

Notes

Phi Delta Kappan Article Reviews Research in CAI and Programming:

The March issue of *Kappan* reviews papers by Richard Diem¹, Douglas Clements², and Gavriel Salomon³ related to CAI and programming. Diem's study cites 350 dissertations on these subjects over the last ten years, and the author is gloomy about what is currently happening. He feels that until educators develop their own technological skills in the classroom, computers will remain "a minor pedagogical side note".

CLIME Member Douglas Clements' study, reviewed in considerable detail, is reported as detecting generally positive effects when comparing Logo trained students with control groups.

Why various researchers get different results in studying CAI and programming effects is the subject of the Solomon paper. Expert teaching, structured guidance, and sequencing are examined for their impact on cognitive transfer.

1. Journal of Educational Research, Nov '86.
2. Journal of Educational Psychology, Oct. '86
3. Salomon and Perkins, "Transfer of Cognitive Skills from Programming: When and How?" (available for \$1.60 from Project Zero, 13 Appian Way, Cambridge, MA 02138)

Scope Math:

A computer based course for teaching mathematical problem solving has been developed at the

Univ. of Hawaii, and is available through *Creative Publications*.

Topics include geometry, number theory, probability, and Logo programming using Apple® Logo.

The course spans some 60 hours of instruction and interaction, employing Apple Logo.

Anyone having experience with *Scope Math*, or is in a position to review the product, please write to us.

Electronic Bulletin Board

The Simon Fraser University CLIME bulletin board is alive and well. Several Clime members, including Ihor have accessed the bulletin board and Sandy is encouraging more people to participate. If you do not have Log On information, please contact Sandy.

14 Logo Papers slated as NCTM Meets in Anaheim

The 65th Annual Meeting of the National Council of Teachers of Mathematics takes place in Anaheim California, April 8 to 11. Several CLIME members are attending and making presentations. Of the 500 sessions in the program, 14 have the word Logo in the title. These are listed below in session number sequence.

Wednesday, April 8th

- 13: Nancy Roberts, Leslie College, Cambridge, Massachusetts: *Logo Tools for Algebraic Problem Solving*.
- 77: Gerald D. Brazier, Pan American University, Edinburg, Texas: *The Transparent Turtle: A Logo-based Tool Kit for Secondary Mathematics*

Thursday, April 9th

- 97: Rick W. Billstein, University of Montana, Missoula, Montana: *Using Logo as a Tool in the Mathematics Classroom*

- 148: Steve R. Tipps, Midwestern State University, Wichita Falls, Texas: *Explorations in Probability and Statistics with Logo*.
- 71: Robert M. Hilgenfeld, Univ. of Wyoming, Laramie, Wyo: *Robots and Logo: Exercises in Mathematics Problem Solving*

Friday, April 10th

- 266: Johnny W. Lott, University of Montana, Missoula, Montana: *Motion Geometry and Tessalations: A Logo Approach*
- 385: Elaine M. Bologna, Summit School, Winston Salem, North Carolina: *Logo Can Be a Tool for Learning New Thinking and Problem-solving skills in Any Classroom*
- 418: W. George Cathcart, Univ. of Alberta, Edmonton, Alberta: *Some Nongraphic Applications of Logo in the Mathematics Classroom*
- 419: Bill Popejoy, Univ. of Northern Colorado, Greeley, Colorado: *Using the Computer and Logo to Discover Properties of Star Polygons: Research by Students.*

- 204: Susan Paalz Scally, Emory University, Atlanta, Georgia: *Learning Geometry in a Logo Environment: Curriculum Ideas for Your Middle/Junior High School*
- 433: Judy Olson, Melfried Olson, University of Wyoming, Larimie, Wyoming: *Logo and Manipulatives, the Right Combination. Theory and Practical Results*
- 435: John Olive, Univ. of Georgia, Athens, Georgia, and Sheryl A. Lankenau, Emory University, Atlanta, Georgia: *Teaching and Understanding Geometric Relationships through Logo*

Saturday, April 11th

- 442: Paula J. Cook, Penn Wood High School, Lansdowne, Pennsylvania: *Teaching Geometry to High School Math Students Using Logo and the Computer*
- 449: Charles S. Thompson, Univ. of Louisville, Louisville, Kentucky: *Teaching Geometric Concepts, Patterns, and Problem Solving with Logo.*