Andrea Bair (Geology)

Andrea Bair (Geology) attended “Earth Educators Rendezvous 2016” in Madison, Wisconsin July 17-22. This was the second year for the only nation-wide meeting of Earth education practitioners, students, and researchers. Andrea also attended last year’s inaugural event in Boulder, Colorado. The event is a mix of long and short workshops, research presentations, teaching demonstrations, and community-building activities. Andrea was invited to help organize the Geoscience Education Research Community Planning Workshop during the first 3 mornings of the Rendezvous. This group was charged with identifying and prioritizing needs within the research community, assessing the state of geoscience education research, and developing community-based action plans to further progress in the field. During the last two mornings, Andrea participated in the workshop “Research at the Interface of DBER (Discipline-based education research) and Cognitive Science.” Here, she partnered with three other undergraduate geoscience faculty planning a research project that 1) involves development and testing of scaffolding activities designed to help students better describe spatial distributions of earthquakes and volcanoes and their relationship to tectonic plate boundaries, 2) utilizes cognitive science research, and 3) includes cognitive scientists who specialize in spatial reasoning and visual processing related to science learning.

David Baker (Chemistry)

In November David Baker (Chemistry) was a panel contributor at an American Chemical Society sponsored Science & the Congress Project briefing in Washington D.C. titled “STEM Policy in the Next Congress: Two- and Four-Year Degrees.” The panel discussion focused on how new Administration and Congressional Session addresses STEM education policy and future labor needs. His experience as the Coordinator of the Chemical Technology Program working with advisory board members, cultivating industry partnerships and development of assessable core laboratory skills provided an interesting perspective to the discussions.
Connie Barber (Computer Science)

On November 18th, 2016, Connie Barber (Computer Science) led a team hosting 310 middle school girls for a Computer Science Girls Day Out event. This initiative encourages an increase in the number of females in STEM, this time particularly computer science. The girls rotated through various activities including circuit boards, CAD and 3D printing, webpage design, programming, robotics, and much more!

Sharon Bernthal (English)

Sharon Bernthal (English) led a team that included Delta College student athletes, faculty, and staff making no-sew fleece blankets for children represented by the CAN Council's Court-Appointed Special Advocate Program (CASA). Donations were accepted from across the College and the blankets will be gifts for kids served by our Great Lakes Bay CAN Council. Athletic Director, Shelly Raube, provided swag for the work group that donates the most material.

Ann Dore (Nursing) and Lori Kloc (Health and Wellness)

Ann Dore (Nursing) and Lori Kloc, Simulation Educator/Learning Specialist presented at TRENDS in Occupational Studies Conference in October. The breakout session was titled "End-of-Life Simulation" an innovative teaching method for first level students utilizing simulation and a actively dying patient scenario. Ann and Lori have teamed up to develop and integrate this actively dying simulation in the Nursing Fundamentals Course at Delta College starting Winter of 2015 since that time they have consistently modified and improved the simulation experience. The presentation included a retrospective review of how this simulation was integrated into the nursing course over three semesters. The breakout session was attended by approximately 30 healthcare educators from various community colleges and disciplines. The goals of the session included: 1. Identifying how End-Of-Life care simulation could be incorporated into the nursing curriculum at various levels in the program. 2. Demonstrate the value of student role assignments and its impact on student learning. 3. Analyze the depth of learning experiences that occur in the debriefing process. 4. Incorporating a variety of learning strategies to maximize end-of-life/post mortem care, communication and skills acquisition for the fundamentals student.
Amy French (History)


Kathy Marchlewski (English), Betheen Gladys-Teschendorf (English), and Myung Pinner (Mathematics)

Kathy Marchlewski (English), Betheen Gladys-Teschendorf (English), and Myung Pinner (Mathematics) are principals involved in an Achieving the Dream (AtD) Grant “Engaging Adjunct Faculty in the Student Success Movement”. They are being assisted by other full- and part-time faculty including part-time faculty Betsy Christensen (English) and Katie Grappin (Mathematics).

In 2015-2016, 339 adjunct faculty were employed by Delta College, compared to 207 full-time faculty members. They make up 35 percent of the entire workforce (of 966 people), while full-time faculty members make up 21.4 percent. Even with this large number, it is challenging to connect adjunct faculty to their full-time colleagues and to the rest of the College, both academically and socially. Delta wants to make sure that adjunct faculty are fully informed about, and comfortable using, the services that it offers both students and employees. It wants to communicate its culture as effectively to adjunct faculty as it does to its full-time employees.

Although adjunct faculty are an important resource for Delta, their schedules often prevent them from being on campus to meet students or colleagues, or connect as often as full-time faculty members. This results in fewer opportunities to connect with the institution, learn about its resources and programs, or feel like an integral part of the College.

Other factors contribute to this challenge. Adjunct faculty are strictly limited in the number of hours that they can teach each semester by the Affordable Care Act, owing to their status as part-time employees. In periods of reduced enrollment, the hours that they may work are reduced further and the hours that they are available are often at less desirable days and times.
Delta has chosen the English and Mathematics Divisions for this grant application because of the high numbers of adjunct faculty compared to other divisions, and because adjunct faculty in these divisions teach a wide range of courses. The divisions generate a high percentage of credit hours and require specific qualifications that are not easily found among the general public.

Randy Nichols (Mathematics)

Randy Nichols (Mathematics) is serving as a Faculty Research Associate for Dr. Vilma Mesa of the University of Michigan in an NSF-sponsored grant “Algebra Instruction at Community Colleges: Exploring its Relationship with Student Learning and Performance”. This grant is investigating the relationship between two characteristics of mathematics instruction at the community college level: (1) quality of teacher-student interaction and (2) quality of mathematics with student learning gains and course performance in community college algebra courses.

The study involves six community colleges from three states and focuses on three key algebra topics: linear equations, rational equations, and exponential equations. The study will also investigate how specific characteristics of the instructors and of the students moderate such relationships. There are three main research questions: RQ1: What is the relationship between characteristics of mathematical instruction and students’ learning gains and performance in community college algebra courses? RQ2: How does the relationship between instruction, learning gains, and course performance in algebra vary in relation to community college students’ and instructors’ attitudes and beliefs about mathematics, its teaching, and its learning? RQ3: Under what conditions does instruction in community college algebra courses result in larger gains in student learning?

The study will refine measures of: (1) quality of instruction relative to student-teacher interactions and quality of mathematics; (2) students’ knowledge and learning of algebraic topics; (3) teachers’ beliefs, attitudes, and sense of efficacy toward mathematics, its teaching, and its learning; (4) students’ beliefs and attitudes towards mathematics, its teaching, and its learning; and (5) students’ perceptions of classroom processes obtained via questionnaires, classroom video, student tests, and instructional artifacts.
David Redman (Mathematics)

David Redman (Mathematics) presented a workshop at the recent quadrennial International Congress of Mathematics Educators (ICME 13) which was held July 24-31 in Hamburg, Germany. The 90-minute workshop was entitled “Symmetry, Chirality, and Practical Origami Nanotube Construction Techniques”.

Mary Roberson (Mathematics)

Mary Roberson (Mathematics) chaired the conference committee of the 2016 Michigan Mathematics Association of Two-Year Colleges (MichMATYC) held at the Delta College Planetarium and Main Campus October 14-15, 2016. Approximately 130 two-year, four-year, and secondary mathematics faculty attended the events which included three national speakers, and a broad range of contributed sessions. Mary managed the conference subcommittees and a budget of approximately $12,000. The conference was funded in part by a $3,500 Innovation Incubator Grant, and a $1,700 Traveling Workshop Grant from the American Mathematical Association of Two-Year Colleges (AMATYC). The conference was extremely well-received.

Charissa Urbano (Biology)

Charissa Urbano (Biology) presented at the Educational Technology Organization of Michigan’s annual Fall Conference held at Mott Community College. Her presentation was on “Online Science Labs”, a three year analysis reported an 86% retention rate and an 89% student success rate (N=72) using a laboratory kit shipped and supplied by eScience Labs, Inc., Denver, CO.
Nancy-Vader McCormick (Communications) and Susan Harvey (Psychology) together with Melissa Wallace, Coordinator of Disability Services recently facilitated the Delta College Mindfulness Summit held at the Delta College Planetarium on Friday, November 18, 2016. The summit was attended by approximately 40 Delta College faculty and staff. The agenda included an overview of Mindfulness, a panel including Professor Emeritus Skip Renker, and break-out sessions on "Mindfulness in the Classroom" and "Stress and Mindfulness.” Susan and Nancy and completing their certification in Koru Mindfulness Teacher Certification as part of their 2015 Endowed Teaching Chair.