NFS Development Projects and Plans

Department of Mathematics Education

Faculty Development Plan	2
Teaching	2
Scholarly Currency	6
Citizenship	7
Teaching Development Project Proposal	10
Context	10
First Time Teaching Goals	11
Learning-Centered Syllabus	12
Scholarship Project Proposal	17
Citizenship Development Project Proposal	18

Faculty Development Plan

Mathematics Education Department College of Physical & Mathematical Sciences

Prior to joining the Mathematics Education Department at BYU, I enjoyed opportunities to work at varied institutions and with a variety of students. Many of my reflections upon my initial experiences at BYU are linked to experiences teaching and working at other institutions. Within each of the three main categories of this development plan, I recognize both strengths and areas of growth based upon experiences at BYU as well as other institutions in which I have worked. Specific goals connected to each identified area of growth are also included within the discussion of my teaching, research as a professional faculty member, and citizenship.

Teaching

Self-assessment

I joined BYU with a variety of successful teaching experiences across grand bands and content strands of mathematics. These experiences support my teaching of prospective mathematics teachers in at least two ways. First, I draw upon a repertoire of curricular knowledge and tasks to create opportunities for prospective teachers to develop deep mathematical understandings needed for teaching mathematics. Second, many prospective teachers appreciate having access to a professor with public school teaching experience to whom they can seek answers to questions related to their future careers.

While these experiences teaching mathematics support my work at BYU, there are adjustments to my teaching with respect to content and audience that I am working to improve. First, I am no longer focused on teaching only mathematics content but instead must integrate content with pedagogy. While I am able to draw upon practices similar to teaching mathematics, I am continuing to refine those practices to provide better opportunities for my students to learn content more closely aligned with pedagogy than mathematics. Second, the audience I am teaching has shifted from students of mathematics to prospective mathematics teachers. Prospective teachers have different expectations and needs as mathematics education students than they did as mathematics students. Additionally, they are transitioning from students to prospective teachers and are thus still learning to articulate and recognize their needs as future teachers.

Based on these shifts with respect to content and audience, I have identified areas of growth on which I would like to focus during my pre-CFS time at BYU. Many of these areas of growth arise from the inherent complexities of integrating mathematics and pedagogy across courses in the department, and this integration is reflected in each of my identified areas of growth. These areas are also related to both formal and informal feedback I have received from students who are transitioning from students to prospective teachers in our program.

Organization and focus. Teaching courses that integrate both content and pedagogy involve multiple moving parts, and how those parts fit together may not be evident to students. Additionally, students have made informal comments to me that they don't always understand how the different courses fit together across the department. For example, learning goals is a topic in both MTHED 277 and MTHED 278, but the different ways learning goals are used in the two classes is not always clear. Additionally, students encounter geometric transformations in MTHED 278, MTHED 308, and MTHED 377, but why it is important for transformations to be part of each of those classes is not always evident to students.

As I've taught different iterations of MTHED 277 and MTHED 308, I've found that focusing units within the courses on one math content topic, one pedagogical topic, and in the case of MTHED 308, one type of technology helps to make the organization more transparent to the student. Based on feedback from students, organization and focus are helpful to them with respect to planning their time and easing their anxieties. Based on data from class assessments, organization and focus are correlated with improved performance and quality work. While I've made some improvements with respect to organization in MTHED 308, I feel like clarity in course organization is something I need to continue to improve, particularly with respect to working with student teachers and MTHED 277. Additionally, we are reorganizing the elementary mathematics sequence of courses to integrate pedagogy and content, so developing a clear vision of how these two threads weave together throughout the courses will be critical to student learning as we work to develop the courses.

Effective assessment and feedback. The integration of pedagogy with mathematics content presents a new challenge with respect to designing and evaluating assessments. Developing assessments with an appropriate amount of scaffolding that supports students' challenges in learning to teach mathematics presents nuanced complexity that I'm still working to refine and navigate. As I've worked to revise and develop appropriate assessments for students, I've found small success using the following guiding principles: (a) build creativity and choice into mathematical content of a project but specify required pedagogical/technological components, (b) use rubrics to facilitate communication of expectations and evaluations, and (c) establish checkpoints for larger projects to provide students with formative feedback.

Growth with respect to the guiding principles listed in the above paragraph will likely occur as I continue to reflect upon and revise assessments. Additional ways in which I would like

to grow in designing effective assessments and feedback include (a) more timely feedback on submitted assignments, (b) structuring major assessments with appropriate detail and challenge, and (c) helping students progress toward effective and accurate self-assessment.

Goals

The goals described below are specific measurable plans for how I can improve as a teacher of prospective mathematics teachers. Each of these different areas of growth can be assessed using **mid-course evaluations** to adjust my teaching to meet the needs of students in my classes.

Organization and focus

- Clarify for students the mathematical and pedagogical foci of units; revisit these organizing foci regularly in the unit to help students make connections
- Organize connect in a learning management system (Canvas or Learning Suite, depending on the course) so that the organization and foci is clear to the students
- Provide details for major assessments early so that students can plan accordingly
- Structure student teaching observations to focus on two or three practices related to either the PAES, 5 Practices, or PPAT; communicate these foci to the student teachers via a weekly email and pre-observation survey

Effective assessments and feedback

- Read *Effective Grading* (Walvoord & Anderson, 2010) to refine efforts to use checkpoints and rubrics for major assignments
- Provide positive and constructive feedback on small assignments within one week (ideally before the next class meeting)

- Consult with other faculty who teach common courses for feedback on my written assessments, particularly with respect to clarity, integration of pedagogy, and appropriate challenge
- Create self-assessment surveys for MTHED 305 to complete for their daily homework assignments
- Create short self-assessment surveys for MTHED 476 (student teaching) to complete pre- and post-observation

Scholarly Currency

Self-assessment

The demands of teaching, with their urgency and necessity, can easily consume all of my time. Carving out time for scholarship activities to maintain currency in the field requires forethought and careful planning. During my first year of teaching, my scholarly activities focused on maintaining currency through reading articles and books. While I feel that this kind of activity was reasonable for a first year as a professional faculty member during COVID, I would like to take a more structured approach to scholarly currency as a move forward in my career at BYU. I've set the following goals to help record my scholarly activities and structure my efforts toward scholarly products.

Goals

Develop a habit of purposeful reading. While I know that I spent time reading research during my first year at BYU, I am unable to accurately quantify this time. Additionally, I am unable to generate a comprehensive list of articles and books read during this time. Moving forward, I plan to keep an annotated reading list as a record of my reading during the course of an academic year. The primary purpose of creating an annotated reading list is so that I can better integrate research into my teaching practice. Thus, the reading list I create will be most useful if it not only includes a summary of the reading but also a section about how the reading applies to particular class(es) that I might be teaching.

Write an article on function transformations for a practitioner journal. Writing an article for MTLT (*Mathematics Teacher: Learning and Teaching PK-12*) has been on my bucket list for the last few years, and I have worked on an article about function transformations off and on during that time. I would like to focus my efforts during Fall 2021 on completing and submitting this article. Thus, I've selected this goal as the focus for my scholarly project proposal. More details, along with a timeline for completing this project, can be found in the Scholarship Project Proposal section of this document.

Within a similar vein of completing papers, I have two other papers that I presented at conferences in previous years that I would like to polish and submit for publication. I plan to finish these papers during Winter 2022.

Participate in and present at conferences. During the 21-22 academic year I am focusing my efforts on writing and submitting manuscripts for publication that I have presented at past conferences. I plan to attend at least one conference during the 21-22 academic year with an eye toward projects and ideas that I could present at future conferences. It's possible that some of my work helping to integrate pedagogy in the elementary mathematics course series might lead to some presentations at conferences in the coming years.

Citizenship

Self-assessment

As a new faculty member at BYU, my citizenship and service responsibilities have been minimal. Over the course of the year and in the coming academic year, I have and will

participate in two college committees (College Curriculum Committee and the College Career Committee) and one department committee (LOC/Curriculum/Program Committee). Participation in these committees has provided opportunities for me to become familiar with the curriculum process at BYU, the new GE program, preferences for writing course learning outcomes, and measurements used to assess program learning outcomes.

The PPAT is one of the measurements we use in our program that students must complete successfully during their student teaching experience. With respect to the PPAT, my work on the LOC/Curriculum/Program Committee dovetails with my teaching from last year and this coming academic year, specifically MTHED 377 and MTHED 476. As I've become more familiar with the PPAT, I've had opportunities to share perspectives and experiences in preparing students for this assessment with different communities across campus (e.g., IPC) and in the community (e.g., mentor teachers).

Participating in service opportunities within professional organizations outside of BYU is also a valuable aspect of my professional career. In the past, I have participated in both national and local organizations for mathematics teachers and mathematics teacher educators. I am currently serving as the secretary for the Utah Association of Mathematics Teacher Educators (UAMTE), which provides opportunities for me to develop relationships with fellow mathematics educators at institutions across the state. As COVID-19 restrictions continue to lift, I will have more opportunities to participate in similar organizations.

Developing relationships with new colleagues at a new institution during the COVID-19 era has been challenging and the majority of my goals focus on developing and strengthening these relationships. I've structured these goals around three different communities on which I would like to focus my efforts on building relationships: within my department, across the university, and in the community. I've included a combination of short and long term goals as an effort to develop a continuum of development in this area of growth.

Goals

Building relationships within my department:

- Participate in the department's faculty writing group (Fall 2021)
- Observe a class taught by another faculty member (monthly)
- Attend MEA (Mathematics Education Association) activities (monthly)

Building relationships across the university:

- Participate in the College of Physical and Mathematical Sciences female faculty luncheons (Fall 2021)
- Participate in a mentoring group for junior female faculty as organized by the Faculty Center (2021-2022)

Building relationships in the community:

- Continue to work with practicing teachers as they mentor our students (on going)
- Develop and implement workshops for future mentor teachers (long term)
- Attend local mathematics teacher conferences, such as UCTM (when available)
- Continue to participate in UAMTE and serve on the board as needed (currently serving as secretary)
- Cultivate relationships with part-time graduate students who are practicing teachers through MEA and other department social events (on going)

Teaching Development Project Proposal

MTHED 305: Basic Concepts of Mathematics

Context

MTHED 305 is the first course in a three-part series on teaching elementary mathematics. Prior to this academic year, MTHED 305 and MTHED 306 functioned as 3-credit hour mathematics content courses with ELED 447 serving as a math methods course for prospective elementary teachers. The credit hours for MTHED 305 and MTHED 306 have been reduced, which necessitates a realignment of content and alteration to course design. A group of faculty members from the Mathematics Education Department and the McKay School of Education who are stakeholders in the course have been meeting to realign the course content of the three courses to spread mathematical content and pedagogy throughout the series. MTHED 305 will have a mathematical content focus of whole number and whole number operation with a pedagogical theme of listening to students.

MTHED 305 uses a common curriculum with a course coordinator overseeing many of the details of the curriculum and syllabus. I will be working closely with the course coordinator, who happens to also be my mentor, as we design and teach this course during Fall 2021 semester. My specific contributions will include writing selected lesson plans, creating and gathering materials to use during those lessons, and developing homework assignments related to the lesson. Additionally, I am focusing on contributing pedagogical content (writing learning outcomes, daily learning goals, and ways of assessing these goals) to integrate with the mathematical content of the course. This focus aligns nicely with my overall teaching focus of improving my effectiveness as a teacher of blended math and pedagogy courses. As part of the redesign of the course, we are in the process of rewriting learning outcomes to reflect new foci and content of the course. In consultation with our department chair, we are drafting and piloting the new course organization this year so that we can submit revised course description and set of learning outcomes to the University Curriculum Counsel that are informed by our analysis of the effectiveness of this course redesign based on student performance on assessments and other learning metrics.

First Time Teaching Goals

These goals align with my general teaching goals to become more effective at integrating pedagogy with mathematics content, designing and evaluating assessments, and making course organization and structure more visible to students.

- Find and create videos for students to analyze to develop their pedagogical practice of listening and responding to students.
- Integrate a pedagogical component to each lesson and/or homework assignment, beginning with a pedagogical learning goal to bring focus to the lesson.
- Help students develop metacognitive skills of self-assessment using a formative completion survey associated with each daily homework assignment.
- Use daily learning goals as well as course learning outcomes to communicate learning expectations to make the organization of the course visible to students and facilitate student self-assessment skills.
- Revise learning outcomes to reflect new mathematical content focus and pedagogical theme of the course.
- Utilize mid-course and final course evaluations to inform course development

Learning-Centered Syllabus

MTHED 305, Section #, Fall 2021

ROOM, TIME

Instructor: Office Location: Office Phone: Office Hours: Email:

Required Texts

Children's Mathematics (2nd ed.) by Thomas Carpenter, et. al. (ISBN: 978-0-325-05287-8)

Course Description

MTHED 305 is designed to help you develop a deeper understanding of important elementary mathematics concepts, as well as to help you improve your ability to reason mathematically, communicate mathematical ideas, and solve mathematics problems. You will engage in mathematical exploration and problem solving related to topics you are likely to teach in elementary school, and you will communicate your thinking both orally and in writing. Because the mathematical knowledge you need as a teacher is deeply connected to the practice of teaching children, we will also examine how children think and learn about these topics. We will also consider how teaching practices can promote learning with understanding.

Course Purpose

Throughout this course you will become someone who

• approaches mathematics as a sense-making activity

so that you are better able to

listen to and make sense of chidrens' mathematical thinking

which will help you

• design learning experiences to help your students learn about number and operation.

Course Learning Outcomes

Mathematics. You will demonstrate a deep understanding of central concepts in elementary school mathematics related to whole numbers and whole number operations by **explaining key mathematical** relationships in core representations, applying canonical examples, and justifying the validity of alternative algorithms.

Mathematical Thinking. You will apply your understanding of mathematics as a sense-making activity to **solve problems using mathematical reasoning** and **reflect on your own learning** to make inferences about how children experience and understand mathematics.

Mathematical Inquiry. You will engage productively in mathematical inquiry, effectively communicate your mathematical ideas and reasoning with your peers, and reflect on the teaching practices modeled in the 305 classroom to make inferences about teaching practices that help children learn mathematics.

Analyzing Children's Thinking. You will analyze and probe student mathematical thinking by applying knowledge of common student strategies, representations, and problem types to design mathematics instruction targeted at developing children's conceptual understanding with procedural fluency.

Grading Scale

Your final grades for the course will be given as follows:

А	94.0% to 100%	В	84.0% to 87.9%	С	74.0% to 77.9%	D	64.0% to 67.9%
A-	91.0% to 93.9%	B-	81.0% to 83.9%	C-	71.0% to 73.9%	D-	61.0% to 63.9%
B+	88.0% to 90.9%	C+	78.0% to 80.9%	D+	68.0% to 70.9%	E	below 61%

Graded Components

Exams (60%)

Two take-home midterm exams and a cumulative final exam will be administered over the course of the semester. A retake or test revision option is available to students who earn an A- or lower on either midterm exam; details will be provided to you after the first exam. Retakes and revisions are not available for the final exam.

Homework and Readings (20%)

Homework is assigned every class period, to be completed before the beginning of the following class, and is scored for completion only. To receive full credit on a homework assignment, you will need to (1) compare your solutions to sample solutions provided on Learning Suite, (2) Revise your homework solutions as needed using an alternate color, (3) complete the formative feedback form on Learning Suite **at least 1 hour before the start of class**, and (4) bring your completed homework to class for instructor/peer review.

Throughout the semester we will be reading the book *Children's Mathematics*, and there will occasionally be additional readings posted on Learning Suite. The purpose of the readings is to help you think about the work of teaching mathematics to children in the context of the mathematics we are learning in class. Work related to readings will include class discussions and periodic assignments, which will be included in your homework grade.

Analyses of Children's Thinking (15%)

You will have the opportunity to observe elementary age children reasoning about the mathematics we learn about in class at three points during the semester, including **two in-person interviews** and a **classroom observation**. Each opportunity will involve advance preparation, and written analysis according to principles learned in class.

Professional Activities (5%)

Students enrolled in any mathematics education course are required to complete <u>two</u> professional activities related to teaching mathematics. The Mathematics Education Association (MEA) is BYU's student association for all students who expect to teach elementary or secondary mathematics, and is a student-led affiliate of the National Council of Teachers of Mathematics (NCTM). Most math education classes require attendance at these activities to fulfill the professional requirement. Other options for fulfilling the requirement can be found on Learning Suite, and I encourage you to fulfill the professional component in a way that is meaningful to you as a future teacher of elementary mathematics.

To receive credit, you will submit a description of what you did and what you learned for each of the two activities (1-2 paragraphs) on Learning Suite before the end of the semester. This description is required for <u>all</u> professional activities, including MEA activities.

Class Policies

Cell Phone, Laptop, and Tablet Use: Phones, laptops, tablets, etc. may be used in support of classroom activities (e.g., as a calculator or reference, or for taking notes). However, other uses are distracting and disruptive to your learning, and to the students around you. Unless they are being used for class purposes, phones, laptops, tablets, etc. should remain in your backpack during class time as a courtesy to the instructor and other students, and any necessary cell phone communication should take place outside the classroom.

Attendance: Attendance is crucial to success in this course, and excessive absences will affect your grade as follows:

- If you miss 4 or more class sessions, you will not be able to earn higher than an A-.
- If you miss **5 or more** class sessions, you will not be able to earn higher than a B.
- If you miss 6 or more class sessions, you will not be able to earn higher than a B-.
- If you miss **7** or more class sessions, you will not be able to earn higher than a C.
- If you miss 8 or more class sessions, you will not be able to earn higher than a C-.
- If you miss **9 or more** class sessions, you will be required to withdraw from the course or take an E.

Arriving more than 15 minutes late to class or leaving more than 15 minutes early will count as half an absence; missing more than half of class will count as a full absence. Nevertheless, if you are only able to come for a partial class, it will still be to your benefit to come to class for as much time as you are able.

Missed Class Sessions: If it is necessary for you to miss a class, please refer to the content section of our course on Learning Suite. A summary of the class, as well as any handouts, notes, and homework will be posted by the end of the day. You should first refer to this, and then make arrangements to speak to group members or to me about content you missed. *If you are absent (no matter the reason), you are still expected to complete homework and assignments by the due date.*

[Any COVID policies regarding illness, and whether remote attendance will be allowed and under what conditions, can also be specified here.]

Late Assignments: Without exception, late assignments will be accepted for half credit up to one week after the due date. Late assignments will not be accepted more than one week after the due date. Exams must be turned in on time to receive credit; exceptions will be made only on a case-by-case basis.

University Policies

Honor Code

In keeping with the principles of the BYU Honor Code, students are expected to be honest in all of their academic work. Academic honesty means, most fundamentally, that any work you present as your own must in fact be your own work and not that of another. Violations of this principle may result in a failing grade in the course and

additional disciplinary action by the university. Students are also expected to adhere to the Dress and Grooming Standards. Adherence demonstrates respect for yourself and others and ensures an effective learning and working environment. It is the university's expectation, and every instructor's expectation in class, that each student will abide by all Honor Code standards. Please call the Honor Code Office at 422-2847 if you have questions about those standards.

Preventing & Responding to Sexual Misconduct

Brigham Young University prohibits all forms of sexual harassment—including sexual assault, dating violence, domestic violence, and stalking on the basis of sex—by its personnel and students and in all its education programs or activities. University policy requires all faculty members to promptly report incidents of sexual harassment that come to their attention in any way and encourages reports by students who experience or become aware of sexual harassment. Incidents should be reported to the Title IX Coordinator at <u>t9coordinator@byu.edu</u> or (801) 422-8692 or 1085 WSC. Reports may also be submitted online at <u>https://titleix.byu.edu/report or 1-888-238-1062</u> (24-hours a day). BYU offers a number of resources and services for those affected by sexual harassment, including the university's confidential Sexual Assault Survivor Advocate. Additional information about sexual harassment, the university's Sexual Harassment Policy, reporting requirements, and resources can be found in the University Catalog, by visiting <u>http://titleix.byu.edu</u>, or by contacting the university's Title IX Coordinator.

Student Disability

Brigham Young University is committed to providing a working and learning atmosphere that reasonably accommodates qualified persons with disabilities. A disability is a physical or mental impairment that substantially limits one or more major life activities. Whether an impairment is substantially limiting depends on its nature and severity, its duration or expected duration, and its permanent or expected permanent or long-term impact. Examples include vision or hearing impairments, physical disabilities, chronic illnesses, emotional disorders (e.g., depression, anxiety), learning disorders, and attention disorders (e.g., ADHD). If you have a disability which impairs your ability to complete this course successfully, please contact the University Accessibility Center (UAC), 2170 WSC or 801-422-2767 to request a reasonable accommodation. The UAC can also assess students for learning, attention, and emotional concerns. If you feel you have been unlawfully discriminated against on the basis of disability, please contact the Equal Opportunity Office at 801-422-5895, <u>eo_manager@byu.edu</u>, or visit https://hrs.byu.edu/egual-opportunity for help.

Date	Торіс	Due				
UNIT 1: Early Number and Operations						
Pedagogical Theme: Listening to Students						
Tues. 8/31	Introduction to the Class					
Thurs., 9/2	Early Numerical Abilities					
Tues., 9/7	Counting and Early Arithmetic					
Thurs., 9/9	Early Arithmetic and Representations					
Tues., 9/14	Addition and Subtraction Problem Types					
Thurs., 9/16	Addition and Subtraction Strategies; Listening to Children	Draft of Interview 1				
Tues., 9/21	Early Algebra					
Thurs., 9/23	School Visit for Interview 1					
Tues., 9/28	Debrief Interview 1	Analysis of Children's Thinking				
	Exam 1 Review	(Interview 1 Project)				
UNIT 2: Multiplication, Division, and Fractions						
Pedagogical Theme: Asking Good Questions						
Thurs., 9/30	Solution Strategies for Multiplication and Division	Exam 1 Due				

Anticipated Schedule

Tues., 10/5	Measurement, Division, Partitive Division, and	
	Multiplication; Dealing with Remainders	
Thurs., 10/7	Algebraic Structure: Commutativity and Distributive	
	Property	
Tues., 10/12	Other Multiplication Problem Types	Exam 1 Revisions
Thurs., 10/14	Equal Sharing and Fractions	
Tues., 10/19	Unit Fractions: Iterating and Partitioning	
Thurs., 10/21	Comparing Fractions and Simple Equivalence	Draft of Interview 2
Tues., 10/26	Interviewing Children	
Thurs., 10/28	School Visit for Interview 2	
Tues., 11/2	Debrief Interview 2	Analysis of Children's Thinking
	Exam 2 Review	(Interview 2 Project)
	UNIT 3: Multidigit Arithmetic	
	Pedagogical Theme: Orienting Students to Each O	thers' Ideas
Thurs., 11/4	Strategies for Multidigit Addition and Subtraction	Exam 2 Due
Tues., 11/9	Videos: Children's Strategies for Multidigit Arithmetic	
Thurs., 11/11	What is an Algorithm? Invented Algorithms and Alternate	
	Algorithms	
Tues., 11/16	Making Sense of the Standard Addition/Subtraction	Exam 2 Revisions
	Algorithm	
Thurs., 11/18	Strategies for Multidigit Multiplication and Division	
Tues., 11/30	Sense-Making Algorithms for Multiplication	Classroom Observation Checkpoint
Thurs., 12/2	Sense-Making Algorithms for Division	
Tues., 12/7	School Visit: Whole Class Instruction	
Thurs., 12/9	Debrief School Visit 3	Analysis of Children's Thinking
	Final Exam Review	(Classroom Observation Paper)



Scholarship Project Proposal

Although publishing articles is not a required expectation, writing an article for a practitioner journal aligns nicely with my job expectations as a mathematics teacher educator at BYU. While working as a high school mathematics teacher, I had many opportunities to discuss mathematics with my colleagues. Function transformations were a focus of many of our conversations as we sought ways to help our students develop a rich understanding of transformations which underpin much of the secondary mathematics curriculum. These conversations, along with questions from students, prompted me to dig deeper into the mathematics involved in function transformations and how to help students understand function transformations from multiple perspectives. I've drafted different versions of a manuscript for MTLT (*Mathematics Teacher: Learning & Teaching PK-12*), but never finished the manuscript with the polishing needed for submission. I plan to finish and submit the manuscript during the Fall 2021 semester. The anticipated timeline below details the steps needed to complete this project.

- 1. Identify upcoming conferences to present this paper (August 27)
- 2. Review recent relevant literature (September 3)
- 3. Revise outline (September 10)
- 4. Draft mathematical understandings section (September 17)
- 5. Revise and develop technological components for online access (September 24)
- 6. Incorporate relevant student examples (October 1)
- 7. Share with colleagues at Penn State & revise (October 15)
- 8. Share with Faculty Writing Group for feedback & revise (October 31)
- 9. Polishing time (November 15)
- 10. Submit to MTLT (December 1)

Citizenship Development Project Proposal

Developing relationships with new colleagues at a new institution during the COVID-19 era has been challenging and the majority of my goals focus on developing and strengthening these relationships. I've structured these goals around three different communities on which I would like to focus my efforts on building relationships: within my department, across the university, and in the community.

I've included a combination of short and long term goals as an effort to develop a continuum of development in this area of growth. The italicized goals are specific to this project and will be measured during the Fall 2021 semester. In recognition that not all of these activities may fit within my schedule depending on student teaching observations for a given week, the goals are prioritized in descending order of importance and focus for this citizenship development project.

Goals

Building relationships within my department:

- Participate in the department's faculty writing group (Fall 2021)
- Observe a class taught by another faculty member (monthly)
- Attend MEA (Mathematics Education Association) activities (monthly)

Building relationships across the university:

- Participate in a mentoring group for junior female faculty as organized by the *Faculty Center* (2021-2022)
- Participate in the College of Physical and Mathematical Sciences female faculty luncheons (Fall 2021)

Building relationships in the community:

- Continue to work with practicing teachers as they mentor our students (on going)
- Cultivate relationships with part-time graduate students who are practicing teachers through MEA and other department social events (on going)
- Continue to participate in UAMTE and serve on the board as needed (currently serving as secretary)
- Develop and implement workshops for future mentor teachers (long term)
- Attend local mathematics teacher conferences, such as UCTM (when available)