

CATHERINE A. CLEMENT

Psychology Department  
Eastern Kentucky University  
Richmond, KY  
(859) 622-1105

**Education**

Ph.D. Cognitive Psychology, Clark University, Worcester, MA., 1986  
M.A. Cognitive Psychology, Clark University, Worcester, MA., 1982  
A.B. University of California, Berkeley, anthropology, 1975, Phi Beta Kappa

**Post Doctoral Research Experience**

1986-1988 Postdoctoral Fellow, Department of Psychology, University of Illinois,  
Urbana-Champaign. Research concerned reasoning with analogical models.

**Teaching Experience**

Fall 1988-Spring 1989 Assistant Professor of Psychology, California State University, Fullerton.

1989-1993 Assistant Professor of Psychology, Eastern Kentucky University.

1994-2004 Associate Professor of Psychology, Eastern Kentucky University.

2004-present Professor of Psychology, Eastern Kentucky University.

**Local Activities-Eastern Kentucky University, Past Five Years**

Departmental Activities (past five years):

Ethics Committee  
Undergraduate Curriculum Committee  
Faculty Research and Development Committee  
Faculty Search  
Tenure and Promotion Committee

College and University Activities (past five years)

College Promotion and Tenure Committee  
Eastern Committee for Responsible Environmental Stewardship; Chair Transportation Subcommittee.  
Dean's Award of Merit Committee; Academic Integrity Committee

**Professional Activities, Past Five Years**

Member: Cognitive Science Society, Psychonomics Society, American Psychological Society

Member of Program Committee: *Proceedings of the Cognitive Science Society*.

Reviewer: *Proceedings of the Cognitive Science Society (reviewer and member of program committee)*,  
*Proceedings of the European Cognitive Science Society*, *The American Journal of Psychology*, *Instructional Science*, *Child Development*, *Journal of Educational Psychology*, *Creativity Research Journal*, *Memory and Cognition*, *Journal of Experimental Psychology: Learning, Memory & Cognition*, *National Science Foundation*, *Cognitive Science*, *British Journal of Educational Psychology*

## Funded External Grants

"Retrieving Analogs from Memory: The Effect of Level of Abstraction of Domain Representations." Funded by the Kentucky - NSF EPSCoR 1990 Regional Universities Visiting Scholars Program. \$10,412

"Enhancing the Understanding and Use of Analogies with a Manifest Representation of Domain Structure". Funded by the Kentucky - NSF EPSCoR 1994 Research Enhancement Program. \$12,000.

"Analogies and Learning to See: The Development of Attentional Strategies and Eye Movement Patterns." Funded by the Kentucky - NSF EPSCoR 2003 Research Enhancement Grants. Funded for \$25,000.

## Publications

Clement, C. A., Henning, J. B., & Osbaldiston, R. (2014). Integrating factors that predict energy conservation: The Theory of Planned Behavior and beliefs about climate change. *Journal of Sustainable Development, 7*.

Clement, C. A., Harris, R. C., Burns, B. & Weatherholt (2010). An eye tracking analysis of the effect of prior comparison on attention during analogical mapping. *Current Psychology, 29*, 273-287.

Weatherholt, T. N., Harris, R. C., Burns, B. & Clement, C. (2006). Analysis of attention and analogical reasoning in children of poverty. *Applied Developmental Psychology, 27*, 125-135.

Clement, C. A. & Yanowitz, K. (2003). Using an analogy to model causal mechanisms in a complex text. *Instructional Science, 31*, 195-225.

Clement, C. A., (2002). Learning with analogies, cases and computers (book review). *Journal of the Learning Sciences, 11*, 129-140.

Mitchell, R. W. & Clement, C. A. (1999). Simulations, simulators, amodality, and abstract terms (commentary). *Behavioral and Brain Sciences, 22*, 628-629.

Clement, C. A., Mawby, R. & Giles, D. (1994). The effects of manifest relational similarity on analog retrieval. *Journal of Memory and Language, 33*, 396-420.

Clement, C. A. (1994). Effect of structural embedding on analogical transfer: Manifest versus latent analogs. *American Journal of Psychology, 107*, 1-38.

Clement, C. A. & Gentner, D. (1991). Systematicity as a selection constraint in analogical mapping. *Cognitive Science, 15*, 89-132.

Gentner, D. & Clement, C. A. (1988). Evidence for relational selectivity in interpreting analogy and metaphor. In G. H. Bower (Ed.), *The Psychology of Learning and Motivation*, (Vol. 22, pp. 307-358). New York, NY: Academic Press.

Kurland, D. M., Clement, C. A., Mawby, R., & Pea, R. D. (1987). Determining the cognitive demands of computer programming. In D. N. Perkins, J. Lockhead, J. Bishop (Eds.), *Thinking*. Hillsdale, NJ: Erlbaum.

Kurland, D. M., Clement, C. A., Mawby, R., & Pea, R. D. (1987). Mapping the cognitive demands of learning to program. In R. D. Pea & K. Sheingold, (Eds.), *Mirrors of Minds: Patterns of Experience in Educational Computing*. (pp. 103-127). Norwood, NJ: Ablex.

Clement, C. A. , & Falmagne, R. J. (1986). Logical reasoning, world knowledge and mental imagery: Interconnections in cognitive processes. *Memory and Cognition*, 14, 299-307.

Clement, C. A., Kurland, D. M., Mawby, R., & Pea, R. D. (1986). Analogical reasoning and computer programming. *Journal of Educational Computing Research*, 2, 473-486.

Kurland, D. M., Pea, R. D., Clement, C. A., & Mawby, R. (1986). The development and transfer of high level thinking skills among high-school programmers. *Journal of Educational Computing Research*, 2, 429-458.

Mawby, R., Clement, C. A., Pea, R. D., & Hawkins, J. (1984). Structured interviews on children's conceptions of computers, Technical Report #19, Center for Children and Technology, Bank Street College.

Linn, M. C., Clement, C. A., & Pulos, S. (1983). Is it formal if it's not physics? *Journal of Research in Science Teaching*, 20 (8).

Pulos, S., De Benedictis, T., Linn, M. C., Sullivan, P. A., & Clement, C. A. (1982). Modification of gender differences in the understanding of displaced volume. *Journal of Early Adolescence*, 2 (1).

### **Presentations**

Clement, C. A. & Henning, J. B. (2012). *Perceived Behavioral Control predicts four energy conservation behaviors*. Poster Presented at the 24<sup>th</sup> meetings of Association for Psychological Science, Chicago, 2012.

Henning, J. B., & Clement, C. A. (2010, August). *Beliefs and attitudes related to environmental sustainability behaviors*. Poster presented at the 118<sup>th</sup> American Psychological Association Convention, San Diego, CA.

Clement, C. A. & Covey, A. (2010, May). *The Effect of Analogical Comparison on Level of Construal of a Story*. Poster presented at the 22<sup>nd</sup> meetings of Association for Psychological Science, Boston, MA.

Clement, C. A., Harris, R. C., Weatherholt, T. N. & Burns, B. (2006, November). *An eye tracking analysis of the effect of prior comparison on analogical mapping*. Poster presented at the 47th annual meetings of the Psychonomics Society, Houston, TX.

Clement, C. A. & Hyatt, D. (2004, April). *The effects of analogical matching on the detection of relational similarity in complex contexts*. Poster presented at the 2004 meetings of the American Educational Research Association, San Diego, CA.

Clement, C. A. & Yanowitz, K. (1999, April). *Using an analogy to model causal mechanisms in a narrative text*. Poster presented at the meetings of the American Educational Research Association, Montreal, Canada.

Clement, C. A. (1999, May). *Learning and thinking with analogies*. Invited talk to the experimental psychology program, Department of Psychology and Brain Sciences, University of Louisville.

Clement, C. A. & Yanowitz, K. (1996). *The effect of an analogy on the representation of causal mechanisms in a complex story*. Poster presented at the thirty-seventh annual meeting of the Psychonomics Society, Chicago, IL.

Clement, C. A. & Burkett, M. (1993, June). *Fixing object mappings facilitates analogical transfer*. Poster presented at the conference of the American Psychological Society, Chicago, IL.

Clement, C. A., Mawby, R., & Giles, D. (1991, November). *The effect of alternative representations of relational structure on transfer between analogous stories*. Poster presented at the thirty-second annual meeting of the Psychonomics Society, San Francisco, CA.

Clement, C. A. (1991, August). Organizer and Chair: *Metaphor as a Device for Conceptual Change*. Symposium at the thirteenth meeting of the Cognitive Science Society. Chicago, IL.

Clement, C. A. (1990, November). *The effect of alternative representations of relational structure on analogical access*. Poster presented at the twelfth annual meeting of the Cognitive Science Society. Cambridge, MA. (Proceedings are published.)

Clement, C. A., Clifford, M., & Le, M. T. (1989, November). *The effect of level of abstraction of domain representations on analog retrieval*. Poster presented at the thirtieth annual meeting of the Psychonomics Society, Atlanta, GA.

Clement, C. A. (1989, June). *Analogical transfer: Effects of the form in which key information is represented*. Poster presented at the meetings of the American Psychological Society. Arlington, VA.

Clement, C. A. (1989, March). *Structural determinants of analogical mapping*. Invited talk to the cognitive psychology group, Claremont Graduate School, Claremont, CA.

Clement, C. A. & Gentner, D. (1988, August). *Systematicity as a selection constraint in analogical mapping*. Paper presented at the eleventh annual meeting of the Cognitive Science Society, Montreal, Canada. (Proceedings are published.)

Clement, C. A. (1987, July). *Applying general principles to novel problems as a function of learning history: learning from examples vs. studying general statements*. Poster presented at the tenth annual meeting of the Cognitive Science Society, Seattle, WA. (Proceedings are published.)

Clement, C. A., Kurland, D. M., Mawby, R., & Pea, R. D. (1984, August). *Analogical reasoning and computer programming*. Paper presented at the Conference on Thinking, Cambridge, MA.

Kurland, D. M., Clement, C. A., Mawby, R., & Pea, R. D. (1984, August). *Determining the cognitive demands of learning to program*. Paper presented at the Conference on Thinking, Cambridge, MA.

Clement, C. A. (1984, April). *Assessing cognitive components of computer programming*. Paper presented at the meetings of the American Educational Research Association, New Orleans, LA.

Kurland, D. M., Clement, C. A., Mawby, R., & Pea, R. D. (1984, April). *The development of reasoning skills in relation to learning Logo Programming*. Paper presented at the meetings of the American Educational Research Association, New Orleans, LA.

Clement, C. A., & Falmagne, R. J. (1983, April). *World knowledge, mental imagery, and logical reasoning: Interconnections in cognitive processes*. Paper presented at the meeting of the Eastern Psychological Association, Philadelphia, PA.

Falmagne, R. J., Sherwood, V., & Clement, C. A. (1981). *Semantic factors in the acquisition of deductive inferences in children*. Paper presented at the meeting of the Psychonomic Society, Philadelphia, PA.