DEBRA OLSON SOWELL, PH.D.

EDUCATION

Oklahoma State University

Ph.D., 1996: Applied Behavioral Studies (Statistics)

University of Nebraska

M.A.T., 1975: Mathematics

University of South Dakota

B.A., 1971: Major in Mathematics, Minor in Physics

EXPERIENCE

| KIENCE | |
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| 2015-present | Oral Roberts University, Tulsa Oklahoma Professor of Mathematics |
| 2008-2014 | Oral Roberts University, Tulsa, Oklahoma Vice President of Academic Affairs Acting Provost |
| 1997-2008 | Oral Roberts University, Tulsa, Oklahoma Dean of Instruction |
| 1995-1997 | Oral Roberts University, Tulsa, Oklahoma Associate Dean, School of Arts and Sciences Professor and Chair, Department of Computer Science/Mathematics Director, ORU Summer Math/Science Academies |
| 1976-1995 | Oral Roberts University, Tulsa, Oklahoma Mathematics Department Faculty |
| 1976 | Tulsa University, Tulsa, Oklahoma Adjunct Instructor, Mathematics |
| 1974-1975 | University of Nebraska, Lincoln, Nebraska Instructor, Extension Division |
| 1971-1973 | Monroe County Public Schools, Key West, Florida Mathematics Teacher |

PROFESSIONAL AND ACADEMIC ACTIVITIES

- I. Professional Activities
 - Mathematical Association of America (M.A.A.) Campus Representative.
 - Member of Pi Mu Epsilon (Mathematics Honorary).
 - Recording Secretary of Kappa Mu Epsilon (Mathematics Honorary).
 - The Visiting Mathematics Lecturer Program for Oklahoma Secondary Schools (M.A.A.).
 - Presented Lecture during Mathematics Week at Charles Page High School.
 - Presented Lecture at Monte Cassino Junior High School.
 - Judge for Oklahoma State Science and Engineering Fair (Mathematics Division).
 - Conference on Computers, Oklahoma State University.
 - Instructor, Oklahoma State Regents for High Education Summer Academies.
 - Member of Student Workshop Committee, 1993 M.A.A. Regional Conference.

- Speaker, National Honor Society (High School) 1994 State of Oklahoma Convention.
- Internet Conference, Oklahoma State University.
- Officer, Oral Roberts University Faculty Senate.
- Wrote three successful Grant Proposals (Approximately \$65,000 per year) for Summer Math Academies sponsored by Oklahoma Regents for Higher Education.
- Presented Keynote Address, Mathematics Department End-of-Year Banquet, University of South Dakota.

II. Honors and Awards

- Oklahoma Science Fair Hall of Fame
- Aberdeen Central High School Alumni Hall of Fame
- Tenured Faculty
- Phi Beta Kappa
- Phi Kappa Phi
- Who's Who in the South and Southwest (Marquis)
- Who's Who in Society (American Publishing)
- 2,000 Notable American Women (American Biographical Institute)
- Who's Who in American Education (National Reference Institute)

III. Faculty Service

- HLC Self Study Coordinator and Steering Committee Chair (Site Visit, 2007)
- HLC Self-Study Coordinator and Steering Committee Co-Chair (Site Visit, 1997)
- Assessment Coordinator, Department of Mathematics and Computer Science
- Council of Chairs Standing Committees (Promotion and Faculty Development)
- Financial Aid Committee Member
- Arts & Sciences Faculty Senate Treasurer
- Arts & Sciences Faculty Cabinet Member at Large
- Arts & Sciences Curriculum Committee Member

IV. Publications

- Type I Error Rates and Powers for the Johansen Test, Pillai-Bartlett Test, and Combs-Algina
 Test under Covariance Matrix Inequality and Non-Normality, by Debra Olson Sowell (Oral
 Roberts University), William T. Coombs (Duke University), and James Algina (University of
 Florida), Social Indicators and Quality of Life Research Methods: Methodological
 Developments and Issues, Yearbook 2000.
- 2. Univariate and Multivariate Omnibus Hypothesis Tests Selected to Control Type I Error Rates When Population Variances are Not Necessarily Equal, by William T. Coombs (Oklahoma State University), James Algina (University of Florida), and Debra Olson Sowell (Oral Roberts University), Review of Educational Research, Vol.66, No.2, summer 1996.
- 3. Dissertation Topic: Power and Robustness of Alternatives to Classic Manova Procedures Under Heteroscedasticity.
- 4. <u>Introductory Statistics for Business and Economics</u>, by Sowell and Lackritz, 1991, (Brooks/Cole Publishing Company).
- 5. <u>A Study Guide for Statistics: An Intuitive Approach, 4th Ed.</u>, by Debra Sowell, 1981 (Brooks/Cole Publishing Company).
- 6. <u>Statistics: An Intuitive Approach, 4th Ed.</u> by Weinberg, Schumaker, and Sowell, 1981 (Brooks/Cole Publishing Company).

V. Presented Papers

Type I Error Rates and Powers for the Johansen Test, Pillai-Bartlett Test, and the Coombs-Algina Tests Under Covariance Matrix Inequality and Non-Normality, by Debra Olson Sowell (Oral Roberts University); William T. Coombs (Oklahoma State University); and James Algina (University of Florida), presented at the National Conference of the American Statistical Association, August 5, 1995.

Using SAS to Evaluate the Operating Characteristics of Selected Multivariate Analysis of Variance Procedures, by Debra Olson Sowell (Oral Roberts University) and William T. Coombs (Oklahoma State University), presented at the 1995 South Central Regional SAS Conference, November 7, 1995.

PERSONAL

Married to Russell W. Sowell, Jr., (Computer Science Faculty Member, Tulsa Community College) One married daughter and two granddaughters Worship at First United Methodist Church of Broken Arrow OK