

BRIEF CURRICULUM VITA
MYRTLE LEWIN, June 2009

EDUCATION:

B.Sc. (University of the Witwatersrand, Johannesburg, South Africa), majors in Mathematics and Applied Mathematics, December 1962 (3 year degree).

B.Sc. Honours (University of the Witwatersrand, Johannesburg, South Africa), Mathematics, February 1964

M.A. (University of Wisconsin, Madison), Mathematics, 1968

Ph.D. (University of Wisconsin, Madison), Mathematics, 1970

RECENT PROFESSIONAL EXPERIENCE:

Fall 1983-Present

Agnes Scott College, department of mathematics

Professor of mathematics (promoted 1996)

Winner of the 1992 Presidential Award for Excellence in Teaching

Chair, department of mathematics, 1997 – 2000 and 2002 – 2006

Chair, department of education, 1993 – 98, acting chair 1999-2000

Director of Academic Computing (part time) 1987-1990

1992-93 academic year and Summer 1994

Cornell University, Ithaca, NY, visiting associate professor of mathematics

PRIOR AFFILIATIONS:

University of Wisconsin (Madison, WI)

1966-70 – graduate student, RA and TA,

1979-80 – visiting instructor

Hebrew University (Jerusalem, Israel)

1970-71 – post-doctoral fellowship

Ben Gurion University (Be'er Sheva, Israel)

1971-74 – Lecturer (tenure track)

University of the Witwatersrand (Johannesburg, South Africa)

1964-66 – lecturer

1974-81 – senior lecturer (tenured)

Lawrence University (Appleton, WI)

1981-83 – assistant professor (tenure track)

SOME EXPERIENCE IN TEACHING AND PEDAGOGY:

SOUTH AFRICA:

1975-1978:

- The Schmerenbeck Centre, University of the Witwatersrand, Johannesburg: This center, established in apartheid South Africa, accepted “talented and gifted youth” of all races from the broad Johannesburg area (including SOWETO), when the schools were segregated by race. I taught enrichment mathematics classes, weekly through several semesters, to young children aged 5 to 8. The social dynamics of rich and poor, white, colored and black, and the pressures for these children to excel in the eyes of their “professors” made this experience both complex and remarkably interesting.

1978:

- University of the Witwatersrand, Johannesburg: I directed a graduate student who obtained the degree of Master of Science in Mathematics in 1978 (thesis topic: topological groups). This was

important because there were no graduate programs in mathematics at the time, so directing this student required me to develop her program.

1979-81:

- I participated in a project funded by the Anglo American Corporation and sponsored by the University of Witwatersrand, Johannesburg, to provide mathematics and science courses at college level for high school teachers whose training at normal colleges had not included any college level mathematics courses. These teachers were all classified by the Apartheid system as “non-white”, the normal colleges they had attended were racially segregated. The courses I taught introduced these experienced teachers to calculus, and I remember that informal conversations centered on the value of the newly acquired deeper understanding of mathematical ideas to their teaching.

1980 –1981:

- Johannesburg, South Africa: I participated in the establishment of the mathematics program at a magnet school funded by the American Chamber of Commerce in South Africa for children of SOWETO, a township outside Johannesburg populated by Africans under the Apartheid system. My role included developing curriculum, and establishing an entrance test, in a society that lacked the structures of what we in the United States take for granted with the ETS.

UNITED STATES:

1986 – 1989:

- Atlanta and Athens, GA: I served as a judge in the mathematics section at numerous science fairs, for Atlanta Public Schools, and the State Science Fair on the UGA campus.

1992 – 1993:

- Cornell University: While on a sabbatical, I introduced study sessions structured broadly on the principles of collaborative learning, and conducted a study in the use and perceived effectiveness of these and other support systems for beginning calculus students. This work resulted in a paper with Tom Rishel (see Publications)

March 1994:

- Tennessee Technological University, Cookeville, TN: I conducted a workshop on the Perry Scheme for Intellectual and Moral Growth, and its application to collaborative learning in mathematics, for faculty teaching developmental studies mathematics courses in the University of Tennessee system.

March 1995:

- The University of Central Missouri, Warrensburg, MO: I conducted a workshop on collaborative learning and gender equity issues in the department of mathematics and computer science, and served as a consultant for an NSF grant application in mathematics and women’s studies that they were writing.

May 2005:

- PMET (Preparing Mathematicians to Educate Teachers) workshop, May 22 – May 29, at the University of Alabama, Tuscaloosa. The theme of this workshop was developing and enhancing programs for secondary mathematics teachers. The program director was David Royster, of U.N.C. Chapel Hill.

November 2005:

- Served as a reviewer for *The Mathematics Teacher*, a publication of the National Council of Teachers of Mathematics (NCTM).

June 2008 – May 2009:

- I have now designed, and taught, the complete cycle of mathematics courses in the M.A.T. program in Secondary Mathematics, and seen the first cohort of students graduate.

SOME SERVICE TO THE BROADER PROFESSIONAL COMMUNITY:

June 15 – 17, 1994:

- I participated as a reviewer of grant proposals for the NSF in the Undergraduate Faculty Enhancement Program in Washington, DC.

November 1995:

- I served on the Southern Association of Colleges and Schools (SACS) review team at Converse College, Spartanburg SC.

February 26 – 28, 2004:

- I participated as a reviewer for the NSF on a Math and Science Partnership (MSP) Proposal Review Panel in Arlington VA. The “partnerships” in these proposals were between research and teaching institutions, and school districts, and addressed plans to improve math and science teaching in public schools.

November 2006:

- I served as an external reviewer for the mathematics program at Oxford College of Emory University.

SELECTED PUBLICATIONS:

- Myrtle Lewin and Thomas Rishel, "Support Systems in Beginning Calculus", chapter 10 in *Readings in Innovative Ideas in Teaching Collegiate Mathematics*, Mohammed H. Ahmadi, Editor, University Press of America, Lanham MD, Summer 2002.
- Myrtle Lewin and Thomas Rishel, "Support Systems in Beginning Calculus", *PRIMUS (Problems, Resources, and Issues in Mathematics Undergraduate Studies)* Vol. V(3), Sept. 1995, 275-285.
- Jonathan Lewin and Myrtle Lewin, *An Introduction to Mathematical Analysis, First edition*. The Random House/Birkhauser Mathematics Series, Random House (1988) ISBN # 0-394-37262-X, (346 pages); second edition: McGraw Hill Series in Pure and Applied Mathematics, 1991.
- Jonathan Lewin and Myrtle Lewin, "A Simple Test for the n-th Term of a Series to Approach Zero", *The American Mathematical Monthly*, Vol 95 (10), Dec. 1988.
- Anatole Beck with the assistance of Jonathan and Mirit (Myrtle) Lewin, *Continuous Flows in the Plane*, Grundlehren der Mathematischen Wissenschaften, Vol 201, Springer Verlag 1974, (458 pages).

RECENT PRESENTATIONS:

- March 2001: The transition from Arithmetic to Algebra: Some Thoughts Gleaned From Euclid, the MAA South Eastern Section meeting, Montgomery AL.

CURRENT INTERESTS AND INVOLVEMENTS:

- In recent years I have developed an interest in both classical and modern geometry.
- Pedagogy: My interests are centered on developing an improved understanding of the relationship between learning theories (such as social constructivism) and methodologies (such as collaborative learning). My classrooms serve as laboratories.
- The development of an MAT program in mathematics/science at Agnes Scott College.