

## **CURRICULUM VITAE**

**Sonya Leach Wisdom, Ph.D.**

**School of Lifespan Development and Educational Sciences  
College and Graduate School of Education, Health, and Human Services  
405 White Hall  
Kent State University, Kent, Ohio 44242-0001  
Office Phone: 330-672-0452; Office Fax: 330-672-2512  
E-mail: [swisdom@kent.edu](mailto:swisdom@kent.edu)**

### **Educational Background**

#### **Kent State University**

Doctor of Philosophy Degree, Curriculum and Instruction, **2010**  
College and Graduate School of Education, Health & Human Services  
Kent, Ohio

#### **Dissertation:**

*How a Science Methods Course May Influence the Curriculum Decisions of Preservice Teachers in The Bahamas*

#### **University of Georgia**

Master of Education Degree, Science Education, **1985**  
Athens, Georgia

#### **Spelman College**

Bachelor of Science Degree, Chemistry, **1977**  
Atlanta, Georgia

### **Professional Experience**

#### **Coordinator, Middle Childhood Education Program, May 2018 – present**

School of Teaching, Learning, and Curriculum Studies  
College of Education, Health, and Human Services  
Kent State University  
P.O. Box 5190, White Hall, Room 405  
Kent, Ohio 44242-0001

#### **Co-Coordinator, Special Education Department, June 2018 – present**

School of Lifespan Development and Educational Sciences  
College of Education, Health, and Human Services  
Kent State University  
P.O. Box 5190, White Hall, Room 405  
Kent, Ohio 44242-0001

**Coordinator, Special Education Department, August 2012 – June 2018**

School of Lifespan Development and Educational Sciences  
College of Education, Health, and Human Services  
Kent State University  
P.O. Box 5190, White Hall, Room 405  
Kent, Ohio 44242-0001

My responsibilities as Coordinator of the Middle Childhood Education Program and Co-Coordinator of Special Education Department include the coordination of the Bachelor's and Master's level programs in Middle Childhood Education and five different concentrations in Special Education at the Bachelor's, Master's, Educational Specialist, and Doctoral levels. Coordination of both programs involves curriculum design and revision, oversight for course offerings, admitting qualified applicants to graduate programs, assignment of faculty advisors, coordinating responses to state, university, and college, and student queries, engaging in marketing/recruitment and retention activities, student advising, maintaining regular contact with student teaching supervisors, facilitating school placements in northeast Ohio for student field experiences, facilitating and documenting regular faculty meetings, participating in Coordinator's meetings at the School and College levels, and overseeing the updating of the Middle Childhood Education and Special Education websites.

**Associate Professor, April 2018 – Present (NTT)**

School of Lifespan Development and Educational Sciences  
College of Education, Health, and Human Services  
Kent State University  
P.O. Box 5190, White Hall, Room 405  
Kent, Ohio 44242-0001

**Assistant Professor, 2012 – April 2018 (NTT)**

School of Lifespan Development and Educational Sciences  
College of Education, Health, and Human Services  
Kent State University  
P.O. Box 5190, White Hall, Room 405  
Kent, Ohio 44242-0001

**Director, Graduate Programmes, 2007- 2012**

The College of The Bahamas  
Graduate Programmes Office  
Office of Research, Graduate Programmes and International Relations  
P.O. Box N 4912  
Nassau, New Providence, The Bahamas

My responsibilities as Director of Graduate Programmes included the oversight of all graduate programs facilitated through the Graduate Programmes Office (established in 2003) at The College of The Bahamas (The College). I was responsible for identifying areas

in which graduate programs might be offered in order to build national capacity, overseeing the marketing, promotional plans and materials for graduate programs, facilitating the implementation of graduate programs offered through The College in collaboration with international institutions, while meeting the mandate to mount and launch independent graduate programs and to build research capacity at The College. Between 2003 and 2012, six different Master's Degree programs were completed by ten cohorts of students in collaboration with four institutions from the U.S. In addition, during this time frame, I chaired the Graduate Programmes Advisory Committee, served as secretary on the Graduate Programmes Review Board, secured Academic Board approval for formal policies and procedures to guide the work of the Graduate Programmes Office (2006), facilitated a local accreditation visit from a representative from the New England Association of Schools and Colleges (NEASC) (2008), and completed a graduate student handbook (2011). I also facilitated the implementation of the first independent master's programs at The College, the Master of Business Administration (MBA) and the Master of Education in Inclusive Reading (2011 and 2012, respectively).

**Assistant Professor, 2007- 2012**

The College of The Bahamas  
School of Education  
P.O. Box N 4912  
Nassau, New Providence, The Bahamas

**Graduate Programmes Officer, 2003-2007**

The College of The Bahamas  
Graduate Programmes Office  
P.O. Box N 4912  
Nassau, New Providence, The Bahamas

**Coordinator, Master of Education Degree Programme in School and Guidance  
Counselling, 2001-2003**

The College of The Bahamas in collaboration with Kent State University  
Nassau, New Providence, The Bahamas

**Lecturer, 1998-2006**

The College of The Bahamas  
School of Education  
P.O. Box N 4912  
Nassau, New Providence, The Bahamas

**Science Teacher (Grades 5 – 9), 1987-1998**

Lyford Cay School  
P.O. Box N 7777  
Nassau, New Providence, The Bahamas

**Science Teacher (Grades 6 – 8), 1983-1986**

Clarke Middle School  
Athens, Georgia

**Laboratory Technician III, 1982-1983**

Department of Microbiology  
University of Georgia  
Athens, Georgia

**Instructor, Chemistry (Part-time position), January 1982 – May, 1982**

Chemistry Department  
Queens College  
Charlotte, North Carolina

**Research Technician (Part-time position), January 1982 – May 1982**

Biology Department  
Johnson C. Smith University  
Charlotte, North Carolina

**Laboratory Technician III, 1980-1981**

Department of Molecular and Population Genetics  
University of Georgia  
Athens, Georgia

**Teaching**

**Courses Taught**

Kent State University (2012- present):

Spring 2019

*Teaching Science in Middle Childhood II* (MCED 40002/50002)

Fall 2018

*Integrated Social Studies and Science in Middle Childhood* (MCED 30002)

*Core & Differentiated Instruction in Social Studies and Science* (CI 4/57505)

Spring 2018

*Curriculum and Organization in Middle Childhood* (MCED 41000/ CI 67107)

*Teaching Science in Middle Childhood II* (MCED 40002/50002)

*Teaching Science in the Early Years* (ECED 40114)

Fall 2017

*Teaching and Learning in Middle Childhood* (MCED 31000)

*Integrated Social Studies and Science in Middle Childhood* (MCED 30002)

Spring 2017

*Curriculum and Organization in Middle Childhood* (MCED 41000/ CI 67107)  
*Teaching Science in Middle Childhood II* (MCED 40002/50002)

Fall 2016

*Teaching and Learning in Middle Childhood* (MCED 31000)  
*Integrated Social Studies and Science in Middle Childhood* (MCED 30002)

Spring 2016

*Teaching Science in the Early Years* (ECED 40114) (Sections 001 and 002)

Fall 2015

*Teaching Science in Early and Middle Grades* (CI 47502/57502)

Fall 2014

*First Year Experience – Destination Kent State University* (U.S. 10097)

Fall 2013:

*First Year Experience – Destination Kent State University* (U.S. 10097)

Spring 2013:

*Teaching Science in Middle Childhood II* (MCED 40002/50002)  
*Teaching Science in the Early Years* (ECED 40114)

Fall 2012:

*Topics in Secondary Science Teaching* (ADED 42277)

Hiram College (Summer 2013):

*Putting Learning into Perspective in the New Landscapes of Science Standards and Assessments* (GEDU 50380)

The College of The Bahamas (Fall 1998- Spring 2012):

*Introduction to General Science* (SCI 070)  
*Techniques and the Teaching Experience I* (EDU 318)  
*Science Teaching in the Primary School* (EDU 363)  
*Classroom Techniques & Management II* (EDU 420)  
*Man and the Environment - An Integrated Process* (EDU 421)  
*Final Teaching Practice* (EDU 490)  
*General Science for Primary Teachers I* (SCI 171)  
*General Science for Primary Teachers II* (SCI 371)

## **Publications**

### **Refereed Journal Articles**

- Kenyon, E. & Wisdom, S. (2018). Integrating Social Studies and Science to Develop Critical Awareness. *Ohio Social Studies Review*, 55 (1), 25-34.
- Novak, E. & Wisdom, S. (2018). Effects of a 3d printing design project on Preservice elementary teachers' science attitudes, science content knowledge, and Anxiety about teaching science. *Journal of Science Education and Technology*. <https://doi.org/10.1007/s10956-018-9733-5>.
- Pytash, K.E., Wisdom, S., & Ferdig, R.E. (2017, in revision). Improving female and Minority participation in arboriculture. *Journal of Arboriculture and Urban Forestry*.
- Barrineau, P., Gilbert, P., Jackson, W.J., Jones, C.S., Summers, A.O., & Wisdom, S. (1985). The Structure of the mer operon. In Helinski, D. R., Cohen, S.N., Clewell, Jackson, D.A., & Hollaender, A. (Eds.). *Plasmids in Bacteria*, U.S.: Springer.
- Barrineau, P., Gilbert, P., Jackson, W.J., Jones, C.S., Summers, A.O., & Wisdom, S. (1984). The DNA sequence of the mercury resistance operon of the IncFII plasmid NR1. *Journal of Molecular and Applied Genetics*, 2(6), 601-619.

### **Book Chapters**

- Novak, E., & Wisdom, S. (in press, invited). Using 3D printing in science for elementary Teachers. In J.J. Mintzes & E.M. Walter (Eds.), *Active Learning in College Science: The Case for Evidence-Based Practice*. Berlin: Springer Nature.
- Wisdom, S. L. & Micklewhite, T. (2014). A Model for Environmental Literacy and Social Justice: Tourism in The Bahamas. In Dowdy, J.K. and Cushner, K. (Eds), *Reading Between the Lines: Activities for Developing Social Awareness Literacy* (pp. 155-159). Lanham, MD: Rowman & Littlefield.

### **Refereed Presentations**

- Kenyon, E.A., Christoff, A. & Wisdom, S.L. (2019). Expanding Ideas of Citizenship Through Citizen Science: Explorations from an Integrated Methods Course. Paper accepted for presentation at the American Educational Research Association (AERA) Annual Conference, Toronto, Canada. April, 2019.
- Novak, E. & Wisdom, S. (2018). *3D Printing Technology Projects in a Science Methods Course: Enhancing Prospective Teachers' Science Teaching Confidence*. Poster accepted for presentation at the American Educational Research Association (AERA)

Conference, New York, NY, April, 2018.

- Novak, E. & Wisdom, S. (2017). *The Effects of 3D Printing Design Projects on Preservice Elementary Teachers' Science engagement and Attitudes*. Paper accepted for presentation at the Association for Educational Communications and Technology (AECT) Conference, Jacksonville, FL., November, 2017.
- Novak, E. & Wisdom, S. (2017). *Enhancing Preservice Elementary Teachers' Science Interest and Design Thinking Through 3D Printing Technology*. Paper accepted for presentation at the American Educational Research Association (AERA) Conference, San Antonio, TX. May, 2017.
- Novak, E. & Wisdom, S. (2016). *Improving preservice elementary teachers' science engagement through 3d printing technology*. Paper presented at the Immersive Italy and the 6<sup>th</sup> European Immersive Education Summit (EiED 2016). Università degli Studi di Padova (the University of Padua), Italy. June, 2016.
- Wisdom, S., Holly, M.L., & Taylor, D. (2016). *Connecting Pakistani and American High School: Citizen Science Solutions to Global Water Issues*. Paper presented at the Ethnographic and Qualitative Research Conference (EQRC). Las Vegas, Nevada, Feb., 2016.
- Holly, M.L., Wisdom, S. & Taylor, D. (2016). *Dominican Environmental Education Program: Fostering Coastal Community Resiliency to Climate Change*. Paper presented at the Ethnographic and Qualitative Research Conference (EQRC). Las Vegas, Nevada, February, 2016.
- Taylor, D., Holly, M.L., Wisdom, S., Guggenheim, P., Kunz, M., Frohring, P., & Sisson, T. (2015). *Increasing Climate Change Resiliency Through Education – A Caribbean Community Model*. Poster presented at The National Center for Science and Civic Engagement, Washington Symposium and SENCER-ISE National Meeting, Washington, D.C., September, 2015.
- Taylor, D., Wisdom, S., Anderson, E., Astalos, R. & Zilla, B. (2014). *Undergraduate Near Peer Mentors – Reversing Roles of Students and Teachers, Innovative Models For Outdoor Programming*, Poster presented at Ohio State University Extension, Ohio State University, Huron, Ohio.
- Tooms, A., Wisdom, S. & Varrati, A. (November, 2006). *Voices from Both Sides of an International Partnership: The Nuts and Bolts of Building an International Leadership Preparation Program*. Paper presented at University Council for Educational Administration Convention, San Antonio, TX.
- Wisdom, S. (March, 2006). *The Relationship Between Memory and Environmental Teaching Behavior in The Bahamas*. Paper presented at the Third Annual Educational Research Exchange Conference, The University of Akron, Akron, OH.

Powers, J.A., Loe, D., Wisdom, S., Giovannone, C.L., & Lipiec, S. (April, 2005) *The Doctoral Student Experience*. Paper presented at the American Educational Research Association Annual Conference, Montreal, Canada.

Powers, J.A., Loe, D., Wisdom, S., Giovannone, C.L., & Lipiec, S. (March, 2004) *Voyage to the Bottom of the Ph.D.* Paper presented at the First Annual Educational Research Exchange Conference, Kent State University, Kent, OH.

### **Other Presentations and Professional Workshops**

Wisdom, S., Holly, M.L., & Chamberlin, L., Taylor, D., & Bader, J. (October, 2017). *Middle School Legacies: Never Too Soon to Start Community Engagement*. Cleveland Metropolitan Schools Build, Lead, Utilize and Engage in the Middle Institute (BLUE Institute), Cleveland, OH.

Wisdom, S. (April, 2016). *What I've Learned from Teaching*. Initiation Ceremony Speaker, Kappa Delta Pi, Delta Beta Chapter, Kent State University, Kent, OH.

Wisdom, S. (February, 2011). *Thinking Skills*. Teacher Workshop, Trinity Christian School, Nassau, New Providence, The Bahamas.

Wisdom, S. (May, 2010). *You Determine Your Destiny*. Graduation Speaker, Gambier Primary School, Nassau, New Providence, The Bahamas.

Wisdom, S. (May, 2009). *Volunteerism*. National Literacy Electronic Media Programme, The Ministry of Education, Nassau, New Providence, The Bahamas.

Wisdom, S. & Riley, W. (August, 2005). *Perspectives from the Learner: The E-Learning Environment*. Faculty Seminar, The College of The Bahamas, Nassau, New Providence, The Bahamas.

Wisdom, S. (August, 2003). *Engaging Children in Meaningful Learning Activities in Science*, Secondary Science Teachers Workshop, The Ministry of Education, Nassau, New Providence, The Bahamas.

Wisdom, S. (November, 2001). *Literature and Science*, Teachers Workshop, Gambier Primary School Nassau, New Providence, The Bahamas.

Wisdom, S. (August, 2001). *Integrating Science and Language*, Teachers Workshop, Catholic Board of Education, Nassau, New Providence, The Bahamas.

Micklewhite, T. & Wisdom, S. (April, 2000). *A Model for Scientific Literacy: Tourism in The Bahamas*. National Science Teachers Association (NSTA) National Convention, Orlando, FL.



Micklewhite, T. & Wisdom, S. (October, 1999). *Literacy through Science*, The Development of Literacy with Young Children Conference, The College of The Bahamas, Nassau, New Providence, The Bahamas.

**Special Administrative and Committee Assignments**

Member, Climate Committee  
College of Education, Health, and Human Services  
Kent State University  
Fall 2018 – present

Member, Graduate Programmes Advisory Committee  
University of The Bahamas  
May 2018 - present

Member, Faculty Advisory Committee, School of Lifespan Development and Educational Sciences, College of Education, Health, and Human Services  
Kent State University  
2016 – 2018.

Member, Student Survey of Instruction (SSI) Review Committee, Kent State University,  
Fall 2015 – Fall 2017.

Member, Teacher Education Coordinators Committee  
College of Education, Health, and Human Services  
Kent State University  
2012 – present

Member, Undergraduate Program Coordinators Committee  
College of Education, Health, and Human Services  
Kent State University  
2012 – present

Member, Graduate Program Coordinators Committee  
College of Education, Health, and Human Services  
Kent State University  
2012 – present

Member, Program Coordinators Committee  
College of Education, Health, and Human Services  
Kent State University  
2012 – present

Member, Doctoral Program Review Committee  
College of Education, Health, and Human Services  
Kent State University  
September 2012 – December 2013

Chair, Programme Committee  
Eighth Annual Caribbean Area Network for Quality Assurance in Tertiary Education  
The College of The Bahamas  
2011

College of The Bahamas Representative, Ministry of Health Ethics Committee, Nassau,  
New Providence, The Bahamas  
2011 – 2012

College of The Bahamas Representative, Public Education & Outreach Subcommittee  
National Climate Change Committee, Nassau, New Providence, The Bahamas  
2010 - 2012

Secretary, Graduate Programmes Review Board,  
The College of The Bahamas  
2009 – 2012

Chair, Online Policy Committee  
The College of The Bahamas  
2008

Chair, Graduate Programmes Advisory Committee  
The College of The Bahamas  
2008

Member of Administrative Management Team  
The College of The Bahamas  
2007 – 2012

Co-Spokesperson, Faculty & Staff Annual Fund  
The College of The Bahamas  
2007-2008

Member of Faculty Board  
The College of The Bahamas  
2006 – 2009

Member of Professional Advisory Board, Gerald H. Read Center for International and  
Intercultural Education, College and Graduate School of Education, Health, and  
Human Services,  
Kent State University, 2006-2007

Member of Chairperson's Committee  
The College of The Bahamas  
2005 – 2009

Member of Graduation Committee  
The College of The Bahamas  
2001-2012

Library Advisory Committee, School of Education Representative  
The College of The Bahamas  
1999-2001

Advisor, Bachelor of Education Advanced Placement Programme, School of Education  
The College of The Bahamas  
1999 – 2001

Co-Advisor, Education Awareness Society, School of Education  
The College of The Bahamas  
1998-2000

### **Professional Service**

Faculty Advisor, International Leaders in Education Program (ILEP), Gerald H. Read Center for International and Intercultural Education, College of Education, Health and Human Services, 2018, 2015, 2014

Speaker, Bridges Summer Program, Office of Diversity, Outreach, and Development, Kent State University, College of Education, Health, and Human Services, 2017

Peer Reviewer of Teaching for HIED 66749/76749 *Assessment and Evaluation in Higher Education*, Kent State University, College of Education, Health, and Human Services, February 2017

Peer Reviewer of Teaching for SPED 63955 *Typical/Atypical Development of Young Children*, Kent State University, College of Education, Health, and Human Services, May 2016

Chapter Counselor, Kappa Delta Pi Education Honor Society, Delta Beta Chapter, College of Education, Health, and Human Services, Fall 2016 – present

Keynote Speaker, Spring 2016 Initiation Ceremony, Kappa Delta Pi Honor Society in Education, Delta Beta Chapter, April, 2016.

Member of Dissertation Committee, Sabri, F., *Solution-Focused Group Therapy in a Residential Care Setting: An Outcome Study Conducted in Malaysia*, School Counseling Department, College of Education, Health, and Human Services, Spring 2015.

Member of Honor's Thesis Committee, Markusic, M. *Are You My Mentor? Students' Views on Teachers as Mentors*. Honors College, Kent State University, Spring 2016.

Member, University Student Survey of Instruction (SSI) Committee, Center for Teaching and Learning, Kent State University  
2016 - present.

Reviewer for *International Journal of Bahamian Studies*, The University of The Bahamas, Nassau, New Providence, The Bahamas  
2016, 2017

Member, Search Committee for Non-Tenure Track Faculty Position  
Social Studies Education,  
School of Teaching, Learning and Curriculum Studies, Kent State University  
Spring 2017

Member, Search Committee for Tenure Track Faculty Position  
Science Education  
School of Teaching, Learning and Curriculum Studies, Kent State University  
Fall 2016 – Spring 2017

Member, Search Committee for Director of the Office of Diversity, Outreach, and Development,  
College of Education, Health and Human Services, Kent State University,  
Fall 2015

Member, Search Committee for Tenure Track Faculty Position  
Instructional Technology and Educational Psychology  
School of Lifespan Development and Educational Sciences, Kent State University,  
Fall 2015

Judge, 30<sup>th</sup> Annual Graduate Research Symposium  
Kent State University  
April 2015

Member, Search Committee for Joint Tenure-Track Faculty Position  
Instructional Technology and Educational Psychology  
School of Lifespan Development and Educational Sciences, Kent State University,  
Fall 2014

Reviewer for Scholarships to Teacher Education Students, Kent State University,  
School of Teaching, Learning, and Curriculum Studies and School of Lifespan of

Development and Educational Sciences  
Spring 2013 - present

Member, University Diversity Action Council (UDAC)  
Kent State University  
Fall 2013 – Spring 2016

Member of Education and Scholarship Sub-Committee, UDAC  
Kent State University  
Fall 2013 – Spring 2016

Faculty Advocate, Diversity, Equity, and Inclusion Advocates Program  
Division of Diversity, Equity, and Inclusion  
Kent State University  
Fall 2013 – Spring 2016

Member, Kent State Taskforce on Women in STEM Education and Research  
Kent State University  
Spring 2013 – Fall 2014

Member of College Hall of Fame Awards Committee  
College of Education, Health and Human Services  
Kent State University  
Fall 2013

Member of Advisory Committee and Faculty Advisor  
Network of Diverse Educators Program (NDEP)  
College of Education, Health and Human Services, Kent State University  
Fall 2013 – Spring 2016

Member, Professional Advisory Board  
School of Lifespan Development and Educational Sciences  
College of Education, Health and Human Services, Kent State University  
Fall 2013 - present

Member, Search Committee for Tenure-Track Faculty Position  
Science Education  
School of Teaching, Learning and Curriculum Studies, Kent State University  
Spring 2013

Member, Search Committee for Non-Tenure-Track Faculty Position  
Deaf Education  
School of Lifespan Development and Educational Sciences, Kent State University  
Spring 2013

Founding Member, Bahamas Association of Science Educators (BASE)  
Nassau, New Providence, The Bahamas  
2012 - present

Member, Search Committee for Executive Vice President/Vice President Academic Affairs  
The College of The Bahamas  
2011

Board Member, E.P. Roberts Foundation  
Nassau, New Providence, The Bahamas  
2009 – 2012

Board Member, Bahamas Reef and Environmental Education Foundation (BREEF)  
Nassau, New Providence, The Bahamas  
2006 – 2012

Board Member, The Meridian School  
Nassau, New Providence, The Bahamas  
2004 – 2009

Member, Bahamas Association of Science, Technology, and Mathematics Educators  
(BASTME), Ministry of Education  
Nassau, New Providence, The Bahamas  
1999-2001

Volunteer, Women's Crisis Centre  
Nassau, New Providence, The Bahamas  
1986-1987

Executive Committee Member, Developing Alternatives for Women Now (DAWN)  
Nassau, New Providence, The Bahamas, 1986-1994  
Coordinator, National Black Women's Health Project  
Athens, Georgia Chapter  
Athens, Georgia  
1984 – 1986

Board Member and Secretary, Athens Regional Attention Home  
Athens, Georgia  
1984 – 1986

Advisor, Southeastern Consortium of Minorities in Engineering  
Clarke Middle School  
Athens, Georgia 1985 – 1986

## **Honors and Awards**

### **School of Lifespan Development and Educational Sciences Colleague Award, 2017-2018**

Kent State University  
Kent, Ohio

**Immersive Learning Award (2<sup>nd</sup> place)**, AECT's Division of Emerging Learning Technologies, Las Vegas, NV (2016): This international award recognizes designers of immersive learning environments and interventions characterized by high production and instructional qualities: *3D Printing Technology Science Project in a Kent State University Preservice Teacher Science Methods Course*, Novak E. & Wisdom S.

### **Mothers, Mentors, & Muses Honoree, 2013**

Women's Center Annual Scholarship Fundraiser  
Kent State University  
Kent, Ohio

### **Alpha Kappa Mu National Honor Society, 2005**

Mu Mu Chapter  
Kent State University  
Kent, Ohio

### **Teacher of the Year, 1985- 1986**

Clarke Middle School  
Clarke County District  
Athens, Georgia

### **Outstanding Young Women of America, 1979 and 1984**

### **Cum Laude Graduate, Spelman College, 1977**

### **Beta Kappa Chi Scientific Society, 1973-1977**

Atlanta University Chapter, Atlanta University  
Atlanta, Georgia

### **Who's Who in American Colleges and Universities, 1977**