

CURRICULUM VITA (2003/01)

Paul Simon Anderson, Ph.D.

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Born September 1943; Married; Four Children; 6 ft.; 175 lbs.

Occupational goals:

University professor of Geography;

Administrator or researcher for distance education, especially for the benefit of less privileged people.

Developer of innovations and materials for the improvement of education.

EDUCATION:

09/61 - 06/65 Augustana College, Rock Island, Illinois; Biology major, Geography minor;
B.A. degree

06/64 - 08/64 Saltillo City College, Saltillo, Coahuila, Mexico; Intensive Spanish studies.

09/66 - 12/66 Lutheran School of Theology, Rock Island, Illinois; Theological studies.

04/69 - 06/70 University of California, Berkeley; Dept. of Geography; Graduate studies emphasizing Latin American tropical geography. **Master of Arts** degree awarded in 1972.

04/70 - 06/70 Tropical Geography Field Course in Guatemala and Costa Rica with the Organization for Tropical Studies (OTS).

08/70 - 12/70 Universidad Nacional, Bogota, Colombia; Fulbright-Hays scholarship studies emphasizing tropical geography and rural land use.

02/71 - 10/71 Centro Interamericano de Fotointerpretacion, Bogota, Colombia, with Dutch professors from the International Institute for Aerial Survey and Earth Sciences ITC, The Netherlands; Graduate technical training in photointerpretation for geology and geomorphology while on Fulbright Hays scholarship; **Graduate Diploma** awarded in 1971.

- 02/72 - 08/75 University of New England, Armidale, New South Wales, Australia; Department of Geography; Ph.D. research on the Latin Americans in Australia (continued in Canberra).
- 09/75 - 10/77 Australian National University, Canberra, A.C.T., Australia; Department of Demography. **Ph.D.** conferred in 1979.
- 1960 - Present Miscellaneous studies not for transcript credit, including Fortran, typing, teaching English as a second language, statistical analysis, computer-assisted cartography, grant writing and computer applications in education.

EMPLOYMENT:

- 10/62 - 06/65 Laboratory proctor, 6 hrs. weekly; Departments of Biology and Geography, Augustana College, Rock Island, Illinois.
- 07/65 - 06/66 Assistant supervisor of a day-care center for pre-school Peruvian children. Casa Belen, Lima, Peru.
- 02/67 - 11/69 U.S. Army, Rank: SP5; Vietnam assignment 9/67 - 9/68.
- 02/72 - 06/74 Teaching Fellow, University of New England, Armidale, New South Wales, Australia. With responsibilities for practical exercises for classroom and distance teaching (External Studies). Also lectured in Geography of Latin America and photogrammetry/Photointerpretation.
- 07/74 - 06/77 Lecturer, Department of Applied Geography at the Canberra College of Advanced Education, Canberra, A.C.T., Australia. Courses taught included Introductory Human Geography, Location Analysis and Geography of Latin America.
- 01/78 - 06/82 Assistant Professor of Geography, Universidade de Brasilia, Brasilia, Brazil. Taught Photointerpretation, Cartography, Agricultural Geography, Quantitative Methods and Population Geography. Also taught four extension courses utilizing distance education methods.
- 08/82 - 08/83 Assistant Professor, Department of Geography-Geology, Illinois State University (ISU), Normal, Illinois.
- 08/83 - Present Associate Professor, Department of Geography-Geology, Illinois State University, Normal, Illinois. Courses taught include Maps and Map Reading, Advanced Cartography, Photogrammetry, Remote Sensing Image Analysis, World Geography, and Latin America.

02/92 - 07/92 Fulbright Professor of Geography at the Center for Environmental Analysis and Planning at the Universidade Estadual Paulista (UNESP) (Sao Paulo State University)-Rio Claro campus. Taught a graduate course on the use of microcomputers for teaching cartography.

08/99 - 07/00 Fulbright Professor of Geography at the Universidade Eduardo Mondlane in Maputo, Mozambique. Taught aerial photo-interpretation and cartography while training a new lecturer. Assisted with teaching Geographic Information Systems (GIS) and contributed to the revamping on the Geography curriculum at that university.

07/01 - 06/03 Rotary University Teacher Grantee at the Universidade Pedagogica in Maputo, Mozambique. Instruction about cartography and remote sensing education; assist with supervision and strengthening of the undergraduate geography program, including the thesis orientation of some students. Research about community mapping using highly enlarged aerial photography.

OTHER QUALIFICATIONS, APTITUDES, HONORS AND GRANTS:

Foreign Languages: Professional level fluency in Portuguese, including public speaking and writing for publication. Spanish proficiency also very good. (Note: Accent marks are not printed in this vita.)

Illinois State Scholarship (honorary) for undergraduate studies, 1961-65

Fulbright-Hays Scholarship (IIE) for graduate study in Colombia, 7/70 - 10/71

Fulbright Scholar (CIES) Faculty Appointment to Brazil, 2/92-7/92

Fulbright Professorship to Mozambique, 11 months 1999-2000

Beta Beta Beta, National Honorary Biological Science Fraternity

Gamma Theta Upsilon, International Honorary Geography Society

Listed in Who's Who in American Education (1988 to present) and Who's Who in the *Midwest* (1988 to present)

Grants Received: Total = \$185,870

- G1. \$200 from ISU Instructional Development Program (IDP) for initial development of educational materials (1983).
- G2. \$2,700 from Colonial Ice Cream, Inc. in two grants for the ISU Geography program, for development of educational materials (1984 and 1985).
- G3. \$670 grant from the ISU FIDP for grant seeking efforts (1985).
- G4. \$47,000 from the ISU Technology Commercialization Center (TCC) of the Illinois Department of Commerce and Community Affairs, for a private company to develop the MDT innovation for educational testing (1985-1986).
- G5. \$1000 from Rand McNally and Company for development of educational materials concerning the learning of geographic place names (1986).
- G6. \$5500 from Multi-Digit Technologies (MDT) Corporation in two grants for research on innovations in educational measurement (1986 and 1987).

- G7. \$1,000 grant from ISU Small Research Grant Program for field work in Brazil (1992).
- G8. \$32,800 from Fulbright grant (salary, airfare, expense allowance) for research and lecturing in Brazil from February to July 1992.
- G9. \$4000 value in materials granted from ERDAS, Inc., to digital remote sensing software taken to host university (UNESP) in Brazil during Fulbright grant (1992).
- G10. \$45,000 from Fulbright grant (salary, airfare, expense allowance) for research and lecturing in Mozambique from August 1999 to July 2000.
- G11. \$12,500 for a Rotary University Teacher Grant for three to five months in 7/01 to 6/02 in Mozambique.
- G12. \$22,500 for a Rotary University Teacher Grant for six to ten months in 7/02 to 6/03 in Mozambique.
- G13. \$10,000 for a Rotary New Opportunities Grant for Biomass-fueled Domestic Stoves in Mozambique, during 2002-2003.
- G14. \$1000 for a Rotary New Opportunities Grant for Geography and Map Educational Materials for Schools in Mozambique, during 2002-2003.

MEMBER OF THE FOLLOWING PROFESSIONAL ORGANIZATIONS:

- National Council for Geographic Education (NCGE)
- Association of American Geographers (AAG)
- Conference of Latin Americanist Geographers (CLAG)
- Illinois Geographical Society (IGS)
- North American Cartographic Information Society (NACIS)
- American Society of Photogrammetry and Remote Sensing (ASPRS)

OFFICES/PROFESSIONAL SERVICE: (No positions while overseas until 1982)

Geography for Higher Education Specialty Group of the AAG: Board Member (1982- 1984).
 Cartography Specialty Group of the AAG: Secretary-Treasurer (1984-1986); Central Office Director (1986-1988).
 Education Committee of the North American Cartographic Information Society: Chairperson (1986-1988)
 Advisory Board for *Annual Editions: Geography*, Dushkin Publishing Group, Connecticut, 1986 through 1995 editions.
 Taskforce on Outline Maps for the National Council for Geographic Education: Chairperson (1990-1991).
 Illinois Conference for Latin American Studies: Board Member (1991-1993).
 Microcomputer Specialty Group of the AAG: Board Member (1994-1995);
 Chairperson (1995-97).
 Taskforce on Technology in Geography Education at the NCGE: Committee Member (1995-97).

THESES:

- A1. Master of Arts Thesis: "Isla Fuerte: A Micro-Regional Geography of a Colombian Island. University of California, Berkeley, 1972. (118 pp.) (published in Spanish, ref. item B1)."
- A2. Final study in Photogeology: "Estudio Integrado del Municipio de Yaguara y Sus Alrededores." [Integrated Study of the Yaguara Municipality and its Environs] Centro Interamericano de Fotointerpretacion, Bogota, Colombia, 1971. (69 pp. plus maps) (published in item B4).
- A3. Ph.D. Thesis: "Latin Americans in Australia: A study in Migration Satisfaction." Australian National University, 1979. (xix + 466 pp.) (Microfiche from ANU)

PUBLICATIONS:

Note 1: Several of the following publications and conference papers have been refereed and selected for inclusion in the works of the Educational Resources Information Center (ERIC). ERIC provides internationally distributed indexing and microfiche reproduction.

Note 2: Foreign language accent marks are not printed.

- B1. "Isla Fuerte: Geografia Micro-Regional de la Isla Colombiana," [Isla Fuerte: A Micro-Regional Geography] *Colombia Geografica*, Journal of the Geographic Institute "Agustin Codazzi," Bogota, Colombia, Vol. V, No. 2, pp. 119-191, 1972.
- B2. "An Oblique, Poly-cylindrical, Orthographic Azimuthal Equidistant Cartographic Projection: Its Purpose, Construction and Theory," *Cartography*, Journal of the Australian Institute of Cartographers, Vol. 8, No. 4, pp. 182-186, July 1974.
- B3. "The Spanish Impact on Indigenous American Culture," *Proceedings of the First Conference of Cultural Studies*, pp. 219-225, Goulburn College of Advanced Education, Goulburn, New South Wales, Australia, August 1975.
- B4. "Contribucion al Conocimiento Geologico de las Localidades de Aipe, Neiva, Palermo e Yaguara, Departamento del Huila, Colombia," [Contribution to the Geological Knowledge of the Localities of Aipe, Neiva, Palermo and Yaguara], with co-authors, *Boletin de Geologia*, Special Publication No. 7, (Memoria Vol. 2 of the Second Latin American Congress of Geology, 1973), pp. 555-566, (with three maps), Geology Division, Ministry of Mines and Hydrocarbons, Venezuela, 1976.
- B5. *Variations in Agricultural Practices*, A high school databank textbook used in Australia; with co-authors R. Ferrett and A. Moore, Holt-Saunders, Sydney, Australia, 91 pp., 1978.
- B6. *Student Guide and Enquiry Book for Variations in Agricultural Practices* with three Broadsheets of maps, with co-authors R. Ferrett and A. Moore, Holt-Saunders, Sydney, Australia, 32 pp., 1978.

- B7. “Estudos Externos na Australia e Sua Aplicabilidade no Brasil,” [External Studies in Australia and their Applicability in Brazil], *Tecnologia Educacional*, Journal of the Brazilian Association for Educational Technology (ABT), Rio de Janeiro, Brazil, VIII, No. 30, pp. 18-23, September-October 1979.
- B8. “O Ensino de Cartografia e Fotointerpretacao a Distancia,” [The Distance Teaching of Cartography and Photointerpretation], *Anais (Annals of the Tenth Brazilian Congress on Cartography)*, Vol. 2, pp. 603-609, Brazilian Cartography Society, Rio de Janeiro, Brasilia, 1981.
- B9. Report on the “Joint Conference on Distance Education in Costa Rica,” *ICCE Newsletter on Distance Learning*, International Council for Correspondence Education, Vol. 11, No. 2, pp. 14-16, August 1981.
- B10. “Planimetro de Pontos” (Dot planimeter transparent template with explanatory sheet) Editora Grafica Ipiranga, Brasilia, Brazil, 1982.
- B11. “Carto-declivimetro” (Slope measurement transparent template with explanatory sheet) Editora Grafica Ipiranga, Brasilia, Brazil, 1982.
- B12. *Fundamentos Para Fotointerpretacao*, [Fundamentals for Photointerpretation], with Study-Guide in manuscript form, used in Brazil as a college textbook. Editor and principal author, Brazilian Cartography Society, Rio de Janeiro and Brasilia, 1982.
- B13. “The Fires of Distance Education in Latin America,” in John Daniel (ed), *Learning at a Distance*, pp. 70-72, International Council for Correspondence Education and Athabasca University, Alberta, Canada, 1982.
- B14. Answer Sheets and Cards for the MDT Multi-Digit Test Procedure (in five formats), Computer readable forms printed by National Computer Systems, Inc., Minneapolis, and other printers; 250,000 copies printed, Multi-Digit Technologies Corporation, Normal, Illinois, 1983-present.
- B15. “Lecture Titles Written in Plain English Increase Student Interest,” *Journal of Geography*, National Council for Geographic Education, Macomb, Illinois, pp. 130-131, May-June 1984. (ERIC EJ 300 564).
- B16. “An Introduction to the Multi-Digit Test (MDT),” *Discussion Papers in Geography*, No. 2: “Objective Testing in Geography,” Old Dominion University, Norfolk, Virginia, pp. IV-1 to IV-18, 1984.
- B17. “Applications of the Multi-Digit Test (MDT) Procedure for Teaching the Geography of Latin America,” *CLAG Communication*, Newsletter No. 50, pp. 2-3, December 1984.

- B18. "Comparison of Cognitive Retention from Three Testing Methods: Fill-in-the-Blank, Multiple Choice and the Multi-Digit Test (MDT)," with co-authors Miriam Hill, Shamim Naim and William Walters, *Illinois School Research and Development*, Journal of the Illinois Association for Supervision and Curriculum Development, Normal, Illinois, Vol. 21, No. 1, pp. 28-37, Winter 1985. (ERIC EJ 315 070).
- B19. "External Studies in Australia and Its Applicability in Developing Countries with Special Reference to Brazil," *International Journal of Innovative Higher Education*, Journal of the University Without Walls International Council, Toronto, Canada, Vol. 2, No. 1, 1985.
- B20. "Millimetric Coordinates (MMC) for Image Locations: Methods, Applications and Advantages," *Technical Papers*, Fall Convention of the American Congress on Surveying and Mapping and the American Society for Photogrammetry and Remote Sensing, Falls Church, Virginia, pp. 486-494, 1985.
- B21. "Millimetric Coordinates (MMC) for Precise Locations on Aerial Photographs and Other Images," *Photogrammetric Engineering and Remote Sensing*, Journal of the American Society of Photogrammetry, pp. 1963-1964, December 1985.
- B22. "Isla Fuerte on the Juan de la Cosa Mapamundi of 1500: A Key to Interpreting the Historical Ethno-Geography for Colombia's Caribbean Coast," *Terrae Incognitae*, Journal of the Society for the History of Discoveries, Chicago, Illinois, Vol. 16, pp. 1-13, 1984, (Published in 1986).
- B23. *The MDT Innovation: Machine-Scoring of Fill-in-the Blank Tests*, Multi-Digit Technologies Corporation, Normal, Illinois, 198 pages, 1987. (ERIC ED 307 287 -- 3 fiche).
- B24. *MDT Educational System: User's Guide*, with co-author James S. Schoner. Multi-Digit Technologies Corporation, Normal, Illinois, 86 pp., 1987.
- B25. "Testing---1, 2,...523,...641,...999---Testing: The MDT Multi-Digit Technique Applied to Science Education," with co-author James S. Schoner. *Spectrum*, Journal of the Illinois Science Teachers Association, Spring/Summer issue, pp. 17-21, 1987. (ERIC ED 318 789).
- B26. "Why Aconcagua is in Argentina," *Malas Noticias*, Midwest Association for Latin American Studies, Vol. 25, No. 7, (December), pp. 8-9, 1987.
- B27. "Distance Education for Teaching Map Use Skills: An Introduction." In Rod Gerber (ed). *Research in Geographical Education*. Vol.3. Australian Geographical Education Research Association, Brisbane, Australia, pp. 107-114. 1987.

- B28. "An Educology of Testing: American Student Attitudes about Test Formats, with Special Reference to the MDT Multi-Digit Testing Method." *International Journal of Educology*, Vol. 2. Sydney, Australia, pp. 143-184. 1988.
- B29. "Uses of MDT Multi-Digit Testing in Geographical Education" Chapter 34 in Rod Gerber and John Lidstone (eds). *Developing Skills in Geographical Education*. International Geographical Union with Jacaranda Press and Brisbane C.A.E., Australia. pp. 215-221. 1988.
- B30. "Changing World Patterns of Machine-Scored Objective Testing: The Expected Impact of the Multi-Digit Method." (with co-author Alcyone Saliba). In George Padavil (ed.) *Internationalizing Curricula*. Occasional Papers of the Midwest Cooperative and International Education Society Annual Conference, Normal, Il. pp.177-188, 1988. (ERIC ED 318-787).
- B31. *A Learning Assessment System: Development of Assessment Instruments Plus Scoring and Reporting Procedures* (with co-author Larry P. March). Bureau County Learning Assessment Cooperative, with funding from the Illinois State Board of Education, pp. 127, 1989. (ERIC ED 307 855 -- 2 fiche)
- B32. "Learning about Map Skills." In Joel Makower. *The Map Catalog*, Tilden Press (Random House), New York, pp. 18-20, 1990.
- B33. *NCGE Outline Map Blackline Masters: Set A* (with co-authors Dale J. Stevens and Jeffrey S. Bird). National Council for Geographic Education, Indiana, PA, 1991. (Four pages of commentary plus ten high quality outline maps.) (Over 14,000 copies distributed.) These maps have been widely reproduced for classroom use as well as reprinted in the following publications:
- a) *Viewer's Guide for Space Ship Earth*, a 10-part PBS series in 1992.
 - b) *Change Without Borders*, a 1993 textbook edited by R.W. Hunt and J.R. Nassar for Ginn Press.
- B34. *MicroCAM Documentation*, Paul S. Anderson, editor. A Project MicroCAM publication for unrestricted photocopy reproduction. Original copies distributed by World Eagle, Inc., Wellesley, Massachusetts, 1992. Currently distributed by the Microcomputer Specialty Group of the Association of American Geographers. NOTE: The 1992 volume has been revised in 1994 and split into two publications:
- B34a. Guide for Users of MicroCAM*
by Paul S. Anderson, pp. 50, with tutorial materials being added, pp. 44.
- B34b. Reference Manual for MicroCAM* (a reorganization by Paul S. Anderson of the three MicroCAM documentation manuals written by Dr. Scott A. Loomer), pp. 113.
- Languages: [The printed materials are being translated.]

- B34c. Portuguese: Available and distributed in Brazil.
- B34d. Spanish: Reference section completed, remainder is in progress in Chile.
- B34e. French: Available and distributed from New Brunswick, Canada.
- B35. “Methods and Materials for Geography Education Improvement Through Innovative Machine-Scored Assessment.” (with co-author Albert D. Hyers) *Proceedings of the New England - St. Lawrence Valley Geographical Society (NESTVAL)*, vol. 21, 1991 meeting, pp. 63-70, 1992.
- B36. “Physiographic Maps of Illinois: Introduction” *Bulletin of the Illinois Geographical Society*, Volume 34, No. 2 (Fall 1992 issue), Normal, Illinois, pp. 19-22, 1992. [This is the first of a series of four articles with explanations and exercises utilizing the Bier physiographic map of Illinois. See also B40, B41 and B42.]
- B37. “Updating Maps of Soils Through Landsat Images,” (with co-authors Gilberto J. Garcia and Mario Valerio F.). In *International Archives of Photogrammetry and Remote Sensing*, Vol. 29, Part B4, Pages 5-7, The American Society for Photogrammetry and Remote Sensing (ASPRS) and the International Society of Photogrammetry and Remote Sensing (ISPRS), Washington, D.C., 1992.
- B38. Contributing Editor for a series of publications for comparison of maps and data of the USA with Africa, Europe, Latin America, etc.
- B38a. *Africa—U.S. Same-Scale Map Comparisons*. World Eagle, Inc., Wellesley, Massachusetts, 1993.
- B38b. *Europe-U.S. Same-Scale Map Comparisons*. World Eagle, Inc., Wellesley, Massachusetts, 1993.
- B39. “Poles Apart: Reflections on the Lives of Polish People in Poland and Brazil,” (with co-author Noeli V. Anderson). *Geografia*, Volume 18, No. 1 (April 1993), pp. 151-157, a journal of Associacao de Geografia Teoretica, Rio Claro, SP, Brazil. (Published in 1995.)
- B40. “Using the ISGS/Bier Physiographic Map of Illinois: Northern Examples,” (with co-author Albert D. Hyers) *Bulletin of the Illinois Geographical Society*, Volume 35, No. 1 (Spring 1993 issue) Normal, Illinois, pp. 16-24. [Second article in a series; see B36, B41 and B42.]
- B41. “Interpreting the Physical Geography of Illinois as Shown on the Bier/ISGS Physiographic Map: Northern and Southern Examples,” (with co-author Albert D. Hyers) *Bulletin of the Illinois Geographical Society*, Volume 35, No. 2 (Fall 1993 issue), Normal, Illinois, pp. 24-34 plus 18-19 for map. [Third article in a series; see B36, B40 and B42.]
- B42. “Human Geography and Physical Features of Illinois as Revealed on the Bier/ISGS Physiographic Map: Focus on Central Illinois,” (with co-authors Albert D. Hyers and

Michael D. Sublett) *Bulletin of the Illinois Geographical Society*, Volume 36, No. 1 (Spring 1994 issue), Normal, Illinois, pp. 16-38. [Fourth article in a series; see B36, B40 and B41.]

- B43. "Once Again the Bier/ISGS Physiographic Map of Illinois: Enlargements, Reductions, ZR Coordinates, and Consolidated Exercises," *Bulletin of the Illinois Geographical Society*, Volume 37, No. 1 (Spring 1995 issue), Normal, Illinois, pp. 24-28. [Fifth article in a series; see B36, B40, B41, and B42.] This publication includes a half-scale (1:2 million) copy of the Bier map with ZR coordinates, and cites the availability of the double-scale (1:500,000) Bier wall map with ZR coordinates. Both maps were prepared by Paul S. Anderson.
- B44. "Understanding Illinois Through the Bier/ISGS Physiographic Map and Exercises," (with co-authors Albert D. Hyers and Michael D. Sublett). An appendix in the reference/text on *Illinois: A Geographical Survey*, Ronald Nelson, ed., Illinois Geographical Society, pp. 289-326, 1996. [Compilation, revision and expansion of B36, B40, B41, B42, and B43.]
- B45. "Project MicroCAM: Expansions and Applications of MicroCAM Free-to-Copy Mapping Software for Instruction and Production." *Proceedings*, 18th International Cartographic Conference of the International Cartographic Association in Stockholm, Sweden, 23-27 June 1997, pages 1052-1059.
- B46. "MicroCAM CD-ROM," Editor, compiler, and a contributor to the contents of the CD. Mircocomputer Specialty Group of the Association of American Geographers, 1999.
- B47. "Low-Cost Mapping of Informal Settlements Using Highly Enlarged Aerial Photography: Mozambique Experiences." *Proceedings* of the 28th International Symposium on Remote Sensing of Environment (ISRSE) with twelve international sponsors, including the International Society of Photogrammetry and Remote Sensing (ISPRS), Cape Town, South Africa, distributed on CD-ROM, (see Category 8, Urban and Regional Planning, no page numbers), March 2000.
- B48. "Mapping Land-Rights in Mozambique." *Photogrammetric Engineering and Remote Sensing*, Vol. 66, No. 6, American Society for Photogrammetry and Remote Sensing, June 2000, pp. 769-775. [This article was translated into Portuguese and published in Mozambique with the following bibliographic reference: *Mapeamento dos Direitos à Terra em Moçambique*, Comissão de Terras, Ministério de Agricultura e Desenvolvimento Rural, Republica de Moçambique, Maputo, Julho de 2002, pp. 15. This printing was of 800 copies intended for free distribution to the agencies and individuals working on the registration of rural lands in Mozambique.]
- B49. [Accepted for publication, but delayed in Mozambique] "Método de Mapeamento à Grande Escala com Participação Comunitária," ["Method of Large Scale Mapping with Community Participation"]. Conference proceedings of the November 1999 "National Workshop on Theoretical and Practical Concepts of Community Participatory Projects: Reflections" Sponsored by CFA-INIA, Rede FTTP Moçambique, and Rede DRP

B50. and B51. Publication of volumes one and two of my cartography textbooks in Portuguese.

B50. Volume One *Princípios de Cartografia Básica (Principles of Basic Cartography)* has seven chapters and 84 pages.

B51. Volume Two *Princípios de Cartografia Topográfica (Principles of Topographic Cartography)* also has seven chapters and 92 pages.

Note: The initial writing was done in Brazil in 1978-82 where my students used it in photocopy format. Major revisions of the manuscript were done while at ISU in 1983 and 1984, but never released for reproduction. This work was re-initiated in August 1999 when I went to Mozambique and again taught cartography in Portuguese. The manuscripts were typed into word-processor files. Proofreading and addition of figures/diagrams has just been completed during 2002. The final edited product is placed on the Internet for downloading and local printing in Mozambique, Brazil, and other Portuguese-speaking countries. In Mozambique the books are available in “reduced-size” format of 2 pages per sheet of paper, and are sold at cost to students for US\$2 per volume, the “at-cost” price that allows continuous reprinting as needed. The instructors of introductory cartography at both the Universidade Eduardo Mondlane and at the Universidade Pedagógica have all decided to use these books in their classes. Study guides are being prepared, with revisions to the exercises and texts to include appropriate Mozambique examples.

PUBLISHED REVIEWS:

- R1. Review of *Atlas Nacional de Guatemala*, Instituto Geografico Nacional de Guatemala, 102 pages, 1972, published in *Cartography*, Journal of the Australian Institute of Cartographers, Canberra, Australia, c. 1976.
- R2. Review of *Atlas of Mexico*, Bureau of Business Research, University of Texas at Austin, 164 pages, 1975, published in *Cartography*, Journal of the Australian Institute of Cartographers, Canberra, Australia, Vol. 10, No. 3, pages 171-172, January 1978.
- R3. Review of *The Map Catalog: Every Kind of Map and Chart on Earth and Even Some Above It*, Joel Makowen (ed), Vintage Books/Random House, 252 pages, 1986, published in *The Professional Geographer*, Association of American Geographers, Washington, D.C., Vol. 41, No. 1, pages 109-111, February 1989.
- R4. Review of *Rand McNally Family World Atlas*, Rand McNally Corporation, Chicago, Illinois, 256 pages, 1988, published in *Cartographica*, Journal of the Institute of Canadian Cartographers, University of Toronto Press, Ontario, Canada. Vol. 26, Nos. 3 & 4, Pages 163-164, 1989.
- R5. Review of *The Map Catalog* (second edition, 1990), Joel Makower (ed.), Vintage Books, Random House, 364 pages, published in *Cartographica*, Journal of the Institute of Canadian Cartographers, University of Toronto Press, Ontario, Canada, Vol. 28, No. 2, pages 107-108, 1991.

- R6. Review of *Goode's World Atlas (17th edition, 1990)*, Rand McNally, Chicago, Illinois, published in *Cartographica*, Journal of the Institute of Canadian Cartographers, University of Toronto Press, Ontario, Canada, Vol. 28, No. 1, pages 111-112, 1991.
- R7. Review of *An Atlas of World Affairs* (ninth edition, 1991), Andrew Boyd, Routledge Press, 240 pages, published in *Cartographica*, Journal of the Institute of Canadian Geographers, University of Toronto Press, Ontario, Canada, Vol. 29, Nos. 3 & 4, (Autumn/Winter) 1992. (Printed in 1993.)
- R8. Review of *Digital Chart of the World (DCW): ASCII Files on CD-ROM*, 1994, Version 2.0, Ph.D. Associates Inc., North York, Ontario, Canada, published in *Newsletter* of the Microcomputer Specialty Group of the Association of American Geographers, Washington, DC, Vol. 12, No. 1, February 1996.

PUBLISHED SOFTWARE:

Note: The following software packages/programs were conceptualized by me and written by others to my specifications. These programs are published items that have been released for use by others as either commercial or "freeware" materials. MDT Corporation is owned by my family.

- S1. *MDT Educational Testing System* [current version is 3.2 (1990) on MS-DOS (PC) microcomputers]. Includes the RECON program for reconsiderative scoring. Sold by Multi-Digit Technologies (MDT) Corporation, Normal, Illinois.
- S2. *QuickScore* [current version is 2.0 (1989) on both MS-DOS (PC) and Apple IIgs microcomputers]. Sold by Multi-Digit Technologies (MDT) Corporation, Normal, Illinois.
- S3. *Database for Geographic Place Names* (Version 1.0 (1990); MS-DOS (PC) microcomputers). Freeware, from author.
- S4. *MicroCAM Interface* [for MS-DOS (PC) microcomputers]. (With co-authors James A. Rohweder, Joseph W. Brook and Pablo Bodini) (Version 3.0 in 1991 and Version 4.0 in 1994). Freeware to drive a freeware program called MicroCAM for computer-generation of outline maps and for cartography education. Offered through the Micro-Computer Specialty Group of the Association of American Geographers, Washington, D.C. A Portuguese-language version is also available since July 1992

PRESENTATIONS AT CONFERENCES:

- C1. "Latin Americans in Australia: An Introduction," Joint session of Geography and Sociology at the 45th Congress of the Australian New Zealand Association for the Advancement of Science (ANZAAS), University of Western Australia, 16 August 1973.

- C2. "Contribucion al Conocimiento Geologico de las Localidades de Aipe, Neiva, Palermo e Yaguara, Departamento del Huila, Colombia," [Contribution to the Geological Knowledge of the Localities of Aipe, Neiva, Palermo and Yaguara], with co-authors; Second Latin American Congress of Geology, Caracas, Venezuela, 11-16 November 1973.
- C3. "A Transverse, Poly-cylindrical, Orthographic Azimuthal Equidistant Cartographic Projection: Its Purpose, Construction and Theory," Twelfth Conference of the Institute of Australian Geographers, Hobart, Tasmania, Australia, February 1974.
- C4. "Grid-Block Interiors - Urban Land-Use Adaptations to a Heritage of Pre-1945 Planning," with co-author Noeli V. Anderson, Forty-sixth Congress of the Australian New Zealand Association for Advancement of Science (ANZAAS), Australian National University, Canberra, A.C.T., Australia, January 1975.
- C5. "A Method for Calculating Spearman's Correlation Coefficient from a Contingency Table, Especially to Test Large Samples Consisting of Grouped Data," Thirteenth Conference of the Institute of Australian Geographers, Wollongong, New South Wales, Australia, August 1975.
- C6. "The Spanish Impact on Indigenous American Culture," First Conference of Cultural Studies, Goulburn College of Advanced Education, Goulburn, New South Wales, Australia, August 1975.
- C7. "Isla Fuerte on the Juan de la Cosa Mapamundi of 1503: A Key to Interpreting the Historical Ethno-Geography of Colombia's Caribbean Coast," Eighth International Congress of Historical Cartography, 12-20 September 1979, West Berlin. Also presented to the conference of the Society for the History of Discoveries, Madison, Wisconsin, 5-6 November 1982.
- C8. "Explicacao Geral do Programa de Extensao a Distancia da Universidade de Brasilia," [General Explanation of the Distance Education Extension Program of the University of Brasilia], VIII Latin American Seminar on University Level Tele-education, Porto Alegre, Brazil, 27-31 October 1980.
- C9. "Mini-Curso a Distancia sobre a Preparacao de Cursos de Ensino Superior a Distancia," [A Distance Education Mini-Course about the Preparation of Distance Education University-level Courses], VIII Latin American Seminar on University Level Tele-education, Porto Alegre, Brazil, 27-31 October 1980.
- C10. "ED-DIS: Una Contribucion a la Cooperacion Ibero-americana para Educacion a Distancia," [ED-DIS: A Contribution to the Ibero-American Cooperation for Distance Education], First Latin American Conference on Distance Education jointly with the IX Latin American Seminar on University Level Tele-education, San Jose, Costa Rica, 15-20 March 1981.

- C11. "O Ensino de Cartografia e Fotointerpretacao a Distancia," [The Distance Teaching of Cartography and Photointerpretation], Tenth Brazilian Congress on Cartography, Brasilia, 19-24 July 1981.
- C12. "Modelos e Metodos Internacionais de Educacao e Treinamento de Sensoriamento Remoto," [International Models and Methods for Remote Sensing Education and Training], Second Brazilian Symposium on Remote Sensing, Brasilia, May 1982, to have been published in the conference proceedings, but copy not received.
- C13. "The Fires of Distance Education in Latin America," Twelfth World Conference of the International Council for Distance Education, Vancouver, Canada, June 1982.
- C14. "International Models and Methods for Remote Sensing Education and Training," National Conference of the Association of American Geographers, Denver, Colorado, April 1983. (ERIC ED 233 937)
- C15. "Micro-Regional Geography: The Example of Isla Fuerte, Colombia," Joint conference of the National Council for Geographic Education and the Jamaican Geographical Society, Ocho Rios, Jamaica, October 1983.
- C16. "Introduction to the Large-List 'Multi-Digit Test' Procedure: With Examples From a World Geography Course," West Lakes Regional Conference of the Association of American Geographers, Iowa City, Iowa, October 1983.
- C17. "Three-Dimensional Mapping: At the Frontiers and in the Classroom," Workshop at the convention of the Illinois Science Teachers Association, Normal, Illinois, 14-15 October 1983.
- C18. "Levels, Divisions, and Stages of Map and Image Interpretation: From Elementary Map Reading Detection to Innovative Image Interpretation Idealization," National Conference of the Association of American Geographers, Washington D.C., April 1984.
- C19. "Applications of the Multi-Digit-Test (MDT) Procedure for Teaching the Geography of Latin America," Conference of Latin Americanist Geographers (CLAG), Ottawa, Canada, September 1984.
- C20. "The Multi-Digit Test Procedure: Refinements and Preliminary Results," with co-authors M. Hill, S. Naim and W. Walters. International meeting of the National Council for Geographic Education (NCGE), Toronto, Canada, October 1984.
- C21. "Millimetric Coordinates (MMC) for Indicating Precise Locations on Aerial Photographs and Other Images," Joint Meeting of the West Lakes and Great Plains/Rocky Mountain Divisions of the Association of American Geographers (AAG), Lawrence, Kansas, November 1984.

- C22. "Laboratory Schools as a Unique Setting for Research: The Experimentation with the Multi-Digit Test (MDT) at Illinois State University High School," with co-author Eileen Kanzler, National Association of Laboratory Schools convention in Denver, Colorado 26-28 February 1985.
- C23. "Comparison of Cognitive Achievement in Objective Testing: Multi-Digit and Multiple Choice Tests," with co-author Eileen Kanzler, Conference of the American Educational Research Association (AERA), Chicago, Illinois, 4 April 1985. (ERIC ED 260 131)
- C24. "Simulation Exercises on the Management of an American Corn Belt Farm," Conference of the Illinois Geographical Society, DeKalb, Illinois, 12-13 April 1985.
- C25. "The Ten Commandments of Contour Lines and Other Educational Aids about Isolines," National Conference of the Association of American Geographers (AAG), Detroit, Michigan, 21-24 April 1985.
- C26. "External Studies in Australia and Its Applicability in Developing Countries with Special Reference to Brazil," International Conference of the University Without Walls International Council, London, England, 15-17 May 1985.
- C27. "Map Interpretation Exercises about Grand Teton National Park," Conference of the National Council for Geographic Education (NCGE), Breckenridge, Colorado, 5-9 August 1985.
- C28. "Applications of the Multi-Digit Test (MDT) in Geography," Demonstration presented to the Conference of the National Council for Geographic Education, Breckenridge, Colorado, 5-9 August 1985.
- C29. "Innovations in Educational Testing with Optical Mark Readers: Multi-Digit Large-List Tests, Subjective Question Scores and Instant Scoring in the Classroom," Discussion session at the World Conference on Computers in Education, Norfolk, Virginia, 29 July 1985.
- C30. "Applications of the Multi-Digit Educational System to Distance Education," Meeting of the International Council for Distance Education, Melbourne, Australia, 13-20 August, 1985.
- C31. "Millimetric Coordinates (MMC) for Image Locations: Methods, Applications and Advantages," Fall convention of the American Congress on Surveying and Mapping (ACSM) and the American Society for Photogrammetry and Remote Sensing (ASPRS), Indianapolis, Indiana, 8-13 September 1985.
- C32. "Applications of the Multi-Digit Test (MDT) in Science Classes," Workshop at the Illinois Science Teachers Association convention in Normal, Illinois, 4-5 October 1985.

- C33. "Map Reading Instructional Materials Exchange: Project and Progress," Regional meeting of the West Lakes Division of the Association of American Geographers in DeKalb, Illinois, 24-26 October 1985.
- C34. "Distance Education for Teaching Map Use Skills: An Introduction," Annual meeting of the North American Cartographic Information Society (NACIS), in Chicago-Skokie, Illinois, 10-12 November 1985. (ERIC ED 286 482)
- C35. "Multi-Digit (MDT) Testing in the Teaching of Criminal Justice Sciences," with co-author Diane Alexander, Academy of Criminal Justice Sciences, Orlando, Florida, March 1986. (ERIC ED 282 936)
- C36. "Applications of the MDT Multi-Digit Testing Method for Cartographic Information Education," Annual meeting of the North American Cartographic Information Society, Philadelphia, Pennsylvania, 15-18 March 1986.
- C37. "Contents and Methods in Map Use Courses," Annual Meeting of the Association of American Geographers, Minneapolis, Minnesota, 4-7 May 1986. (ERIC ED 284 811)
- C38. "The *Planet Earth* Video-Geography Course: Experiences and Prospects for Distance Education," with co-author Albert D. Hyers, Annual meeting of National Council for Geographic Education, Chicago, Illinois, 9-12 October 1986.
- C39. "The Isla Fuerte Example of Historical Cartography and Ethno-Geography," invited presentation (only speaker) to the meeting of the Chicago Map Society, Herman Dunlap Center for the History of Cartography at the Newberry Library, Chicago, Illinois, 20 November 1986.
- C40. "Agrarian Reform Role Play Classroom Exercise for Latin American Geography," International annual meeting of the Conference of Latin Americanist Geographers, Merida, Yucatan, Mexico, 7-10 January 1987. (See B5.)
- C41. "Answer Banks and Question Banks for Immediate Classroom Use: MDT Materials for Geography and Social Studies," Annual meeting of the Illinois Geographical Society, Elgin, Illinois, 10-11 April 1987.
- C42. "Student Attitudes about MDT Multi-Digit Testing: Analyses from Pioneer Experiences," Annual meeting of the National Council on Measurement in Education, held jointly with the American Educational Research Association, Washington, DC, 19-23 April 1987. (ERIC ED 296 000).
- C43. "Ongoing Activities to Facilitate Access to Supplementary Materials for Cartographic Education," Annual meeting of the Association of American Geographers, Portland, Oregon, 23-26 April 1987. (ERIC ED 284 810)

- C44. "Changing World Patterns of Machine-Scored Objective Testing: The Expected Impact of the Multi-Digit Method," (with co-author Alcyone Saliba), Sixth World Congress of Comparative Education, Rio de Janeiro, Brazil, 6-10 July 1987. Also presented to annual conference of the Midwest Comparative and International Education Society, Normal, Illinois, 19-20 February 1988. (ERIC ED 318 787).
- C45. "Advantages of MDT Multi-Digit Testing in Veterinary Medicine Education: Basic Features," (with separate demonstration) Fifth Symposium on Computer Applications in Veterinary Medicine, Urbana, Illinois, 26-29 September 1987.
- C46. "Comparison of Student Attitudes about Seven Formats of Educational Testing, With Emphasis on the MDT Multi-Digit Testing Technique," Annual meeting of the Mid-Western Educational Research Association, Chicago, Illinois, 15-17 October 1987. (ERIC ED 295 999)
- C47. "A cooperative approach to the Development of a Locally Designed Assessment and Reporting System." (Joint presentation with Larry P. Marsh.) Annual Mt. Vernon Conference on Directions and Innovations in Education, Mt. Vernon, IL 27 October 1989.
- C48. "Seeking a Core of World Regional Geography Place Names: An Analysis of Published Materials." Annual Conference of National Council for Geographic Education, Hershey, Pennsylvania, 12-14 October 1989. (ERIC ED 319 675).
- C49. "Initial Experiences with Machine-Assisted Reconsiderative Test Scoring: A New Method for Partial Credit and Multiple Correct Responses." Annual conference of the National Council for Measurement in Education, Boston Massachusetts, 15-19 April 1990. (ERIC ED 318 788).
- C50. "Keeping Teachers Involved in Computer-Managed Learning: A View of Innovations for the Future." Invited keynote address. Second International and Fourth Provincial Computer-Managed Learning Conferences, Edmonton, Alberta, Canada, 16-18 May 1990.
- C51. "Educational Issues of Recent Enhancements to Computer-Assisted Measurement: Research and Viewpoints about MDT and RECON." Presentation to the Second International and Fourth Provincial Computer-Managed Learning Conferences, Edmonton, Alberta, Canada, 16-18 May 1990.
- C52. "A Microcomputer Database for Managing Geographic Place Names by Location, Type, Grade Level, Difficulty and Other Key Attributes." Presentation at the 75th Conference of the National Council for Geographic Education (NCGE), Williamsburg, Virginia, 7-10 November 1990.
- C53. "Outline Maps for Regional Geography and Area Studies: Types, Costs and Sources for Non-Copyright and Other Outline Maps." Presented at the 75th Conference of the

National Council for Geographic Education (NCGE), Williamsburg, Virginia, 7-10 November 1990.

- C54. "Roundtable Discussion of Issues and Directions in Place Literacy," Chairperson and presenter of background information, Conference of the National Council for Geographic Education (NCGE), Williamsburg, Virginia, 7-10 November 1990.
- C55. "Key Topics, Content and Educational Materials for Latin American Geography/Area Studies: A Focus for Teachers in Grades 7-12." Presented at the annual meeting of the Illinois Conference of Latin Americanists (ICLAS), Champaign, Illinois, 16-17 November 1990.
- C56. "Quantitative Comparisons of Difficulty, Discrimination and Reliability of Machine-Scored Completion Items and Tests (In the MDT Un-Cued Answer-Bank Format) In Contrast with Statistics from Comparable Multiple Choice Questions: The First Round of Results," (with co-author Albert D. Hyers). Annual meeting of the National Council for Measurement in Education (NCME), Chicago, Illinois, 2-6 April 1991. (ERIC TM 018 923)
- C57. "Centralized Measurement Services in Support of Individualized Reconsiderative Test Scoring." Annual meeting of the Measurement Services Association (MSA), Chicago, Illinois, 4 April 1991. (ERIC TM 018923)
- C58. "The User-Friendly "MicroCAM Interface" (MI) Software for Cartographic Education and Inexpensive Production of Outline Maps" (with co-authors James A. Rohweder and Joseph W. Brook). Annual meeting of the Association of American Geographers (AAG), Miami, Florida, 13-17 April 1991. [Printed as a two-page item in the "Newsletter" of the Microcomputer Specialty Group of the Association of American Geographers, Vol. 7, No. 2, June 1991.] This paper was presented a second time as an introductory presentation at a session on MicroCAM at the annual meeting of the North American Cartographic Information Society (NACIS), Milwaukee, Wisconsin, 19-23 October 1991.
- C59. "Teaching Cartography Fundamentals with MicroCAM Software." A presentation at the annual meeting of the North American Cartographic Information Society (NACIS), Milwaukee, Wisconsin, 19-23 October 1991.
- C60. "Introductory Cartography Exercises with MicroCAM Software." (Co-author with Jill Freund Thomas.) A presentation at the annual meeting of the North American Cartographic Information Society (NACIS), Milwaukee, Wisconsin, 19-23 October 1991.
- C61. "Methods and Materials for Geography Education Improvement through Innovative Machine-Scored Assessment." (Co-author with Albert D. Hyers.) Presentation to New England-St. Laurence Valley Regional Division of the Association of American Geographers, Montreal, Canada, 4-6 October 1991. (ERIC TM 018 947)

- C62. “Manuais, Exercícios e Software em Português para o Uso do Programa MicroCAM no Ensino de Cartografia no Brasil” [Manuals, Exercises and Software in Portuguese for Using the MicroCAM Program in Cartography Education in Brazil]. (With co-authors Salete Rejare Borin, Raquel Bovo, and Roberto Cassol). Presentation to the Special 15th Anniversary Conference of Cartographic Engineering at Sao Paulo State University- Presidente Prudente Campus, 29-30 April 1992. A similar presentation with software demonstration was presented fourteen additional times to various groups of students, professors and researchers visited in the Brazilian cities of Brasilia (Distrito Federal), Goiania (Goias), Rio Branco (Acre), Porto Velho (Rondonia), Manaus (Amazonas), Belem (Para), Fortaleza (Ceara), Recife (Pernambuco), Maceio (Alagoas), Rio de Janeiro (Rio de Janeiro), and Rio Claro (Sao Paulo).
- C63. “MicroCAM for Cartography Education.” (With co-presenters Scott A. Loomer and Keith Clarke). Demonstration/presentation in a special software session at the annual conference of the Association of American Geographers (AAG), San Diego, California, April 1992.
- C64. “Technical and Practical Methodologies for Rapid Mapping of Large Regions of Tropical Soils in Agricultural Areas in Order to Minimize Erosion.” (With co-authors Gilberto J. Garcia and Mario Valerio F.). Presentation to the Conference on GIS and Remote Sensing Applied to Environmental Management, in association with the World Conference on the Environment and Development (United Nations Conference “Rio-1992”), Rio de Janeiro, Brazil, 2-5 June 1992.
- C65. “Comparação da Vida dos Poloneses na Polônia e no Brasil.” [Comparison of the Lives of Polish-people in Poland and Brazil.] (With co-author Noeli V. Anderson). Presentation at the Ninth Bi-annual Encounter of the Association of Brazilian Geographers, Presidente Prudente, Sao Paulo, Brazil, 19-24 July 1992.
- C66. “Software Gratuito para Auxiliar O Ensino de Cartografia, Sensoriamento Remoto, e Geografia Humana.” [Free Software to Assist the Teaching of Cartography, Remote Sensing and Human Geography.] Presentation to the Ninth Bi-annual Encounter of the Association of Brazilian Geographers, Presidente Prudente, SP, Brazil, 19-24 July 1992.
- C67. “Updating Maps of Soils Through Landsat Images.” (with co-authors Gilberto J. Garcia and Mario Valerio F.). Presentation to the international joint conference of the American Society for Photogrammetry and Remote Sensing (ISPRS) and the International Society of Photogrammetry (ISP), Washington, D.C., 5-7 August 1992,
- C68. “MicroCAM Documentation and Data Files for Cartography Education: Existing, Revised, Previously Undocumented, and Non-traditional Materials.” Annual meeting of the Association of American Geographers (AAG), Atlanta, Georgia, 6-10 April 1993.
- C69. “Understanding Southern Illinois Landforms Through Use of the Bier/ISGS Physiographic Map.” (with co-author Albert D. Hyers). Presentation to the annual conference of the Illinois Geographical Society, Carterville, IL, 1 May 1993.

- C70. "Harrison Physiographic (Relief) Maps for In-School Copying: Source, Coverage, Significance and Uses (With Exercises)." Presentation to the international conference of the National Council for Geographic Education (NCGE), Halifax, Nova Scotia, Canada, 4-7 August 1993.
- C71. "Map Projection Capabilities of MicroCAM." Presented in the round-table session on map projection programs of the joint international conference of the Canadian Cartographic Association (CCA) and the North American Cartographic Information Society (NACIS), Ottawa, Canada, 9-12 August 1994.
- C72. "Aerial Photo Identification Exercises: A Project and Initial Publication." Presented to the international conference of the National Council for Geographic Education (NCGE), Lexington, Kentucky, 2-5 November 1994.
- C73. "Using MicroCAM Software for Teaching Regional Geography in Junior High Through College Classes." Presented to the international conference of the National Council for Geographic Education (NCGE), Lexington, Kentucky, 2-5 November 1994.
- C74. "Free-to-Copy Materials for Teaching and Assessing Location and Place Questions in Geography and Other Social Sciences." Presentation at the annual conference of the Association of American Geographers (AAG), Chicago, IL, 14-18 March 1995.
- C75. "Assessing and Grading in Geography with Uncued Testing." (with co-author Albert D. Hyers). Presentation at the annual conference of the Association of American Geographers (AAG), Chicago, IL, 14-18 March 1995.
- C76. "Expanding Beyond Multiple Choice: Five New Machine-Scored Question Formats for Geography Education." (with co-author Miriam Helen Hill.) Presentation at the annual conference of the Association of American Geographers (AAG), Chicago, IL, 14-18 March 1995.
- C77. "Enlargements and Reductions of the Bier/ISGS Physiographic Map of Illinois: A Resource for Geography Education," A poster presentation at the annual meeting of the Illinois Geographical Society (IGS), Dixon, IL, 28-29 April 1995. Contains instructions for assembling the double-scale (1:500,000) wall map enlargement of Bier's map. A copy of this paper is enclosed with each copy of the double-scale map.
- C78. "Using Mental Maps—National Geography Standard #2." Presentation at the Advanced Summer Geography Institute of the Illinois Geographic Alliance. Normal, IL, 23 July-3 August 1995.
- C79. "Sources of Physiographic (Landform) Maps for Geography Education." Presentation at the annual conference of the National Council for Geographic Education (NCGE), San Antonio, TX, 25-28 October 1995.

- C80. "Easy Access to the Digital Chart of the World (DCW) for Microcomputer Mapping: ASCII files on CD-ROM for MicroCAM, AutoCAD, IDRISI, and MapInfo." Presentation at the annual conference of the Association of American Geographers (AAG), Charlotte, NC, April 1996.
- C81. "Faceted Globes as Intermediates between Spherical Globes and Flat Maps." (with Thomas E. Smith, Jr.). Presentation at the annual conference of the National Council for Geographic Education (NCGE), Santa Barbara, CA. 13-16 November 1996.
- C82. "Cartographic Analysis of Smith's 14-Faceted Globe." Presentation at the National Council for Geographic Education (NCGE), Santa Barbara, CA. 13-16 November 1996.
- C83. "The Wiley CD-ROM for Geography Education: Experiences of Early Reviewers, with Demonstration." (with Royse J. Smith). Presentation at the National Council for Geographic Education (NCGE), Santa Barbara, CA. 13-16 November 1996.
- C84. "A Model for Creating a Digital Atlas: MicroCAM Mapping of the Index Kentuckienisis Flora." (with Miriam Helen Hill, Charlie Lapham, and Ron L. Jones). Presentation at the annual meeting of the Association of American Geographers (AAG), Fort Worth, TX, 1-5 April 1997.
- C85. "Further Developments and Applications of MicroCAM for Geography and Cartography." Presentation at the annual meeting of the Association of American Geographers (AAG), Fort Worth, TX, 1-5 April 1997).
- C86. "Project MicroCAM: Expansions and Applications of MicroCAM Free-to-Copy Mapping Software for Instruction and Production." Presentation at the 18th International Cartographic Conference of the International Cartographic Association (ICA) in Stockholm, Sweden, 23-27 June 1997.
- C87. "Virtual Geography and Distance Education: Compatibilities and Differences." Presentation at the annual meeting of the National Council for Geographic Education (NCGE), Orlando, FL, 8-11 October 1997.
- C88. "MicroCAM Support on the Internet." Presentation at the annual meeting of the Association of American Geographers (AAG), Boston, MA, 11-14 March 1998.
- C89. "The 'Outline Map Home Page' and Related Virtual Cartography Resources." (with Paul B. Anderson). Presentation at the annual meeting of the North American Cartographic Information Society (NACIS), Milwaukee, WI, 7-10 October 1998.
- C90. "Teaching Introductory World Regional Geography." Panelist/presenter (with Phillip Klein, Barry Mowell, and Richard Cleek) at the annual conference of the National Council for Geographic Education (NCGE), Indianapolis, IN, 11-14 October 1998.

- C91. "Mapping Rural Mozambique Via Distance Education for Obtaining GIS Input." Presentation at the annual conference of the Association of American Geographers (AAG), Honolulu, HI, 23-27 March 1999.
- C92. "Método de Mapeamento à Grande Escala com Participação Comunitária," ["Method of Large Scale Mapping with Community Participation"]. A presentation at the "National Workshop on Theoretical and Practical Concepts of Community Participatory Projects: Reflections" Sponsored by CFA-INIA, Rede FTTP Moçambique, and Rede DRP, Maputo, MZ, 8 – 9 November 1999.
- C93. "Urbanização e GIS," ["Urbanization and GIS,"] A presentation at the Second Conference on GIS in the Central Region of Mozambique, (CIDDI), Universidade Catolica de Moçambique, Beira, MZ Feb 2000.
- C94. "Resources for Mapping in Central Mozambique," an invited 90-minute computer-assisted presentation to seventeen mapping specialists and map users, CIDDI (Center for Investigation and Documentation for Integrated Development), Universidade Catolica de Moçambique, Beira, MZ, 4 January 2000.
- C95. "Dados para GIS/LIS Provenientes de Fotografias Aéreas Altamente Ampliadas: Aspectos Técnicos e Perspectivas para uma Solução Moçambicana para Adquisição de Dados," ["GIS/LIS Data from Highly Enlarged Aerial Photography: Technical Aspects and Perspectives for a Mozambican Solution for the Acquisition of Data"]. A poster presentation at the Workshop about GIS/LIS for Mozambique, sponsored by DINAGECA, Maputo, MZ, 28-29 Feb & 1 March 2000.
- C96. "Low-Cost Mapping of Informal Settlements Using Highly Enlarged Aerial Photography: Mozambique Experiences." Presentation at the 28th International Symposium on Remote Sensing of Environment (ISRSE), a conference with twelve international sponsors, including the International Society of Photogrammetry and Remote Sensing (ISPRS), in Cape Town, South Africa, 29 March-2 April 2000.
- C97. "Mapeamento de Moçambique: Alternativas Técnicas e Práticas para a Realidade Africana." [Mapping of Mozambique: Alternative Techniques and Practices for the African Reality.] Public presentations for one hour given six times to diverse audiences (including professors, mapping specialists, students, and the general public) as the Report of Fulbright Activities, at the US Embassy Cultural and Media Services building, Maputo, MZ, 13 – 16 June 2000, and once at the GIS/RS in Spatial Modeling Training Workshop, hosted by CENACARTA, Maputo, MZ, 13-18 July 2000.
- C98. "Eradication of Malaria from South Africa: Introduction to a Discussion Topic." Presentation to local and regional leaders at a meeting at the Southern African Wildlife College, Orpen Gate, South Africa, 9 March 2001.

- C99. “Interpreting Variability of Examination Scores for Geography Education,” (with co-author Albert Hyers). A presentation (in a reviewed session) at the annual conference of the National Council for Geographic Education, Vancouver, British Columbia, Canada, 1-4 August 2001.
- C100. “Appropriate Technology for Appropriate Mapping of Developing Communities: Experiences with “Rustic” Mapping in Rural and Urban Mozambique,” (with co-author Kingston Nyamapfene. A presentation to the Study Group on “Local Development” (G-09) at The Conference of the International Geographical Union in Durban, South Africa, 4 - 7 August 2002.
- C101. “Teaching Map-Use Skills for Sustainable Living: A Model and Initial Experiences for Low Cost and High Impact Educational Change in Mozambique,” (with co-authors Rachael Thompson and Kingston Nyamapfene). A presentation to the Commission C-07 Geographical Education: “Education for Sustainable Living” at the Conference of the International Geographical Union in Durban, South Africa, 4 - 7 August 2002.
- C102. “The Juntos Gasifier Combustion Chamber and Stove.” HEDON Household Energy Network Conference, Johannesburg, South Africa, 27 - 28 August 2002.
- C103. “Field-work Report on the Mapping of Bairro Josina Machel, City of Manica, Manica Province, Mozambique.” A presentation [in Portuguese] to the municipal council of the City of Manica about the progress in mapping the land units of approximately 12% of the City. 20 September 2002.
- C104. “The “Juntos Stove” that Gasifies Biomass.” A presentation [in Portuguese entitled: “O “Fogão Juntos” que Gasifica Biomassa”] and demonstration to the National Forum on Women and Energy, Ministry of Mineral Resources and Energy, Republic of Mozambique, Maputo, 11 October 2002. Also presented at the ETHOS Conference on Stoves for Developing Countries, Seattle, Washington, 11 – 12 January 2003.
- C105. (For August 2003 presentation.) “Low-Cost Solution from Mozambique for Appropriate Large-Scale Mapping for Urban Planning with GIS Interface.” A presentation at the 21st International Cartographic Conference, Durban, South Africa, 10-16 August 2003.
- C106. (For August 2003 presentation.) “Globe-Maps: Novelty of Cartographic Necessity?” (with co-author Lorraine M. Innes). A presentation at the 21st International Cartographic Conference, Durban, South Africa, 10-16 August 2003.

INVITED WORKSHOPS AND DISCUSSIONS ABOUT THE MDT TESTING TECHNIQUE AND ABOUT MicroCAM FOR CARTOGRAPHY:

- D1. Faculty of the Jefferson Medical School, (largest private medical college in the USA), Philadelphia, Pennsylvania, 17 October 1986.
- D2. Mathematic teachers of Junior and Senior High Schools in the Unit #5 School District (Teacher’s Institute Day), Normal, Illinois, 24 October 1986.

- D3. Faculty of the College of Veterinary Medicine, University of Illinois, Champaign-Urbana, Illinois, 25 February 1987.
- D4. Seminar for School Administrators, Educational Services Center No. 2 of Illinois, Grayslake, Illinois, 7 December 1987.
- D5. Tenth Annual University-wide Planning Retreat, Morgan State University, Baltimore, Maryland, 11-12 May 1988.
- D6. Discussions about “Introduction to Machine-Assisted Reconsiderative Test Scoring: A method for Partial Credit and Multiple Correct Responses.” Presentation to two groups of medicine/pharmacy educators at Jefferson Medical College and Philadelphia College of Pharmacy and Science, Philadelphia, Pennsylvania, 10-11 October 1989.
- D7. Workshop on “New Capabilities of Computer-Assisted Educational Measurement: Hands-on Workshop with the originator of MDT Multi-Digit Testing and RECON for Reconsiderative Scoring.” Second International and Fourth Provincial Computer-Managed Learning Conferences, Edmonton, Alberta, Canada, 16-18 May 1990.
- D8. Workshop (8 hours) on “Uso de MicroCAM na Cartografia” [Using MicroCAM in Cartography]. Ninth Bi-annual Encounter of the Association of Brazilian Geographers, Presidente Prudente, SP Brazil, 19-22 July 1992.
- D9. Workshop and Demonstration (from 4 to 8 hrs.) on “Using MicroCAM Software for Cartographic Instruction.” a. International conference of the National Council for Geographic Education, Halifax, Nova Scotia, Canada, 4-7 August 1993.
- b. Joint international conference of the Canadian Cartographic Association and North American Cartographic Information Society in Ottawa, Canada, 9-12 August 1994.
- c. Conference of the National Council for Geographic Education in Lexington, KY, 2-5 November 1994.
- d. Workshop of the Idaho Geographic Alliance, in Rexburg, ID, 14 June 1996.

MEDIA ARTICLES RELATING TO PAUL S. ANDERSON:

- E1. *Associate Press* (national), May 1985, various titles including “New Exam Takes Guessing Out of Multiple-Choice Test.”
- E2. *Pantagraph* (McLean County, IL), 31 August 1986, page A3, “ISU Professor Devises Testing Method to Make Guessing a Thing of the Past.”
- E3. *Business to Business* (McLean County, IL) February 1987, pp. 24-27, “Computerization Takes Drudgery Away From Teachers.”

- E4. *Technological Horizons in Education* (T.H.E.) Journal (national), March 1987, pp. 46-47, "Teacher's Testing Method Eliminates Guessing on Machine Scored Exams."
- E5. *Vidette* (Illinois State University), 6 November 1987, page 5, "Testing Method Development."
- E6. *Pantagraph* (McLean County, IL), 30 April 1990, page A2, "Prof on brink of testing coup snared in funding Catch 22."

ADDITIONAL ACTIVITIES:

1. Coordinator of the cartography and remote sensing activities of the Department of Geography-Geology, Illinois State University (1982 -)
2. Originator and developer of MDT Multi-Digit Testing Systems for computer-scored fill-in-the-blank (recall) testing, plus RECON for reconsiderative scoring..
3. Gaining proficiency with microcomputers, including desktop publishing and computer-assisted cartography.
4. President and founder, The Anderson Group, Inc., a research and development corporation in Normal, Illinois, (one patent on the Home-Nasium Residential Fitness and Recreation Facility).
5. Vice president and founder, Multi-Digit Technologies (MDT) Corporation, a computer software company in Normal, Illinois.
6. Member (1983 – 2001), Rotary Club of Normal, Illinois. (Board member 1995-97; President 7/97-6/98).
7. Founder and member of the Sunset Rotary Club of Bloomington-Normal, IL (2001- present)
8. Writing non-academic material: a book on dieting; an essay on peace; and a movie script.
9. Faculty advisor to the Rotaract Club of Normal, which is a service club for young professionals (begun in 1992, to 1997).
10. Organizer and leader of the Portuguese Language Club of Normal (1994-1996).
11. Developer of the "Juntos Biomass Gasifier Stove" for developing countries (2001-present)..