

CURRICULUM VITAE (April, 2006)

NAME: William David (Bill) BARTON
CURRENT POSITION: Associate Professor, Head, Department of Mathematics,
 Faculty of Science, The University of Auckland, NZ
 b.barton@auckland.ac.nz

EDUCATIONAL QUALIFICATIONS: [Tertiary only]

1971 University of Auckland, M.Sc. Hons (2nd Div I)(Mathematics)
 1973 Christchurch Teachers College, Dip Tchg,
 1981 Massey University, M.Phil. (Education),
 1982 Massey University, Maori Language to 200-level
 1996 University of Auckland, Ph.D., Mathematics Education
 2002 University of Auckland, Spanish Language to 200-level

PREVIOUS APPOINTMENTS:

1973-1989 Secondary mathematics teaching in New Zealand (total of 11yrs full-time)
 (including 1987-89 Maori/English Bilingual teacher at Wellington High School)
 1983 Producing national mathematics programme for Television NZ (40 5-minute episodes)
 1977-1981 University College of Swaziland, Lecturer
 1990 McCarthy Research Fellowship, Victoria University
 1991-1992 Auckland College of Education, Lecturer
 1993-present University of Auckland, Lecturer, Senior lecturer, Assoc. Prof (from 2002).
 Head, Maths Education Unit, (2x2-year tenures); Head, Dept Mathematics, from 2005.

SIGNIFICANT DISTINCTIONS / AWARDS:

1990 McCarthy Research Fellowship, Victoria University
 1995 NZAMT Bevan Werry Memorial speaker
 2003 Faculty of Science Teaching Award, Team Leader, MATHS102 Teaching Team

PROFESSIONAL SOCIETIES / SERVICE / OTHER ACTIVITIES:

Committees, Service & Associations

1980-81 Chair, Maths. Education Advisory Committee, Botswana, Lesotho & Swaziland
 1994-98 Chair, Mathematics Education Subcommittee, Board of Studies, SMIS, UofA
 1994-98 NZ Representative, International Commission on Maths. Instruction, (NZ)
 1996-98 Tertiary Rep., National Executive, NZ Association of Mathematics Teachers.
 1996 -> Various print, radio and TV media appearances
 1997-98 Member, School of Education Board of Studies, University of Auckland
 1999-2002 National Executive, NZ Mathematics Society
 1999-2002 Education Committee (Elected non-Prof. member), University of Auckland
 2000-2002 Ethics Committee (DVC Research Nominee), University of Auckland
 2001-02 Organising Committee MERGA conference, 2002
 2001-04 International Programme Committee for ICME 11, Copenhagen, 2004
 2003 Organising Committee/Programme Committee, DELTA-3 conference, 2003
 2003-> Foundation Studies Representative, Faculty of Science
 2005-> Faculty Staffing Committee, Faculty of Science, The University of Auckland

Member of the following associations:

Mathematics Education Research Group Australasia
 NZ Association of Mathematics Teachers
 NZ Mathematics Society
 Association of University Staff (NZ)
 Royal Society of New Zealand

TEACHING

15 years secondary mathematics and science teaching, including bilingual (English/Maori) classes.
 2 years teaching pre-service secondary mathematics teachers at Auckland College of Education.
 Since 1993, UG mathematics, and UG and PG mathematics education classes with particular emphasis on
 cultural, language and social issues. Supervised >30 Masters projects, and 2 completed PhD supervisions,
 with 5 current PhD students. Regular NZ and international Masters and PhD thesis marking since 1995.

RESEARCH SPECIALTIES / CAREER:**Summary Statement:**

My PhD topic and main research area is Mathematics & Culture (Ethnomathematics), more recently specialising in Mathematics and Language. This includes fifteen years of research and development of the Maori mathematics vocabulary, which has developed into a consideration of communicating mathematics in non-Indo-European languages. The second research area is a Research & Development project in Manukau schools involving the barriers and opportunities for professional development of senior mathematics teachers in low-decile schools. A third area is researching mathematics learning for students who do not have English as a first language.

Editorial & Review Positions:

2004→ Assistant Editor, *Educational Studies in Mathematics*, Kluwer, Dordrecht, NL
 1994–03 Editorial Board, *Educational Studies in Mathematics*, Kluwer, Dordrecht, NL
 1998→ Reviewer for Kluwer Academic Publishers Mathematics Education Series
 1996–03 Asst Editor (96-99), Editor (00-03) of *Mathematics Education Research Journal*, Australia
 2003→ Reviewer (97-02), Editorial Board (03→) *For the Learning of Mathematics*, Canada
 2004→ Editorial Board, *Pythagoras*, South Africa
 1995→ Reviewer for *MERGA Proceedings*, Australia (1995→); *DELTA Proceedings* (2002→); *Journal for Research in Mathematics Education* (2003→); *Canadian Journal of Science, Mathematics and Technology Education* (2003→); *Cambridge Journal of Education* (2004).

Conference Organisation

ICME 7 TG 15 Convenor; ICME 8 TG Plenary speaker; ICME 9 WG 9 Convenor; ICME 10 Intl. Prog. Cttee
 3rd International Conference on Ethnomathematics (2006) Convenor

Research Grants / Funding (lead or sole negotiator, funds external to The University of Auckland):

NZ Ministry of Education (1993, 1997, 2003) Total of 5 grants	\$NZ 658000
British Council (1993, 1994) Total of 3 grants	\$NZ 42000
Other (1997-2005) Total of 8 grants	\$NZ 701000

International Invited Lectures (last ten years):*Invited talks:*

University of British Columbia (3)	Manchester University	Cape Town University
University of Birmingham	Free University of Berlin	Durban Education College
Mozambique Ministry of Education	University College of Swaziland	University of Illinois
Michigan State University (2)	Anuene Immersion School, Hawaii	University of Granada (2)
Oxford University	Bristol University	San Diego State University
State University of Parana, Brazil	University of Buenos Aires	University of Pisa
University Autonoma de Barcelona	Grenoble University	Institute of Education, London

Plenary speaker:

SAARSME Conference, Johannesburg, SA 1997	D'Ambrosio Seminar, Baltimore, USA, 1998
1st Intl. Conf. on Ethnomathematics, Spain, 1998	CMESG conference, St Catharines, Canada, 1999
1 st Brazilian Conf. on Ethnomathematics, USP, Sao Paulo, Brazil, 2000	
Nordic Conference In Maths. Education, Kristianstad, Sweden, 2001	
2 nd Intl. Conf. on Ethnomathematics, Brazil, 2002	ICMI Comparative Study Conference, HK, 2002
Plenary Panel on Teacher Education, Malmo Mathematics Education Conference, 2003	
MWM conference, Goteborg, Sweden, 2003	Saami Conf. on Ethnomathematics, Sweden, 2003
Chair, Plenary Panel DELTA-05, 2005	

Research Publications (Last ten years – full list available on request)

13 refereed journal articles, including: *International Journal of Mathematical Education in Science and Technology*, *NZ Journal of Mathematics*, *Mathematics Teacher Education & Development*, *Zentralblatt für Didaktik der Mathematik*, *For the Learning of Mathematics*, *Educational Studies in Mathematics*
 7 sections in books, including: *ICMI Study: Mathematics Education in Different Cultural Traditions*, Springer; *Sociocultural Research in Maths. Education: An Intl. Perspective*, Mahwah, NJ:Lawrence Erlbaum Assocs.; *International Perspectives on Learning and Teaching Mathematics Proceedings of the Midsummer World Mathematics Education Conference*, Göteborg, Sweden: National Centre for Mathematics Education (NCM), *Handbook of Mathematics Education*, Dordrecht: Kluwer Academic Publishers, 1035-1054
 2 co-edited conference proceedings; 21 papers in refereed conference proceedings.
 4 reviews or comments in journals, including: *For The Learning of Mathematics*, *Educational Studies in Mathematics*, *Science and Education*.
 3 technical research reports.