BRIAN E. SMITH

5604 ALPINE AVENUE Montreal, Quebec CANADA H4V 2X5

Tel: 514-482-6000 Fax: 514-482-1639

E-mail: brian.smith@mcgill.ca

EDUCATION

B.A., M.A. 1965. University of Dublin, Trinity College (1st class) Major: Pure and Applied Mathematics.

Minor: English Literature.

M.Sc. 1967. University of Alberta, Edmonton, Alberta, Canada.

Mathematics (Relativity Theory).

Ph.D. 1972. Queen's University at Kingston, Ontario, Canada

Mathematics (Differential Geometry).

M.Sc.A. 1984. McGill University, Montreal, Quebec, Canada

Computer Science.

AWARDS

Ontario Graduate Fellowship 1967 - 1969

National Research Council of Canada Scholarship 1969 - 1971

EMPLOYMENT HISTORY

June 1976 - present: McGill University, Faculty of Management, Montreal, Quebec.

Position: Faculty Lecturer in Statistics and Management Science

- Lecturer in Statistics and Operations Research, B.Com. Program.
- Lecturer in Applied Time Series Analysis for Managerial Forecasting, MBA Program.
- Lecturer in Simulation of Management Systems, MBA Program.
- Faculty Disciplinary Officer: responsible for cases of cheating, plagiarism, misuse of Internet privileges. 1998 - 2001.
- Committee member of Pedagogical Excellence Committee
- Committee member of Undergraduate Program Committee.

1970 – 1997: **Dawson College, Montreal, Quebec, Canada**

Position: Professor of Mathematics (Retired)

- Chair of the Department of Mathematics, 1992 94.
- Teaching experience in pure and applied mathematics for social science, science, commerce, and technology programs.
- Coordinated faculty and student usage of computer laboratory and served as advisor to system users.
- Served as Chair of the Mathematics Department Computer Users Group.
- Served as Chair of Mathematics Department Grievance Committee.

1994-95: Santa Monica College, Santa Monica, CA.

Position: Visiting Lecturer, Mathematics Department (while on sabbatical leave).

• Lecturer in calculus and statistics courses.

ORGANIZATIONAL AND PROFESSIONAL ACTIVITIES

2004 – 2008:	Board Member, CAUSE (Consortium for the Advancement of Undergraduate Statistics Education).
2003 – 2005:	Chair, ASA/AMATYC Joint Committee – a joint committee of the American Statistical Association and the American Mathematical Association of Two-Year Colleges.
2000 – 2008:	Chair, Statistics Education Committee, American Mathematical Association of Two-Year Colleges
1999 - 2009:	Software Editor, AMATYC Review.
1995 – Present:	Academic Fellow, Canadian Institute for Jewish Research.
1992 – 2005:	Founder and original list owner of MATHEDCC Internet discussion group for College Mathematics Educators
1993 - 1999:	Chair, Technology in Mathematics Education (TiME) Committee, American Mathematical association of Two-Year Colleges (AMATYC).
1995 - 1999:	Chair, AMATYC Home Page Committee.
1991 - 1994:	Newsletter Editor for the TiME Committee of AMATYC,
1993 - 1999:	Reviewer for AMATYC REVIEW.
1993 - 2003:	Member: Mathematical Association of America.
1998 - 2003:	Member of the Committee on Computers in Mathematics Education (CCIME) of the Mathematical Association of America.
1997 - 1998:	Writer for NASA-AMATYC-NSF Project Coalition I, a National Science Foundation funded project for developing mathematical educational materials based on aeronautics and space engineering technology applications at NASA.
1998 - 1999:	Writer for NASA-AMATYC-NSF Project Coalition II, a National Science Foundation funded project for developing mathematical educational materials based on aeronautics and space engineering technology applications at NASA.
2001 – 2003:	Member of ad-hoc joint ASA-AMATYC Committee. (American Statistical Association - American Mathematical Association of Two-Year Colleges).
2001 – 2003:	Writer for <i>The Math Works</i> , a National Science Foundation (USA) funded project for developing mathematical educational materials based on various technological applications.
2002 - 2005:	Member of National Advisory Committee for the American Mathematical Association of Two-Year Colleges' revision project for the Crossroads Document (Standards for Mathematics Education).

PUBLICATIONS AND PRESENTATIONS

Smith, B.E., "Cosmological Solutions in General Relativity", M.Sc. Thesis, University of Alberta, 1967.

Trollope, J.R., and Smith, B.E., "Exact Solutions of Einstein's Cosmological Equations", Il Nuovo Cimento, Serie X, Vol 59B, , 125-136, (1969).

Smith B.E., "A Bivector Formalism for 4-dimensional Zero-Signature Manifolds", Ph.D. Thesis, Queen's University at Kingston, 1971.

Merrett, T.H., and Smith, B.E., "A Comparison of Relational Database Systems for Microcomputers", Proceedings: Conference on Design, Implementation and Use of Relational DBMS on Microcomputers, Toulouse 14-15, 31-51 Feb. 1983.

Merrett, T.H., and Smith, B.E., "A Comparison of Relational Database Systems for Microcomputers", BIT: Current Status of Database and Applications 1983, 167-174 (in Japanese).

Smith, B.E., "A Survey of Relational Database Management Systems for Microcomputers", McGill University, Faculty of Management, Working Paper #84.07, 1984.

Smith B.E., "Statistical Simulations". Presented at the Regional Conference of the National Council of Teachers of Mathematics, Montreal, 1985.

Smith B.E., "Quartile Confusion". A paper presented to the American Mathematical Association of Two Year Colleges (AMATYC), Dallas, Oct. 1990.

Smith B.E., "Textbook Related Statistical Packages: Choosing Them, Using Them". Presented to the American Mathematical Association of Two Year Colleges, Seattle, Nov. 1991.

Smith B.E., "MINITAB: The New Student Edition". A workshop presented to the AMATYC conference, Indianapolis, Nov. 1992.

Smith B.E., "Computers, Calculators and Group Problem Solving in Calculus". Presented at the Second Annual Conference on the Teaching of Calculus, Harvard University, Cambridge, MA, June 1993.

Smith B.E., "Calculus Reform vs. Tradition: Bridging the Gap". Proceedings of the Sixth Annual International Conference on Technology in Collegiate Mathematics (ICTCM), Parsippany, NJ, Nov. 1993.

Smith B.E. and Zabowski, G: "MINITAB: Exploring Release 8". A minicourse presented at the Sixth Annual ICTCM conference, Parsippany, NJ, Nov. 1993.

Smith B.E., "Calculators, Computers, Graphs and Calculus". Presented to the AMATYC conference, Boston, MA, Nov 1993.

Smith B.E., "Numeracy - the Relationship between Mathematics and Language". A seminar presented at the Centre for Literacy, Dawson College, Montreal. Feb. 1994

Smith B.E., "Classroom Experiences with DERIVE". CMC³ Newsletter, California Mathematics Council - Community College, Spring 1994.

Smith B.E.and Zabowski, G., "MINITAB for Windows - an Educational Approach". A minicourse presented at the Seventh Annual ICTCM conference, Orlando, Florida, Nov. 1994.

Smith B.E., "Using the Internet for Education and Research". A paper presented at the Seventh Annual ICTCM conference, Orlando, Florida, Nov. 1994.

Smith B.E., and Villas S., "Mathematical Resources on the Internet: Finding them - Using Them". A workshop presented at the AMATYC conference. Tulsa, OK, Nov. 1994.

Smith B.E., "Mathematics on the Internet: A Classroom Tool". A paper presented at the Fourth Conference on the Teaching of Mathematics, San Jose, CA, June 1995.

Smith B.E. and Villas, S., "Instructional Aspects of mathematics on the Internet". A minicourse presented at the Mathematical Association of America summer conference, Burlington, Vermont, Aug. 1995.

Smith B.E. and Zabowski, G., "Probability Distributions and Simulation Using MINITAB". A minicourse presented at the Eighth Annual ICTCM conference, Houston, Texas, Nov. 1995.

Smith B.E., "Teaching mathematics with f(g)Scholar". A minicourse presented at the Eighth Annual ICTCM conference, Houston, Texas, Nov. 1995.

Smith B.E., "Mathematical resources on the World Wide Web". Syllabus Magazine. Syllabus Press, Sunnyvale, CA. April 1996.

Szilagyi, Salomon, Smith, Martin and Seidman., "Determinants of Prolonged Oral Cecal Transit Time during Late Phase Pregnancy". Clin.Invest.Med, Vol. 19, pp 20-27. 1996.

Smith, B.E., "Lively Mathematics with f(g) Scholar". Proceedings of the Ninth Annual International Conference on Technology in Collegiate Mathematics (ICTCM), Reno, Nevada. Nov. 1996.

Robinson, M.R. and Smith, B.E., "Mathematics and History: An Adventure in Cyberspace". Proceedings of the Ninth Annual International Conference on Technology in Collegiate Mathematics (ICTCM), Reno, Nevada. Nov. 1996.

Smith, B.E., "The TI-83, A Versatile Problem Solver for Your Mathematics Class". A paper presented at the Eighth Annual Conference of the New Mexico Mathematical Association of Two-Year Colleges. Albuquerque, NM, May 1997.

Smith, B.E., "DERIVETM in your Math Class/Lab - All this Technology and fun too!". A minicourse presented at the Eighth Annual Conference of the New Mexico Mathematical Association of Two-Year Colleges. Albuquerque, NM, May 1997.

Smith B.E., and Robinson, M.R.; "Teaching the History of Mathematics using the World Wide Web." A minicourse presented at the Joint Mathematics Meetings, Baltimore, MD. Jan. 1998.

Ray, J., Smith B.E. and Wang, W. Co-organizers, "*Teaching Calculus for Advanced Technical Careers*". An MAA contributed paper session at the Joint mathematics Meetings, Baltimore, MD. Jan. 1998.

Smith B.E., "Mathematics Educators: Make Use of Technology". Christian Science Monitor, Boston. April 1998.

Smith B.E., "MINITAB-12 - Teaching Statistics with Style". Electronic Proceedings of the American Mathematical Association of Two Year Colleges (AMATYC), Portland, Oregon, Nov. 1998. World Wide Web, http://www.amatyc.org/Proceedings/Portland24/proceedings.html.

Robinson, M.R. and Smith, B.E., "Using Scientific Notebook and DERIVE in the Mathematics Classroom". To appear in the Proceedings of the Eleventh Annual International Conference on Technology in Collegiate Mathematics (ICTCM), New Orleans, Louisiana. Nov. 1998.

Zabowski, G. and Smith, B.E., "Learning Statistics with Microsoft EXCEL Simulations". Proceedings of the Ninth Annual International Conference on Technology in Collegiate Mathematics (ICTCM), New Orleans, Louisiana. Nov. 1998.

- Smith, B.E., "Teaching Statistics in a Hi-Tech Classroom". Abstracts of Papers Presented to the American Mathematical Society. Vol. 20, San Antonio, TX. Jan. 1999.
- Smith B.E., "The Lognormal Distribution: An analysis of Wind Changes at the Kennedy Space Center." Mathematical Explorations I, NASA-AMATYC-NSF. C.T., 1999.
- Smith, B.E., "Wind Changes Affecting Shuttle Launch at the Kennedy Space Center". A seminar presented at the Management Science Research Centre, McGill University, March 1999.
- Smith B.E., "An Applet a Day: Using the World Wide Web in Teaching Statistics". A keynote address delivered at the conference on Teaching Statistics: Technology and Reasoning, Borough of Manhattan Community and the CUNY Mathematics Discussion Group. March 1999.
- Smith B.E., "Statistics on the Web: Using Applets and Data Sets in your classroom". Electronic Proceedings of the 14th Annual Conference of MSMESB (Making Statistics More Effective in Schools of Business). Babson College, June 1999. World Wide Web, http://roger.babson.edu/rao/msmesb_14talks.htm
- Smith, B.E. and Merceret, F.J., "The Lognormal Distribution". The College Mathematics Journal. Vol. 31, No. 4 (259-261), (2000).
- Sattler, N., Smith, B.E., and V. Kays, *Report of the Task Force on Distance Learning*, Annual conference of the American Mathematical Association of Two-Year Colleges. Pittsburgh, PA. Nov. 1999.
- Smith B.E., Bessman, M. Co-organizers, "Innovative Uses of the World Wide Web in Teaching Mathematics". An MAA contributed paper session at the Joint Mathematics Meetings, Washington, DC. Jan. 2000.
- Smith B.E.,, "Applets, data Sets, and Other Web Resources in a Business Statistics Class". Abstracts of Papers Presented to the American Mathematical Society. Vol. 21, Number 1, 207-208. Washington, DC. Jan. 2000.
- Smith, B.E., "Minitab or Excel You Decide!". Presented at the 26th Annual Conference of the American Mathematical Association of Two-Year Colleges, Chicago, IL. Nov. 2000.
- Bessman, M., Smith B.E. Co-organizers: "Innovative Uses of the World Wide Web in Teaching Mathematics". An MAA contributed paper session at the Joint Mathematics Meetings, New Orleans, LA. Jan. 2001.
- Smith, B.E., "Statistical Data on the Internet: Seek and Find", Abstracts of Papers Presented to the American Mathematical Society. Vol. 22, Number 1, 186. New Orleans, LA. Jan. 2001.
- Smith, B.E., "Statistics and Data: a Web-based Approach", Abstracts of Papers Presented to the American Mathematical Society. Vol. 22, Number 1, 198-199. New Orleans, LA. Jan. 2001.
- Bertness, C., Alarcon, F., Smith, B.E, Sullivan, M. and Zhang, J. "Teaching a Student-Active Data-Driven Introductory Statistics Course", Mathematical Association of America Workshop, Indiana University of Pennsylvania, May 21-25, 2001.
- Smith, B.E., "Exploratory Data Analysis: Statistical Exploration and Discovery". Presented at the 27th Annual Conference of the American Mathematical Association of Two-Year Colleges, Toronto, ON. Nov. 2001.
- Smith, B.E., "Enhancing the Educational Experience: Statistical Boot Camp Preliminary Report". Presented at the Joint Mathematics Meetings, San Diego, CA. January 2002. Abstracts of Papers Presented to the American Mathematical Society. Vol. 23. San Diego, 2002.
- Smith, B.E., "Statistical Applets: The Good, the Bad and the Ugly." Delivered at "A Leadership Series: Using Technology to Teach Mathematics and Science", Borough of Manhattan Community College, City University of New York. March 2002. Online at http://www.bmcc.cuny.edu/mathsci/2002/presentations/briansmith.html.
- Smith, B.E. "Fathom Dynamic Statistics". Software Review appearing in the AMATYC Review, Vol. 23 Number 2, Spring 2002.
- Smith B.E., "The Mathematician and the Graph". A keynote speech delivered at the annual conference of the Virginia Mathematical association of Two-Year Colleges, Alexandria, VA. April 2002.

Smith, B.E., "Using Fathom Dynamic Statistics to teach an interactive data-driven Statistics Course". VMATYC Conference, Alexandria, VA. April 2002.

Smith, B.E., Jordan, C., Climent, J.L., Flanagan-Hyde, P. "*Preparing College Statistics Instructors*". Panel discussion, 28th AMATYC Annual Conference, Phoenix, AZ. Nov. 2002.

Smith, B.E., "GraspMath". Software Review published in The AMATYC Review, Vol. 24. No. 2, Spring 2003.

Smith, B.E., "Effective Projects in the Large Statistics Class". Abstracts of Papers Presented to the American Mathematical Society. Vol. 24, Number 1. Baltimore MD. Jan. 2003.

Smith, B.E., "On-Line Resources in the Statistics Classroom". Presented at the 29th Annual Conference of the American Mathematical Association of Two-Year Colleges, Salt lake City. Nov. 2003.

Smith, B.E. and Merceret, F.J. "A Stochastic Model of Wind Velocities at the Kennedy Space Center". Abstracts of Papers Presented to the American Mathematical Society. Vol. 25, Number 1. Phoenix, AZ, Jan. 2004.

Bessman, M., Birken, M., Platt, M. and Smith B.E. Co-organizers: "Uses of the WWW that Enrich and Promote Learning". An MAA contributed paper session at the Joint Mathematics Meetings, Phoenix, AZ. Jan. 2004.

Smith, B.E. "The Rice Virtual Lab in Statistics: RVLS". Software Review published in The AMATYC Review, Vol 25, No. 2, Spring 2004.

Touyz, L.G.Z, Lamontagne P, and Smith, B.E. "Pain and Anxiety Reduction by using a Manual Stimulation Distraction Device when administering Local Analgesia Oro-Dental Injections: a multicenter clinical investigation." Journal of Clinical Dentistry. 15(3)88-92, 2004.

Smith, B.E. "Statistics, the Web, and Real Data", Presented at the 30th Annual Conference of the American Mathematical Association of Two-Year Colleges, Orlando, Fl. Nov. 2004.

Chaired Committee Meeting for Statistics Education Committee at the Annual Conference of the American Mathematical Association of Two-Year Colleges, Orlando, Fl. Nov. 2004.

Parker, M and Smith, B.E. "Teaching Statistics in a Community College - Connections". A workshop offered at the United States Conference on Teaching Statistics (USCOTS), The Ohio State University, Columbus, OH. May 2005.

Smith, B.E. "Do the Right Test! A Nonparametric Approach". Presented at the USCOTS conference, Columbus, OH. May 2005

Smith, B.E. "One Data set – Six Projects". Presented at the Joint Statistics Meetings, Minneapolis, MN, Aug. 2005. To appear in the Abstracts of the American Statistical Association.

Smith B.E. "Statistical Literacy and Thinking". A Keynote address delivered at the Annual Conference of IMACC – The Illinois Mathematical Association of Two-Year Colleges. Champaign-Urbana, IL, March 2009.

Smith B.E. CAUSEWeb Workshop on Teaching Statistics with GAISE (Guidelines for assessment and Instruction in Statistics Education). Presented four 1-hour sessions on Conceptual Understanding and Using Real Data. Annual Conference of IMACC – The Illinois Mathematical Association of Community Colleges, Champaign-Urbana, IL, March 2009.

Smith B.E. *Bayes Theorem: How It Affects the Way We Decide* Online Proceedings of the annual conference of the American Mathematical Association of Two Year Colleges, Boston. Nov 2010.

Smith, B.E. Statistics Without Tears, The MathAMATYC Educator, Volume 2, Number 2. Feb. 2011

Smith, B.E. *Maclaurin Series for Functions with Removable Singularities at* x = 0. The MathAMATYC Educator, Volume 3, Number 2. Feb 2012.

Smith, B.E., "Time Series Analysis – All You Need is Arithmetic". Electronic Proceedings of the 38th Annual Conference of the American Mathematical Association of Two-Year Colleges, Javksonville FL. Nov. 2012.

CHAPTERS

Ebersole, D., Smith, B.E., and F.J. Merceret: "The Doppler Radar Wind Profiler Project: Vector Analysis of Wind Changes Affecting Shuttle Launch at the Kennedy Space Center", *Mathematical Explorations I*, NASA-AMATYC-NSF. CT., 1999.

Smith, B.E., Triola, M., and J. Rebmann: "Population Size Matters: Formulating a Mathematical Model for Scrub-Jay Population at the Kennedy Space Center". *Mathematical Explorations II*, NASA-AMATYC-NSF. CT., 2000.

Smith, B.E., and Mace, D.: "Hemodialysis - Biotechnology", Mathematical Journeys I, Capital College, CT, 2002.

TEXTBOOK

Smith B.E.; Simplifying Mathematics Using the TI-82/83 or TI-85/86. MathWare, Urbana, IL. 1997.

Render B., Stair R.M., Balakrishnan N, and Smith B.E. Managerial Decision Modeling with Spreadsheets, Canadian Edition. Pearson Education Canada. 2005

Balakrishnan, N, Render, B, Stair,R.M. and Smith, B.E. *Managerial Decision Modeling with Spreadsheets*, 2nd *Canadian Edition*. Pearson Education Canada. 2009.

CONSULTING EXPERIENCE

- Consulting experience in office automation, statistical analysis and database systems.
- Quebec Real Estate Association: seminars on mortgages, statistical analysis of real estate sales data.
- Jewish General Hospital: statistical consultant to medical research group.
- Educational Consultant to Hebrew Academy of Montreal High School in Educational Technology.
- Statistical consulting on sales tracking and forecasting in the Pharmaceutical Industry.