

Our Story

Prologue

*I absolutely love this program and I will never stop talking about my positive experience!!
Go Wolfpack, Go Teaching!*

Elementary Education at NC State University is the only **SteM-focused Elementary School Teacher Preparation Program** in our state and one of only a handful of such programs that exist across the nation. We use a unique acronym (SteM) to suggest that the program emphasizes science and math education, and covers aspects of technology and engineering teaching to a lesser degree.

Our history is rather short. In October of 2004, the Dean and faculty of our College of Education voted to develop an Elementary Education licensure program to help combat the persistent teaching shortages in our state. With that decision, 2005 saw intensive work to design and develop the program. In February of 2006, the program received approval from the North Carolina General Assembly. In the fall of that same year, Elementary Education opened its doors, and our classes were filled. On May 10th, 2008, (local) history was made when the 1st **Bachelor of Science in Elementary Education** at NC State was conferred upon 27, fully-licensed elementary school teachers. Since that time our program has grown and evolved but has remained steadfast to its original mission to:

Develop elementary school teacher-leaders who have deep content knowledge in all elementary disciplines, a strong working knowledge of effective pedagogy, expertise in STEM-focused instruction, and a commitment to equity and social justice.

In this publication, we describe the major tenets or features of our **Elementary Education Teacher Preparation Program** that serve to make our program unique and (we believe) help us actualize our mission. We do so through sharing our 6 “**Ps**” of success:

- **P**rogrammatic Structure
- **P**urposeful Field Placements
- **P**romotion of Equity
- **P**erformance in SteM
- **P**ragmatic Improvements, and
- **P**roximity

The purpose of this publication is two-fold. First, it is intended to help external stakeholders gain a better sense of the work we are doing to prepare highly effective elementary school teachers in our state. Second, we hope that this document serves as a set of “design principles” for others looking to establish or improve their own teacher preparation programs.

Programmatic Structure

This program has given me so much in the professors, the classes, the assignments, and the field placements that I have applied to my student teaching semester and can apply to my future classroom.

In this section, we describe the programmatic structure of our Elementary Education (Grades K-6) program. We focus on our teacher candidates’ **pre-professional** (Freshman- and Sophomore-year) and **professional** (Junior- and Senior-year) coursework, and opportunities beyond and across courses that serve to make our program unique. We use the term **teacher candidate** throughout to refer to the undergraduate students enrolled in our program.

Pre-professional coursework

During their Freshman and Sophomore years, our candidates take a variety of STEM-focused and teacher-education courses that build their content knowledge (see Figure 1). A unique aspect of this pre-professional coursework is that our candidates are required to take 12 hours of Mathematics content and 11 hours of Science content coursework. These courses include a two semester sequence of *Calculus for Elementary Education* and a *Conceptual Physics* course for Elementary Education. These courses were co-designed by faculty in the Mathematics and Physics Departments on campus and STEM-focused faculty in our Elementary Education program. Candidates also complete an engineering, technology, and design course that might include graphic communication, science technology and society, or educational technology. For their humanities and social sciences requirements, many of our candidates take a linguistics course to both build their content knowledge in this area and to provide necessary understandings should they choose to pursue English-As-A-Second-Language (ESL) add-on licensure. We also direct our candidates into pre-professional courses that are important to teaching and learning, including an educational psychology and developmental psychology course, a sociology course focusing on family structures, and a course that builds our candidates’ understandings of language and culture.

Professional coursework

At the beginning of their Junior year, our candidates are assigned to an Academic Advisor who is a tenured faculty member in our program. All of the candidates are now enrolled (almost exclusively) in courses taught by our program faculty until completion. Students (program is capped at 60 students) are randomly assigned to one of the two cohorts before the start of each semester during their professional coursework. They complete their coursework and fieldwork (described in the “Purposeful Field Placements” section) for that particular semester together. Both cohorts ultimately graduate at the same time point.

There are multiple, unique aspects of our candidates' professional coursework. First, the majority of our core courses (i.e., mathematics methods, science methods, and reading methods) are structured such that the first semester of Junior-year courses focus on teaching and learning in Grades K-2 and the second semester focuses on Grades 3-5 (with field placement experiences that mirror the coursework such that candidates work in Grades K-2 classrooms during their first semester in their Junior year and in Grades 3-5 classrooms during their second semester in their Junior year). In so doing, our candidates gain both breadth and depth in terms of their declarative (knowing "what"), procedural (knowing "how"), and conditional (knowing how their knowledge applies to a given context or "condition") knowledges.

Second, all of our courses are technology-enriched. In each course, our candidates learn about and incorporate digital tools that they will use as educators. Using the *NC Digital Learning Competencies for Educators* (<http://www.dpi.state.nc.us/dtl/digitallearningnc/competencies/>) as a guide, all instructors ensure that our candidates are adept at using digital tools within and across subject areas for various administrative, assessment, and pedagogical purposes.

Third, our candidates engage in a number of unique projects and experiences throughout their professional coursework. For example, our candidates engage in a cross-course project during the first semester of the Junior year that helps them learn how develop a lesson sequence that integrates mathematics, science, and engineering design in their instruction.

In this same semester, our candidates implement a tutoring project weekly throughout the semester either in their field placements or in the afterschool programs of local community-based organizations that serve children who live in poverty and who often are English learners. During the second semester of their Junior year, our candidates engage in a cross-course project that integrates science, mathematics, social studies, and reading by focusing on a common practice derived from national and state standards.

Finally, our program designed a set of practices and routines (see Figure 2) that we, as instructors, discuss and model throughout our methods courses. Derived from the Elementary Education Program at the University of Michigan "high-leverage practices" (see <http://www.soe.umich.edu/academics/bachelors/elementary-teacher-education/high-leverage-practices/>) and other evidence-based principles, our candidates are able to see these practices and routines in action in our methods courses and then implement them in their field-placement classrooms.

Elementary Education Coursework

Pre-Professional Coursework	Professional Coursework
Introduction to Education Courses (2)	Grades K-2 and Grades 3-5 Science Methods Courses
Academic Writing and Research Course	Grades K-2 and Grades 3-5 Mathematics Methods Courses
Mathematics Courses (4)	Grades K-2 and Grades 3-5 Reading Methods Course
Science Courses (4)	Children Design, Create, and Invent (Engineering) Course
Engineering, Technology, or Design Course	Language Arts Methods Course
Humanities and Social Sciences Courses (6)	Social Studies Methods Course
General Education Courses (5)	Instructional Seminars (Diversity, Classroom Management, Student Teaching, and edTPA*)
Foreign Language Coursework	Special Education Methods Course
	Arts Integration Course
	Classroom Assessment Course
	Student Teaching

Figure 1. Elementary Education Pre-Professional and Professional Coursework

*edTPA is a performance-based assessment required for state teaching licensure in Elementary Education.

Essential Practices and Routines

<p>1. Attend to Equity</p> <ul style="list-style-type: none">• Vary instruction based on knowledge of diverse learners• Provide all students with opportunities to access and engage in tasks
<p>2. Promote Collaboration</p> <ul style="list-style-type: none">• Design learning environments that enable student collaboration• Communicate with other stakeholders—colleagues, parents, and members of the community—about classroom activities
<p>3. Align Tasks with Learning Goals</p> <ul style="list-style-type: none">• Select tasks in a manner that provides coherence between what you want students to learn and what you ask them to do
<p>4. Plan and Reflect</p> <ul style="list-style-type: none">• Anticipate student thinking and plan how you will respond• Compare what actually happened during the lesson to what you thought was going to happen
<p>5. Prime students for engagement</p> <ul style="list-style-type: none">• Draw attention to relevance of tasks• Provide access points without reducing the cognitive demand of the task
<p>6. Orchestrate Discussions</p> <ul style="list-style-type: none">• Ask questions to elicit, assess, and connect student learning
<p>7. Assess for Success</p> <ul style="list-style-type: none">• Make instructional decisions based on assessment data

Figure 2. Our Essential Practices & Routines

Purposeful Field Placements

I love our program and think it has overall prepared me well to be a teacher! I think our program is unique in that we have a lot of time in the classroom and I see that as the most valuable thing that has prepared me for the future!

Extensive fieldwork aligned to university-based coursework (just described) is crucial component of our program. We like to say that our teacher candidates are “*in the field early and often*”. In conjunction with their professional coursework, our candidates are placed in a variety of diverse (including at least one placement in a high-poverty, “low-performing” school) elementary school classrooms throughout their Sophomore, Junior, and Senior years. We call these schools our “partner” schools, as faculty provide professional development to these schools and we communicate regularly with the administrators and educators in these schools.

Our candidate's first experience in the elementary schools occurs in the spring semester of their Sophomore year when they are placed in K-5 classrooms of local, partner schools within a 30 mile radius of campus. The sophomore field experience is directly linked to their *Introduction to Elementary Education* seminar course. The candidates (in pairs) spend 3 half days and 1 full day (totaling 15 hours) across the semester in their classrooms, where they observe and assist with instruction.

During the fall semester of the Junior year, the four methods courses (mathematics, science, engineering, and reading) focus on K-2 instruction, so students are purposefully placed in K-2 classrooms to mirror the target grade levels of their on-campus courses. Then, during the spring semester of this same year, when the methods courses (mathematics, science, assessment, and reading) focus on upper elementary instruction, candidates are placed in Grades 3-5 classrooms. Candidates, in a new pairing, visit for a half day once a week but now also complete two **Redirect weeks**. During these two weeks, our candidates do not come to campus for any of their university-based courses but rather their effort is redirected to 4 full days (Monday-Thursday) in the field. Each candidate is required to have one formal observation completed by their mentor teacher. They also complete **field-based assignments** in each of their courses. We employ a **University Liaison** who visits them regularly and acts as a conduit between the school/classroom and the program. Candidates average just over 180 hours in the field during their Junior year.

In their Senior year, our candidates enter into a **year-long field placement** in their Grades K-5 student teaching classroom and complete their final semester of methods courses in the fall of this year. Our candidates are in their classroom before the students even arrive in August (attending meetings and helping their Mentor Teacher set up the classroom). They are there for the first few days of the school year and then throughout the fall semester (125 hours). They follow the same half day once a week and two **Redirect weeks**. In the spring semester, they are complete their full-time (15 weeks/600 hours) student teaching in the same classroom where they have already established strong working relationships with both their students and their mentor teacher.

During this senior year, the candidates are supervised by the same **university supervisor** throughout both the fall and spring semesters. The preservice teachers are formally observed by the university supervisor a total of four times (twice in the fall, twice in the spring) as well as formally observed by the mentor teacher a minimum of four times (twice in the fall and twice in the spring). The university supervisors, most of whom have been supervisors for more than 5 years, are considered an integral part of the program, attending monthly program meetings to discuss the candidates' performance in the field as compared to their performance in the methods courses with the faculty instructors.

The university supervisors sometimes observe and discuss lessons collaboratively with program faculty to ensure that everyone has a common vision of high-quality instruction. Additionally, the university supervisors provide valuable input during the deliberate matching of student teachers with mentor teachers. Table 1 is a summary of our fieldwork component. Upon completion of our program, the teacher candidates will have accumulated more than 900 hours in the field, with placements in both upper and lower grade elementary classrooms at four different schools, thus providing **diverse and varied field experiences**.

Table 1. Summary of our Fieldwork

Undergraduate	Sophomore (Spring)	Junior (Fall)	Junior (Spring)	Senior (Fall)	Senior (Spring)
Frequency of field visits	3 half days + 1 full day	½ day, once a week + 2 Redirect Weeks (full days, Mon-Thurs)	½ day, once a week + 2 Redirect Weeks (full days, Mon-Thurs)	½ day, once a week + 3 Redirect Weeks (full days, Mon-Thurs)	15 weeks of full-time student teaching
Total hours in field (estimated)	15 hours	92 hours	92 hours	127 hours	600 hours
Student placement	Visit in pairs	Visit in pairs	Visit in pairs	Year-long, individual placement	Year-long, individual placement
Grade-level focus	K-5	K-2	3-5	K-5, based upon student request	K-5, based upon student request
Formal observation	No formal observations	1 formal observation for each student	1 formal observation for each student	2 formal observations each semester (4 total)	2 formal observations each semester (4 total)
Formal assessment	No formal assessment	1 formal assessment for each student (mid-term & final)	1 formal assessment for each student (mid-term & final)	Student teaching scoring rubric Certification of Capacity form	Student teaching scoring rubric Certification of Capacity form
Supervision	ELM 250 instructor	ELM Liaison visits semi- regularly	ELM Liaison visits semi- regularly	ELM University Supervisor visits regularly	ELM University Supervisor visits weekly

Promotion of Equity

I had an amazing time in the program here. I feel like although I don't know everything about teaching (and will always be learning), I am prepared to go into the workforce and be a loving and inclusive teacher.

We, as a teacher preparation program, are committed to promoting equity. A key part of our mission is to develop elementary-school teachers who have a commitment to equity and social justice. Furthermore, our program's **Seven Essential Teaching Practices and Routines** (see "Programmatic Structure" section) are infused into all of our professional courses, the first of which is to **attend to equity**. In our effort to attend to equity, our program varies instruction to ensure equitable access and engagement for all candidates, and implements curriculum that reflects multiple perspectives, identities, and experiences. We expect each teacher candidate who graduates from our program to understand, respect, and value their own students' individual and cultural identities and experiences. Therefore, in our courses, we model strengths-based language and hold students to high expectations. In doing so, we embolden our teacher candidates to promote equity within their own classrooms by incorporating their students' cultures and funds of knowledge into the curriculum.

In promoting equity within our program, there are several philosophies that are foundational to our program and courses. Specifically, our teacher education candidates are actively engaged in learning about the following philosophies through the program's coursework that includes:

- *Equity*: We teach our candidates about the difference between equality and equity (i.e., the understanding that each student has individual strengths and needs, so treating all students "the same" should not be the goal of our instruction and interactions with students). In particular, our candidates explore the differences between these concepts in the *Introduction to Elementary Education* and *Diversity* seminar in their readings about systemic inequities in schools. Furthermore, our candidates learn about opportunity gaps that are the result of inequitable distribution of resources and how teachers can still cultivate equitably accessible, safe, and supportive learning environments.
- *Growth Mindset*: We teach our candidates that individuals can develop their abilities through dedication and perseverance instead of believing that intelligence is a fixed trait. In the mathematics methods courses, we address the problematic nature of early identification of talent, and how this often leads to fixed mindset grouping practices. Additionally, we discuss how conceptually driven tasks are appropriate for all students. We also ensure our students use person-first language (e.g., students with learning disabilities versus learning-disabled students) and discuss their own students based on observable actions.
- *Asset-Based Thinking*: We guide our candidates to reject deficit thinking that explains genetic or cultural differences as reasons for the lack of academic achievement. Instead,

we focus on asset-based thinking that demonstrates how teachers' attitudes, behaviors, and practices contribute to student successes. Our field-based course assignments are structured to help our teacher candidates use strengths-based language to describe students, maintain high expectations for all students, and bring students' cultural assets into the learning environment. For instance, our students learn about the Responsive Classroom approach (e.g., Charney, 2002), a structure that emphasizes developing the whole child--including their social, emotional, cultural, and academic competencies. In the science methods courses, we take on a strengths-based approach that leverages the funds of knowledge that students bring into the classroom to underscore that the students' ideas are useful and appreciated.

- *Culturally Relevant Pedagogy:* We encourage our candidates to utilize culturally relevant pedagogy, which incorporates the principles of cultural competence, high expectations for all students, and critical consciousness. We believe every child's individual and cultural identities should be valued, supported, and empowered by the teacher's instruction. Furthermore, a strong teacher, student, and family partnership should be established to promote student learning. In one of the reading methods courses, our candidates implement a tutoring project either in their field placements or in the afterschool programs of local community-based organizations that serve children who live in poverty and who often are English learners.
- *Social Justice:* We empower our candidates to be agents of social change who reject deficit perspectives, recognize structural inequities, and work toward equitable solutions. Furthermore, we model social justice as an approach that embodies treating everyone with fairness, respect, and dignity. We discuss how racism, discrimination, prejudice, oppression, and biases are unacceptable. In doing so, we engage our candidates in transformative actions throughout our courses. For instance, in the social studies methods course, our students identify a current social issue in their field-placement school or school community and determine a plan of action to promote equitable solutions by rejecting deficit perspectives and recognizing structural inequities.

We are dedicated to promoting equity throughout our program to help ensure that these philosophies are not only implemented in our courses, but also in our graduates' elementary school classrooms. It is our vision that our graduates will be educators who ensure equitable access and engagement for every student by providing high-quality instruction that reflects diversity, respect, inclusion, and equitable learning opportunities.

Performance in SteM

Background

Again, our Elementary Education teacher preparation program is a SteM-focused program in that teacher candidates **take more** mathematics, science, and engineering courses, both content and methods, than is typical across the U.S. As outlined in the section on “Programmatic Structure”, during their freshman and sophomore years, the candidates take nine courses consisting of four math, four science, and one engineering design course. These content courses include two courses that were designed specifically for elementary school teachers. First, candidates take a six-credit, two-semester Calculus course that was developed through a grant from the National Science Foundation. The course focuses on developing deep, conceptual knowledge of content relevant to their work as elementary school teachers (e.g., rational numbers, measurement) and modeling high-quality pedagogical practices (e.g., classroom discourse, use of multiple mathematical representations). Second, candidates complete a Physics course in which they engage in applying physics to everyday phenomena and experiences through demonstrations and discovery-based labs.

During their junior year, teacher candidates complete two mathematics methods courses, two science methods course, and one engineering methods course. Within each discipline, instructors collaborate regularly and work to ensure the courses cohere and progress logically. For example, the mathematics methods instructors discuss how their two courses complement and build on each other to meet the desired outcomes. Additionally, all methods instructors work across disciplines to provide relevant and high-quality, cross-disciplinary experiences for the teacher candidates through implementing cross-course projects and explicitly connecting pedagogical practices that transcend disciplines.

One monitor and measure of the program’s effectiveness has been data analyzed and displayed on the UNC Educator Quality Dashboard:

(<http://eqdashboard.northcarolina.edu/performance-employment/>) .

Specifically, we have utilized the dashboard to monitor the achievement of elementary students’ in our graduates’ classrooms. On the dashboard, there is data about the “performance and employment” of graduates of institutions of higher education in the UNC system. The “value-added models” available on the dashboard indicate that elementary children in our graduates’ classrooms score statistically higher on mathematics achievement tests than children in all other classrooms. Furthermore, the “teacher evaluation ratings” on the dashboard indicate that our graduates outperform all others on all five standards of teacher performance.

Faculty Awarded National Science Foundation Grant to Study the Program

In 2011, researchers in the Elementary Education program were awarded a \$3.1 million grant from the National Science Foundation (DRK-12; Award #1118894) to engage in a study called Project ATOMS (Accomplished Elementary Teachers of Mathematics and Science; <https://projectatoms.wordpress.ncsu.edu/>). Project ATOMS is a longitudinal, in-depth study to

examine the impact and outcomes of the SteM-focused elementary school teacher preparation program. Over the course of the study, researchers have examined how the teacher candidates develop during the program and into their early years of teaching in their science and mathematics content knowledge, pedagogical content knowledge, beliefs, and teaching practices. This examination has included comparing graduates of the program to graduates of other teacher preparation program in their knowledge, beliefs, and practices.

Part of the work of Project ATOMS was identifying the “theory of action” of the program. That is, researchers identified the key desired outcomes of the program for math and science in particular. The process of identifying the outcomes was conducted systematically and rigorously through qualitative analyses of interviews with methods instructors by an external researcher. Each theory of action includes the experiences in the program and the knowledge, attitudes, dispositions, and beliefs that the program aims for candidates to acquire through those experiences. It also shows the professional practices, displayed in Figure 3, that candidates are expected to demonstrate when they are classroom teachers due to their experiences in the program.

ATOMS’ Theory of Action: Professional Practices	
Mathematics	Science
<u>Conceptual Understanding:</u> Articulate goals that are aligned with students developing conceptual understanding of mathematics	<u>Specialized Science Knowledge:</u> reflects what is known about the nature of science & the societal importance of science literacy, as well as the teacher’s content knowledge in life and physical science.
<u>Tasks:</u> Select tasks that are aligned with mathematics learning goals	<u>Sound Strategies:</u> Instruction incorporates the Essential Features of Inquiry and the Science Practices, carefully selected & developmentally appropriate tasks, science discourse, curricular integration, and research-based teaching strategies
<u>Mindsets:</u> Acknowledge students’ mathematical assets, experiences, and effort rather than ability	<u>Sophistication with Student Thinking:</u> Instruction uncovers and leverages students’ ideas (both naïve conceptions/everyday ideas and correct thinking) and includes productive questions
<u>Representations:</u> Use mathematical representations appropriate for a concept and context, and make connections among representations	<u>Robust Assessment Development:</u> Instruction strikes a balance between formative and summative assessments, includes multiple types of assessment, and utilizes science notebooks/journals
<u>Discourse:</u> Facilitate students’ engagement in mathematics discourse	<u>Attitudes/Beliefs:</u> Teacher actually teaches science, learns science along with students, tackles complex science topics, and is a critical consumer of resources/materials
<u>Mathematical Language:</u> Communicate effectively with students using mathematically accurate and precise language	
<u>Professional Communication:</u> Communicate effectively with parents and team members, focusing on what students understand about mathematics and avoiding deficit language.	
<u>Teaching Knowledge:</u> Continue to learn about mathematics teaching practices	

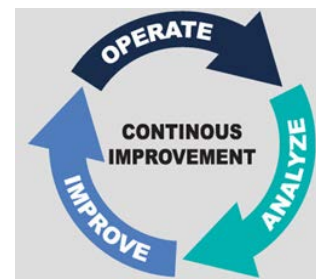
Figure 3. Elementary Education Teacher Professional Practices from ATOMS’ Theory of Action

The Project ATOMS research team conducted comparative analyses to identify how the program is making an impact. The team analyzed quantitative data to determine how graduates of the program are different than graduates of other programs, controlling for relevant teacher-level and school-level variables. Findings indicate that graduates of the program facilitate “math talk” in their classrooms more frequently and the “math talk” is of higher quality. The team also found that graduates of the program demonstrate higher quality instruction in how they structure mathematics lessons to be coherent and how they utilize mathematical representations. At the end of the first year of teaching, graduates of the program demonstrated deeper knowledge of mathematics as it relates to teaching. They also expressed higher confidence in their abilities to teach math and more favorable attitudes toward the discipline of mathematics. Finally, graduates of the program had stronger beliefs in their abilities to influence their students’ learning outcomes in science compared to graduates of other programs, and they expressed beliefs about effective science instruction that are more aligned with research-based best practices.

Pragmatic Improvements

kaizen (改善)

The word *kaizen* (改善) is derived from two Japanese words: Kai (improvement) and Zen (good), which has been loosely translated to “continuous improvement” (Imai, 1986). We attribute much of our program’s success to our commitment to making pragmatic improvements. Throughout its life, our program has been employing a **continuous improvement** approach where improvements have come from **incremental changes** rather than radical modifications. We feel that this tactic allows us to maintain what is working well and to be nimble enough to respond quickly to necessary changes as they arise. Key mechanisms for this continuous improvement process are systematic and ongoing opportunities for programmatic feedback from our Teacher Candidates and recurrent input from our faculty.



Opportunities for Feedback

Many of our best ideas for improvement have come from the candidates themselves. For example, at the end of both semesters of our candidates’ **Junior year**, they complete a survey that garners feedback regarding their fieldwork experiences. This survey asks our candidates to:

- *Describe the overall school culture/climate of their host school*
- *Describe the classroom community and classroom management system of their host classroom*
- *Share their perspectives on key strengths of their mentor teacher*
- *Suggest areas where they felt that they could have received better mentoring and support*

This survey also *zeros in on the instruction that they observed and took part in* during their fieldwork with questions that ask them to:

- *Rate the quality of instruction in each of the core content areas (reading, math, science, and social studies) and explain their ratings*
- *Explain how the instruction aligned with and differed from what they learned during their on-campus coursework*

We routinely use the results of these surveys to take stock of our fieldwork sites and mentor teachers with whom we place our candidates. These data also help us as individual instructors look to refine our courses to help ensure solid alignment with what our candidates are experiencing in the field.

At the end of our candidates' **Senior year**, we host what we call a "**Reconnect Day**." This day takes place after our candidates have completed their full-time student teaching experience. The day includes a *Student Support Specialist Panel* (e.g. school counselor, school psychologist, special education teachers) and a *Beginning Teacher Panel* of our recent graduates. A critical part of this day is to provide our candidates the opportunity to offer feedback on their student teaching experiences; these questions mirror the ones given to the Juniors (described above) and the findings are used in the same way (to continually improve our fieldwork placements).

A separate survey focuses on programmatic feedback. In this survey, candidates are asked to:

- *Describe what they think the MOST and LEAST important NC State experiences/courses for helping them learn how to teach well were, and to*
- *Share the three things they liked MOST and LEAST about the program.*

Following the completion of the survey, we engage in a discussion about specific ideas for program improvement. This immediate feedback from our graduating Seniors has led to numerous incremental yet incredibly important changes. Some have come in the form of adjustments to the timing of our professional education courses. For example, we moved our "Diversity Course" from the fall of Senior year to the fall of Junior Year (as our candidates enter the full slate of our courses) as a way to introduce them to the critical issues outlined in the "Promoting Equity" section of this publication.

We also moved our "Classroom Management" course later in their program (Fall Senior year) to coincide with the start of their full-year, student teaching experience. Another change that came directly from the candidates was the timeline for completion of their edTPA portfolio so that it would be completed, submitted, and scored during Fall/Winter so that they were not having to work on this rather daunting task during their full-time Student Teaching in the Spring semester.

Faculty Input

Another trigger for incremental changes that feed our continuous improvement is our **monthly program meetings**. At these meetings, we discuss issues and concerns related to our students and their progress and experiences in our program. For example, we noticed that many of our Seniors were entering the spring semester missing courses (beyond our program courses) that were required for graduation. Upon reflection, we learned that our academic advising process was somewhat haphazard and lacked some consistency. In response to this concern, we developed and instituted an **advising guide**, which ensures that all of our teacher candidates meet with their advisor (who are all Program faculty) at least twice an academic year, and that, during these face-to-face meetings, the same procedures are followed with each candidate.

As another example, several years ago, we noticed an uptick in the number of students who were exhibiting unprofessional behaviors (either in the field or in our on-campus courses) that were impacting their performance negatively and sometimes even jeopardizing their progression in our program. As a program, we developed a rather robust, multi-step, **professional dispositions support process** (Figure 4). As a group, we worked hard to first operationalize “professional dispositions” so that we had a common understanding of when to initiate the process. These professional dispositions include: demonstrating punctuality; meeting required deadlines (for assignments, lesson plans, and observation forms); having positive and productive interactions with instructors, peers, parents, students, administrators; being receptive to constructive feedback; making necessary changes to improve performance; exhibiting a commitment to equity and social justice; and maintaining a classroom environment that is inviting, respectful, supportive, and inclusive. We stress to our candidates that this process is supportive in nature (not punitive) and that it has “off-ramps” at the various levels when necessary improvements have been made.



Figure 4. Our professional dispositions support process

Propinquity

Pro-pin-qui-ty (noun)

- 1. the state of being close to someone or something; proximity.*
- 2. close kinship.*

Perhaps the greatest strength of our program can be expressed through the concept of **propinquity**, which is played out in a variety of ways throughout our program. First, we, as faculty in the Elementary Education program, respect, care for, and appreciate one another greatly. All faculty in our program, be they new faculty, teaching faculty, tenured faculty, supervisors, or lecturers, are valued for the contributions they make and the expertise they offer. We operate from an ethos of caring, and this ethos permeates our program and serves as the foundation of our interactions with one another and our teacher candidates in our work.

We suspect we may be somewhat unique in that our program meetings include not only program faculty, but also program supervisors and adjuncts. In so doing, we are able to gain multiple perspectives on our candidates work both in the university setting and in their field-placement classrooms. We discuss candidates' strengths and concerns from multiple perspectives, allowing us to better understand our candidates holistically.

The program is also deliberate in making sure we do our best to keep the same "corps" of university supervisors every year in "their same schools". We believe that this sort of "continuity of care" is critical while in the field. This also means that our university supervisors are able to build productive relationships with the administration and faculty of each partner school.

Our candidates are our focus. We know our candidates not only as undergraduate students and future teachers, but as people. We support our candidates both in and outside of our classroom walls during our advising appointments, impromptu office conversations, and during lunch breaks and extracurricular events. Our candidates know and appreciate how much we care about them. We relish the opportunity to model for our candidates how we want them to interact with their future students.

As a transfer student, I felt immediately welcomed and a part of a community. I feel very prepared to teach because of the professors and the courses that I took and the experiences I had through being a student in the Elementary Education program.

Finally, our candidates develop a bond and trust with one another that often goes beyond their graduation from our program. Our candidates respect and support one another, which serves as a key factor in their success. In the words of two of our graduates:

Definitely a great program. I feel like I have learned so much from this program and I am really thankful for it. It changed my perspective of teaching/ teachers and I will be forever grateful for this program. There are so many interesting things I have learned and great relationships that I have built with both friends and professors.

I have loved every second in this program. I love the community among my colleagues and I love the support we receive from our professors.

Postscript

Through our Elementary Education program's **P**rogrammatic structure, **P**urposeful field Placements, **P**romotion of equity, **P**erformance in SteM, **P**ragmatic improvements, and **P**roximity, we have created unique and significant experiences that hold great meaning and lasting effects on our future teachers.

We end this document with the words of one of our graduates:

My time in the program is something I will always remember and cherish. I feel so lucky to have had such wonderful teachers guiding me every step of the way in order to become the best teacher I can be!

References

- Charney, R. (2002). *Teaching children to care: Classroom management for ethical and academic growth*. Turners Fall, MA: Center for Responsive Schools.
- Imai, M. (1986). *Kaizen* (Vol. 201). New York: Random House Business Division.

