ALEX JOHNSON

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EDUCATION

University of North Dakota, Grand Forks, ND — 12/03-Present

Ph.D. in Teaching & Learning — 8/08 Expected Graduation Date

Dissertation Topic "A Comparison of the Instructional Use of Benchtop Machine Tools to Industrial Grade Equipment in an Industrial Technology Program"

University of North Dakota, Grand Forks, ND — 2001

M.S., Industrial Technology

Independent Study "Development of an Introductory Course on Stirling Engines for the Industrial Technology Department at the University of North Dakota"

University of North Dakota, Grand Forks, ND — 2000

B.S., Industrial Technology

Emphasis in manufacturing processes

WORK EXPERIENCE

Concrete Inc., Grand Forks, ND — 2003–Present

Quality Control Technician

Ensure compliance with PCI and ACI standards in the construction of precast concrete floors and walls, architectural precast concrete, precast parking structures, and glass fiber reinforced concrete. Work extensively with all branches of the company to assure production of safe, quality products.

EAPC Architects Engineers, Grand Forks, ND — 2002-2003

Mechanical Technician (Drafter)

Worked extensively with AutoCAD and CADWorx Plant software to create 2D and 3D layouts. Gained an excellent understanding of all issues related to technical drawing and dimensioning.

Dakota Science Center, Grand Forks, ND 2002

Exhibit Developer / Production Manager *(Temporary grant- funded position)*

Worked with five education developers producing a web site called *NatureShift.org*. Duties at the center included technical support and kit development.

Cirrus Design, Grand Forks, ND 2000-2001

Manufacturing Engineer Intern

Worked with factory layout planning and analysis, work flow simulation, plant design optimization, and work loads on multiple stations. Worked extensively with manufacturing teams and personnel to improve production efficiency

Bobcat, Gwinner, ND 1999

Tooling Intern

Designed jigs and fixtures in the tooling department using AutoCAD and ProE software. Worked extensively with all departments to schedule the repair and rework of existing metal forming dies and the design of new dies.

TEACHING EXPERIENCE

University of North Dakota, Grand Forks, ND 2007- Present

Assistant Professor

Courses taught include:

IT 122- Computer Aided Design/Drafting

IT 202- Technical Drawing

IT 203- Production Processes Manufacturing

IT 330- Quality Assurance

IT 332- 3D CAD

IT 560- Quality Planning and Analysis

University of North Dakota, Grand Forks, ND 2006-2007

Lecturer – Production Processes: Manufacturing

Developed syllabus, managed overall course administration, and assigned all grades.

Teaching Assistant – to Dr. Ray Diez in Production Processes: Manufacturing 2002

Assisted instructor and students with lab activities during open lab hours. Met with students individually and in groups upon request and graded all lab work.

Teaching Assistant – to Dr. Ray Diez in Fundamentals of Photography 2001

Assisted instructor and students with lab activities during open lab hours. Met with students upon request.

Teaching Assistant – to Dr. Ronald Holten in Computer Aided Design/Drafting 2001

Assisted instructor and students with lab activities during open lab hours. Met with students upon request, and graded all lab work and exam papers.

Teaching Assistant – to Charles Crummy in Fundamentals of Photography 2001

Assisted instructor and students with lab activities during open lab hours. Met with students upon request.

SOFTWARE EXPERTISE

- Expertise with a wide variety of Windows-based programs and CAD systems and a good understanding of G-code.
- Working knowledge of the following software:

* Windows XP	* Microsoft Office	* AutoCAD
* CADKEY	* SPSS	* CADworx
* Lotus	* Visio	* Course Management System
* ProE		

PROFESSIONAL EXPERTISE

- Over six years experience working within industry and education in areas of manufacturing, course development and teaching, industrial safety, quality control, and drafting.
- Two years experience as a drafter in architectural and industrial settings using AutoCAD, Pro Engineer, and CADworx software.
- Excellent background in technical drawing.
- Direct work experience with quality control programs.
- Extensive coursework and work experience with lean manufacturing principles, such as cellular manufacturing, Kanban, Six Sigma, Total Quality Management, rapid setup, and team development.
- Working knowledge of machining using both CNC (with g-code and CAD/CAM software) and manual equipment, welding, foundry, and other machine shop skills.

- Experience working successfully on teams within industry.
- Strong background with scholarly writing in both APA and MLA
- Understanding of machine tool theory and design.
- Working knowledge of production materials, including plastics, ferrous and non-ferrous alloys, including an understanding of heat treatment techniques and machinability.
- Excellent knowledge of construction materials and components, including structural precast/prestressed concrete products, cement, rebar, and admixtures.
- Extensive background in woodworking tools and processes.
- Excellent background in the creation and interpretation of blueprints in both mechanical and architectural areas.
- Extensive coursework in the Occupational Safety and Environmental Health program at the University of North Dakota. Courses included Asbestos, Emergency Response, Construction Safety, and Industrial Safety.
- Direct work experience and coursework with ISO and PCI standards.

TRAINING & CERTIFICATION SUMMARY

Precast Concrete Institute Level I Certification 2003

American Concrete Institute Certification 2003

30 Hour OSHA in Construction Safety Certification 2001

24 Hour Hazardous Materials Technician Certification 2001

4H Shooting Sports Instructor State Level Certification 2004

RESEARCH & SCHOLARLY ACTIVITIES

Summer Instructional Development Professorship 2005

PowerPoint Research

Teaching & Learning Brown Bag Discussion 2006

Rethinking PowerPoint-Information Delivery Systems or Tools to Foster Creativity.

Presenter at University of North Dakota Beyond Boundaries 2006

Rethinking PowerPoint-Information Delivery Systems or Tools to Foster Creativity.

PROFESSIONAL REFERENCES

Dr. David Yearwood
905 South Columbia Road
Grand Forks, ND 58201
772-2873

Charles Crummy
611 19th Avenue South
Grand Forks ND 58201
772-5402

Jerome D. Feltis
2950 South Washington Street
Grand Forks, ND 58201
746-4337