CURRICULUM VITAE

Clayton Ray Diez

TECHNOLOGY ASSOCIATE PROFESSOR

EDUCATIONAL BACKGROUND

Bachelor of Arts in Education

Wayne State College
Department of Industrial Education
August 1972
Major: Industrial Education
Minor: Physical Education.

Master of Science in Education

Wayne State College
Division of Applied Sciences
Department of Industrial Education
August 1979
Industrial Education

Doctor of Industrial Technology

University of Northern Iowa
College of Natural Sciences
Department of Industrial Technology
August 1990
Design/Drafting and Graphic Arts

Certified Senior Industrial Technologist (CSIT)

National Association of Industrial Technology
Since September 1992

Exchange Professor

Granted Developmental Leave; Spring 2006
Visiting Professor
National Koahsiung Normal University, Taiwan

PROFESSIONAL EXPERIENCE

TEACHING EXPERIENCE

Postsecondary Education
Years at UND – 23rd
Associate Professor of Technology August 2005
Assistant Professor of Technology, 1985 – 2005

Years at other institutions of Higher Education – 3
Graduate Teaching Assistant & Instructor, 1982-85
University of Northern Iowa

Full Member, Graduate Faculty

Secondary Education
Teacher & Coach
Fullerton City Schools, Fullerton, NE 1975-1982
Reinbeck Community Schools, Reinbeck, IA 1972-75

ADMINISTRATIVE EXPERIENCE

Lead Instructor - 3 years 1997-00

Faculty Unit Coordinator 2000-01

Department Chair 2001-2005

INSTRUCTIONAL RESPONSIBILITY

Director, Graduate Programs

Master of Science in Industrial Technology
Master of Science in Technology Education

Coordinator

Occupational Safety and Environmental Health major

Assistant Professor/Associate Professor

Department of Technology

Undergraduate and Graduate courses

COURSES TAUGHT

Teaching Load (2 year cycle)

Term	Course Number	Credits	Title	No. of Sections	Course Enrollments	Field
F 05 & 06	IT 110	2	Principles of Industrial Tech.	1	48/45	IT
F 05 & 06	IT403/ENTR 405	3	Product Research & Development	1	38/32	IT ENTR
F 05	IT 400	3	Teaching Methods	1	8	IT
Fall 04	IT 412	3	Design/Drafting	1	10	IT
Spr. 05 & 06	IT 203	3	Production Processes: Manufacturing	2	45/D.L.	IT
S 05 & 06	OSEH 440	3	Industrial Safety	1	28/D.L.	IT/ OSEH
Sum. 05 & 06	OSEH 345	2	Emergency Response	1	5/8	OSEH
Sum. 06	OSEH 355	1	Inspections	1	5	OSEH
Sum. 05	OSEH 375	3	Asbestos	1	3	OSEH
05-06	IT 337		Co-op Education	1	5 total	IT/ OSEH
05-06	IT 537		Graduate Co-op	1	1	IT Grad Prog.
Fall 04	IT 550		Industrial Technology Management	1	10	IT Grad Prog.

Other Classes Taught (1985-Present)

NKNU Industrial Design 3 credits **Masters Level** course

while on developmental leave

NKNU Special Topics in Industrial Technology 2 credits **Doctoral level** course while on developmental leave

IT 103 Introduction to Production Technology (1 credit) [precursor to IT 110]

IT 104/204 Industrial Materials (3 credits)

IT 213 Production Processes: Construction (3 credits)

IT 223 Applied Synthetics (3 credits)

IT 340 Cost Estimating (3 credits)

IT 397/IT 537 Cooperative Education

IT 404 Materials Testing (3 credits)

IT 412 Design/Drafting

IT 420 Facilities Design (3 credits)

IT 440 Industrial Safety (3 credits) [precursor to OSEH 440]

IT 440 Industrial Safety (3 credits) Correspondence course until 1999

Advisees

Undergraduate 44

Graduate 8 Masters; 10 Doctoral Committees

Instructional Development

Designed, developed, wrote, and coordinated the Master of Science in Technology Education cooperative degree program approved in November 2003 and launched in February 2004.

Worked with Philip Parnell to develop articulation agreements with two year colleges in North Dakota, South Dakota, Minnesota plus Sioux City and Council Bluffs, Iowa plus Red River Community College in Winnipeg, Canada. 2001-2002.

The Experiential Classroom: Using Entrepreneurial Practice to Teach Entrepreneurship, Sponsored by the Lifelong

Learning for Entrepreneurial Education Professionals (LLEEP) Partnership @ the Thomas C. Page Center for Entrepreneurship, Miami University of Ohio, Oxford, Ohio. September, 2000.

Developed and finalized Articulation Agreement with the North Dakota State College of Science for the transfer of OSH and HAZ course work to the OSEH program at UND. June 1996.

Participant, Writing Across the Curriculum, Faculty Writing Extended Workshop. May 1994.

Participant, Writing Across the Curriculum: Faculty Writing Seminar, facilitated by Prof. E. Rankin. September-December 1992.

Interactive Video Network Workshop, Grand Forks, ND. April 1994.

Effective Grant Writing Workshop, sponsored by Writing Across the Curriculum. April 1992.

HRD Spring Workshop - Grantsmanship Opportunities sponsored by the HRD Faculty Development Committee, HRD Dean's Office, and Office of Research and Program Development. Spring 1992.

Attended the National Educator's Workshop on Standard Experiments in Engineering Materials Science and Technology at three different national laboratories during the past 7 years. November 1989, 1990, 1992, 1993, 1994, **96, 97, 98, 99**.

Completed training workshop on Strain Gage technology and Photoelastic Stress Evaluation Techniques at MicroMeasurements Group, Wendell, NC. July 1991.

INSTITUTIONAL SERVICE

National

Reviewer, ***Journal of Technology Studies***, the journal of Epsilon Pi Tau.

Region IV Director, ***Epsilon Pi Tau*** Honorary, 2005-2008; Vice Chair 2006-07; Chair 2007-08

National Association of Industrial Technology Served as Team Chair for **seven** accreditation visits.
College of the Redwoods, Eureka, CA. April 2003.
Iowa State University of Science and Technology, Ames, Iowa. April 2002.

University of Arkansas at Pine Bluff, Pine Bluff, Arkansas. April 2001.
Jacksonville State University, Jacksonville, AL April 2000.
Alcorn State University, Lorman, MS. April 1998.
Northwestern State University, Natchitoches, LA April 1997.
University of Wisconsin-Platteville, Platteville, WI. April 1996.

National Association of Industrial Technology Served as Team member for **five** accreditation visits.
Eastern Michigan University, Ypsilanti, MI April 1995;
Central Missouri State University, Warrensburg, MO March 1994;
Eastern Illinois University, Charleston, IL April 1993;
Georgia Southern University, Statesboro, GA April 1993;
Indiana State University, Terre Haute, IN April 1992;

Undergraduate Program Review – University of Wisconsin-Stout Fall 2005

Graduate Program Review – Master of Science in Industrial Management – South Dakota State University Spring 2005

Undergraduate Program Review – Bemidji State University Spring 2001

Undergraduate Program Review – University of Wisconsin-Stout Fall 1998

External Evaluator and Chair of the Undergraduate Curriculum Evaluation for the Industrial Technology Department at the University of Nebraska-Kearney, December 1995;

University Committees

Division I Transition Committee, Education Sub-Committee; 2006-07.

125th Anniversary Historical Preservation Sub-Committee – Member 2006-2008.

University Senate. Member, Elected Spring 2003. Serve until August, 2004.

Intercollegiate Athletic Committee, University Senate Appointment, 1990-92, 1996-1999, 2002-05; & 2005-2008

Chair, 1997-99 & 2005-07.

GER Committee, University Senate Appointment, 1999-2002. Committee Chair, 2001-2002.

Enrollment Management Task Force 2000-Present.

GER Committee, University Senate Appointment, 1999-2002.

Summer Sessions Committee, University Senate Appointment, 1998-2002, Committee Chair 2001-2002.

Academic Polices and Admissions Committee, University Senate Appointment, 1998-2000.

Cooperative Education Advisory Board, 1997-Present.

University Library Committee, University Senate Appointment. 1993-1996, Chair 1995-96.

University Traffic and Parking Committee, Presidential Appointment. 1991-1994. Chair 92-93 & 93-94.

Steering Committee, Center for Innovation and Business Development; 1989-present;

Historical Preservation Committee, 2002-present

Architect/Engineer Project Evaluation for Plant Services 2000-present

Program Review Teams

Business and Vocational Education Undergraduate Program Review Team, Chair

Elementary Education Undergraduate Program Review Team Member, Chaired by Dr. Lynn Chalmers, November 1995 - June 1996.

College

Member, Mission Statement Task Force, 2003-04.

Member, International Programs Task Force, 2003-04.

Member, CoBPA Graduate Programs Committee, 2003-Present.

Member, MBA Steering Committee, 1997-2006.

Member, Merit and Evaluation Committee, 1999-2000

Chair, Hultberg Lectureship Committee, 1997-98.

Member, Promotion, Scholarship, & Grants Committee, 1996-97, 2006-Present.

Member, BPA-IT Task Force.

College of Business and Public Administration, Hultberg Lectureship Committee, Member, 1996-97.

College of Business and Public Administration, New Product Development Sub-Committee of the larger BPA-IT Integration Committee. Chair, 1995-96.

College of Business and Public Administration, Environmental Issues Sub-Committee of the larger BPA-IT Integration Committee. Member, 1995-96.

College of Business and Public Administration Promotion Committee, 1994-97, Member;

College for Human Resources Development Faculty Development Committee, 1989-94, Recording Secretary;

College for Human Resources Development Evaluation Task Force. Spring 1993;

College for Human Resources Development Evaluation Committee, 1985-89, Member.

Department

Department of Technology

Trusteee, Omega Chapter, Epsilon Pi Tau, 2006-Present.

Co-Trustee, Omega Chapter, Epsilon Pi Tau, 1988-2006.

Advisor, Society of Manufacturing Engineers Student Chapter 1988-Present.

Advisor, American Society of Safety Engineers.

Advisor, Alpha Tau/NAIT Student Chapter.

Editor: National Association of Industrial Technology Accreditation Self-Study Report, March 2004.

Institutional and Certification Representative for NAIT.

Liaison, North Dakota Department of Economic Development and Finance, Center for Innovation, Small Business Development Centers, and Technology Transfer activities.
Editor: National Association of Industrial Technology Accreditation Self-Study Report, March 1999.

Accreditation, Full: October, 1999.

Chair, Instructional Resources Committee.

Industrial Technology Chairperson Search Committee. Chair, 1995-96.

Industrial Technology Department Instructional Resources Committee, Member, 1993-Present, Chair, 1994-96;

Industrial Technology Department Education Programs Committee, Member, 1991-1993;

Faculty Participant: BF Goodrich Collegiate Inventors Program, February 1993;

Participant: Career Day at Little Hoop Community College, Fort Totten, ND, January 1993;

Contributor: National Association of Industrial Technology Accreditation Self-Study Report, January 1992

Liaison with North Dakota Department of Economic Development and Finance, the Center for Innovation and Business Development, Small Business Development Centers, and Technology Transfer activities 1989-Present;

Institutional Representative for NAIT, 1986-Present;

Department Library Committee, 1987-91, Chair;

Physical Facilities Coordinator, 1989-91;

Curriculum development for assigned courses;

Expanded Horizons Program - Participated in panel discussion and demonstration of computer numeric control machining;

National Association of Industrial Technology Student Chapter Advisor/Representative;

Participant: Quality Enhancement Project for the Department of Industrial Technology, March 1991;

Committee Assignments and Other Assigned Duties

Appointed to Chair the BPA/IT Task Force: Interest Area Sub-Committee on New Product Design, December 7, 1995.

Appointed as member of the BPA/IT Task Force: Interest Area Sub-Committee on Environmental Issues,

December 7,1995.

Appointed Region II Director of the Student Division of the National Association of Industrial Technology, November 1994;

Who's Who Selection Committee, Student Activities Center November/December 1994;

Appointed to Planning Team for 1996 National Educator's Workshop on Materials, Science and Technology. November 1994.

Community Health Assessment Committee, Member and Chair of Unintentional Injuries Sub-Committee. May 1994-Present.

Who's Who Selection Committee, Student Activities Center October 1991;

INTELLECTUAL CONTRIBUTIONS

PUBLICATIONS

Basic Scholarship

PUBLICATIONS:

Submitted/Accepted:

Tseng, K.H., Lou, S.J., Yang, H.J., & Diez, C. R. (2006, October).Using On-line Nominal Group Technique to Implement Knowledge Transfer in Engineering Education. Journal of Engineering Education.

Diez, C. R. (June, 2006). Making Application of The Project Method in Technology Education. Journal of Technology Education, 39(3), 32-42.

Thamma, R., Huang, L.H., Lou, S.J., & Diez, C.R. (June, 2004). Controlling robot through Internet using Java. Journal of Industrial Technology.

Coauette, C. M., Askim, M. K., & Diez, C. R. (Fall, 1998). Industrial technology marketing: Getting your ideas to commercialization. Journal of Industrial Technology, 14(4), 38-40.

Diez, C. R. (1996, February). ABCs of emergency response. Occupational Safety and Health.

Diez, C. R. (1990, August). Curricular trends in four year baccalaureate industrial technology programs. Cedar Falls, IA: University of Northern Iowa.

REFEREED PROCEEDINGS:

Diez, C.R., Yearwood, D.N., & Huang, L.H. (2004, June). Characteristics of an industrial technology capstone course. Paper accepted for publication in the proceedings of the American Society for Engineering Education. Salt Lake City, UT.

Diez, C. R. (1998, July). Case hardening: An activity to demonstrate brinell hardness. Paper to be published in NASA Conference Publication on the proceedings of the National Educator's Workshop: Update 97, Standard Experiments in Engineering Materials Science and Technology, Seattle, WA.

Diez, C. R. (1996, October). Occupational safety and environmental health: An interdisciplinary baccalaureate degree. Proceedings of the 58th Annual American Society

of Engineering Education. North Midwest Section Meeting.

Submitted:

Tseng, K.H., Diez, C.R., Chiang, F.K., Tsai, H.L., Tsai, T.S. Using the CIPP (context, input, process, and product) model to assess engineering curriculum. Submitted April, 2006 to World Transactions on Engineering and Technology Education (Australia) journal.

Applied Scholarship

Invited

Published: Diez, C. R. (1996, February). The ABCs of emergency response. Occupational Health and Safety, 65, 38-40.

Published: Diez, C. R. (1993, Spring). Faculty Writing Seminar. UND Writing Across the Curriculum Newsletter.

Published: Diez, C. R. (1990, Spring). Computer integrated manufacturing systems: An overview. T.E.A.M.

Other

Published: Diez, C. R. (ed.). (1994, Spring). News from Region II. Newsletter of Region II of the National Association of Industrial Technology, University of North Dakota.

Published: Diez, C. R. (ed.). (1993, Winter). News from Region II. Newsletter of Region II of the National Association of Industrial Technology, University of North Dakota.

Published: Diez, C. R. (ed.). (1993, Fall). News from Region II. Newsletter of Region II of the National Association of Industrial Technology, University of North Dakota.

Published: Diez, C. R. (ed.). (1993, Spring). News from Region II. Newsletter of Region II of the National Association of Industrial Technology, University of North Dakota.

PROFESSIONAL PRESENTATIONS

International

Boll, A. & Diez, C.R. (2006, October). The energy village: A hydrogen fuel cell unit for the middle school. Poster session presented at the Third

International Colloquium of the American Society for Engineering Education.

Teng, C.C., Chen, C.C., & Diez, C.R. (2006, October). Teaching activities: Design of a problem solving model and creative thinking instruction – brush car. Poster session presented at the Third International Colloquium of the American Society for Engineering Education.

Yang, H.J., Lou. S.J., & Diez, C.R. (2006, October). Motivating approach: "Learning by Project" – Design of an intercom telephone system.. Poster session presented at the Fifth International Colloquium of the American Society for Engineering Education.

Lin, C.C., Lee, C.J., Tsai, H.L., & Diez, C.R. (2006, October). The web-based e-journal instructional design to improve student critical thinking. Poster session presented at the Fifth International Colloquium of the American Society for Engineering Education.

Tsai, H.L., Lee, C.J., Yang, H.J., & Diez, C.R. (2006, October). A study of aviation technology education with transnational internet D-learning for primary and middle school. Poster session presented at the Third International Colloquium of the American Society for Engineering Education.

Diez, C.R., Yearwood, D.N., & Huang, L.H. (2004, September). Characteristics of an industrial technology capstone course. Poster session presented at the Third International Colloquium of the American Society for Engineering Education. Beijing, China.

National

NAIT Panel Discussion: Diez, C. R., Estepp, M. Foster, W. T., and Kashef, A. (2005, November). How to Market our Profession? 38th Annual National Association of Industrial Technology Conference, St. Louis, MO. November 17-19, 2005.

NAIT Panel Discussion: Smith, R., Moderator (2005, November). Departmental Mergers and Combinations in Industrial Technology: Case Studies of Successes and Challenges. 38th National Association of Industrial Technology Conference, St. Louis, MO. November 17-19, 2005.

Severson K., Huang, L. H., and Diez, C. R., (2004). Advantages of Using Vacuum-infusion for Composite Construction as Compared to Two Other Traditional Processes. Oral presentation in the 37th Annual Conference of National Association of Industrial Technology, Louisville, Kentucky. October 20-24,2004.

Diez, C.R., Yearwood, D.N., & Huang, L.H. (2004, June). Characteristics of an industrial technology capstone course. Paper presented at the Annual Conference of the American Society for Engineering Education. Salt Lake City, UT.

Boe, J., Diez, C. R. On-line technology education in North Dakota, W. (2004, March). Paper presented at the International Technology Education Association Convention, Albuquerque, NM.

Kashef, A., Diez, C. R., Patrick, C., Owens, J.R., & Izadi, M. (2003, November). The Impacts of Educational Leaders in Academia. Panel discussion presented at the 36th Annual Convention of the National Association of Industrial Technology, Nashville, TN.

Huang, L. H., & Diez, C. R. (2003, November), Application of motion and time study to optimize manufacturing processes. Paper presented at the 36th Annual Convention of the National Association of Industrial Technology, Nashville, TN.

Diez, C.R. (2002, November). Technology Education: Perception and Partnership. Paper presented at the 89th Meeting of The Mississippi Valley Technology Teacher Education Conference, St. Louis, MO.

Diez, C. R., Holten, R. L., Huang, L. H., & Yearwood, D.N. (2002, November), Assessment plan for an existing IT program. Paper presented at the 35th Annual Convention of the National Association of Industrial Technology, Panama City, FL.

Diez, C. R., Holten, R. L., Huang, L. H., & Yearwood, D.N. (2002, November), The Capstone Course – An integrated Experience. Paper presented at the 35th Annual Convention of the National Association of Industrial Technology, Panama City, FL.

Huang, L. H., Jones, M. D., & Diez, C. R. (2002, November), Implementation of a practical project in a materials testing course. Paper presented at the 35th Annual Convention of the National Association of Industrial Technology, Panama City, FL.

Diez, C. R. (1997, November). Case hardening: An activity to demonstrate brinell hardness. Paper presented at National Educator's Workshop: Update 97, Standard Experiments in Engineering Materials Science and Technology, Seattle, WA.

Diez, C. R., Pickle, D. L., & Rogers, D. (1997, October). Workforce development articulation: 2+2+2+2? Paper presented at the 30th Annual Convention of the National Association of Industrial Technology, Atlanta, GA.

Diez, C. R., & Wiedner, D. B. (1997, October). Computer systems technologist: Bachelor of science degree in industrial technology. Paper presented at the 30th Annual Convention of the National Association of Industrial Technology, Atlanta, GA.

Regional

Diez, C. R. (1996, October). Occupational safety and environmental health: An interdisciplinary baccalaureate degree. Proceedings of the 58th Annual American Society of Engineering Education. North Midwest Section Meeting, Fargo, ND.

Sponsored: Coauette, C. (1997, April). Super Setter. Poster Session at the 1997 Spring Conclave, Region II of the National Association of Industrial Technology, Normal, IL.

Diez, C. R. (1995, October). Promulgating the Concepts of CIM in North Dakota. Computer Integrated Manufacturing Education: Issues and Solutions for the 21st Century at the University of Northern Iowa, Cedar Falls, Iowa.

Diez, C. R. (1994, April). Trends in NAIT Accreditation. Region II Spring Conclave, National Association of Industrial Technology. Cedar Rapids, Iowa.

PROFESSIONAL ASSOCIATIONS

Professional Memberships

Mississippi Valley Technology Education Conference, One of only 65 active members. Nominated and Sponsored by Dr. Myron Bender, Professor Emeritus; Initiated November 2001. Chicago, Illinois. (2001-present).

American Society of Safety Engineers (1996-present).

Epsilon Pi Tau (1971-72, 1983-present), **Co-Trustee**, Pi Chapter (1985), **Co-Trustee**, Omega Chapter (1988-01),

Director Region IV (2004-present).

International Technology Education Association (1983-93, 2004-present.

Phi Delta Kappa (1983-present).

National Association of Industrial Technology (1983-present),
Institutional Representative, (1986-present);
Region II Director Responsible for communications within the seven state region, edit region newsletter, organize and conduct Regional Spring Conclave, and conduct elections (1992-94);
Member, **Research Committee**, (1991-Present);
Institutional NAIT Certification Representative, (1994-present),
President-Elect, President, Past-President, Student Division of NAIT (1997-99).

Council on Technology Teacher Education (1987-95).

National Association of Industrial and Technical Teacher Educators (1989-01).

Society of Manufacturing Engineers, UND Chapter S256 Advisor (1989-present).

American Society of Materials, International (1990-present).

Offices Held

Director, Region IV of Epsilon Pi Tau, International Honorary Fraternity for Industrial Technology and Technology Education, July 2004 – present.

Past-President, Student Division of the National Association of Industrial Technology, October 1998-October 1999.

President, Student Division of the National Association of Industrial Technology, October 1997-October 1998.

President-Elect, Student Division of the National Association of Industrial Technology, April 1997-October 1997.

Region II Director, Student Division of the National Association of Industrial Technology, October 1996-April 1997.

Committees

Planning Committee, National Innovation Workshop, Member. June 1993.

Association Research Committee, Member. National Association of Industrial Technology, 1991-Present.

PROFESSIONAL AWARDS, HONORS RECEIVED

November 2001 - Initiated into the **Mississippi Valley Technology Education Conference**, one of 65 active members in a selective membership.

Spring, 1997 - Received **UND Foundation-McDermott Award for Individual Excellence in Teaching** at the University of North Dakota

Spring 1995 - Nominated for **Outstanding Faculty Award** at UND.

February, 1995 - Received **Scoutmaster of the Year** award for Lake Agassiz District, Boy Scouts of America.

October, 1994 - Received **Outstanding Regional Director Award** from **National Association of Industrial Technology** at the 28th Conference in St. Louis, Missouri.

April, 1994 - Received **Laureate Award** from **Epsilon Pi Tau,** Industrial Technology Honorary Fraternity for **Outstanding Contributions to the Profession.**

Spring, 1991 - Nominated for **Advisor of the Year**

Spring, 1991 - Received the UND Memorial Union **Outstanding Advisor Award**

October, 1990 - Received the **Outstanding Professor Award** for Region II of the National Association of Industrial Technology

Spring, 1990 - Nominated for **Advisor of the Year**