

CURRICULUM VITAE

Karen Kathleen Kemp

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Nationality: Canadian

Birthdate: September 15, 1954

EDUCATION

Ph.D. (Geography), 1992

University of California, Santa Barbara, California, USA
Dissertation topic: Environmental modeling with GIS: Strategies for dealing with spatial continuity
Advisor: Dr. Michael F. Goodchild

M.A. (Geography, Resources), 1982

University of Victoria, Victoria, B.C., Canada
Thesis title: Municipal Energy Conservation Programs in B.C.: A Study of Innovation Decisions
Advisor: Dr. W.R. Derrick Sewell

B.Sc., First Class Honours (Physical Geography), 1976

University of Calgary, Calgary, Alberta, Canada

CURRENT APPOINTMENTS

Senior Scientist, Kohala Center, Waimea Hawai'i, USA

November 2006 to present

Senior Consultant, Redlands Institute, University of Redlands, Redlands California, USA

January 2006 to present

Adjunct Instructor, Department of Geography, University of Southern California

January 2008 to present

Adjunct Professor, Electronic Commerce/Internet Computing, University of Hong Kong

March 2005 to present

MOST RECENT FULL-TIME EMPLOYMENT

Professor of Geographic Information Science Director of International Masters Program in GIS

September 2000 to December 2005 (promoted from Assoc. Prof, 2004)
University of Redlands, Redlands CA

Created and directed the MS in GIS program, an entirely new program within the largely undergraduate University of Redlands. Required design of all administrative details for a new graduate program, hiring of all faculty and development and oversight of all budget matters. In addition to on-going administrative responsibilities, advised all incoming and current students, acted as thesis committee chair for a large proportion of the students and taught "Introduction to GIS and Spatial Analysis" and "Fundamentals of Geographic Information" courses in both the graduate and undergraduate program. Also provided university-wide support for GIS initiatives in all Colleges and Schools.

OTHER PROFESSIONAL EXPERIENCE

Adjunct Professor

Faculty of Engineering, University of Hong Kong, 2005-present
Course taught: Geo-spatial information for e-business applications, for MSc in Electronic Commerce and Internet Computing

Adjunct Instructor

Department of Geography, University of Southern California, 2008-present
Courses taught: Spatial Databases, and Spatial Analysis and Modeling (taught on-line), for Master of Science in Geographic Information Science & Technology

Executive Director

January 1999 to May 2000
Geographic Information Science Center
University of California, Berkeley, California

Coordinated a campus-wide initiative to enhance the awareness and use of Geographic Information Science in research, teaching and administration. Responsible for managing the Center's activities and staff including: long-range and strategic planning; budget planning and control; organizing and delivering technical support services; coordinating the development of collaborative grant proposals; developing industrial relations; maintaining a dialog with the GIS Center Advisory Council; coordinating the instructional program; consulting on campus GIS initiatives; recruiting and supervising non-academic staff; coordinating public relations; negotiating contracts; and preparing annual reports.

Associate Director, January 1998 to December 1998

Assistant Director for Development, July 1994 to December 1997

National Center for Geographic Information and Analysis (NCGIA)
University of California, Santa Barbara, California

Develop and implement long-term plans for continued Center funding. As the senior researcher resident in the NCGIA office, oversee the technical operation of the Center,

provide mentoring to Center graduate students and provide linkages between campus GIS activities and the national and international GIS community. As Senior Editor and Project Manager for the new on-line *Core Curriculum in GIS*, coordinate a major international curriculum development project. Oversee the Center's education and outreach activities. Assist center scientists develop research proposals and ensure scientific and financial viability of these activities. Conduct research on the integration of environmental models with GIS and on fundamental education needs for GIS.

Lecturer - Geography 176A, Introduction to GIS, Fall 1994 and 1995

Department of Geography
University of California, Santa Barbara, USA

Distance Learning Development Manager and Technical Editor (*GIS Europe*)

October 1993 to June 1994
Longman GeoInformation (now Adams Business Media)
Cambridge, UK

Researched, prepared and presented a business plan for a Global Distance Learning Diploma in GIS. Negotiated with various organizations to participate as partners. Provided technical editorial advice to *GIS Europe*, Europe's only GIS trade magazine and *Mapping Awareness*, the UK's GIS trade magazine. Completed the technical development of the MS Windows version of *GISTutor 2*, a hypertext tutorial in GIS.

Visiting Lecturer - Introduction to GIS, Fall 1993

Department of Geoinformation
Technical University of Vienna, Austria

Coordinator of the International Post-graduate Course on GIS

January 1993 to September 1993
Department of Geoinformation
Technical University of Vienna, Austria

Coordinated a European Union funded project to develop an International Post-Graduate Course on GIS. Conducted an international survey to determine GIS educational needs and developed a course blueprint for the development of materials. Identified and contracted course authors. Coordinated promotion and logistical arrangements for presentation of course.

Coordinator of Education Programs, September 1990 to December 1992

National Center for Geographic Information and Analysis (NCGIA)
University of California, Santa Barbara, California

Oversaw the education outreach activities of the NCGIA, including the worldwide distribution of the *NCGIA Core Curriculum in GIS*, the development of foreign language versions and other GIS education publications and liaison with national and international GIS organizations. Presented workshops and papers on teaching GIS at conferences in the US, Europe, Asia and Latin America.

Teaching Associate - Geography 3, Introduction to Physical Geography, Fall 1990

Department of Geography
University of California, Santa Barbara, USA

Co-editor, *NCGIA Core Curriculum in GIS*, September 1988 to August 1990

National Center for Geographic Information and Analysis (NCGIA)
University of California, Santa Barbara, California

With Michael Goodchild, developed the outline for the curriculum contents, coordinated contributions from GIS experts worldwide, edited and compiled the draft version, managed the evaluation program and prepared the revised, final version of the widely respected Core Curriculum now used in academic institutions and commercial and government agencies around the world.

Teaching Assistant - GIS, Computer Cartography, Hydrology, September 1988 to June 1989

Department of Geography
University of California, Santa Barbara, USA

College Instructor - Geography, Geology, Microcomputer Applications, 1980 to 1988

Department of Geography and Geology
Malaspina College (now Malaspina University College), Nanaimo, BC, Canada

Taught first and second year Physical Geography, Geomorphology, Meteorology, Introductory Geology and Microcomputer Applications for Business in the university transfer program at a regional community college. Responsible for all aspects of instruction including preparing and presenting all lectures and laboratory sessions and student assessment. Participated on college committees and organised sessions on Computers in Geography for the Geography instructors of British Columbia colleges.

Computer Education Coordinator and Instructor, January 1983 to January 1984

Van Isle Industrial Education Centre Ltd.
Nanaimo, BC, Canada

Vice-President - Operations, January 1979 to July 1979

Patch Work Enterprises Ltd.
Calgary, Alberta, Canada

Co-founder of a small company offering support services to Alberta oil and gas exploration companies. Responsible for all technical operations.

Geophysical Coordinator/Exploration Resource Specialist, Sept. 1977 to Dec. 1978

Alberta Forest Service
Edmonton, Alberta, Canada

Supervised a small division charged with reviewing environmental impact and regulatory aspects of applications for permission to conduct geophysical exploration in Alberta.

Environmental Technician, May 1977 to August 1977

Northern Engineering Services Co. Ltd.
Calgary, Alberta, Canada

Engineering Survey Assistant, Summer 1975 and May 1976 to May 1977

National Parks Service
Banff, Alberta, Canada

SELECTED CONSULTATIONS

Educational Programs Consultant

US Geospatial Intelligence Foundation, Washington DC. 2009-present.

Consultant

University of Redlands, MS GIS Program, 2009-present.

Expert Working Group Member

Virtual Center for Humanities GIS (West Virginia University, Indiana University Purdue University Indiana and Florida State University). 2008 and 2009.

Advisor

Spatial Decision Support Consortium, Redlands Institute. 2008-9.

Information Specialist

Pasifika Foundation Hawai'i. Grant from US Department of Health and Human Services, Administration for Native Americans for "Community-based Host/Visitor Project: Phase II: Community Asset Survey, Analysis & GIS Mapping", October 2007 to September 2008.

National Visiting Committee Member

San Diego Mesa College, NSF Funded Scaleable Skills Certification Program in GIS, 2005 and 2006.

Member, Leadership Roundtable on the Geospatial Industry

Wharton College/GITA/AAG, October 2005

External Reviewer, Unit Review

Department of Geography, University of Calgary, September 2005

NSF Review Panel Participant

National Science Digital Library, May 2003

Learning Resources Consultant

May to July 2000

Center for Spatially Integrated Social Science, University of California Santa Barbara

Outside evaluator on NSF-ATE grant.

Observe and evaluate training and products throughout the duration of grant "GIS Access - Geographic Information Sciences Curriculum Clearing House and Faculty Enhancement Project", Sept 1998-August 1999, awarded to Les Doak, Cypress College, CA.

New market development analysis for small data conversion company, January 1998.

Outside evaluator for Richard Stockton College NJ

Evaluated interim progress on NSF-CCD grant "Integrating Geographic Information Systems into Undergraduate Environmental Science Curriculum", March 1996.

PUBLICATIONS AND PRESENTATIONS

Refereed Journal Articles

- Kemp, K. K. (2009). What does GIS offer to History? *International Journal of Humanities and Arts Computing*, 3(1-2), 15-19.
- DiBiase, D., DeMers, M., Johnson, A., Kemp, K., Luck, A. T., Plewe, B., et al. (2007). Introducing the first edition of Geographic Information Science and Technology Body of Knowledge. *Cartography and Geographic Information Science*, 34(2), 113(118).
- Kemp, K. K. 2003. Guest Editorial: Why GIS Professional Certification Matters to Us All. *Transactions in GIS* 7(2): 159-163.
- Kemp, K. K. and L. Wiggins 2003. Guest Editorial: Introduction to the Special Issue on GIS Education. *URISA Journal* 15(1): 4-6.
- Kemp, K.K. 2003. Update on the UCGIS Model Curricula Project. *URISA Journal* 15(1):47-49.
- Gregory, I., K.K. Kemp and R. Mostern, 2003. Geographical Information and Historical Research: Current progress and future directions. *Humanities and Computing* 13:7-22.
- Reeve, D., Hardwick, S., Kemp, K., and Ploszajtska, T., 2000. Delivering courses internationally. *Journal of Geography in Higher Education*, 24(2): 228-237.
- Goodchild, M. F., Egenhofer, M. J., Kemp, K. K., Mark, D. M., and Sheppard, E., 1999. Introduction to the Varenius Project. *International Journal of Geographic Information Science*, 13(8):731-745.
- Kemp, K. K., 1999. Strategic Change in GIScience Education. *Geographic Information Sciences*, 5(1):24-29.
- Kemp, K. K., and Unwin, D. J. 1997. Guest Editorial. From geographic information systems to geographic information studies: An agenda for educators. *Transactions in GIS* 2(2):103-109.
- Kemp, K.K., 1997. The NCGIA Core Curricula in GIS and Remote Sensing, *Transactions in GIS* 2(2):181-190.
- Foresman, T. W., T. Cary, Shupin, T., Eastman, R., Estes, J.E., Faust, N., Jensen, J.R., Kemp, K.K., 1997. "Internet teaching foundation for the Remote Sensing Core Curriculum program." *ISPRS Journal of Photogrammetry and Remote Sensing* 52: 294-300.
- Kemp, K.K., 1997. Fields as a framework for integrating GIS and environmental process models. Part one: Representing spatial continuity, *Transactions in GIS* 1(3):219-234.
- Kemp, K.K., 1997. Fields as a framework for integrating GIS and environmental process models. Part two: Specifying field variables, *Transactions in GIS* 1(3):235-246.
- Kemp, K.K., and A.U. Frank, 1996. Toward consensus on a European GIS curriculum: \The International Post-Graduate Course on GIS, *International Journal of Geographical Information Systems*, 10(4):477-497.
- Leipnik, M.R., K.K. Kemp and H.A. Loaiciga, 1993. Implementation of GIS for water resources planning and management, *Journal of Water Resources Planning and Management*, 119(2):184-205.

- Kemp, K.K., and Fiona M. Goodchild, 1992. Evaluating a Major Innovation in Higher Education: the NCGIA Core Curriculum in GIS, *Journal of Geography in Higher Education* 16(1):21-35.
- Goodchild, M.F., and K.K. Kemp, 1992. NCGIA Education Activities: The Core Curriculum and Beyond, *International Journal of Geographical Information Systems* 6(4):309-320.
- Kemp, K.K., M.F. Goodchild and R.F. Dodson, 1992. Teaching GIS in Geography, *Professional Geographer* 44(2):181-191.
- Kemp, K.K., and Michael F. Goodchild, 1991. Developing a Curriculum in GIS: The NCGIA Core Curriculum Project, *Journal of Geography in Higher Education*, 15(2):121-132. Reprinted in *Cartographica* 28(3):39-54, 1991.
- Kemp, K.K., 1991. The NCGIA Core Curriculum evaluation program: a review and assessment, *Cartographica* 28(3): 88-93.

Refereed Conference Proceedings

- Kemp, K.K. and R. Mostern, 2001. Spatial Vagueness and Uncertainty in the Computational Humanities. *Proceedings of the First COSIT Workshop on Spatial Vagueness, Uncertainty and Granularity*, Ogunquit, ME, October 2001. CD-ROM.
- Kemp, K. K., Reeve, D. E., and Heywood, D. I., 1999. Interoperability for GIScience Education. In *Interoperating Geographic Information Systems*, A. Vckovski, K. E. Brassel, and H.-J. Schek, eds., Springer-Verlag, Berlin, pp. 101-114.

Books

- McDonnell, R and K Kemp, 1995. *International GIS Dictionary*. Cambridge, UK, Geo-Information International.

Edited works

- Kemp, K. K. (Ed.). 2008. *Encyclopedia of Geographic Information Science*. Thousand Oaks CA: Sage Publications.
- Kemp, K. K. (Ed.). 2006. *The ESRI/University of Redlands Colloquium CD Set*. Redlands CA: ESRI Press.
- DiBiase, D., DeMers, M., Johnson, A., Kemp, K., Luck, A., Plewe, B., et al. (Eds.). 2006. *Geographic Information Science and Technology Body of Knowledge, First edition*, Washington, DC: Association of American Geographers.
- Kemp, K.K. and L. Wiggins, eds. 2003. Special Issue on GIS Education. *URISA Journal* 15(1).

Other Major Publications

- Goodchild, M.F., K.K. Kemp, M. Theriault and Y. Roche, 1994. *Systèmes d'Information Géographique: Notes de Cours*. LATIG, Département de géographie, Université Laval, Québec. (NCGIA Core Curriculum French translation)
- Goodchild, M.F., and K.K. Kemp, 1990. *NCGIA Core Curriculum in GIS*, National Center for Geographic Information and Analysis, University of California, Santa Barbara, CA.

Book Chapters

- Kemp, K.K., Keali'i'ikanaka'oleohaililani, K., & Hamabata, M.M. (in press). Ha'ahonua: Using GIScience to link Hawaiian and Western knowledge about the environment. In M. Dear, S. Luria & D. Richardson (Eds.), *Geography and the Humanities: Interactions and Investigations*: Routledge.
- Kemp, K.K. (in press). Geographic Information Science and Spatial Analysis for the Humanities. In D. Bodenhamer, T. Harris & J. Corrigan (Eds.), *The Spatial Humanities*: Indiana University Press.
- Brown, D.G., Elmes, G., Kemp, K.K., Macey, S., & Mark, D., 2004. Geographic Information Systems. In G. L. Gaile & C. J. Willmott (Eds.), *Geography in America at the Dawn of the 21st Century* Oxford University Press, pp. 353-375.
- Heywood, D.I., K.K. Kemp, and D.E. Reeve, 1999. Interoperable education for interoperable GIS. In *Interoperating Geographic Information Systems*, M.F. Goodchild, M.J. Egenhofer, R. Fegeas, and C.A. Kottmann, eds., Kluwer, New York, pp. 443-458.
- Kemp K.K., 1996. GIS and Geography Education, in H. Chamussy, R.P. Bradshaw and M. Antrop, eds., *Intelligent Tutorial Systems in Geography*, Springer-Verlag.
- Kemp, K.K., 1996. Managing spatial continuity for integrating environmental models with GIS, in M.F. Goodchild, B.O. Parks, L.T. Stayaert, & S. Glendinning, eds., *GIS and Environmental Modeling: Progress and Research Issues*, Fort Collins, CO: GIS World Books, pp. 339-343.
- Kemp, K.K., and A.U. Frank 1995. Toward consensus on a European GIS curriculum: The International Post-Graduate Course on GIS, in Frank A.U. (ed.), *Geographic Information Systems - Materials for a Post-Graduate Course*, Vienna, Austria, Department of Geoinformation, Technical University Vienna, 3: 865-895.
- Kemp, K.K., 1994. GIS Education in Europe, in P.J. Shand & P.J. Ireland, eds., *The 1994 European GIS Yearbook.*, NCC Blackwell Ltd., Oxford, pp. 90-92.
- Kemp, K.K., 1993. Spatial data: sources and issues, in M.F. Goodchild, B.O. Parks and L.T. Stayaert, eds., *Environmental Modeling with GIS*, Oxford University Press, New York, Chapter 35, pp. 363-371.

Proceedings

- Kemp, K.K., 2001. Using Geographic Information to Improve the Sharing of Digital Information Resources in the Humanities. *Proceedings of the Symposium on SIG-CH: Computer and the Humanities of Information Processing Society of Japan*, Osaka, Japan, December 2001, pp. 101-2.
- Kemp, K.K., 2001. Building a Global GIS Workforce: The new International Masters in GIS Program at the University of Redlands, *Proceedings of the Europe, Middle East and Africa ESRI Users Conference*, Lisbon Portugal, October 2001. CD-ROM.
- Kemp, KK., 2000. Background on international GIS professional certification efforts. *Proceedings of the European Seminar on GIS Education*, Budapest, Hungary, September 2000. CD-ROM.

- Kemp, Karen K., and Andrej Vckovski, 1998. Towards an ontology of fields. *Proceedings of the Third International Conference on GeoComputation*, September 17-19, 1998, Bristol, UK. CD-ROM.
- Kemp, K.K., 1997. Integrating traditional spatial models of the environment with GIS. In *Autocarto 13*, Seattle, WA. American Society of Photogrammetry and Remote Sensing and American Congress on Surveying and Mapping. pp. 23-32.
- Kemp, K.K., Goodchild, M. F., Mark, D. M., and Egenhofer, M. J., 1997. Varenius: NCGIA's Project to Advance Geographic Information Science. In *Proceedings of Joint European Conference and Exhibition on Geographical Information*, Vienna, Austria.
- Kemp, K.K., and M.F. Goodchild, 1996. The new on-line Core Curriculum in Geographic Information Science, in *Proceedings of GIS/LIS '96*, Denver, CO, pp. 363-367.
- Kemp, K.K., 1996. Easing environmental models into GIS, in *Proceedings of the Third International Conference/Workshop on Integrating GIS and Environmental Modeling*, Santa Fe, NM, January 21-26, 1996. Santa Barbara, CA: National Center for Geographic Information and Analysis (CD-ROM).
- Kemp, K.K., 1995. Teaching and Learning about GIS, in *Proceedings of III Simpósio Brasileiro de Geoprocessamento*, pp. 259-292, São Paulo, Brazil.
- Kemp, K.K., 1994. GIS education in the global marketplace, in J.J. Harts, H.F.L. Ottens, & H.J. Scholten, eds., *Proceedings of EGIS/MARI '94*, EGIS Foundation, Paris, vol. 1:538-541.
- Kemp, K.K., 1993. GIS education options, in *Proceedings of 25th International Symposium, Remote Sensing and Global Environmental Change*, Graz, Austria, Environmental Research Institute of Michigan, Ann Arbor, MI. pp. I-477-483.
- Kemp, K.K., 1993. Toward a consensus on a European GIS curriculum: The International Post-Graduate Course on GIS, in *Proceedings of Urban Data Management Conference*, Vienna, Austria, ADV Handelsgesellschaft m.b.H, Vienna, Austria, pp. 42-51.
- Kemp, K.K., 1993. Environmental modelling with GIS: dealing with spatial continuity, in K. Kovar & H.P. Nachtnebel (Eds.), *Proceedings of HydroGIS '93, Application of Geographic Information Systems in Hydrology and Water Resources Management*, Vienna, Austria, International Association of Hydrological Sciences Press, Wallingford, Oxfordshire, UK, pp. 107-115.
- Kemp, K.K., 1993. Managing spatial continuity for integrating environmental models with GIS, in *Proceedings of Environmental Modeling and GIS*, Breckenridge, CO, GIS World, Ltd., in press.
- Kemp, K.K., 1992. Spatial models for environmental modeling with GIS, *Proceedings of the Fifth International Symposium on Spatial Data Handling*, Columbia, SC, pp. 524-533.
- Kemp, K.K., 1992. Environmental modeling with GIS: A strategy for dealing with spatial continuity, in *Proceedings of GIS/LIS '92*, San Jose, CA, pp. 397-406.
- Kemp, K.K., 1991. GIS Education Around the World: Year Three of the NCGIA Core Curriculum Project, in *Proceedings of the AGI '91 Conference*, Birmingham.
- Kemp, K.K., 1990. An Update on the NCGIA Core Curriculum Project, in *Proceedings of the Tenth Annual ESRI Users Conference*, Volume 1, Environmental Systems Research Institute, Redlands, CA.

Kemp, K.K., 1990. A Review and Assessment of the NCGIA Core Curriculum Evaluation Program, in *Proceedings of the International Symposium on Spatial Data Handling*, Zurich, 2:1053-1058.

Goodchild, M.F., K.K. Kemp, D.M. Mark and A.U. Frank, 1989. The U.S. National Center for Geographic Information and Analysis: An Overview of the Agendas for Research and Education, in *Proceedings of Canadian National Conference on GIS: Challenge for the 1990's*, Ottawa, pp. 918-925.

Other publications

DiBiase, D., DeMers, M., Johnson, A., Kemp, K., Luck, A. T., Plewe, B., et al. (2007). Introducing the First Edition of the Geographic Information Science and Technology Body of Knowledge. In *2007 U.S. National Report to the ICA*.

Kemp, K.K. 2006. "Future for GIS Education in a World of Embedded GIS". *GIS Development*, 10, p. 41.

Kemp, K.K., 2005. "Those of us teaching GIS must set the example". *GIS Development*. 9:1. Available on-line at www.gisdevelopment.net/magazine/years/2005/jan/interview.htm.

Kemp, K.K. and David Unwin, 2005. *Instructor's Manual for Geographic Information Systems and Science*, 2nd Edition. By P. A. Longley, M. F. Goodchild, D. J. Maguire and D. W. Rhind. John Wiley & Sons.

Kemp, K.K. 2002. Book Review of "Concepts and Techniques of Geographic Information Systems". *Transactions in GIS* 6(4):485-489.

Maher, R. and others, 2002. *Project 19122 - Geographic information/Geomatics - Qualifications and Certification of personnel*. Report N1319, Oslo, Norway, ISO/TC 211 Secretariat.

Kemp, K.K., 2001. GIS Education Center and International Master's Degree Program at the University of Redlands. *ArcNews*, Winter 2001.

Kemp, K.K. 2001. Geography and GIS. *Geographic Information Systems & Science, Instructor's Manual*, Wiley and Sons.

Kemp, 2000. International certification efforts. In Somers, R., Defining the GIS Profession and Debating Certification and Regulation. *Geo Info Systems*. May 2000, pp.24-25.

Kemp, K. and N. Obermeyer, 1999. GIS Certification/Accreditation debate heats up. *AAG Newsletter*. 34 (12): 1-2.

Kemp, K.K., D.E. Reeve, and D.I. Heywood, 1998. *Report of the International Workshop on Interoperability for GIScience Education, IGE '98*, Soesterberg, The Netherlands, May 18-20, 1998. National Center for Geographic Information and Analysis, University of California Santa Barbara.

Kemp, K.K., 1998. Education. In *Interoperating GISs*. NCGIA Varenius Report, University of California Santa Barbara.

Wright, R. and K. Kemp, 1998. GIScience Education Challenges. *Intergovernmental Solutions Newsletter*. Oct. 1998, <http://policyworks.gov/org/main/mg/intergov/letter/1Kemp5.html>.

Kemp, K.K., and R. Wright, 1997. UCGIS identifies GIScience education priorities. *Geo Info Systems*, September 1997, pp. 16-20.

- Taylor, J., J. Fletcher and K.K. Kemp, 1996. *GIS Laboratory Exercises: Introduction to GIS*, 2nd edition, Technical Report 96-12, National Center for Geographic Information and Analysis, University of California, Santa Barbara, CA.
- Densham, P.J., M.P. Armstrong and K.K. Kemp, 1995. *Collaborative Spatial Decision-Making: Scientific Report for the Initiative 17 Specialist Meeting*, Technical Report 95-14, National Center for Geographic Information and Analysis, University of California at Santa Barbara.
- Kemp, K.K., 1994. GIS Education at EGIS '94, *GIS Europe*, 3(6):15-16.
- Kemp, K.K., 1993. TUW offers a new kind of course, *GIS Europe* 2(2):31.
- Kemp, K.K., W. Kuhn, A.U. Frank, 1993. GIS education for professionals: Making GIS accessible, *Geo Info Systems* 3(4):50-52.
- Kemp, K.K., 1993. *Environmental Modeling with GIS: A strategy for dealing with spatial continuity*, Technical Report 93-3, National Center for Geographic Information and Analysis, University of California at Santa Barbara.
- Goodchild, M.F., and K.K. Kemp, 1992. GIS Education and NCGIA, *Geo Info Systems* 2(3):54-56.
- Goodchild, M.F., and K.K. Kemp, 1992. GIS Research and Education in the USA, *Vestnik Moskovskogo Universiteta, Geography Series* 4:68-72, in Russian.
- Goodchild, M.F. and K.K. Kemp, 1992. GIS Accreditation: What are the options?, *ACSM Bulletin*, Nov/Dec 1992, pp. 44-47.
- Kemp, K.K., 1991. The NCGIA Core Curriculum evaluation program: a review and assessment, *Cartographica* 28(3): 88-93.
- Dodson, R.F., K.K. Kemp and S.D. Palladino, 1991. *The NCGIA Guide to Laboratory Materials, 1991*, NCGIA Technical Report 91-20, National Center for Geographic Information and Analysis, University of California, Santa Barbara, CA.
- Palladino, S.D., and K.K. Kemp, 1991. *GIS Teaching Facilities: Six case studies on the acquisition and management of laboratories*, NCGIA Technical Report 91-21, National Center for Geographic Information and Analysis, University of California, Santa Barbara CA.
- Kemp, K.K. and M.F. Goodchild, 1990. NCGIA Core Curriculum Update, *GIS World*, April/May 1990:75-77.
- Kemp McMillan, K.K. and E.A.M. Forrester, 1984. *Abstracts of papers presented at the annual meeting of the Canadian Association of Geographers*, Department of Geography, Malaspina College, Nanaimo, BC, Canada.

Invited Presentations

- “Teaching GIS at University and College Level”, 5th International Conference on GIS, Istanbul, Turkey. July 2008.
- “Getting started as a GIS Professional”, University of Calgary, Department of Geography colloquium, November 2002 and University of Hong Kong, Expert’s Address Series, March 2005.

- “GIS and the Humanities”, Idaho State University, special colloquium sponsored Departments of Geology and History, the ISU Office of Research, the GIS Training and Research Center, and the Ifft Social Sciences Laboratory and funded by the ISU Speakers and Artists Committee, October 2001.
- “Extending GIS into the Humanities”, keynote presentation at Third Annual Cal Poly Pomona GIS Exposition, California State Polytechnic University Pomona, May 2001.
- “GIS for the Humanities”, invited tutorial presented at the Pacific Neighborhood Consortium Annual Conference, Hong Kong, January 2001.
- “GIS and the Humanities”, inaugural lecture in the Lecture & Workshop/Seminar Series on “Geographic Information Science & the Disciplines”, part of the Educational Program for Spatial Analysis/GIS sponsored by The Center for European Studies, The China Data Center, and The International Institute at the University of Michigan, November 2000.
- “Helping old and new geographies converge”, invited lecture, Department Colloquium Series, Department of Geography, University of Oklahoma, October 1999.
- “Geographic Information Science”, various invited departmental lectures at the University of California Berkeley and Lawrence Livermore National Labs, spring 1999.
- "Interoperability for GIS Education", First European GIS Education Seminar, EUGISES'98, Soesterberg, The Netherlands, September 1998.
- Three lectures on Geographic Information Science, Regional Workshop on Integrated Environmental Information Systems, Cairo, Egypt, January 1997.
- “Teaching and Learning about GIS”, Third Brazilian Symposium on Geoprocessing, Sao Paulo, July 1995.
- "Geography and GIS", Department of Geography, University of Oxford, April 1994.
- "Environmental Modelling with GIS", University of Klagenfurt, Austria, June 1993; Vienna University of Economics, Austria, June 1993; University of Osnabrück at Vechta, Germany, June 1993; and Institute of Information Science, University of Bergen, Norway, October 1993; University of Sheffield, UK, February 1994; University of Cambridge, UK, March 1994.
- "GIS Education and the NCGIA Core Curriculum", International Cartographic Association, Commission on Education and Training, Seminar on Surveying and Mapping Aspects of GIS and Visualization, University of Maryland at College Park, MD, August 1992.
- "GIS education around the world: The role of the NCGIA Core Curriculum", Second International Symposium on Remote Sensing and Space '92, Hat Yai, Thailand, January 1992.
- "GIS Education, Geography and the NCGIA Core Curriculum", NATO Workshop on Intelligent Tutorial Systems in Geography, Montpellier, France, November 1991.
- "NCGIA Core Curriculum", North Carolina GIS Conference, Raleigh, NC, January 1991.
- "A Review and Assessment of the NCGIA Core Curriculum Evaluation Program," GIS Education and Training Conference, Midlands Regional Research Laboratory, Leicester, UK, March 1990.
- "The NCGIA Core Curriculum: An interim report on the evaluation program," GIS/DIP Workshop for California State University Faculty, San Diego, CA, February 1990.

"The NCGIA Core Curriculum", with M.F. Goodchild, GIS Educator's Conference, Ohio State University, June 1989.

Workshops Presented

"GIS for Humanities", Annual Conference of the Pacific Neighborhood Consortium, Hong Kong, January 2001.

"Interoperability for GIS Education", GISPlaNET'98, Lisbon, Portugal, September 1998.

Presenter in "Training of Trainers Workshop on Geographical Information Systems in the field of environmental management", UNITAR and Swiss Federal Institute of Technology, Lausanne, Switzerland, October 1993.

Presenter in "Workshop on Spatial Data Modelling", EGIS '93, Genoa, Italy, March 1993.

"Laboratories for GIS education: Hardware, software and exercises", Annual Conference, American Association of Geographers, San Diego, April 1992.

Selected units from the NCGIA Core Curriculum presented during course on Remote Sensing and GIS held at FORMEZ, Naples, Italy, November 1991.

Presenter in "Third Latin American Course on Geographic Information Systems, Seminar on the introduction of GIS in university teaching and the creating of GIS laboratories", Santiago, Chile, October 1991.

"Teaching GIS", GIS/LIS '91, Atlanta, October 1991.

"Teaching GIS and the NCGIA Core Curriculum", International Symposium on Environmental Change and GIS, Asahikawa, Japan, August 1991.

"Materials for Teaching GIS Workshop", International Symposium on Spatial Data Handling, Zurich, July 1990 and LIS/GIS '90, Anaheim, November 1990.

Other Presentations

"Exploring Kona's Development Future Through GIS", Kailua-Kona, April 2010.

"Revisiting GIS and Environmental Modeling", University of Hawai'i Hilo, March 2010.

"County of Hawai'i Agricultural Suitability Web Application", Hawai'i County Department of Planning, Hilo Hawai'i, October 2009.

"GIS Certification", ESRI Survey Summit, San Diego CA, August 2004.

"Getting started as a GIS Professional". Europe and Middle East and Africa ESRI Users Conferences, Brugges Belgium and Dubai UAE, October 2002 and GISMAP, Honolulu HI, June 2004.

"Education for GIS Professionals around the world". Third European GIS Education Seminar, Girona, Spain, September 2002.

"Report on Project 19122: Qualifications and Certification of Personnel", Europe, Middle East and Africa ESRI Users Conference, Lisbon Portugal, October 2001.

"Master of Science in Geographic Information Systems", ESRI International Users Conference, San Diego CA, July 2001.

"Digital Earth: A global village for the Humanities", Digital Earth 2001, Fredericton NB Canada, June 2001.

“Digital Earth, Digital People: Where is the Humanity in GIS”, Electronic Cultural Atlas Initiative Conference: Towards an Electronic Cultural Atlas: E-Publishing and data interoperability in the Humanities, Sydney Australia, June 2001.

Organizer, discussant and presenter in sessions on “GIS Professional Certification”, Association of American Geographers Annual Conference, New York City, March 2001

Discussant, “The Electronic Cultural Atlas Initiative” session, Annual meeting of the Association of American Geographers, New York City, February 2001.

“Certification for GIS”, European GIS in Education Seminar (EUGISES), Budapest Hungary, September 2000.

Session organizer and presenter on "New Strategies for GIS Education", Annual meeting of the Association of American Geographers, 1999.

Co-organizer of panel discussions on "What does it take to be a GIS professional?: Exploring the skills required in the GIS profession" and "How can we be sure?: On evaluating the competency of the GIS professional" at URISA '98.

Co-organizer of panel discussions on “The Role of GIS Education in the Schools, Colleges and Universities” and on “Convincing your colleagues that GIS is more than technology”, Annual Conference, Association of American Geographers, March 1995.

"Integrating environmental modeling and GIS: Dealing with continuity", International Geographical Congress, Washington D.C., August 1992.

Co-organizer of panel discussion on GIS laboratory facilities, Annual Conference, Association of American Geographers, San Diego, April 1992.

"GIS education needs and the NCGIA Core Curriculum", EGIS '92, Munich, Germany, March 1992.

Participant on panel discussions on GIS Education at GIS/LIS '89, Orlando, URISA '91, San Francisco and Remote Sensing and Space '92, Thailand, and many others since then.

"The NCGIA," with M.F. Goodchild *et al*, Annual Conference, American Association of Geographers, April 1989.

GRANTS AWARDED

“Kahalu‘u Ahupua‘a – a Blended-Science Prototype Decision Tool for Coastal Zone Climate Change Impacts in High Volcanic Islands”, NOAA Sector Application Research Program (SARP). \$300,000. September 2010-August 2012. Principal Investigator.

“Hawai‘i County Agricultural Suitability GIS”, County of Hawai‘i, Research and Development Department to The Kohala Center, Waimea HI. \$75,000. July 2008-June 2009. Project Director.

“Hawai‘i Island Digital Geocollaboratory”, National Endowment of the Humanities, Digital Humanities Initiative. \$30,000. April 2007-March 2008. Principal Investigator.

“Using the Community College System to Train and Certify GIS Technicians for Framework Data Production and Integration: A Feasibility Study”, FGDC, \$58,080 for the period 10/1/98 to 5/31/99, PI: Elizabeth Johns, NC Department of Community Colleges, Collaborators: Robert Pittman, NC Community College System, Karen Siderelis, NC

Center for Geographic Information and Analysis, Tom Tribble, NCCGIA Karen Kemp, NCGIA.

“Information Technologies, Social Movements and Civil Society”, National Science Foundation, Social, Economic and Behavioral Sciences Directorate, Cultural Anthropology Program, \$16,240 for the period 6/1/98 to 5/31/99, PI: Susan Stonich, UCSB Sociology, co-PI: Karen Kemp.

“A GIS Core Curriculum for Technical Programs”, National Science Foundation, Education and Human Resources Directorate, Undergraduate Education Division, Advanced Technological Education Program, \$ 188,500 for the period 7/1/96 to 6/30/98, PI: Michael Goodchild, co-PIs: Stephen Palladino and Karen Kemp.

“Mastering the Technical Issues of GIS: A problem solving approach using Arc/Info”, Instructional Development Office, University of California, Santa Barbara, \$12,000, for the period 7/96 to 6/97, PI: Michael Goodchild, co-PIs: Paul Sutton and Karen Kemp.

"Practical Learning in Geographic Information Systems", Instructional Development Office, University of California, Santa Barbara, \$11,568, for the period 7/95 to 4/96, PI: Michael Goodchild, co-PIs: Karen. Kemp, Stephen Palladino.

"The Conduct of Information Science Research Related to the Development of an EOSDIS User Model", National Aeronautics and Space Administration (NASA), \$129,746, for period 12/94 to 8/95, PIs: John Estes, Michael Goodchild, co-PIs: Joseph Scepan, Karen Kemp.

INVITED WORKSHOP PARTICIPATION

Space-Time Modeling and Analysis Workshop, ESRI Redlands, CA. February 2010.

Geodesign Summit 2010, ESRI Redlands, CA. January 2010.

Specialist Meeting on Spatial Concepts in GIS and Design, University of California Santa Barbara, December 2008.

Language in Landscape, NSF funded workshop organized by David Mark, University at Buffalo and others. Canyon de Chelly, Arizona. October 2008.

NASA's National Workforce Development Education and Training Initiative (NWDETI) Planning Workshop for the GeoSpatial Workforce Development Project, January 2001 and March 2001.

National Science Foundation workshop "Portal to the Future: A Digital Library for Earth System Education", August 9-11, 1999, Berkeley Springs WV.

Federal Geographic Data Committee workshop on Metadata Education Materials, June 3-5, 1999, Herndon VA.

International Symposium on Learning and Teaching Geography in Higher Education, March 23, 1999, Honolulu HI.

National Science Foundation workshop on the Digital Government Initiative: Geographic Information Systems, July 8-9, 1998, in Arlington VA.

National Research Council workshop on Distributed Geolibraries, June 15-18, 1998, Washington DC.

COMMITTEES AND PROFESSIONAL SERVICE

Founding Member of the Board of Directors, GIS Certification Institute, September 2004 to February 2006.

Member of the Editorial Team, UCGIS Geographic Information Science Body of Knowledge, 2004 to 2006.

Member of the Organizing Committee, EduEdCon 2003 (European Education Users Conference), Innsbruck, Austria, October 2003.

Member of the Strategic Planning Committee, Electronic Cultural Atlas Initiative (ECAI), January 2001 to 2004.

Education Editor, *URISA Journal*, January 2000 to present.

GIS Team Leader, Electronic Cultural Atlas Initiative (ECAI), January 2000 to 2004.

Member of Certification Task Force, American Association of Geographers (AAG), 1999.

Technical Expert to the ISO/TC 211 Working Group "Certification of GIS Professionals" project, 1999 to 2004.

Member of Education Committee, Urban and Regional Information Systems Association, ongoing, 1998-2005.

Member of Task Force for the UCGIS Model Curriculum Project, 1998-2003.

Member of the International Review Panel for the ESRI Virtual Campus GIScience Curriculum, 1998.

Member of National Advisory Committee, Work/Site Alliance: Community Based GIS Education, an NSF funded project at Eastern Michigan University, 1998-2000.

Member of Program Advisory Committee, First International Conference on GIS Education, Ypsilanti, Michigan, October 29-November 1, 1998.

Member of Steering Committee, First European GIS Education Seminar: EUGISES '98, Soesterberg, The Netherlands, September 3-6, 1998.

Member of Steering Committee, GISPlaNet 1998, Lisbon Portugal, September 1998.

Co-leader, An International Workshop on Interoperability for Distributed GIScience Education, Soesterberg, The Netherlands, May 1998.

Program Chair and Member of Organizing Committee, Third International Symposium on Geographic Information Systems in Higher Education, Chantilly VA, October 1997.

Co-chair, University Consortium for Geographic Information Science Assembly and Summer Retreat, Bar Harbor Maine, June 1997.

Member of Education Committee, University Consortium for Geographic Information Science, 1996-2006.

Member of Executive Committee, National Center for Geographic Information and Analysis, 1997-98.

Program Chair and Member of Organizing Committee, Second International Symposium on Geographic Information Systems in Higher Education, Baltimore MD, September 1996.

Member of Board of Directors, University Consortium for Geographic Information Science, 1995–99.

Co-leader, NCGIA Research Initiative 17: Collaborative Spatial Decision-Making, 1995-1997.

Member of Steering Committee, NCGIA Core Curriculum for Remote Sensing, 1995-1997.

Member of Editorial Committee, Proceedings of the EOSDIS Potential User Group Development Effort Conference, Leesburg, VA, June 19-22, 1995.

Member of Interim Executive, University Consortium for Geographic Information Science (UCGIS), Dec. 1994 - Nov. 1995.

Member of Steering Committee, MRRL/SERRL Visualization Toolkit Project, Leicester UK, 1994.

Student Director, GIS Special Interest Group, Association of American Geographers, 1990-1992.

Member of Local Organizing Committee, Annual Meeting, Canadian Association of Geographers, Nanaimo BC, 1984.

Member of Promotion and Recruitment Committee, Malaspina College, Nanaimo BC, 1980-1988.

REVIEWER FOR:

US National Science Foundation
US Department of Education
US Environmental Protection Agency
Canadian Social Sciences and Humanities Research Council of Canada
California Space Institute
Swiss National Research Council
University of California Digital Media Innovation Program
University of Hong Kong
Hong Kong Research Council
WM Keck Foundation
Oxford University Press
Wiley Publishing, Inc.

ASCE Journal of Environmental Engineering
Cartography and GIS
Computers and Geosciences
Cartography and GIS
Decision Support Systems
Geographical Analysis
Environmental Modelling and Software
International Journal of Geographical Information Systems
Journal of Geography
Photogrammetric Engineering and Remote Sensing
Professional Geographer
Transactions in GIS

SCHOLARLY AWARDS

UCGIS Educator of the Year 2004, presented by the University Consortium of Geographic Information Science
University of California Regents Fellowships, 1988-1991
Sara Spencer Foundation Research Fellowship, University of Victoria, 1982
Canadian Association of Geographers Undergraduate Award, 1976

PROFESSIONAL CERTIFICATION

Certified GIS Professional, certified October 2005 by the US GIS Certification Institute

PROFESSIONAL SOCIETIES

Association of American Geographers, member since 1989