

Name

Terrence R Waugh

Department

Agricultural and Industrial Sciences

College Degrees Earned**Degree, Major, (minor-optional), institution, Year**

Ph.D. Human Sciences, with a specialization in Leadership Studies

University of Nebraska-Lincoln 2006

Dissertation: "Community Members' Perspectives of the Role the Intergenerational Dialogue Process Served in Changing Residents' Attitudes and Strategies for Working Together: A Multiple Case Study in Two Rural Midwestern Communities"

Advisor: Leverne A. Barrett

M. A. Urban Studies, with concentrations in Aviation and Transportation University of

Nebraska-Omaha 2000

B. A. Psychology, Creighton University 1998

Minor: Business

Articles

"Community Members Perspectives of the Intergenerational

Dialogue Process: A Multiple Case Study in Two Rural Midwestern Communities"

Submitted for publication to the *Journal of Community Development Society*, 2006.

"Intergenerational Dialogues Get Results in Two Communities" Submitted

for publication by the Extension Accomplishments Reporting System (EARS), 2006

"Planning an Intergenerational Dialogue" Cooperative Extension, Institute

of Agriculture and Natural Resources, University of Nebraska-

Lincoln, 2004.

Proceedings

“The Intergenerational Dialogue Process in Two Rural Communities” Presented at the National Association of Community Development Extension Professionals (NACDEP) conference, Philadelphia, Pennsylvania, April 16-18, 2007.

“Leadership Styles and Bases of Power” Presented at Sam Houston State University, November, 2006.

“Effective use of the Intergenerational Dialogue Process” Presented at The Home Town Competitiveness Group, Center for Rural Affairs, and Nebraska Community Affairs, Lincoln, NE, June, 2006.

“The Intergenerational Dialogue Process” Presented at the Nebraska Extension Educators Conference, Kearney, NE, November, 2003.

“Using the Intergenerational Dialogue Process in Communities of Faith” Presented at the 4th Annual Nebraska Health Ministry Conference, Hastings, NE, September, 2003.

“Mentoring Entrepreneurship” Presented to the Thomas Sorensen Policy Seminar Series, Lincoln, NE, January, 2002.

Work or Professional Experiences

Faculty Pool at Sam Houston State University 2006, teaching, Two sections of Agriculture Mechanization and Engineering AGR 162 and two lab sections same class. I also taught Agriculture Communications Class AGR 320. Presently teaching AGR 488 Principles of Agricultural Leadership and Community Development, IT 484 Supervisory Personal Practices and IT 374 Time and Motion Study.

Teaching, ALEC 202 Leadership Development for Small Groups, 2004 University of Nebraska-Lincoln. Taught sections of AGR 901 Leading Change in Rural America.

Internship, Researcher, University of Nebraska Rural Initiative, Research conditions in small communities in Nebraska. In 2003 conducted focus groups in three rural Nebraska communities. This data was used by Nebraska Extension when making needs assessments.

Research, Served as a facilitator of the Intergenerational Dialogues in four Nebraska rural Communities in 2003. The same Dialogues were used in the context of my doctoral dissertation one year later.

Internship, Researcher/Organizer, Community Planning, City of Omaha, 2001, Worked with people to organize Neighborhood Watch Groups, Community Gardens, organized neighborhood meetings, and conducted needs surveys.

Internship, Researcher, Joshlyn Castle Institute, 2000, Conducted research on neighborhood architecture. Worked together with neighborhoods and businesses to better community economic and aesthetic conditions.

Assistantship, University of Nebraska Aviation Institute, 1999-2000, Conducted research on Nebraska Airports. Spring 2000 I facilitated a program where elementary school students from 3 Nebraska Indian reservations were invited to participate in Aeronautics Day. This program emphasized staying in school and not using alcohol or drugs. Students were given a tour of an Air Guard Base and talked with mechanics and pilots about their careers.

1990 - 1997

Amtrak, Omaha, NE, Inspector/Consultant/Supervisor, Inspected the electrical/mechanical systems of Amtrak trains and analyzed and repaired mechanical or electrical problems. Reported and documented findings to appropriate personnel. Supervised eight person work crews on two shifts, servicing all trains arriving and departing Omaha Union Station. Responsible for interviewing, hiring and training crew members and maintaining a safe work place. My main purpose in this job was to complete the FRA required thousand mile inspections. This inspection required a detailed examination of all wheels and brakes, electrical connections between cars and locomotive inspection. Charged with hiring and supervising crews to check brake shoes, clean the windows, and fill each car with water as the necessary repairs and inspection were performed. If any repair was needed, I would make the decision to perform the repair in the terminal or send the train to Denver or Chicago to be repaired. Of course many repairs on locomotives required immediate attention and I would make the repairs in the station. Some of the common repairs would include:

- Repair or service to air conditioning or heating system
- Evacuate Freon or add Freon to air conditioning system
- Electrical repair to 480 volt train line
- Stuck rack on locomotive
- Locomotive brake problems
- Air compressor control
- Locomotive electrical system
- Locomotive lighting
- Locomotive signal equipment
- Train line communication
- Electrical motor controls
- Diesel engine governor
- Traction motor leads
- Flat wheels
- Brake shoes
- Brake adjustment
- Air leaks
- Oil leaks
- Water leaks
- Fuel system
- Electrical wiring or contactor failure

1971 - 1995

Union Pacific Railroad, North Platte and Omaha, NE, Council Bluffs, IA
Electrician Apprentice, Journeyman Electrician, Supervisor, Electrical Design, Traveling
Electrical Supervisor.

I enjoyed 25 years with Union Pacific beginning my career when I was eighteen years old when I hired out as an electrician apprentice at North Platte, NE in 1971. Two ½ years later I passed my electrician competency test and was promoted to journeyman electrician. As a journeyman electrician I performed the following duties:

- Locomotive lighting
- Low voltage DC wiring and circuits
- Fan and motor controls
- High voltage (600volts) DC contactors and generators
- Traction motor repairs
- Contactors repairs
- Electrical blue print reading and comprehension
- Electrical trouble shooting/Running repair
- Maintain electrical equipment
- Locomotive signal equipment

In September, 1973 I was promoted to a supervisor at the Council Bluffs, IA locomotive repair facility. Council Bluffs was then the most eastern point of the Union Pacific and all UP trains terminated there. Most of the locomotives were turned around and placed on west bound trains.

The locomotives would run through the diesel facility in Council Bluffs to be inspected and running repairs made. I supervised a 28 person work force that included electricians, machinists, pipe fitters, laborers, and locomotive hostlers. This job presented me with many challenges in that I was 21 years old when I accepted this job and the youngest man that I supervised was 54 years old. The men were very experienced professionals that were hired before WWII, they were emotional and volatile, all had over 30 years experience and were being asked to be supervised by someone much younger and inexperienced. Needless to say it was a hard first year on the job. The experience was invaluable because I learned every aspect of locomotives from true professionals. I also learned how to use several types of leadership styles to supervise and motivate people in a real life setting. I loved this job, many times I wanted to quit. I think I learned more in this situation then any other time of my career, it was a lot of responsibility and a very fast and changing pace. We had a lot of tasks to perform with very minimum people to do it; working together was absolutely necessary. At this shop we only did running repair, which is repairs that take less than 4 man hours. This could include:

- Making up locomotive train sets
- servicing locomotives
- Fuel systems
- Brake shoes
- Brake cylinders
- windshield wipers
- Air compressors
- Motor controls
- Locomotive lighting
- Fuel or oil filters
- Water, fuel, oil leaks
- Air horns
- Cab heaters
- High voltage electrical contactors
- FRA inspections
- Daily inspections of locomotives
- Repairing any FRA defects

In 1981 I took a job as a journeyman electrician in the passenger car facility at Council Bluffs. This job let me work daylight shifts and was only a few blocks from where I lived at the time. The high ranking rail road executives had the privilege of using their own private rail road passenger cars. It was my job to build and maintain these vintage passenger cars. When I came to the facility the cars were a 32 volt DC axle driven generator system. All the motors and lights were 32 volt DC. The air conditioning system had 32 volt motors and the condensers were sprayed with water to help cool the Freon 12 systems. In transition weather the cars would run into cold temperatures and freeze up the water systems and damage the equipment. The cars were supplied with 110 volt alternators driven by 32 volt motors. These alternators supplied a few 110 volt outlets but were very low wattage. When the cars were stopped for more than an hour the amperage demand would increase as the battery voltage decreased because the axle driven generator was not supplying voltage to keep the 32 volt batteries charged. The batteries, alternators, or 32 volt motors would often overheat and fail, leaving the people on the passenger car without electricity. We addressed this problem in the early eighties by converting each of the 60 passenger cars to a self-contained system. We got rid of the steam heat and replaced it with electric heat. We converted the propane stoves to electric ranges. We took off all the 32 volt lighting system and converted to 110 volt. Each car was supplied with a five cylinder air cooled Dietz diesel driven generator with a 65 KVA generator supplying 480 volts. This new technology changed the image of Union Pacific passenger cars. Our cars became dependable models that were imitated by many other rail car providers.

I was personally involved in and supervised the design of these systems including changing our air conditioning systems to a Carrier Freon 22 system that did not require being sprayed with water. Our cars were now able to be in any weather condition or transitional weather. I was the person who maintained all of the diesel generators and performed the electrical design. We converted the cars to 480 volt train line so they could be used with head end power (HEP) systems. We designed a power car that had two Detroit 12 cylinder engines that each drove a 250 KVA generator that when used a synchronous system could supply 500 KVA to power a whole train of passenger cars with 480 volts. After being involved with the design and construction of these passenger cars, I was promoted to a traveling

passenger car supervisor. From 1983 to 1995 I, or one of my subordinates or colleges, would travel with the passenger equipment to make any needed in-route repairs and maintain the passenger equipment. I was a journeyman electrician, however when I was not in the terminal I was in charge of the equipment and would cross over into the other trades.

My duties would include:

- Maintaining the diesel generators and air conditioning equipment
- Evacuating Freon or adding Freon to air conditioning system
- Trouble shooting electrical failures
- Maintaining the electrical systems
- Low voltage controls
- High voltage contactors
- Fuel systems
- Heating systems
- Electronic devices
- Communication equipment
- Plumbing repair
- Air brake equipment
- Signal equipment
- Supervision of other workers
- Arrange logistics
- Budget time for projects

Honors and Awards

Research Grant, K.W. Kellogg Foundation, 2005

Fellowship, University of Nebraska Rural Initiative, 2003-2004

NASA Nebraska Space Grant Research Fellowship, Nebraska Space Grant Consortium, 2000

Distinguished Student Award, University of Nebraska-Omaha Aviation Institute, 2000

Regent's Tuition Waiver, University of Nebraska-Omaha, 1999

Other Competencies

1975 - Present:

Own and maintain apartments and single family dwellings. For over thirty years have bought and sold, rented to others, or restored real estate. Over the thirty years I have had experience in electrical, heating and air conditioning, painting, papering, finish carpenter work, new construction, much plumbing and remodeling.