

Exploring Teacher Diversity: How a Historical Review of Project Midstate Student Support for Teaching (MSS) Informs Future Practice

Ronda Mitchell & Nancy Barrett, University of Illinois

Abstract

Project Midstate Student Support for Teaching (MSS) (http://www.uis.edu/projectmss/) is an initiative at University of Illinois Springfield (UIS) designed to increase the number of first generation and diverse teacher candidates in area school districts. Students accepted into MSS receive full tuition waivers, a \$200 book stipend per semester, and academic support. Key findings from the document review of 424 student records show that 94% of the candidates came from the targeted areas and 83% were non-white. The teacher test passing rate was 96% with an average score above the Minimum Passing Level set by the state. Since 2012, all initial inquiries resulted in official university enrollments. Five of the 424 candidates became principals and six took master's-level education courses. While not part of the target group of recent high school graduates, some older candidates also enrolled in MSS. These older candidates (enrolling after the age of 23) graduated with GPA's statistically higher than the younger age group (p=0.04) and were more likely to graduate than their younger classmates. The older candidates were also more likely to complete student teaching requirements, suggesting that more of the older group actually went into teaching. In large part, the findings corroborate the potential value of teacher development programs like MSS to diversify the future teacher pool. The study also suggests ways that MSS may be improved to further its mission in the future.

Keywords: preservice teacher education; student recruitment; minority group students; student diversity; teacher education; first generation college students

Introduction

The University of Illinois Springfield (UIS) is one of three campuses of the University of Illinois. It offers 31 bachelor's degrees, 20 master's degrees, and one doctoral program.

As of fall 2016, the total enrollment was 5,428. There were 2,959 (55%) undergraduate students and 2,469 (45%) graduate students, with 56% registered as full-time and 44% part-time. There were 52% males and 48% females. The average age of an undergraduate was 26 and a graduate was 31. Approximately 11% of the students are African-American, 6% Hispanic, 20% International and 63% other ethnicities. The majority of the students come from Illinois (67%), and a smaller percentage are from out of state (13%). The remainder (20%) are international students (UIS, "At a glance").

The College of Education and Human Services is the home for educational and social service professional programs at UIS. Students can earn MA degrees in Educational Leadership, Human Development Counseling or Human Services. The Social Work program offers a BSW degree and Teacher Education provides training for a BA in Elementary Education or a minor in Secondary Education (UIS, "Departments in the College") Teacher Education offers coursework, both onground and online, in general education, introductory courses, core courses, methods courses, clinical practice (student teaching), and concurrent academic content major area (UIS, "Teacher Education").

Project Midstate Student Support for Teaching (MSS) began in 1991 as Project Minority Student Support for Teaching and is housed in the Department of Teacher Education. Its original goal was to increase the pool of diverse and first generation teachers in area school districts by providing incentives for high school graduates and community college students. Since its inception, there have been two Directors, with the current Director beginning in the fall of 2013. While MSS has been referred to as a program or a project in past years, it is actually an initiative of TEP and not a stand-alone program. The incentive is administered by the university in conjunction with area school districts and community colleges.

Students apply to MSS, which includes a well-developed essay discussing their reason for choosing to teach and, specifically, why they believe MSS will benefit them, and how they will benefit it. The essay is not only to determine their fit with MSS but also to gauge their writing skills. Transcripts are sent to university admissions for review. In addition, MSS considers high school or community college GPA, high school class rank and any accomplishments, awards or recognitions.

Students decide which licensure program they plan to pursue, either elementary or secondary. If they choose elementary, they can also receive a middle school endorsement in one of the following content area: language arts, math, social science, or science. If they are interested in the secondary licensure, they can choose from the following content areas: science (biology), science (chemistry), mathematics, English, social science, sociology/anthropology, political science, or history.

Students take a series of exams, some that may be completed before they arrive at UIS. If they have taken the Test of Academic Proficiency (TAP) or ACT + Writing, they must provide the date. They also complete the Fingerprint Background Check (through Accurate Biometrics for the university) and provide that date, as well. By a student's junior year, they can be admitted into the Teacher Education Program, if they have met all of the requirements.

Students also sign an agreement. Each student participant must be in good academic standing to be eligible to receive financial benefits offered through MSS. Upon acceptance, the student is required to meet all requirements from semester-to-semester. General MSS requirements are summarized in *Figure 1* (next page).

- Be enrolled in at least 12 credit hours per semester as advised; 8 hours of these must be courses toward teacher licensure.
- Maintain a minimum cumulative grade point average of at least 2.50.
- Maintain a minimum grade point average of 3.0 in all Teacher Education courses.
- Perform 10 hours of community service each semester.
- Attend all regularly scheduled MSS meetings and activities.
- Submit a signed agreement, agreeing to teach two (2) years in the MSS contract region after graduation from the University and teach if said employment is available or offered.

Figure 1. General MSS Requirements.

The MSS Application and Agreement are included in Appendices A and B. Upon admission, the students are referred to as "candidates." If the requirements are not met at the end of each semester, the candidate will receive a written letter of Notification of Probation by the Director within 15 days of the semester's end confirming that he/she has been placed on probation. Candidates on probation are not eligible to receive the MSS tuition waiver.

Upon receipt of the Notification of MSS Probation, the candidate can request a meeting with the Director to discuss specific areas needing improvement. Appropriate help and/or counseling for improvement will be made available, and the candidate will be given one year to eliminate MSS probation status. Candidates are also eligible to make a written case for extenuating circumstances that may have impeded progress or participation for that semester. Cases will be reviewed on an individual basis and follow-up which may include an interview with the candidate or request for further documentation will be instituted by the Director. If a successful case is made, reinstitution of the tuition waiver may result.

At the end of the MSS probationary period, if confirmation of satisfactory status has been met the candidate will be removed from MSS probationary status and reinstated to good standing. The Director will notify the candidate by written correspondence that good standing has been restored and that candidate has been reinstated in MSS.

If the candidate does not make the improvements necessary for minimum requirements during the MSS Probationary period, the Director will determine whether all or part of the direct financial benefits previously awarded to the candidate must be returned. In such cases, written notification will be forwarded to the candidate stating the specific amount owed to MSS and the terms for repayment. The repayment agreement complies with university regulations. In the event that reimbursements are not made as scheduled, the candidate will be placed on academic hold until such debt has been satisfied.

When candidates are accepted into MSS, they are required to take an eight-week course with the Director every semester. The course is designed to provide them with an opportunity to explore teaching as service and involves community and campus connections as well as exposure to professional from the field. They are expected to complete a 10-hour service project working with children every semester. They can gain an understanding of the teaching career, connect with members in the community, see how content they are learning in their courses is applied in the

classroom, and gain confidence in their abilities and skills. They must also submit a midterm status report, which is signed by each of their professors, indicating how they are progressing. As a department, we will know if they are struggling in one or more of their courses and need additional support or resources. Candidates also see two theatrical productions a year, usually held at UIS Sangamon Auditorium. This is a great way for them to interact with each other and the Director outside of the classroom and gives them an opportunity they may not otherwise have on their own. Each semester, the MSS group decides on the production they want to attend. Attending a production also allows them the opportunity to see how others think and feel, while appreciating the arts.

Many guest speakers visit the class and present information on various topics: interviewing, technology, mathematics, licensure, counseling, and writing resumes. Candidates also visit one K-12 classroom each semester, giving them opportunities to examine school activities, curriculum, discipline and classroom management, school organization, transitions in the classroom, styles of teaching, etc. Books and articles utilized in the course have varied over the years, covering many topics related to education.

Lastly, candidates meet with their Teacher Education Program faculty advisors every semester, so they can plan their schedules and know that they are progressing. They are given support to complete their degrees.

Literature

Having a more diverse teacher workforce is important in our state since 52% of students in public schools are non-white, suggesting a need for more teachers of color (ISBE, 2015-2016). Diversity is important because students perceive their teachers in different ways. Cherng, an assistant professor of international education at New York University, and his colleague, Halpin, an assistant professor of applied statistics, found that all races have more positive perceptions of their black and Latino teachers than they do of their white teachers. Using a data set of over 50,000 adolescent student reports on 1,680 classroom teachers, they asked if students' perceptions of teachers varied by the race/ ethnicity. They found that perceptions do vary. Students have more positive ratings of Latino and Black teachers than White teachers. Students were asked about individual classroom teachers rather than the general workforce of their schools. Black students have particularly favorable perceptions of Black teachers, but the same is not true for Latino students and Latino teachers. Moreover, they find that Asian American students also have particularly favorable perceptions of Black teachers (Cherng and Halpin, 2016).

The literature identifies many programs that provide encouragement or support for first generation students seeking to enter college. The 2017 Illinois Office of Education report identified Rockford University's *Education Pathways*, Arlington Height's District 214 program, and Ozark Teaching Corps in Missouri as programs of note. Holt (2017) describes five other Midwestern summer bridge programs for promising students. Parks (2017) describes Elon Academy (Elon Acadmy, 2019), part of Elon University's Center for Access and Success, as another example. This North Carolina university offers a three-year summer residency experience for academically promising high school students and provides academic and financial support upon successful admission to the university.

In addition to traditional recruitment events at high schools, Henry (2017) suggests broadening the scope by attending minority sporting events, barbershops and religious activities. Researchers offer many suggestions for recruitment and retention of first generation and minority

college students. Both Henry (2017) and Johnson (2017) identify the importance of having a sufficient cohort for support. Means and Pyne (2017) echoes the importance of cohorts by suggesting institutions adopt "cohort-based academic and social support" systems (p. 921). Demetriou et al (2017) suggests that living-learning communities can be a means of building cohorts for those who live on campus.

Helping students socialize to the college experience was seen as important for retention. Developing an academic mind-set and learning how to navigate the system were mentioned by Olson (2017), Johnson (2017) and Means and Pyne (2017). Demetriou et al (2017) suggest that first generation/minority students must learn "that college will be challenging and that challenge is a part of learning" (p. 34). Holt, White and Terrell (2017) noted that students unfamiliar with college often lack the "navigational capital" (p. 35) to properly transition to college while Katrevich and Aruguete (2017) noted that "poor academic integration" (p. 42). Increasing the sense of what Means and Pyne (2017) calls "academic belonging" (p. 16) might help these students become successful in college. Participation in student organizations, service learning activities, research projects were suggested by Means and Pyne (2017) and Demetriou et al (2017) as ways to create a sense of belonging.

Fostering executive function skills among first generation and minority students may be another strategy to help students socialize to college and facilitate retention. Olson (2017) indicates that helping students learn self-regulation skills will help them develop the necessary "grit" to be more successful in college. According to Castillo-Montoya (2017), student "modes of thinking" (p. 559) derived from their lived experiences impact their academic success. Johnson (2017) stresses the importance of mental preparation, suggesting that if a student has strong internal motivation he or she may be able to overcome some negative external forces that may exist.

Because many first generation and minority students often lack appropriate academic preparation for college (Johnson, 2017) there is a real need for "just in-time" academic support (Holt, 2017) as well as peer or faculty mentoring. (Henry, 2017; Holt, 2017,; Means, 2017). Demetriou et al (2017) suggests encouraging faculty mentorships to develop naturally through existing research or employment relationships.

In addition to a mentor role, Means and Pyne (2017) and Katrevich and Aruguete (2017) pointed out the crucial role of faculty in helping to create a sense of academic belonging. They do this by recognizing any gaps in prior learning and encouraging scholarly activities. Because of the faculty's key role in socializing first generation and minority students, professional development is important to help them understand and navigate cross-cultural differences.

Additional elements seen as important for the success of first generation and minority students were the family, noted by Katrevich and Aruguete (2017) and Parks, Parrish and Holmes (2017). Of course, the need for consistent and adequate financial aid goes without saying as noted by Means and Pyne (2017) and Katrevich and Aruguete (2017).

Besides race, ethnicity and first generation status, there are other ways to think about "minorities." Ocampo (2018) indicates that different colleges and universities use other variables such as age, sexual orientation, gender, socioeconomic status and geographic background. Diversity, then, is an extensive term with meanings extending beyond race or ethnicity. A "minority" candidate, therefore, can refer to any student who does not belong to the majority group, typically Caucasian at a Predominantly White Institution (PWI). Ocampo goes on to talk about the sociological definition of "minority" as focusing on any group of people who are singled out from the others for

differential and unequal treatment. Ocampo sees recruiting students from this broader pool as another way of diversifying the "academic experience" since these students bring their "culturally authentic" backgrounds to the institutions.

Methodology

In the 27 years of its existence, MSS has accumulated 424 candidate records. During that time, there has never been a systematic review of academic outcomes or student demographics. There was no systematic summary of the age, gender, race or geographical location of candidates who had been enrolled in MSS. Also, missing was whether the candidates went into teaching or even if they had successfully completed MSS. Understanding what had happened in the past seemed the best way to make changes going forward.

This desire to learn more about the MSS's history resulted in two major questions which drove the study:

- 1. How well did MSS meet its enrollment, diversity, and academic achievement goals?
- 2. Are there ways these findings can improve MSS going forward?

An exploratory grounded theory methodology provided the conceptual framework for this document review of the files.

We requested and received IRB approval to conduct the document review and assigned each file an ID number. Because most files were those of former MSS candidates, informed consent for this group was not practical so we requested and received a consent waiver.

While file content varied, each student/candidate record included some combination of application materials, high school completion data, previous college enrollment and, in some cases, University Identification Numbers (UIN's). Having UIN's enabled a secondary search of demographic and academic data in the University's Data Warehouse. These data included date of birth, gender, race/ethnicity, program major, graduation date, GPA, and ACT scores.

After gathering data from the files and university sources, we were able to generate descriptive aggregated tables summarized as either mean scores or percentages as appropriate for the type of data. We were also able to compare age groups and student learning outcomes for graduate and non-graduate groups. To ensure confidentiality of the MSS candidates, results are reported only in the aggregate.

Findings

A review of the 424 paper files revealed that only 144 (34%) included a University Identification Number (UIN) which allowed for subsequent review of student demographics and learning outcomes. Data from the MSS records and University sources provided information on enrollment, teacher candidate diversity, and academic outcomes. Figure 1 (next page) summarizes the filtering process:



Figure 1. Numbers of records used in the analysis.

We will first look at enrollment.

Enrollment

For students/candidates where high school data are available, 95% of them reported high schools from two local geographic locations. These areas represented the MSS target; only five (five percent) come from high schools outside the target area. See Table 1 below.

Table 1. High school location for MSS students/candi-					
d	ates				
number percent					
Other	5	5%			
Target Area 1	11	13%			
Target Area 2	70	82%			
Total	86	100%			

The study also found variation in the total number of candidates in any given year. While the number of candidates in MSS has an official cap of 10, records show that MSS exceeded that cap from 2009 to 2015. The number of MSS candidates enrolled ranged from 19 in 2009 to 11 in 2015.

Diversity

Besides geographic location, increasing ethnic diversity was and remains a second major goal for the MSS initiative. Having a more diverse teacher candidate pool is important in the two target areas because the most recent data show that 55% of candidates in Area 1 (55%) and 62% of candidates in Area 2 are non-white (ISBE, 2015-2016). Drilling down into MSS candidate data, we found that 76% of all MSS candidates were non-white females. These data represent almost the reverse of the traditional teacher education population. In fact, the 2016 Title II Report indicated that 80% of all UIS teacher candidates were white females. While increasing the numbers of First Generation college students is a goal for the Initiative, the existing data do not allow an exploration of this topic.

Academic Outcomes

In addition to geographic and diversity goals, we also looked at the academic outcomes of GPA and graduation rates for MSS graduates and non-graduates. See Table 2 (next page).

Table 2.						
Comparison of graduate/non-graduate GPA scores						
Non-Graduates Graduat						
	(N=65)	(N=79)				
Mean GPA	1.89	3.19				
STDEV	1.03	0.57				
GPA Range	0-3.76	2.08-3.96				
% Greater than 3.00	9%	72%				
% Lower than 2.00	45%					

Not surprisingly, Table 2 shows very pronounced differences between the graduate and non-graduate groups. Only nine percent of the non-completers had GPA's greater than 3.00 while 72% of the graduates did. In fact, 45% of the non-graduates left UIS with GPA's that were less than 2.00.

While only 10% of the MSS candidates had required state test score data¹, the candidates where data were available did well. They had an overall pass rate of 96% with an average aggregate score of 251. The Minimum Pass Level in Illinois is 240 and 80% is considered to be the acceptable aggregate passing level for teacher education programs.

Non-traditional Learners

Age at entry was calculated by subtracting the date of birth found in University archives from the start date located in MSS files. Although the target audience for the MSS Initiative was recent high school graduates, 58% of the graduates were older. This unexpected finding gave the ability to compare outcomes for "traditional" and "nontraditional" graduates. The traditional graduation age is typically described as a young adult ranging in age from 21 to 23, while the nontraditional graduate, typically comes from other careers, has more life experiences, is older than 23 and may be in their 40s or 50s (Podsen, 2002). Gender and age data are presented in Table 3.

Table 3.						
MSS Graduate Outcomes by Age at Entry						
	N	%F	%W	Age	Age	
	11	%Г	% VV	Mean	STDEV	
Older than 23	46	79%	0%	31	9.12	
23 or Younger	33	72%	42%	20	4.94	
All Graduates	79	75%	28%	26	7.95	

The data show greater range in ages of the older group. All of the older group were non-white.

Table 4 (next page) shows GPA and ACT mean and standard deviations for the older and younger groups of graduates.

^{1.} Teacher Education's test score database began in 2011 so earlier records are not available.

m 11 /						
Table 4.						
MSS Gradua	MSS Graduate ACT and GPA Scores by Age					
	GPA	GPA	ACT	ACT		
	Mean	STDEV	Mean	STDEV		
Older than 23*	3.28	0.46	19.50	3.87		
23 or Younger	3.05	0.34	21.06	4.21		
All Graduates	3.19	0.45	20.76	4.10		

Note: *A testing using the Student's t statistic showed a very statistically significant difference in GPA's between the older and younger groups of graduates at the p=0.04 level. The 95% confidence interval of this difference is 0.0124 to 0.4076. T = 2.1160; df = 77 and the SEM = 0.099.

It is interesting to note that, while the older graduates started with slightly lower ACT scores than their younger counterparts, they graduated with statistically significantly higher GPA's.

The older (nontraditional) cohort was also more likely to complete teaching requirements. Table 5 compares student teaching completion rates for these two groups.

Table 5.						
MSS Graduate Teach	MSS Graduate Teacher Education Completion					
Ì	Rates					
	Student Teaching					
	Completion Rates					
Older than 23	65%					
23 or Younger	48%					
All Candidates	58%					

While more of the older MSS graduates completed student teaching requirements than did the younger group, only 58% of ALL graduates actually finished student teaching.

Digging deeper into MSS teacher candidate data for those who completed teacher training, we uncovered exciting and unexpected success stories. Five MSS graduates (all African American) went on to become school principals. Six other graduates, again, all African American, enrolled in master's-level education courses at UIS.

Discussion

While descriptive in nature, this study has uncovered rich, and often unexpected, findings. Delving into the findings yields both negative and positive outcomes that can help shape the Initiative going forward, identify directions for future research and possibly suggest aspects that can be applied to other teacher education programs. We will first review the negative outcomes we have found and consider what we can learn from them.

Negative Outcomes

The first negative aspect this study uncovered was the nature of the files themselves. Only 34% of the hard copy records contained University Identification Numbers, which allowed access

to the University's data system. This means that we are only able to report learning and demographic outcomes for one-third of the candidates. The fact that there were so many files but so few applicants who were officially enrolled as university students suggests issues with initial recruitment efforts. This relatively high level of initial enrollment and subsequent attrition should probably not be surprising given the nature of the students entering MSS. Many of these first generation/minority students who are, after all, the MSS target population, have what Johnson (2017) calls strong negative external forces that they must overcome to consider themselves viable college students in the first place.

The review also identified some concerns with the numbers of candidates enrolled in MSS at any given time. While MSS has always had an official cap of 10 candidates per year, records show that MSS exceeded that cap from 2009 to 2015. Because these students often require what Holt (2017) calls "just-in-time" academic support to achieve success, having more students enrolled may have put too many demands on the administration so that the MSS candidates were not given the necessary resources, both academic and financial, for them to successfully complete requirements. The number of MSS candidates enrolled ranged from 19 in 2009 to 11 in 2015. As older candidates leave MSS, the enrollment numbers are gradually decreasing and are coming into compliance with MSS's mission. Keeping the cap at ten allows the Director to attend to academic needs while maintaining control of costs, which is congruent with helping these students develop the send of "belonging" as indicated by Katrevich and Aruguete (2017).

For those candidates where academic outcomes can be documented only 55% actually graduated from UIS. See Table 2 in the Findings section for details. Also in Table 2, we see that the 45% of MSS candidates who did not graduate had ending GPA's of less than 2.00. This relatively low graduation rate suggests that past candidates had greater academic needs, suggesting more careful applicant screening up front. Both the high non-completion rate and low GPA's suggest that this group of candidates may have needed a great deal of academic support to successfully complete their program of study and graduate from UIS. Because many of these MSS candidates have academic and social deficits making success in college difficult, admitting these students into the Initiative requires that they receive academic support, again, corroborated by the literature. In other words, MSS has a responsibility to help those who are admitted to remain and complete it. However, other factors, including self-regulation skills suggested by Olson (2017), are also important, so support should be necessary but not sufficient in and of itself.

In addition to the low graduation rate, Table 5, also in the Findings section, highlights the relatively low rate of graduates who actually completed student teaching. Only 58% actually completed the student teaching requirement that would allow them to become licensed teachers. MSS is housed in the Teacher Education Program so it is not unreasonable to expect a higher student teaching completion rate. Also, since increasing the number of teachers for the district was one of the Initiative goals, having such a high percentage of candidates who did not complete student teaching suggests that the Initiative would have difficulty meeting the goal of funneling more teachers, diverse or not, into the local education pipeline. This low completion rate again corroborates what we find in the literature on persistence for high risk college students: the need for academic support and strong mentoring. If these items are not in place, then it will be more difficult for these students to be successful, which may account in part for the low completion rates.

While an interesting result, Table 3 in the Findings section highlights another negative outcome of the study: The relatively high number of older candidates in the MSS Initiative. This was surprising to us since MSS was intended to focus on recent high school graduates. The data show that 58% of candidates who successfully completed MSS were older than 23 at the time they

entered. Since MSS was intended for recent high school graduates, this high percentage of older candidates suggests that the Initiative only partially met its recruitment goal, at least in terms of age range at time of starting MSS. However, it is quite possible that these older students may actually have more resiliency and what Olson (2017) called "grit" than did the younger group so maybe their higher success rate should not be so surprising after all.

Despite these negative outcomes, there were interesting positive outcomes from this study.

Positive Outcomes

Since 2012, our data show that all official MSS applications have resulted in official university enrollments. This suggests that there is a more careful scrutiny of candidates expressing initial interest in the MSS Initiative. This increased selectivity may be admitting candidates who are more prepared for college with an academic mind-set allowing them to be more successful. If this is the case, we may anticipate a higher percentage of successful completers going forward. This implies that MSS is not right for every student who wants to become a teacher, at least initially. Summer bridge programs or other types of "academic boot camps" might provide the prerequisites INCLUDING executive function skills that high-risk prospective teachers need. This increased attention on recruitment efforts should result in fewer inappropriate enrollments and more completions going forward. Furthermore, having a more stable cohort should also help build a support group for these students as they progress through the teacher training program as suggested by Henry (2017), Johnson (2017), and Means and Pyle (2017). Low graduation rates and low participation in teacher education were two historic problems for MSS candidates, which appears to have been addressed.

Reviewing the historical data indicates many other positive outcomes for the MSS Initiative. Regarding increased teacher diversity, we found that 94% of the MSS candidates came from high schools within the Initiative's target area, thus meeting the stated goal of increasing the potential pool of teachers from the local area. See Table 1 in the Findings section. This high percentage suggests that the goal of recruiting candidates from the targeted geographic area was largely met. A recent plan to offer dual credit education courses in high schools may help MSS reach more of these younger students.

Recruiting diverse candidates was also found to be successful. Our data show that 76% of all MSS candidates were non-white females. While there is still room for improvement by recruiting more males of color, these data suggest that MSS was largely able to achieve its diversity goal of increasing the number of minority teacher candidates for the area. While MSS will continue to strive for more gender, racial and ethnic diversity, its future teacher candidates may actually reflect more of the diversity suggested by Ocampo (2018). MSS's diversity may very well include a mix of candidates from different urban-rural settings and those who are older or military veterans. These diverse groups can bring their lived experiences to the teacher education cohort thereby enriching it as well as the students they will eventually teach.

The report also identified some success in achieving academic outcomes. While not part of the Initiative's target population, older MSS candidates graduated with GPA's statistically significantly higher than their younger peers, as reported earlier in *Table 3*. The older group also completed teacher education requirements at a higher rate than the younger group (*Table 4*). These data raise questions and may need further research to identify the reasons for the success of the older group. One possible reason might be that this group has stronger self-regulation skills important for success in college, echoing what Olson found in her 2017 study.

Another positive academic outcome was in the area of standardized teacher test scores. For those candidates where test score data were available, there was an overall testing pass rate of 96% with an average score of 251. The Minimum Pass Level in Illinois is 240, and 80% is considered to be the acceptable passing level for teacher education programs. Success in test taking is another area where more research may be warranted, as we are not sure what factors helped the MSS candidates be successful test takers. A better understanding of their strategies for success may be generalizable to other parts of Teacher Education, thus benefiting the program as a whole.

Most surprising of all were the success stories we uncovered. We found that five MSS graduates went on to become school principals. All five of them were minority candidates, thus spreading diversity beyond teaching into the administrative arena, a positive unintended consequence of the MSS Initiative. Six other MSS graduates, also minority candidates, went on to complete Master's-level Educational Leadership courses. Continuing their education in this fashion provides the local educational community with a pool of candidates with advanced skills in education and research to help districts better address educational challenges. Following up with these groups would be another interesting area of research to determine their motivations for moving on with their education.

Limitations of the Study

While we did learn a great deal from our deep dive into the MSS data, it is important to remember that there were two major structural problems that negatively impacted this study. The first is that we had only paper files to reference and the contents of the files varied greatly in their level of completeness. As mentioned in the Findings Section, only one-third of the files included UIN's, the only way to access demographic and student outcomes. Because only students enrolled in the University receive a UIN, this means that the vast majority of the MSS student files included inquiries that did not result in actual student enrollments. This means we were unable to find information for almost two-thirds of the students.

The second structural problem is that, while we can identify candidates who completed teaching coursework, we do not know if they actually went on to become teachers in the area. Having outcome data on their subsequent teaching careers would allow us to make a more definitive statement about MSS success in increasing teacher diversity.

Next Steps

This review provided us with historical data that can improve the current Initiative and suggest topics for future research to further enhance and improve MSS.

Program Improvement

This study identified practical suggestions to improve the MSS Initiative:

- 1. Accurate and thorough record-keeping is essential. Having a robust database will allow the Director to track candidate outcomes over time.
- 2. Careful recruitment is important to ensure that candidates have the skills to successfully complete MSS requirements.

- 3. Initially, MSS may not be right for every student expressing interest in teaching. Referring worthy candidates to a campus program such as <u>Necessary Steps</u> may provide those interested in education as a career with additional skills that will equip them to be successful in MSS.
- 4. Along with recruitment, MSS applicants need to clearly understand the teaching requirements of TEP. Part of this understanding includes having the maturity and skills to take on the rigors of college.
- 5. Explore ways to further diversify the Initiative, especially as relates to increasing minority male recruitment, such as the *Call Me MISTER®* program (https://www.clemson.edu/education/callmemister/). Additionally, The College as a whole is creating a plan to increase the diversity of faculty, staff and students, which should also help make TEP a more diverse and welcoming program.
- 6. Provide training on how to develop and use executive function skills to enhance the college experience. This task can be accomplished either within the Initiative itself or through existing campus boot camps or other enrichment activities.

Suggestions for Other Teacher Education Programs

While MSS is not perfect, we strive to improve and hope these suggestions may help others. To facilitate the program development process, we have included a copy of the Application and Agreement, included in the Appendix. Other programs are free to adapt them as appropriate.

Financial aid is an important component to consider and supported by the research. In addition to federal and state funding sources, programs who are recruiting older or non-traditional students/candidates might consider funding to supplement on-campus expenses such as meals and housing. Funding to support transportation and child care for returning adult students/candidates might also be important for recruitment.

To recruit interested and qualified students/candidates, it is, of course, important to work closely with local high schools as well as community colleges. However, it might be helpful to try some of the non-traditional recruitment avenues suggested by the literature, including dual enrollment options. After students/candidates are recruited, retention is the next step. In addition to financial aid, faculty mentoring and connections are seen as crucial to encouraging completion. Making connections with existing campus mentoring programs can provide additional support and may even serve as additional on-ramp for future teacher candidates.

Future Research

The data also raised unanswered questions. Future research might focus on the following:

- 1. How can faculty best mentor and support MSS candidates?
- 2. Which elements of MSS were most helpful for successful completion?
- 3. Why were older candidates more likely to graduate and complete teacher education requirements?
- 4. What are the long term effects of dual credit options on enrollment?
- 5. What is the effect of executive function skills training on retention, academic performance and completion?

Final Thoughts

On another note, MSS is changing its name to Prairie Area Teaching Initiative (PATI) to better reflect who we are and what we do. The vision of PATI is "Forging Equity and Unity in Teacher Education" and the mission statement is 'to inspire and support aspiring future teachers from historically marginalized populations." This new vision echoes the broader definition of diversity suggested by Ocampo (2018). These statements will be added to all documents, along with a descriptor at the bottom of the mission statement that describes changes to the population that we will accept into the Initiative, (high school graduates, paraprofessionals, community college students, etc.).

One big change that PATI will make is in where graduates will be able to teach. While MSS required graduates to teach in one of the two partner school districts, PATI will allow completers to teach anywhere in the state of Illinois, still for at least two years as employment opportunities are available. In addition to increasing a diverse pool of candidates, we hope that this new initiative will also help the teacher shortage in the state of Illinois.

Increasing the pool of diverse teachers is important to enhance education for all of our candidates. This was and remains our goal. Our study showed that MSS has largely met its goal for its targeted area. Careful attention to recruitment and administration coupled with support and mentoring will further encourage teacher diversity, allowing PATI to continue this mission of diversity for decades to come.

References

- Castillo-Montoya, M. (2017). Deepening understanding of prior knowledge: What diverse first-generation college students in the use can teach us. *Teaching in Higher Education*, 22(5), 587-603.
- Cherng, H. & Halpin, P. (2016). The importance of minority teachers: Student perceptions of minority versus white teachers. *Educational Researcher*, 45(7), 407-420.
- Clemson University College of Education. (2019). *Call Me MISTER*®. Retrieved from https://www.clemson.edu/education/callmemister/
- Demetriou, C., Meece, J., Eaker-Rich, D. & Powell, C. (2017). The activities, roles, and relationships of successful first-generation college students. *Journal of College Student Development*, 58(1),19-36.
- Elon Academy. (2019). *Welcome to Elon*. Retrieved from https://www.elon.edu/u/academics/access-and-success/elon-academy/
- Henry, D. (2017). Effective strategies for recruiting African American males into undergraduate teacher-education programs (Order No. 10265479). Available from ProQuest Dissertations & Theses Global. (1884638987). Retrieved from https://search.proquest.com/docview/ 1884638987?accountid=14554
- Holt, J; White, B. & Terrell, S. (2017). *Degrees with less debt: effective higher education strate-gies for underrepresented student populations*. (IERC 2017-2). Edwardsville, II: Illinois Education Research Council. Retrieved from https://ierc.education/wp-content/up-loads/2017/04/2017-2_Degrees_with_Less_Debt_Interactive.pdf.
- Illinois State Board of Education (ISBE). (2015-2016). *Illinois report card*. Retrieved from https://www.illinoisreportcard.com

- Johnson, R. (2017). Experiences that influenced first-generation student post-secondary enroll-ment and persistence: A phenomenological study (Order No. 10265056). Available from ProQuest Dissertations & Theses Global. (1892487974). Retrieved from https://search_proquest.com/docview/1892487974?accountid=14554
- Katrevich, A. & Aruguete, M. (2017). Recognizing challenges and predicting success in first-generation university students. *Journal of STEM Education: Innovations and Research*, 18(2), 40-44.
- Means, D. & Pyne, K. (2017), Finding my way: Perceptions of institutional support and belonging in low-income, first-generation, first-year college students. *Journal of College Student Development*, 58(6), 907-924.
- Ocampo, R. (2018). Why diversity matters in college admissions. Retrieved from https://www.collegexpress.com/counselors-and-parents/parents/articles/college-journey/why-diversity-matters-college-admissions/
- Office of the Illinois Governor. (2017). *Improving teacher preparation policy and programs:***Building a high-quality teacher workforce in the state of Illinois. Retrieved from http://files.sj-r.com/media/news/Improving_Teacher_Prep_in_Illinois_2017.compressed. pdf
- Olson, J. (2017). Helping first-year students get grit: the impact of intentional assignments on the development of grit, tenacity, and perseverance. *Journal of The First-Year Experience & Students in Transition*, 29(1), 99-118.
- Parks, R; Parrish, J & Holmes, M. (2017). Equity and access: Strengthening college gateway programs with credentials. *College and University*, 92(2), 43-46.
- Podsen, I. J. (2002). *Teacher retention: What is your weakest link?* Larchmont, NY: Eye on Education.
- Title II of the Higher Education Act (HEA) (2016). *Institutional report card data*. Retrieved from https://title2.ed.gov/Public/Home.aspx
- University of Illinois Springfield (UIS). (2019). *At a glance*. Retrieved from http://www.uis.edu/about/
- University of Illinois Springfield (UIS) . (2019). *College of Education and Human Services*. Retrieved from http://www.uis.edu/cehs/degrees/
- University of Illinois Springfield (UIS). (2019). *Teacher Education*. Retrieved from http://catalog.uis.edu/undergraduate-students/cehs/teachereducation/#text
- University of Illinois Springfield (UIS). (2019). *Department in the College*. Retrieved from https://www.uis.edu/cehs/departments-and-centers/

Ronda Mitchell is an Assistant Professor of teacher education at the University of Illinois at Springfield. She is also the Director of Prairie Area Teaching Initiative (PATI). Her teaching emphasis is foundations of education, assessment, and wellness for elementary teachers. She holds both a doctorate's degree and a master's degree in education with a concentration in elementary and early childhood education from the University of Illinois at Urbana-Champaign and a Bachelor of Science degree in elementary education from Bradley University. Her research focus includes first-generation and diversity college students. Exploring Teacher Diversity: How a Historical Review of Project Midstate Student Support for Teaching (MSS) Informs Future Practice.

Nancy Barrett is Coordinator of Assessment and Accreditation for the College of Education and Human Services in the College of Education and Human Services at the University of Illinois

Springfield. Her master's and doctoral degrees are both from the University of Illinois Urbana Champaign in Educational Organization and Leadership with an emphasis on program development and program evaluation. She is interested in ways to use data to make informed programmatic decisions.

Appendix A

Project Midstate Student Support for Teaching (MSS) Application



University of Illinois at Springfield
College of Education & Human Services
One University Plaza, MS BRK 330
Springfield, Illinois 62703-5407
Dr. Ronda Mitchell, program director
Ph: 217.206.7008 Email: rmitche@uis.edu

APPLICATION FOR PROJECT MIDSTATE STUDENT SUPPORT FOR TEACHING (MSS)

				Today's D	ate:	
catur school syst iculated teacher i	ident Support for Tea ems in the recruitme recruitment and prep licensure at the Univ	nt of diverse and baration initiative	first generatic beginning at t	n teachers b	y establis	shing an
e print clearly for all info	rmation requested below					
STUDENT INFORM	MATION					
Name						
Address:						
	City:		State:		Zip:	
Home Phone:		Cell Phone:		Birtho	late:	
Email Address:			UIN (for cur	rent UIS studer	nts only):	
	most recent, list all high s		olleges and/or ur	Cumulative		Date Received
	, ,					
Tame and location (c)	RSITY ADMISSION STA	Dip	loma/Degree	Cumulative	GPA above? If y	Date Received

TEACHER CERTIFICATION PROCESSING
Which licensure program do you plan to pursue?
Elementary licensure: Yes No
If yes, are you interested in a middle school endorsement? Yes:No:
If yes, which content area? Language Arts: Math: Social Science: Science:
Secondary licensure: YesNo
If yes, which content area?
Science (Biology): Science (Chemistry): Mathematics: English:
Social Science (Sociology/Anthropology): (Political Science): (History):
UIS TEACHER EDUCATION PROGRAM (TEP) ACCEPTANCE
Have you been accepted into Teacher Education at UIS? Yes: No: No:
Date of meeting with TEP Initial Advisor:
TEP ADMISSION TESTING
Have you taken the Illinois Test of Academic Proficiency (TAP)? Yes: No:
If yes, date taken:
Have you taken the ACT + writing? Yes:No:
If yes, date taken:
CRIMINAL BACKGROUND CHECK
Have you completed the Fingerprint Background Check (through Accurate Biometrics for UIS)? Yes: No: (For those 18 years and older)
If yes, date completed:
SIGNATURE(S) VERIFYING INTEGRITY OF THE APPLICATION'S CONTENTS
Applicant Signature: Date:
Parent/Guardian
Signature: Date:

. ESSAY (REQUIRED):

Please provide a well-developed essay discussing your reason for electing to teach and, specifically, why you believe the Project MSS Program will benefit you, and how you will benefit the MSS program. The purpose of this essay is to not only determine your fit with the MSS program, but also to gauge your writing skills. Please write legibly.

Appendix B

Project Midstate Student Support for Teaching (MSS) Agreement



Project Midstate Student Support for Teaching

"Helping Local Students become Local Teachers"

Dr. Ronda Mitchell, Program Director University of Illinois, Springfield One University Plaza, MS BRK 330 Springfield, Illinois 62703-5407 Ph: 217.206.7008 Email: mitche@uis.edu

Program Requirements

Each student participant must be in good academic standing to be eligible to receive financial benefits offered through the Midstate Student Support office. Upon acceptance into Project MSS, the student is required to meet all program requirements from semester to semester. These requirements are as follows:

- Enroll in at least 12 credit hours per semester as advised: Students who drop below 12 credits or more will not be eligible for financial benefits from Project MSS.
- Students with 45 credit hours or more must be enrolled in a minimum of six (6) hours of TEP coursework at UIS per semester.
- Maintain a minimum cumulative grade point average of at least 2.50. (GPA requirements are subject to change according to catalog year.)
- Maintain a minimum content major grade point average of at least 2.75.
- Maintain a minimum grade point average of 3.0 in all Teacher Education courses.
- Complete all general education, content major, and TEP courses with a minimum grade of C or better.
- Perform 10 hours of community service each semester.
- Attend all regularly scheduled MSS meetings and activities.
- Upon licensure for a teaching position, apply to at least one of the two partner school districts (Springfield District #186 or Decatur District #61) and provide verification of the applications.
- Submit this agreement, signed below, agreeing to teach two (2) years in the Project MSS region (Springfield, Decatur) after graduation from the University of Illinois at Springfield.

Tuition Waiver Requirements

- Tuition waivers apply to general education coursework, TEP coursework, or coursework required by the content major.
- Eligibility must be confirmed by the Office of Financial Aid
- Acceptance of any level of waiver funds confirms participant's understanding and intent to
 participate in Project MSS and to graduate from UIS and teach in a partnering school district for a
 minimum of two years.

Timeline Completions

- Incoming freshmen will be eligible for tuition waiver for no more than five (5) years.
- Timeline completion parameters for transfer students will be determined on a case-by-case basis.

Probation

Notification

If the above Program requirements are not met by the end of each semester, the student participant will receive a written letter of **Notification of Probation** by the Director **within 15 days of the semester's end** confirming that he/she has been placed on academic probation.

Consequences of Academic Probation

Students on academic probation <u>are not</u> eligible to receive the MSS tuition waiver or stipend for subsequent semesters until the remediation terms of probation have been met.

Director Signature

	Student Response		
	Upon receipt of the Notification of any pertinent advisers, if necessary	to establish a plan for remedia	tion. Appropriate help and/or
	counseling for improvement will be designated time frame to eliminate		
	of remediation necessary. If a stud s/he may choose to present the case	ent feels s/he has been subjecte	d to extenuating circumstances,
	Resolution	1.1 D ' - 1 MG D'	1
	At the end of the probationary period the student's remediation plan and fully met. Upon confirmation of same appropriate to a good standing. The	progress and determine if the te isfactory, the student will be re	erms of remediation have been emoved from probationary status
	and reinstated to good standing. The correspondence that good standing Program.		
	Failure to Resolve Probation	ary Status	
	If the student does not complete the probationary period, the Project Dir		
	previously awarded to the student r	rust be returned. If the student	is found to be in default, stipends
	from the most recent school semest written notification will be forward		
	the terms for repayment. The repay	nent agreement will comply w	ith existing community college or
	University of Illinois Springfield re	gulations.	
	Failure to Repay Monies Due		
	In the event that reimbursements ar		
	hold until such debt has been satisf previous paragraph of this Program		egulations identified in the
Aq	reement Renewal		
	Every MSS student will be required		
	These agreements will incorporate departmental policy.	any necessary changes reflectiv	e of legislative, advisory, or
Sig	gnature		
	signing below, I agree that I have read ar		
in t	he Midstate Student Support Program as lerstand all Program requirements as give	given in this agreement. I agree	e to such terms and conditions and
fail	ure to meet that status. Upon successful	ompletion of the Program and	graduation from the University of
Illin	nois Springfield, I agree to teach in the Pr	ogram region for two consecut	ive years following graduation if
sal	d employment is available / offered.		
Stu	dent Participant Signature	Da	te
	70 III		

Date