

KELLY MORGAN DETERS

EDUCATION

- **University of Nebraska**, Lincoln, NE May, 2009
 - PhD in Educational Studies: Internet-Based Education with a focus on use of technology in science education
 - Dissertation: *Investigating a Computerized Scaffolding Software for Student Designed Science Investigations*
- **University of Missouri**, Kansas City, MO May, 2003
 - Masters of Arts in Curriculum & Instruction: Natural Sciences
- **The Colorado College**, Colorado Springs, CO May, 1999
 - Bachelors of Arts in Chemistry, minor in Secondary Education
 - Recipient of Barnes full-tuition scholarship for chemistry
 - Graduation with Distinction

TEACHING LICENSE/CERTIFICATION

- **National Board Certified Teacher** Valid until November 2017
 - Chemistry, Adolescent/Young Adult
- **Kansas Master Teaching License** Valid until July 2017
 - Secondary Chemistry, General Science

CURRENT POSITION

- **Kansas State University**, Manhattan, KS June 2009 - current
 - Program Manager for K-State's NSF-Funded GK-12 grant program
 - Coordinate all aspects of the grant program including: all administrative aspects, budget, writing the annual report to NSF, creating and maintaining the webpage, teaching the seminar course for the graduate fellows, planning and implementing the 2 week Summer Institute for fellows and partner teachers, supporting fellow-teacher interactions throughout the school year, recruitment and selection of fellows and teachers, planning and implementing research studies for the program.

TEACHING EXPERIENCE

- **Shawnee Heights High School**, Tecumseh, KS August 2006-May 2009
 - Chemistry, Physical Science
- **Hayden High School**, Topeka, KS August 2002-May 2006
 - Advanced Placement Chemistry, Chemistry, Honors Chemistry
- **Highland Community College**, Perry, KS June 2004-December 2004
 - Introductory and college chemistry
- **Blue Valley West High School**, Stilwell, KS August 2001-May 2002
 - Chemistry, Advanced Placement Chemistry
- **Olathe East High School**, Olathe, KS August 1999-May 2001
 - Chemistry, Advanced Placement Chemistry, Chemistry with Art Emphasis

WORKSHOPS LED & PRESENTATIONS GIVEN

- **Teaching chemistry without hearing "When am I ever going to need this"**, California Science Teacher's Association conference Oct 2008; National Science Teacher's Association regional conferences Nov and Dec 2008, Oct, Nov and Dec 2009; LASER conference Jan 2009; NSTA's National Conference March 2009 and March 2010; Washington Association of Science Teachers State Conference, March 2010.

- **Efficient Learning**, Full-day workshop for secondary math and science teachers, February 3, 2009, Jones Institute for Educational Excellence at Emporia State, Ks Assoc of Chemistry Teachers, October 2008.
- **Preparing for the Kansas State Science Assessment**, Jones Institute for Educational Excellence at Emporia State. Full-day workshops. Secondary Teachers: November 30, 2007; January 7, 2008. 4th and 7th grade: December 7th, 2007; January 14th and 15th, 2008.
- **Using an online template for student designed labs**, Ks Assoc of Chemistry Teachers, October 2007.
- **Running a Mastery Course: The Ultimate in No Child Left Behind**, KS Assoc of Chemistry Teachers, October 2007; USD 450 district professional development day, October 2007.
- **Making Labs Meaningful**, Jones Institute for Educational Excellence full day workshop for secondary science teachers October 2007.
- **Teaching Chemistry with Relevance**, ChemEd 2007, National Science Teacher's Assoc Regional 2007, 2008.
- **Teaching Students to Design Their Own Labs**, ChemEd 2007, National Science Teacher's Assoc Regional 2007.
- **Seeing Inside: Tracing Student Misconceptions**, Jones Institute for Educational Excellence full day workshop for secondary science teachers March 2007, for elementary science teachers October 2007.
- **Teaching Inquiry the Backwards Way**, KS Assoc of Chem Teachers 2005, KS Assoc of Teachers of Science 2006, Biennial Conference on Chemical Education July 2006, National Science Teacher's Assoc Regional 2006, KS Dept of Education Science Curriculum Leader meeting October 2008.
- **Rearranging the Chemistry Curriculum**, KACT 2005, KATS 2006, NSTA Regional 2006
- **Affects on Student Attitudes of Real-World Integration**, BCCE July 2006
- **Integrating Real-World Application & Inquiry Into the HS Chemistry Classroom**, Florida American Chemical Society Annual Meeting Keynote speaker, May 2006
- **Use of Inquiry**, Archdiocese of KC in Kansas, April 2004
- **Chemistry inquiry lab development**, Olathe School District, Spring 2000
- **Use of ChemConnection Modules**, National ACS Meeting March 2000

AWARDS, HONORS & SERVICE TO PROFESSION

- **Reviewer for Journal of Chemical Education**, 2005-present
- **USD 450 K-12 Science Curriculum Review Committee**, 2007-2008
 - Member of committee re-aligning science curriculum for the district K-12
- **Presidential Award for Excellence in Math and Science Teaching**
 - 1 of 3 finalists for Kansas for 2007.
- **National Board Certified Teacher**
- **Excellence for Inquiry-Based Science Teaching**
 - National Science Teacher's Association, 2006. One chosen nationally for High School.
- **Patrick Award for Outstanding High School Chemistry Teaching**
 - Kansas State University ACS Local Section, 2006. One chosen in Kansas
- **Kansas Association of Chemistry Teachers**
 - Founded the KACT and currently served as 1st president, Fall 2005
- **Professional Association Affiliations**
 - National Science Teacher's Association, Kansas Association of Chemistry Teachers

PUBLICATIONS

- **Journal of Science Education and Technology**
 - "Investigating a method of scaffolding student designed experiments" In Review

- *Mastery Learning in the Science Classroom: Success for Every Student* January, 2011
 - Book for science teachers with history, theory and practical applications of mastery learning in science classrooms. Published by NSTA Press
- *Chemistry in the National Science Education Standards, 2nd edition* 2008
 - Co-Authored Chapter 1: Thinking About Standards. Published by American Chemical Society.
- *Discovering Chemistry You Need to Know—HS Chemistry Text* August, 2008
 - Authored a new chemistry text for high school chemistry. Text is completely real-world application integrated, organizes content on a need-to-know-basis, includes inquiry and traditional labs imbedded within the text, and is standards-based. Published with Kendall Hunt
- **The Journal of Chemical Education**
 - “What Are We Teaching in High School Chemistry” November, 2006
 - “Student Opinions on Inquiry Teaching” August, 2005
 - “What Should We Teach In High School Chemistry” October, 2003
- **The Physics Teacher**
 - “An Inquiry lab on Inclined Planes” March, 2005
- **The Science Teacher**
 - “Inquiry in the Chemistry Classroom” December, 2004
 - “Buffer Biology” November, 2000

INSTRUCTIONAL DESIGN EXPERIENCE

- **Core Concepts Tutorial Series** October 2005-current
 - Authored animated tutorial series for College Chemistry, High School Chemistry, AP Chemistry, SAT Chemistry, and New High School Chemistry Teachers as a technical writer for 360 ESolutions
- **Chemistry with an Emphasis on Art** August 2000-May 2001
 - Designed and implemented a chemistry with art course at Olathe East High School
- **Analytical Chemistry Outreach Programs** Summer 2000 & 2001
 - Quintiles Corporation, Kansas City, MO
 - Designed and implemented a two-week program for high school students and teachers to experience pharmaceutical analytical chemistry techniques using ibuprofen
 - Designed a traveling instrument program to use UV/Vis spectroscopy at high schools with food dyes and sunscreens
- **ChemConnections Modules** Fall 1997-Spring 1999
 - Co-authored a ChemConnections module, at Colorado College. The module used the context of human vision to teach general chemistry concepts such as light, color, electron configuration and biochemistry.
 - Evaluated the use of the vision module and reported findings in a senior thesis and at a national ACS meeting, Spring 2000