaffolds in a model-based inquiry curriculum for middle school science. In N. Rummel, M. Kapur, M. Nathan, & S. Puntambekar (Eds.), *To see the world and a grain of sand: Learning across levels of space, time and scale* (pp. 341-342). Madison, WI: International Society of the Learning Sciences.
- Chinn, C. A. (2010). Integrating philosophy into learning sciences research on epistemic cognition. In *ICLS 2010: Proceedings of International Society of the Learning Sciences*. Raleigh, NC: Lulu.
- Buckland, C. A., & Chinn, C. A. (2010). Model-evidence link diagrams: A scaffold for model-based reasoning. In *ICLS 2010: Proceedings of International Society of the Learning Sciences*. Raleigh, NC: Lulu.
- Pluta, W. J., Buckland, L. A., Chinn, C. A., Duschl, R. A., & Duncan, R. G. (2008). Learning to evaluate scientific models. In *ICLS 2008: Proceedings of International Society of the Learning Sciences*. Raleigh, NC: Lulu.
- Chinn, C. A., Duschl, R. A., & Duncan, R. G., Buckland, L. A., Pluta, W. P. (2008). *A microgenetic classroom study of learning to reason scientifically through modeling and argumentation*. In *ICLS 2008: Proceedings of International Society of the Learning Sciences*. Raleigh, NC: Lulu.
- Chinn, C. A. (1995). Representing dialectical arguments. In J. D. Moore & J. F. Lehman (Eds.), *Proceedings of the Seventeenth Annual Conference of the Cognitive Science Society* (pp. 544-549). Hillsdale, NJ: Erlbaum.
- Brewer, W. F., & Chinn, C. A. (1994). Scientists' responses to anomalous data: Evidence from psychology, history, and philosophy of science. *PSA 1994, 1*, 304-313.
- Chinn, C. A. (1994). Are scientific theories that predict data more believable than theories that retrospectively explain data? A psychological investigation. In A. Ram & K. Eiselt (Eds.), *Proceedings of the Sixteenth Annual Conference of the Cognitive Science Society* (pp. 177-182). Hillsdale, NJ: Erlbaum.
- Brewer, W. F., & Chinn, C. A. (1994). The theory-ladenness of data: An experimental demonstration. In A. Ram & K. Eiselt (Eds.), *Proceedings of the Sixteenth Annual Conference of the Cognitive Science Society* (pp. 61-65). Hillsdale, NJ: Erlbaum.
- Chinn, C. A., & Brewer, W. F. (1993). Factors that influence how people respond to anomalous data. *Proceedings of the Fifteenth Annual Conference of the Cognitive Science Society* (pp. 318-323). Hillsdale, NJ: Erlbaum.

Chinn, C. A., & Brewer, W. F. (1992). Psychological responses to anomalous data. *In Proceedings of the Fourteenth Annual Conference of the Cognitive Science Society* (pp. 165-170). Hillsdale, NJ: Erlbaum.

Brewer, W. F., & Chinn, C. A. (1991). Entrenched beliefs, inconsistent information, and knowledge change. In L. Birnbaum (Ed.), *The International Conference on the Learning Sciences: Proceedings of the 1991 Conference* (pp. 67-73). Charlottesville, VA: Association for the Advancement of Computing in Education.

### ***Other Publications***

Anderson, R. C., Chinn, C., Chang, J., Waggoner, M., & Yi, H. (1995, November). *On the logical integrity of children's arguments* (Tech. Rep. No. 628). Champaign, IL: Center for the Study of Reading.

Chinn, C. A. (1995, November). *Constructing explanations from scientific text: A theory with implications for conceptual change* (Tech. Rep. No. 626). Champaign, IL: Center for the Study of Reading.

Chinn, C. A., & Brewer, W. F. (1993, September). *The role of anomalous data in knowledge acquisition: A theoretical framework and implications for science instruction* (Tech. Rep. No. 583). Champaign, IL: Center for the Study of Reading.

Chinn, C. A., Waggoner, M. A., & Anderson, R. C. (1993, September). *Situated actions during reading lessons: A microanalysis of oral reading error episodes* (Tech. Rep. No. 582). Champaign, IL: Center for the Study of Reading.

Anderson, R. C., Waggoner, M. A., & Chinn, C. A. (1990). *Reader's guide to Fostering a literate culture*. Champaign, IL: Center for the Study of Reading.

### ***Submitted Papers and Papers under Revision and Resubmission***

Pluta, W. J., & Chinn, C. A. (under revision). *Coordinating evidence: Learners' adaptive strategy use*

Pluta, W. J., & Chinn, C. A. (under revision). *Developing shared epistemic criteria*.

Barzilai, S., & Chinn, C. A. (under revision). *On the goals of epistemic education: Apt epistemic performance*

### ***Working Papers with Drafts***

Chinn, C. A., Duncan, R. G., Hung, L. C-C., & Rinehart, R. W. *Evaluating the quality of argumentation: Going beyond structure to incorporate epistemic practices*.

Rinehart, R. W., Duncan, R. G., & Chinn, C. A. *Using evidence to develop and refine models of inheritance*.

Rinehart, R. W., Chinn, C. A., & Duncan, R. G. *Bad evidence makes for good learning*.

Buckland, L. A., & Chinn, C. A. *Epistemic cognition and understanding the nature of science*.

- Buckland, L. A., & Chinn, C. A. *Epistemic cognition and reliable processes of knowledge production.*
- Buckland, L. A., & Chinn, C. A. *Epistemic growth in model-based reasoning.*
- Chinn, C. A., & Buckland, L. A. *Beliefs about learning are epistemic beliefs: Implications of a conceptual analysis for expanded research on epistemic cognition.*
- Chinn, C. A. *Effects of explicit explanations and refutations on belief and understanding: Implications for theories of conceptual change.*
- DaCosta, M. C., & Chinn, C. A. *Seeing the whole: Systemic explanation and decision making on a complex social problem.*
- Samarapungavan, A., & Chinn, C. A. *Underdetermination in philosophy of science and science education.*

### ***Presentations***

#### ***Keynote and Plenary Presentations***

- Chinn, C. A. (2015, August). *Epistemic design: Creating learning environments to foster epistemic growth.* Keynote address at the European Association for Research on Learning and Instruction, Limassol, Cyprus.
- Chinn, C. A. (2014, April). *The quality of arguments in problem-based and inquiry learning environments.* Keynote address at the Problem-Based Education SIG, American Educational Research Association, Chicago.
- Chinn, C. A. (2014, August). *Promoting reasoning and conceptual change through argumentation: Challenges and responses.* Plenary address at the meeting of the Conceptual Change SIG of the European Association for Research on Learning and Instruction, Bologna, Italy.
- Chinn, C. A. (2012, July). *Promoting epistemic growth.* Keynote presentation. Biennial meeting of the International Society for the Psychology of Science and Technology, Pittsburgh, PA.

#### ***Invited Conference Presentations***

- Chinn, C. A., & Duncan, R. G. (2016, July). *General knowledge of reasoning strategies and practices: What (if any) value does it have?* Paper presented at a conference on Interplay of Domain-General and Domain-Specific Aspects of Scientific Reasoning and Argumentation Skills, Ludwig-Maximilians-Universität München, Munich Germany.
- Chinn, C. A., Rinehart, R. W., & Duncan, R. G. (2015, August). *Conceptual change through inquiry and argumentation: Successes and challenges.* Paper presented at the biennial meeting of the European Association for Research on Learning and Instruction, Limassol, Cyprus.
- Chinn, C. A., & Duncan, R. G. (2015, March). *Designing science instruction to support growth in students' thinking.* Invited presentation, Waseda University Conference on Teaching Critical Thinking, Tokyo, Japan.

- Chinn, C. A. (2014, November). *The Learning Sciences and Educational Psychology*. Invited presentation, Japan Association of Educational Psychology, Kobe, Japan.
- Chinn, C. A., & Duncan, R. G. (2013, April). *PRACCIS: Promoting reasoning and conceptual change in science*. Invited paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Chinn, C. A. (2011, October). Invited comments on National Science Foundation panel to discuss a potential *How People Learn, Part 2*.
- Chinn, C. A. (2011, April). Invited panelist in session *What educational psychologists and learning scientists can learn from each other: A dialogue*. Annual meeting of the American Educational Research Association, New Orleans, LA.
- Chinn, C. A. (2007, June). *Cognitive perspectives on epistemology in science education*. Invited panel presentation presented at the biennial meeting of the International History, Philosophy, and Science Teaching Conference, Calgary, Canada.

### ***Editorial Presentations***

- Chinn, C. A. (2016, June). Invited panelist on session on publishing in academic journals at the CyberLearning Conference 2016, Washington, DC.
- Chinn, C. A. (2015, April). Invited panelist on session on publishing in academic journals at the annual meeting of the American Educational Research Association, Chicago, IL.
- Chinn, C. A. (2014, August). Invited panelist on session on publishing in academic journals at the annual meeting of the American Psychological Association, XX.
- Chinn, C. A. (2014, June). Invited panelist on session on publishing in academic journals at the biennial meeting of the International Conference of the Learning Sciences, Boulder, CO.
- Chinn, C. A. (2014, April). Invited panelist on session on publishing in academic journals at the annual meeting of the American Educational Research Association, Philadelphia, PA.
- Chinn, C. A. (2012, July). Invited panelist on session on publishing in academic journals at the biennial meeting of the International Conference of the Learning Sciences, Sydney, Australia.

### ***Other Invited Presentations***

- Chinn, C. A. (2017, August). *Teaching thinking in the contemporary world, with reflections for teacher preparation*. Invited presentation, Department of Education, Turku University, Turku, Finland.
- Chinn, C. A. (2017, April). *Teaching thinking in the post-truth world*. Invited presentation, Graduate School of Education Alumni Association, Rutgers University, New Brunswick, NJ.
- Chinn, C. A. (2016, July). *Coding argumentation with the AIR model of epistemic cognition*. Invited workshop presented at Ludwig-Maximilians-Universität München, Munich, Germany.

- Chinn, C. A. (2016, April). *The AIR model of epistemic cognition*. Invited presentation. Department of Engineering and Science Education, Clemson University, Clemson, SC.
- Chinn, C. A. (2016, April). *A new model of epistemic cognition: Applications to practical problems*. Invited presentation, Graduate School of Education, Temple University, Philadelphia, PA.
- Chinn, C. A. (2014, November). *Improving students' argumentation in science classes*. Invited presentation, Graduate School of Education, Kyoto University, Kyoto, Japan.
- Chinn, C. A. (2014, April). *Learning to reason through epistemic criteria: Challenges of underdetermination and domain-specific knowledge*. Invited presentation, Ludwig Maximilians University, Munich, Germany.
- Chinn, C. A. (2014, April). *Epistemic cognition*. Webinar for the Network of Academic Programs in the Learning Sciences, <http://isls-naples.psy.lmu.de/intro/1-how-people-learn/index.html>.
- Chinn, C. A. (2013, July). *Promoting epistemic growth in the classroom through epistemic criteria and understanding reliable processes: Challenges and possible solutions*. Invited presentation, Muenster University, Psychology Department, Muenster University.
- Chinn, C. A. (2012, April). *Promoting reasoning and epistemic growth in middle-school science classes*. Invited presentation, Learning Sciences Program, University of Illinois at Chicago.
- Chinn, C. A. (2011, September). *Promoting growth in reasoning in middle-school science classes*. Invited presentation, Graduate School of Education, University of Tokyo and Japan Association of Educational Psychology.
- Chinn, C. A. (2009, May). *Learning to reason in middle-school science classes*. Invited presentation, Department of Educational Psychology, University of Nevada at Las Vegas, Las Vegas, NV.
- Chinn, C. A. (2009, April). *Learning to reason through modeling and argumentation in middle-school life-science classes*. Invited presentation, Department of Human Development, Columbia University, New York, NY.
- Chinn, C. A. (2009, March). *Promoting growth in scientific reasoning through model-based inquiry*. Invited presentation, TERC, Cambridge, MA.
- Chinn, C. A. (2003, March). *Authentic reasoning in the classroom*. Colloquium presented at the Learning Research and Development Center, University of Pittsburgh, Pittsburgh, PA.

### **Workshops**

- Renken, M., Chinn, C., Sandoval, W., & Vargas, P. (2014, June). *Exposing and assessing epistemic thinking*. Workshop presented at the International Conference of the Learning Sciences, Boulder, CO.

### **Presentations as Discussant**

- Chinn, C. A. (2017, August). Discussant of symposium *Teachers epistemic cognition for professional practice: A focus on reflection and reflexivity*. Discussion presented at the biennial meeting of the European Association for Research on Learning and Instruction, Tampere, Finland.
- Chinn, C. A. (2017, April). Discussant of symposium *Just a minute! New methods for observing conceptual change in STEM*. Discussion presented at the annual meeting of the American Educational Research Association, San Antonio, TX.
- Chinn, C. A. (2015, August). Discussant of symposium, *Argumentation in long-term educational program: Skill acquisition or becoming a citizen?* Discussion presented at the biennial meeting of the European Association for Research on Learning and Instruction, Limassol, Cyprus.
- Chinn, C. A. (2014, April). Discussant of symposium, *Problem-based education*. Discussion presented at the annual meeting of the American Educational Research Association, Philadelphia, PA.
- Chinn, C. A. (2013, August). Discussant of symposium *Dealing with (Socio-)Scientific Controversies: Epistemic, motivational, and cognitive dimensions*. Discussion presented at the biennial meeting of the European Association for Research on Learning and Instruction, Munich, Germany.
- Chinn, C. A. (2013, June). Discussant of symposium *Scripting and orchestration: Recent theoretical advances*. Discussion presented at the biennial Computer Supported Collaborative Learning conference, Madison, WI.
- Chinn, C. A. (2011, August). Discussant of symposium *The role of refutational texts in achieving conceptual change*. Discussion presented at the biennial meeting of the European Association for Research on Learning and Instruction, Exeter, UK.
- Chinn, C. A. (2011, August). Discussant of symposium *The impact of genre on reading processes, critical thinking and epistemological beliefs in science*. Discussion presented at the biennial meeting of the European Association for Research on Learning and Instruction, Exeter, UK.
- Chinn, C. A. (2010, May). Discussant of symposium “*Really? How do you know?*” *An exploration of the relation between knowledge, information, and truth*. Discussion presented at the annual meeting of the American Educational Research Association, Denver, CO.
- Chinn, C. A. (2009, April). Discussant of symposium *Developing and refining a learning progression for matter from PreK to grade 12: Commonalities and contrasts among four current projects* (Marianne Wiser and Carol L. Smith, Organizers). Discussion presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Chinn, C. A. (2007, August). Discussant of symposium *Exploring the nature of the refutation text effect in conceptual change* (Gale Sinatra and Mirjamaija Mikkila-Erdmann, Organizers). Discussion presented at the biennial meeting of the European Association for Research on Learning and Instruction, Budapest, Hungary.
- Chinn, C. A. (2005, April). Discussion of symposium *Examining the hinge: The influence of epistemological beliefs in conceptual change* (Jill A. Gushka, Chair). Discussion presented

at the annual meeting of the American Educational Research Association, Montreal, Canada.

Chinn, C. A. (2003, April). Discussion of symposium *The development of argument skills* (Deanna Kuhn, Chair). Discussion presented at the biennial meeting of the Society for Research in Child Development, Tampa, FL.

Chinn, C. A. (2002, April). Discussion of symposium *The development of reasoning through story discussions* (Richard C. Anderson, Chair). Discussion presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Chinn, C. A. (1999, April). Discussion of symposium *Seeking common ground: Exploring the bonds between conceptual change and persuasion theory and research* (P. K. Murphy, Chair). Discussion presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

Chinn, C. A. (1999, April). Discussion of symposium *Innovations in the use of analogies in science education* (J. Clement, Chair). Discussion presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

Chinn, C. A. (1998, April). Discussion of symposium *Theoretical and empirical perspectives on learning science* (J. Clement, Chair). Discussion presented at the annual meeting of the American Educational Research Association, San Diego, CA.

### ***Papers and Posters***

Chinn, C. A., & Duncan, R. G. (2017, August). *What is the value of general knowledge of scientific reasoning?* Paper presented at the biennial meeting of the European Association for Research on Learning and Instruction, Tampere, Finland.

Mauclair-Augustin, B., Cavera, V., Chinn, C. A., & Duncan, R. G. (2017, August). *Middle school students engage in a pre-instruction model revision task: Ideals for good models.* Paper presented at the biennial meeting of the European Association for Research on Learning and Instruction, Tampere, Finland.

Kainulainen, M., Puurtinen, M., & Chinn, C. A. (2017, August). *Historians' epistemic aims: Interviewing experts.* Paper presented at the biennial meeting of the European Association for Research on Learning and Instruction, Tampere, Finland.

Rinehart, R. W., Chinn, C. A., & Duncan, R. G. (2017, August). *The body of evidence: The role of evidence evaluation in science classes.* Paper presented at the biennial meeting of the European Association for Research on Learning and Instruction, Tampere, Finland.

El-Moslimany, H., Av-Shalom, H., Duncan, R. G., & Chinn, C. A. (2017, August). *Evidence-based Model Evaluation: Students' Interpretation of Multiple Pieces of Evidence.* Paper presented at the biennial meeting of the European Association for Research on Learning and Instruction, Tampere, Finland.

Mochizuki, T., Chinn, C. A., Yamaguchi, E., & Zimmerman, R. (2017, August). *Instruction on disagreement resolution in reasoning about multiple documents.* Poster presented at the biennial meeting of the European Association for Research on Learning and Instruction, Tampere, Finland.

- Kainulainen, M., Puurtinen, M., & Chinn, C. A. (2017, August). *Historians' epistemic cognition: An interview study of experts*. Paper presented at the 29<sup>th</sup> Congress of Nordic Historians, Aalborg, Denmark.
- Zimmerman, R. M., Av-Shalom, N., Chinn, C. A., & Duncan, R.G. (2017, August). *Disagreement Discourse Processes and Strategies in the Middle School Science Inquiry Classroom*. Paper presented at the biennial meeting of the European Association for Research on Learning and Instruction, Tampere, Finland.
- Rogat, T., Samarapungavan, A., Chinn, C. A., Adeoye, T., & Shuba, T. (2017, August). *Students' epistemic beliefs about group process as antecedents for collaborative interactions*. Paper presented at the biennial meeting of the European Association for Research on Learning and Instruction, Tampere, Finland.
- Barzilai, S., & Chinn, C. A. (2017, April). *Rethinking the goals of epistemic education*. Paper presented at the annual meeting of the American Educational Research Association, San Antonio, TX.
- Zimmerman, R., Av-Shalom, N., Chinn, C. A., & Duncan, R. G., (2017, April). *Disagreement discourse processes and strategies in middle-school science inquiry classrooms*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, San Antonio, TX.
- El-Moslimany, H., Av-Shalom, H., Duncan, R. G., & Chinn, C. A. (2017, April). *Choosing among competing models: Students' evidence-based arguments*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, San Antonio, TX.
- Chinn, C. A., Duncan, R. G., Hung, Leah C.-C., & Rinehart, R. W. (2016, April). *Epistemic criteria and reliable processes as indicators of argument quality in science students' argumentation*. Paper presented at the annual meeting of the American Educational Research Association, Washington, DC.
- Zimmerman, R. M., Chinn, C. A., & Duncan, R.G. (2016, April). Disagreement resolution strategies during student inquiry: Applying the AIR model of epistemic cognition. Poster presented at the annual meeting of the *American Educational Research Association*, Washington, DC.
- Mauclair-Augustin, B., Chinn, C.A., & Duncan, R.G. (2016, April). Meta-epistemic discourse in middle-school science inquiry classes. Poster presented at the annual meeting of the *American Educational Research Association*, Washington, DC.
- Cavera V. L., Seryapov, R., Belkin, K, J., Duncan, R. G., & Chinn, C. A., (2016, April). Relating evidence and models in genetics: Students' argumentation strategies. Paper presented at the annual meeting of the *National Association of Research in Science Teaching*, Baltimore, MD.
- Rinehart, R. W., Chinn, C.A., & Duncan, R. G. (2015, August). *Bad evidence makes for good learning: An analysis of science students' argumentation*. Paper presented at the 16<sup>th</sup> meeting of the European Association for Research on Learning and Instruction, Limassol, Cyprus.



- Rinehart, R. W., Castro-Faix, M., Duncan, R. G., & Chinn, C. A. (2015, April). *Learning inheritance through modeling in middle school life science classes*. Paper presented at the annual meeting of the National Association of Research on Science Teaching, Chicago, IL.
- Chinn, C. A., Duncan, R. G., Rinehart, R. W., & Dianovsky, M. (2014, November). *Learning to reason through epistemic criteria*. Presentation at the Japanese Association of Educational Psychology.
- Rinehart, R. W., Chinn, C. A., Duncan, R. G., & Castro-Faix, M. (2014, August). *Conceptual change through model-based inquiry in genetics for middle school science students*. Paper presented at the 9<sup>th</sup> International Conference on Conceptual Change, a SIG of the European Association for Research on Learning and Instruction, Bologna, Italy.
- Duncan, R. G., Tate, C., & Chinn, C. A. (2014, June). *Students' use of evidence and epistemic criteria in model generation and model evaluation*. Paper presented at the biennial meeting of the International Conference of the Learning Sciences, Boulder, CO.
- Chinn, C. A., Hung, L. C.-C., Zimmerman, R. M., & Dunan, R. G. (2014, June). *How good is this evidence? Students' epistemic competence in evidence evaluation*. Paper presented at the biennial meeting of the International Conference of the Learning Sciences, Boulder, CO.
- Chinn, C. A., Duncan, R. G., & Rinehart, R. W. (2014, June). *Epistemic criteria: How far does general knowledge get you?* Paper presented at the biennial meeting of the International Conference of the Learning Sciences, Boulder, CO.
- Chinn, C. A., & Rinehart, R. W. (2014, April). *Epistemic practices of coordinating conflicting data with competing theories*. Paper presented at the annual meeting of the American Educational Research Association, Philadelphia, PA.
- Rinehart, R. W., Duncan, R. G., & Chinn, C. A. (2014, April). *Emphasizing evidence evaluation in model-based inquiry*. Paper presented at the annual meeting of the American Educational Research Association, Philadelphia, PA.
- Rinehart, R. W., Castro, M. F., Duncan, R. G., & Chinn, C. A. (2014, January). *Scaffolding Student Coordination of Evidence and Models in Genetics*. Presented at the Seventh Annual Subway Summit on Cognition and Education Research, New York, NY.
- Rinehart, R., Duncan, R. G., Chinn, C. A., Dianovsky, M. T. (2013, June). *Digital Evidence and Scaffolds in a Model-Based Inquiry Curriculum for Middle School Science*. Poster presented at the 10<sup>th</sup> International Conference on Computer Supported Collaborative Learning, Madison, WI.
- Dianovsky, M., Chinn, C. A., Duncan, R. G., & Rinehart, R. (2013, May). *Middle school students' reasoning about the relations between models and evidence*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Dianovsky, M., Duncan, R. G., Rinehart, R., & Chinn, C. A. (2013, April). *Using evidence to evaluate multiple competing models*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Puerto Rico.
- Dianovsky, M., Rinehart, R., Duncan, R., & Chinn, C. (2012, January). *Promoting scientific reasoning through public epistemic criteria in middle-school science classrooms*. Paper presented at the Subway Submit, New York.

- Chinn, C. A. (2012, August). *A classroom study of learning to evaluate scientific evidence*. Poster presented at the annual meeting of the Cognitive Science Society, Sapporo, Japan.
- Chinn, C. A., & Buckland, L. A. (2012, April). *The epistemic cognition of evaluating sources*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, British Columbia.
- Chinn, C. A., Rinehart, R., Drescher, C., Duncan, R. G., Dianovsky, M., & Buckland, L. A. (2012, April). *Standards for evaluating evidence in arguments: The problem of Underdetermination*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, British Columbia.
- Chinn, C. A., & Buckland, L. A. (2012, April). *A multiparameter framework for the design of assessments of epistemic cognition*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver, British Columbia.
- Chinn, C. A., Buckland, L. A., & Samarapungavan, A. (2011, September). *A new framework for the conceptualization of epistemic cognition*. Paper presented at the biennial meeting of the European Association for Research on Learning and Instruction, Exeter, UK.
- Chinn, C. A., Duncan, R. G., Pluta, W. J., & Buckland, L. A. (2011, April). *Promoting model-based reasoning and conceptual change in middle school*. Poster presented in a poster symposium at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Buckland, C. A., Chinn, C. A., & Hurwitz, A. (2011, April). *Expert disagreement and epistemic commitment*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Chinn, C. A., Buckland, L. A., & Samarapungavan, A. (2010, August). *Expanding (greatly) the scope of epistemic cognition: Insights from philosophy*. Poster presented at the annual meeting of the American Psychological Association, San Diego, CA.
- Chinn, C. A., Duncan, R. G., Pluta, W. J., Buckland, L. A., Rogat, T. K., DiFranco, J., & Witham, S. (2010, May). *Promoting reasoning: A microgenetic study of middle-school students learning through model-based inquiry*. Symposium presented at the annual meeting of the American Educational Research Association, Denver, CO.
- Chinn, C. A., Buckland, L. A., & Samarapungavan, A. (2010, May). *Expanding the dimensions of learners' personal epistemologies: Applying philosophy to psychology and education*. Roundtable presented at the annual meeting of the American Educational Research Association, Denver, CO.
- Chinn, C. A., & Duncan, R. G. (2010, May). *Teacher practices that support and impede growth in reasoning*. Paper presented at the annual meeting of the American Educational Research Association, Denver, CO.
- Buckland, L. A., Chinn, C. A., & Duncan, R. G. (2010, May). *Epistemic growth in model-based argumentation*. Paper presented at the annual meeting of the American Educational Research Association, Denver, CO.

- Pluta, W. J., Chinn, C. A., & Duncan, R. G. (2010, May). *Epistemic criteria for good scientific models*. Poster presented at the annual meeting of the American Educational Research Association, Denver, CO.
- Chinn, C. A. (2010, April). *How teachers promote growth in reasoning in a model-based inquiry curriculum*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Philadelphia, PA.
- Pluta, W. P., Chinn, C. A., Buckland, L. B., Duncan, R. G., Rogat, T. K. (2009, April). *The structure of discussions that promote successful model-based reasoning*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Buckland, L. B., Chinn, C. A., Pluta, W. P., Duncan, R. G. (2009, April). *Model evaluation criteria in inquiry classrooms*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Rogat, T. K., Swiggett, W., & Chinn, C. A. (2008, July). *Sustaining motivation during complex tasks with motivating features*. Paper presented at Motivation in Action – The 11th International Conference on Motivation, Turku, Finland.
- Pluta, W. P., Buckland, L. A., Pluta, W. P., Chinn, C. A., Duschl, R. A., & Duncan, R. G. (2008, June). *Learning to evaluate scientific models*. Paper presented at the biennial meeting of the International Conference of the Learning Sciences, Utrecht, Netherlands.
- Chinn, C. A., Duschl, R. A., & Duncan, R. G., Buckland, L. A., Pluta, W. P. (2008, June). *A microgenetic classroom study of learning to reason scientifically through modeling and argumentation*. Poster presented at the biennial meeting of the International Conference of the Learning Sciences, Utrecht, Netherlands.
- Chinn, C. A., Duschl, R. A., Duncan, R. G., Pluta, W. J., Buckland, L. A., Ruppert, J., Bausch, A., & Freidenreich, H. B. (2008). *Promoting growth in scientific reasoning: A yearlong microgenetic study of middle-school students learning through model-based inquiry*. Symposium presented at the annual meeting of the American Educational Research Association, New York.
- Chinn, C. A. (2008, March). *Middle school students' epistemic criteria for evaluating scientific studies*. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
- Chinn, C. A. (2008, March). *A microgenetic study investigating the development of reasoning in middle-school life-science classrooms*. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
- Pluta, W. P., & Chinn, C. A. (2008, March). *Coordinating evidence across science domains: Students' adaptive epistemologies and strategy use*. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
- Hung, C.-C. L., & Chinn, C. A. (2007, April). *Group argumentation and learning*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

- Chinn, C. A., & Hung, C.-C. L. (2007, April). *Learning to reason about the methodology of scientific studies: A classroom experiment in the middle school*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Chinn, C. A., & Samarapungavan, A. (2006, August). *Rethinking the foundations of research on learners' epistemologies*. Poster presented at the annual meeting of the American Psychological Association, New Orleans, LA.
- Cutting, M. F., & Chinn, C. A. (2006, August). *Perspective taking: Strategies and obstacles*. Poster presented at the annual meeting of the American Psychological Association, New Orleans, LA.
- Chinn, C. A. (2006, June). *Assessing the quality of group argumentation*. Paper presented at the International Conference of the Learning Sciences, Bloomington, IN.
- Chinn, C. A. (2006, April). *Deep epistemological differences between creationists and evolutionary scientists*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Chinn, C. A. (2006, April). Panelist on panel *Research on epistemology: Bridging disciplinary boundaries and theoretical perspectives* (Clark A. Chinn, Chair). Panel presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Chinn, C. A. (2006, March). *Learning through argumentation in classrooms*. Paper presented at the Institute for Child Development, University of Medicine and Dentistry of New Jersey, New Brunswick, NJ.
- Chinn, C. A. (2005, October). *Rethinking the foundations of research on learners' epistemologies*. Paper presented at the University of Delaware, Newark, DE.
- Chinn, C. A., & Samarapungavan, A. (2005, July). *Toward a broader conceptualization of epistemology in science education*. Paper presented at the biennial meeting of the International History, Philosophy, and Science Teaching Conference, Leeds, United Kingdom.
- Chinn, C. A., & DaCosta, M. C. (2005, July). *Reasoning about conflicting evidence*. Paper presented at the biennial meeting of the International History, Philosophy, and Science Teaching Conference, Leeds, United Kingdom.
- Cutting, Maris F., & Chinn, C. A. (2005, April). *Perspective taking in cross-cultural problem solving: Reasoning from another's point of view*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.
- Chinn, C. A. (2005, April). *The microgenetic method*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.

- Chinn, C. A., & Samarapungavan, A. (2005, February). *Learning to use scientific models: Multiple dimensions of conceptual change*. Paper presented at the Inquiry Conference on Developing a Consensus Research Agenda, Piscataway, NJ.
- Chinn, C. A. (2004, November). *Learning through argumentation in classrooms*. Paper presented to the National Academy of Sciences Committee on Science Education, Washington, DC.
- DaCosta, M.C., & Chinn, C. A. (2004, June). *Who is to blame? The impact of views of causal agency on reasoning and decision making*. Poster presented at the International Conference of the Learning Sciences, Santa Monica, CA.
- Chinn, C. A. (2004, April). *Learning to reason*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Chinn, C. A. (2004, April). *Reasoning about methodological error*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Schreiner, M., & Chinn, C. A. (2004, April). *High school students' beliefs about learning Spanish: An interview study*. Poster presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Chinn, C. A. (2004, April). *The microgenetic method: Current work and extensions to classroom research*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Chinn, C. A. (2003, March). *The epistemology of observation*. Paper presented at the annual meeting of the National Association of Research in Science Teaching, Philadelphia, PA.
- Chinn, C. A. (2003, January). *Knowledge, belief, and understanding in learning science*. Paper presented at the biannual meeting of the American Association of Physics Teachers, Austin, TX.
- Chinn, C. A., Van Der Beck, S. L., & Cutting, M. F. (2002, April). *Reasoning about uncertain evidence*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Malhotra, B. A., & Chinn, C. A. (2002, April). *A microgenetic study of fourth graders learning to design and interpret experiments in the classroom*. Poster presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Chinn, C. A. (2001, October). *Effects of the structure of collaborative discourse on student learning*. Paper presented at the annual meeting of the National Academy of Education, Berkeley, CA.
- Chinn, C. A. (2001, August). *Obstacles to children's conceptual change in response to anomalous observational data*. Invited address presented at the annual meeting of the American Psychological Association, San Francisco, CA.
- Chinn, C. A. (2001, June). *Promoting authentic reasoning in middle-school classrooms*. Paper presented at the National Science Foundation, Washington, DC.

- Chinn, C. A. (2000, November). *Children's conceptual change in response to anomalous data*. Colloquium presented at the Department of Educational Psychology, University of Washington, Seattle, WA.
- Chinn, C. A., O'Donnell, A., & Jinks, T. (2000, April). *Structural analysis: An approach to analyzing discourse*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Chinn, C. A., & Samarapungavan, A. (2000, April). *Relations between belief and understanding*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Chinn, C. A., & Malhotra, B. A. (2000, October). *The epistemology of authentic scientific research*. Paper presented at the inaugural meeting of the Cognitive Development Society, Chapel Hill, NC.
- Chinn, C. A., & Malhotra, B. A. (1999, April). *Models of authentic experiments*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.
- Chinn, C. A. (1998, April). *Learning science from explicit models*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Chinn, C. A. (1998, April). *Patterns of participation during literature discussions*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Chinn, C. A., & Malhotra, B. A. (1998, April). *What does it mean to do an experiment?* Invited paper presented at the Designing for Science Conference, Pittsburgh, PA.
- Chinn, C. A. (1998, January). *Core issues in knowledge acquisition: A microgenetic study of learning about matter and chemical reactions*. Paper presented at the Winter Conference on Discourse, Text, and Cognition, Jackson Hole, WY.
- Chinn, C. A. (1998, January). *Eight issues in knowledge acquisition: A microgenetic study of learning in chemistry*. Poster presented at the annual meeting of the Cognitive Science Society, Stanford, CA.
- Chinn, C. A., & Brewer, W. F. (1997, April). *Scientific reasoning in children*. Paper presented at the annual meeting of the Society for Research in Child Development, Washington, DC.
- Chinn, C. A. (1997, April). *A microgenetic study of learning about molecules and chemical reactions*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Chinn, C. A., & Brewer, W. F. (1996, November). *Mental models in data interpretation*. Paper presented at the biennial meeting of the Philosophy of Science Association, Cleveland, OH.
- Chinn, C. A., & Brewer, W. F. (1996, April). *Key issues for theories of knowledge acquisition in science*. Paper presented at the annual meeting of the American Educational Research Association, New York.

- Chinn, C. A., & Brewer, W. F. (1996, April). *A psychological model of how people evaluate data*. Paper presented at the annual meeting of the American Educational Research Association, New York.
- Anderson, R. C., Chinn, C. A., Waggoner, M. A., & Chang, J. (1996, April). *Aspects of children's argumentation during story discussions*. Paper presented at the annual meeting of the American Educational Research Association, New York.
- Brewer, W. F., & Chinn, C. A. (1995, September). *Cross-domain and within-domain reasoning and beliefs about the world in children and scientists*. Paper presented at Conference on the Psychology of Science, Memphis, TN.
- Chinn, C. A. (1995, July). *Representing dialectical arguments*. Poster presented at the annual meeting of the Cognitive Science Society, Pittsburgh, PA.
- Brewer, W. F., & Chinn, C. A. (1995, July). *An analysis of models of knowledge acquisition*. Paper presented at the IV European Congress of Psychology, Athens, Greece.
- Chinn, C. A., & Brewer, W. F. (1995, April). *Issues for models of knowledge acquisition*. Paper presented at the annual meeting of the Society for Research in Child Development, Indianapolis, IN.
- Chinn, C. A., & Waggoner, M. A. (1995, April). *Participation structure and argumentation during collaborative reasoning*. Poster presented at the annual meeting of the Society for Research in Child Development, Indianapolis, IN.
- Brewer, W. F., & Chinn, C. A. (1994, October). *Scientists' responses to anomalous data: Evidence from psychology, history, and philosophy of science*. Paper presented at the biennial meeting of the Philosophy of Science Association, New Orleans, LA.
- Chinn, C. A. (1994, August). *Are scientific theories that predict data more believable than theories that retrospectively explain data?* Poster presented at the annual meeting of the Cognitive Science Society, Atlanta, GA.
- Chinn, C. A. (1994, August). *The theory-ladenness of data: An experimental demonstration*. Poster presented at the annual meeting of the Cognitive Science Society, Atlanta, GA.
- Chinn, C. A. (1993, July). *The role of anomalous data in knowledge acquisition*. Invited paper presented at the Third International Seminar on Misconceptions and Educational Strategies in Science and Mathematics, Ithaca, NY.
- Chinn, C. A. (1993, December). *An analysis of the effects of reflective thinking discussions on discourse structure*. Paper presented at the annual meeting of the National Reading Conference, Charleston, SC.
- Brewer, W. F., & Chinn, C. A. (1993, November). *The role of anomalous data in theory change*. Poster presented at the annual meeting of the Psychonomics Society, Washington, DC.
- Chinn, C. A., & Brewer, W. F. (1993, June). *Factors that influence how people respond to anomalous data*. Paper presented at the annual meeting of the Cognitive Science Society, Boulder, CO.
- Anderson, R. C., Waggoner, M., Chinn, C. A., & Yi, H. (1993, May). *Story discussions that promote reflective thinking*. Reading Research '93, San Antonio, TX.

- Chinn, C. A. (1993, April). *Effects of reflective thinking discussions on discourse structure*. Paper presented at the annual meeting of the American Educational Research Association, Atlanta, GA.
- Chinn, C. A., & Brewer, W. F. (1993, April). *Theory change in response to contradictory information*. Poster presented at the annual meeting of the American Educational Research Association, Atlanta, GA.
- Chinn, C. A., & Brewer, W. F. (1993, April). *A theoretical framework for understanding how science students respond to anomalous data*. Paper presented at the annual meeting of the American Educational Research Association. Atlanta, GA.
- Waggoner, M. A., & Chinn, C. A. (1993, April). *Teachers' beliefs and the nature of classroom discussions*. Poster presented at the annual meeting of the American Educational Research Association, Atlanta, GA.
- Brewer, W. F., & Chinn, C. A. (1993, April). *The role of anomalous data in knowledge acquisition*. Paper presented at the annual meeting of the Society for Research in Child Development, New Orleans, LA.
- Chinn, C. A., & Brewer, W. F. (1992, July). *Psychological responses to anomalies*. Paper presented at the annual meeting of the Cognitive Science Society, Bloomington, IN.
- Chinn, C. A., & Waggoner, M. A. (1992, April). *Dynamics of classroom discussion: An analysis of what causes segments of open discussion to begin, continue, and end*. Poster presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Chinn, C. A., Waggoner, M., & Schommer, M. (1990, December). *Oral reading errors and teachers' reactions to them*. Paper presented at the annual meeting of the National Reading Conference, Miami, FL.

### ***Professional Activities***

#### ***Editorial and Reviewer Activities***

Current Editor of *Educational Psychologist*.

Currently serving on Editorial Boards of:

*Journal of Experimental Education*

*Journal of the Learning Sciences*

Past member of Editorial Boards of *American Educational Research Journal*, *Educational Research Review*, *Educational Researcher*, *Contemporary Educational Psychology*, *Educational Psychologist*, and *Journal of Educational Psychology*

#### ***National Service***



- 2010-2015 Publications Committee, Division 15, American Psychological Association
- 2012-2013 Program Chair for Section 1d of Division C, American Educational Research Association
- 2007-2008 Scientific Committee, International Conference of the Learning Sciences (ICLS) Conference 2008
- 2006-2007 Program Chair, Computer Supported Collaborative Learning conference, International Society of the Learning Sciences
- 2005-2006 Program Chair, Division 15 (Educational Psychology), American Psychological Association
- 1999-2000 Chair, Sylvia Scribner Award Committee, Division C, American Educational Research Association.
- 1998-1999 Chair, Sylvia Scribner Award Committee, Division C, American Educational Research Association.
- 1997-1998 Program Chair for Section 4 of Division C, American Educational Research Association.

***Educational Service***

- 2016-present Have provided professional to science teachers as part of a math-science partnership with central New Jersey districts
- 2012-present Have worked with the state of New Jersey on various aspects of the adoption and implementation of the Next Generation Science Standards
- 2001-present Have worked with middle-school teachers in a total of 23 districts to develop science curriculum and to improve science instruction practices.
- 2005-2007 Worked with faculty at Raritan Valley Community College, NJ, to infuse strategy instruction into courses.
- 2000-2001 Developed a variety of lessons to promote reasoning; these have been used in all seventh-grade science classes in Franklin, NJ.
- 2000 Developed lessons with eighth graders to help them learn about astronomical observation and how observations can be biased, Franklin, NJ.
- 1999 Developed materials for a middle-school history unit on the Jacksonian era; the lessons involve students in reading and interpreting historical sources, Edison, NJ.
- 1999 Developed an electrical circuits unit for fifth graders; employed the unit in classes in North Brunswick, NJ, and Franklin, NJ.
- 1999 Advised ESL faculty of Middlesex Community College on how to incorporate strategy teaching into their courses.
- 1998 Developed a whole-class demonstration lesson for helping middle-school students learn to reason about archaeological evidence; worked with teachers to implement this lesson in sixth-grade classes in Edison, NJ, New Brunswick, NJ, and Harding, NJ.
- 1998 Developed lessons to teach fifth graders about conducting experiments, Conerly Road Elementary School, Franklin Township
- 1998 Developed and demonstrated lessons to teach fourth graders about molecules and states of matter, Conerly Road Elementary School, Franklin Township; Harding Township Elementary School, Harding Township

- 1998 Developed and demonstrated lessons to teach fourth graders about conducting experiments, Hillcrest Elementary School, Franklin
- 1990 Consultant to Teaching Reading: Strategies from Successful Classrooms, a six-part national teacher training video series (directed by R. C. Anderson).  
Champaign, IL: Center for the Study of Reading.

### ***University***

- 2009-present Coordinator, Concentration in Learning, Cognition, Instruction, and Development, Ph.D. Program in Education
- 2005-2008 Director, Ph.D. Program in Education
- 2004-2005 Chair, Rules of Procedure Committee (Graduate School of Education)
- 2002-2004 Chair, Admissions and Scholastic Standing committee (Graduate School of Education)
- 2000-2003 Chair, Human Subjects Committee (Educational Psychology department).
- 2000-2001 Chair, Courses of Study Committee (Graduate School of Education)

### ***Courses Taught***

#### *Graduate:*

Design-Based Research  
Fieldwork Experience in the Design of Learning Environments  
Educational Psychology II: Theories of Cognition and Instruction  
Seminar on Reasoning and Problem Solving  
Seminar on Conceptual Change  
Seminar on Creativity and Problem Solving  
Seminar on Critical Thinking Across the Curriculum  
Seminar on Metacognition and Learning  
Seminar on Reasoning  
Psychology of Learning  
Cognition and Memory  
Psychology of Instruction  
Teacher As Researcher

#### *Undergraduate:*

Educational Psychology/Principles of Classroom Learning

### ***Dissertations Chaired***

William Pluta, 2015, *Promoting the development of epistemic cognition.*  
Luke A. Buckland, 2013, *Exploring an expanded conception of epistemic cognition*

- Maris F. Cutting, 2009, *Perspective-taking accuracy on a conceptually complex problem*
- Wanda D. Swiggett, 2008, *“It was more useful than I initially thought”: Changes in motivational components as preservice teachers complete a meaningful academic task*
- Maria Carolina DaCosta, 2008, *Causal beliefs in educational leadership and implications for problem solving*
- Betina Malhotra, 2006, *Research in Education Applied to Learning (R.E.A.L.): Community-project-based learning*
- Michele Schreiner, 2004, *High school students’ beliefs about learning*
- Rebecca Dutton, 2003. *The impact of epistemology, motivation, and metacognition on performance in case-based classes.*