The Mathematics Professional Learning Community (PLC) at UNM-Taos
Colin Nicholls, UNM-Taos, Taos, NM
Tom Gruszka, Western New Mexico University, Silver City, NM

Background

Opportunity
- UNM Taos is a 2 year Branch Campus of University of New Mexico; a Rural Community located in N. Central NM
- A Title V ‘Guided Pathways to Success’ (GPS) grant permitted recruitment of 2 new full time faculty
- GPS also included funds for Math Department Professional Development

Grant Objective
- Increase Student learning and completion rates by restructuring Developmental Courses.

Vision & Approach

Vision
- Reshape UNM-T Math department to become a fully collaborative Professional Learning Community.
  - ‘Any course problem is a Math Department problem’

Approach
- Enhance Faculty Content Knowledge (and ensure HLC compliance) by enrolling in WNMU Graduate Certificate in Mathematics
- Use instructional approaches outlined in AMATYC IMPACT document
- Support Pedagogical shifts with additional Professional Development – in class and out of class – partner with MC2 group at NMSU.

Program Format

WNMU Course Format
- One 3CR hybrid course each Semester (Fall, Spring, Summer)
- Start each course with one or two day live workshop
- Participants meet weekly for face to face discussion/ assignment sessions.
- Remote participants join via Zoom video conferencing.
- Monthly Zoom sessions with Instructor.

MC2 Support Format
- Start each semester with one or two day live workshop for team building, doing math together, defining pedagogy priorities (individual and departmental) for Semester
- Biweekly Zoom support sessions between faculty & MC2.
- Two additional 2 day Workshops each semester.

MC2 Group at NMSU
- Weekly Zoom sessions with WNMU group at NMSU.

MC2 – Wanda Bulger-Tamez
WNMU – Tom Gruszka
UNM-Taos – Colin Nicholls

Current Priority Project
- Restructure Pre-Algebra & Intro Algebra Course SLO’s (as per AMATYC IMPACT Document).

Products So Far
- Creation of a variety of class room activities for Pre Algebra & Introductory Algebra
  - Group work
  - Conceptual Development
  - Exploratory
- Use of ‘Number Talks’ in Pre-Algebra to College Algebra
  - Increase Number Sense
  - Promote & display alternate solution strategies
  - Start class wide discourse on math

MC2
The goal of Mathematically Connected Communities (MC2) is to improve the mathematics learning for students in grades k-16 through professional learning experiences that

- Build teacher mathematics knowledge and pedagogical skills for effective teaching.
- Promote district or math department’s capacity for creating support systems and structures for educator ongoing, job-embedded professional learning.

MC2 team meets with UNM Taos Team regularly during the academic year to identify and implement new strategies to improve student success.

Our objective is to build the pedagogical skills of the mathematics faculty to implement new instructional strategies that will increase the retention and completion rates of students in development and transfer mathematics courses.

https://mc2.nmsu.edu/

Contact Information

UNM-Taos
- Colin Nichols colnics@unm.edu

WNMU
- Tom Gruszka Thomas.Gruszka@wnmu.edu

MC2
- Wanda Bulger-Tamez wpuzman@nmsu.edu
- Kathe Kanim kakanim@nmsu.edu