

## Proposal Application

**Project Title:** *Nebraska Math Readiness Initiative*

**Timeline:** *July 1, 2018 – December 31, 2019*

**Amount of Funds Requested:** \$51,066.50

**Contact Name(s):** *Dr. Deborah Brennan, Executive Vice President*

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**Abstract of Proposal:** *In a page or less, provide an abstract of the proposal*

College-ready students have a base of knowledge that supports their educational success as they take college-level courses in their primary program of study and thereby students are required to possess a minimum standard of knowledge. Unfortunately, many students are entering postsecondary education without being college-ready and are thus required to take developmental coursework upon entry to a postsecondary institution. As Rutschow, Edwards, & Serna-Wallander (2017) discovered “few students enroll in and successfully complete these developmental course sequences”. This highly collaborative project amongst five of Nebraska’s community colleges and twenty high schools will impact over 1,000 high school students during its three-year pilot phase.

Due to the project’s size and the numerous funders, this project is requesting funding from several sources and has matching funds from both secondary and postsecondary partners. The three-year, \$2 million project, through a combination of matching and secured funds, is approaching organizations, such as PFI, to help support the remaining \$900,000. Accordingly, this proposal to PFI requests funding to directly support the coordinated software, MyMathLab, that will provide a bridge for student success by assisting secondary students in gaining the skills to be math-ready prior to entering postsecondary education. The broad scope of program implementation will occur through support of other funders and the commitment by secondary and postsecondary educational partners. However, PFI can make a great impact on student success by ensuring that students are prepared to enter postsecondary education through direct support of the software.

The overall goal of the project is to improve secondary students’ math readiness through an individualized-based resource tool that is coordinated across the state and amongst both secondary and postsecondary education. Personalized tools will allow student participants to learn new math skills and build upon existing knowledge. Instructors at the partner institutions will learn how to effectively implement the MyMathLab software to improve students’ ability to progress their math skills to a college-ready level. It is anticipated that this project will impact a student’s motivation to pursue postsecondary education and persistence. The opportunity for students to advance their math skills during high school can better prepare them for success in both their postsecondary and professional careers.

## Vision and Purpose:

### **1. Describe the connection(s) to the PFI Areas of Focus and Purpose Statement (Appendix B)**

The Nebraska Math Readiness program will impact students in both career education and academic preparation prior to entering postsecondary education. This project coordinates math readiness between secondary and postsecondary and will address several of the PFI Areas of Focus and Purpose Statement:

#### Secondary-Postsecondary Transitions:

- Create statewide articulation agreements and enhance curriculum alignment: The MyMathLab course has been articulated and will be accepted across Nebraska community colleges for high school participants who successfully complete the experience prior to entering college.
- Examine outcomes of secondary courses to ensure students are prepared to enter postsecondary education both in career education and academic preparation: This project intervenes early and allows a high school student to advance into college-level math immediately upon postsecondary entry; thus, advancing their skills beyond developmental courses. As a result, the MyMathLab software and program ensures that students are math-ready and prepared to successfully enter postsecondary education.

#### Statewide Partnerships and Initiatives:

- Provide the potential for securing statewide license agreements that are determined priority need areas: As data points are collected, the project partners will not only continue to pilot and evaluate the project and its impacts across the state, but will begin approaching and incorporating the Nebraska Department of Education and state leaders in the project. These discussions will be instrumental in the future sustainability of the program beyond the three-year pilot phase. Collaborative discussions will focus on the logistics, mechanics, outcomes of the pilot, and ultimately the future of the program. As discussions will be fluid during the initial years of the pilot phase and future funding will take time to secure, these discussions will progress throughout the life of the project. The ultimate goal of these discussions will be statewide implementation of “Math Readiness” across all high schools in the state with support from the Nebraska Department of Education and state leaders.

### **2. Explain why this activity or product is innovative**

Educational success at the postsecondary level is a primary mission of all of the partner community colleges. The Nebraska Math Readiness Project will provide a bridge to success for high school seniors who need to improve their math skills prior to entering and completing a college-level math course.

The proposed program will be a pilot project coordinated by Central Community College, Mid-Plains Community College, Northeast Community College, Southeast Community College, and Western Nebraska Community College with fifteen pilot high schools initially (within PFIs 18-month period) and twenty high schools in year three (within the Nebraska Math Readiness’ pilot phase). Each community college has identified three high schools to begin the pilot and letters of commitment have been received from these partners. Through these partnerships a math readiness course will be offered to high school seniors who failed to show college-readiness on their ACT Math exam by scoring between 13 and 16 while also declaring intentions to pursue a postsecondary education. The course curriculum is being co-developed across the community colleges and high school partners through an existing

grant and in conjunction with Metropolitan Community College's pilot program.

The coursework with the assistance of MyMathLab software will provide a customized, personalized, adaptive learning experience for students to increase preparation for college-level math coursework prior to their entrance in postsecondary education. This intervention is driven by technology and allows a student to learn through personalized pre-tests, homework, quizzes, and tests. Students can access the MyMathLab virtual platform two ways: 1) during the required, in-class course where an instructor is present to assist with in-depth questions and instruction, and, 2) outside the traditional classroom with internet and computer accessibility to continue advancing their skills at an individualized pace.

### **3. Describe the overall outcomes**

Overall outcomes include implementation of the pilot project and increasing students' math readiness before entering postsecondary education. Therefore, the collaborating Nebraska community colleges propose to partner with fifteen high schools during the PFI 18-month timeframe (and twenty high schools in year three) to co-develop and implement a bridge to success program for high school juniors and seniors (seniors have priority) to increase the percentage of high school graduates prepared for post-secondary level math.

- The project will be facilitated through a student success center environment with teacher oversight to improve understanding and to reinforce learning. Students will work on a virtual publisher platform that provides personalized tools to learn new math skills and build upon existing knowledge. Students will be required to take periodic assessments to measure learning outcomes. Instructors at the partner institutions will learn how to effectively implement the MyMathLab software to improve students' ability to progress their math skills to a college-ready level. As a result, high school students will be better prepared as they pursue a career field or enter the workforce.
- Postsecondary institutions could continue to address the need for college-ready individuals upon a student's arrival at the postsecondary institution, however, there are many benefits to earlier intervention. For example, by reducing the need for developmental coursework at the postsecondary level, one reduces costs (tuition) and allows a student to focus on credit-bearing coursework that is relevant to their program of study. Thus, impacts on student success (e.g. motivation to pursue postsecondary education and persistence) are anticipated.

### **Needs Statement:**

- ***Provide information which supports the need for the project.***

Students are entering college without the skills that are necessary for success in post-secondary level math. Math readiness at a college level for high school students entering post-secondary education is a key challenge for all partners in this proposal. This is evident as less than a third of Nebraska students met the ACT benchmarks that predict college readiness, as identified recently in the Omaha World Herald (12/4/17). More specifically, according to the 2016 ACT scores of Nebraska high school graduates, 57% failed to meet the college-ready level in Mathematics (ACT, 2016). In addition, the number of Nebraska high school graduates who are failing to meet college-level math benchmarks has increased by 8% over the last four years (ACT 2016). Nationally, this results in approximately two-thirds of community college students who are required to take developmental coursework (Rutschow

E., 2017). These statistics show the need for academic interventions to assist and better prepare students to be successful as they pursue postsecondary education.

When a student enters postsecondary education without college-level math skills, developmental math is an important requirement and fundamental need prior to advancing to a college-level math course. The necessity of taking a developmental math course can present its own logistical and instructional challenges for students. Developmental coursework can prolong the time it takes for a student to enter a math class that counts towards their program of study. These courses can also add significant costs to a student's overall college debt through the additional tuition costs. This delay in taking program courses and the additional tuition for a course that does not count towards a program of study can deter and discourage a student from pursuit of postsecondary education.

Nebraska community colleges strive to aggressively address college-readiness disparities by providing developmental education programs that prepare students for post-secondary level work as a primary tenant of the institutions. The MyMathLab software utilized in this project allows for individualized instruction, which can help a student build upon their knowledge for better mastery and success. Currently, a student may struggle to succeed as math coursework builds upon itself to learn new skills. Many times traditional classroom settings are challenged to balance and teach to many learning abilities and the time spent on a topic may be too quick or too slow for a student based on the topic and the student's skill level. Developmental courses are designed to increase skills and knowledge as a way to bring a student's knowledge up to a college-ready level. National studies have shown that 50-70 percent of community college students enter college unprepared and only 20 percent of students who begin with developmental courses successfully finish a college-level math course (Rutschow, Diamond, & Serna-Wallender, 2017). Specifically, of Nebraska high school graduates entering a community college, 25% required a developmental math course before meeting the requirements to enter a college-level math course for their program of study (NCCA Study, Fall 2016). Thereby, there is a great need to assist these students prior to high school graduation. The academic intervention proposed in the Nebraska Math Readiness Project can be a bridge to success for students.

- ***Identify the stakeholders who will be impacted by the activity and how they will be served***

To increase the number of students who are college-ready upon high school graduation, five of Nebraska's six community colleges (Central Community College, Mid-Plains Community College, Northeast Community College, Southeast Community College, and Western Nebraska Community College) are working together to provide a clear path to postsecondary educational attainment. The sixth community college (Metropolitan Community College) established a similar program in 2016. This project will thereby encompass five of the community colleges and their service areas, entailing 89 of Nebraska's 93 counties (over 95% of the state).

This pilot project will directly impact 380 students during the first 18-months and a total of 1,089 high school seniors (over three years) who are struggling to achieve the skills to be college-ready in math and are interested in pursuing postsecondary education. The project will focus on serving high school seniors with a desire to pursue postsecondary education and who failed to meet the college-ready math benchmarks on the ACT exam. The ACT exam was chosen as the assessment tool due to its universal use across the state by all high school juniors beginning in 2017. In addition to the availability of a standard assessment tool, this population was chosen as early intervention can greatly impact a student's success. It is anticipated that this project through academic preparation will greatly impact career and technical education student success. For example, developmental courses at CCC were

comprised of over 45% career and technical education students (CCC Spring 2018 credit-bearing students; CCC Institutional Research, 2018). Additionally, the Tennessee SAILS program has shown that individuals who earn nine hours in their focus area within their first year at a community college have graduation rates of 40% compared to a 16% graduation rate for those who did not attempt nine hours within their first year (Nichols, 2016).

**Goals and Objectives:** *The goals should be directly related to the PFI Areas of Focus and Purpose Statement; the objectives should be related to the activities and outcomes as a result of the activity or product*

- Outline the objective(s) to include measurements, expectations and timeline
- Communicate the activities related to the objectives
  
- **Goal\*:** Increase academic preparedness of Nebraska students upon entry to postsecondary education.
  - **Objective:** Improve student math readiness to a college-level by implementing the MyMathLab software at pilot high schools.
    - Activities:**
      - Purchase MyMathLab software for over 380 students during the first 18-months (over 1,000 students during the three-year pilot) to utilize.
      - Provide follow-up support with instructional, administrative, and evaluative assistance across all partner community colleges and high schools.
      - Evaluate student participant preparedness for postsecondary education through the individualized assistance of the MyMathLab experience.

*\*Note:* Additional objectives of this goal that encompass broad implementation and evaluation of the Nebraska Math Readiness program, such as implementation of professional development workshops and overall program coordination, are being supported through additional funding resources.

**Impact on Career and Technical Education:** *Communicate how CTE will be impacted as a result of the activity or product*

**1. Identify the number of students, teachers, and/or partners involved**

The five state community colleges and fifteen high schools (twenty in year three) have partnered to support student achievement and assist students who want to pursue postsecondary education. Table 1, below, outlines anticipated enrollments based upon conversations with associated institutions and a minimum of three years of programmatic activities. Three years will allow for a strong statistical base to see if the project impacts are yielding positive results. Beyond these three years it is anticipated that additional years for evaluation will be required to analyze the impact of the intervention on overall student success. As this opportunity from Partnerships for Innovation is 18 months in duration, the budget accounts for parts of the project to be completed within the allotted timeframe.

All five partners have been corresponding with potential pilot high schools. Letters of support from these schools and the four partner community colleges are available upon request. Each community

college considered the following when choosing their three pilot high schools: accessibility of a computer lab, instructors with required credentials, and ability of instructors and administrators to participate in project activities. Growth in numbers at each high school partner institution were included in the projections for the three years of the programmatic grant request. Should demand outpace the projections, the project partners will implement a ‘priority’ system as was established with the Metropolitan program that builds off of lessons learned from both programs. Note: As participant numbers grow in subsequent years, a reduction in the per participant software cost is anticipated. For budgetary considerations, the software user fee for MyMathLab is consistent across budget years should the participant-quantity discount not materialize. As a result of adding additional schools for the third year, the project would serve a total of 1,089 students through 76 sections of MyMathLab instruction.

**Table 1: Anticipated Enrollments – Years 1-3**

	Large High School			Medium High School			Small High School		
	Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3
<b>Central</b> # Students (# Sections) Teachers/Teacher Aid*	<b>Grand Island Public (A)</b>			<b>Columbus Lakeview (C)</b>			<b>South Central Unified (C)</b>		
	30 (2) 1/1	80 (4) 1/1	120 (6) 1/1	10 (1) 1/0	20 (1) 1/1	30 (2) 1/1	6 (1) 1/0	10 (1) 1/0	15(1) 1/1
<b>Mid-Plains</b> # Students (# Sections) Teachers/Teacher Aid*	<b>North Platte (A)</b>			<b>McCook (B)</b>			<b>SWPS: Southwest (D)</b>		
	15(1) 1/1	15(1) 1/1	30 (2) 1/1	10 (1) 1/0	10 (1) 1/0	20 (1) 1/1	6 (1) 1/0	6 (1) 1/0	10 (1) 1/0
<b>Northeast</b> # Students (# Sections) Teachers/Teacher Aid*	<b>Norfolk (A)</b>			<b>Battle Creek (C)</b>			<b>Randolph (D)</b>		
	30 (2) 1/1	30 (2) 1/1	45 (3) 1/1	10 (1) 1/0	10 (1) 1/0	20 (1) 1/1	6 (1) 1/0	6 (1) 1/0	10 (1) 1/0
<b>Southeast</b> # Students (# Sections) Teachers/Teacher Aid*	<b>Lincoln (A)</b>			<b>Beatrice (B)</b>			<b>Palmyra (C)</b>		
	60 (4) 1/1	75 (4) 1/1	90 (5) 1/1	10 (1) 1/0	10 (1) 1/0	20 (1) 1/1	6 (1) 1/0	6 (1) 1/0	10 (1) 1/0
<b>Western</b> # Students (# Sections) Teachers/Teacher Aid*	<b>Gering (B)</b>			<b>Alliance (B)</b>			<b>Kimball (C)</b>		
	15 (1) 1/1	15 (1) 1/1	30 (2) 1/1	10 (1) 1/0	10 (1) 1/0	15 (1) 1/1	6 (1) 1/0	6 (1) 1/0	10 (1) 1/0
<b>Year 3 (Additional Schools)</b> # Students (# Sections) Teachers/Teacher Aid*	<b>Central (TBD)</b>					15(1)			
	<b>Mid-Plains (TBD)</b>					15(1)			
	<b>Northeast (TBD)</b>					15(1)			
	<b>Southeast (TBD)</b>					15(1)			
	<b>Western (TBD)</b>					15(1)			
<b>TOTAL STUDENTS</b>	<b>150</b>	<b>215</b>	<b>315</b>	<b>50</b>	<b>60</b>	<b>180</b>	<b>30</b>	<b>34</b>	<b>55</b>

\*Teacher Aid: Sections over 15  
(# of Sections)

## **2. *Communicate the impact of the activity on student learning and/or professional growth***

An intervention that could assist students in being successful prior to entry into postsecondary education can have profound impacts. “Students assigned to developmental math face especially low odds of graduation, and some experts view it as the single biggest obstacle to their success” (Rutschow E. , 2017). In particular, the Tennessee SAILS program has seen impressive results in the reduction of students requiring developmental math upon entry to a postsecondary institution, 16.5% (Nichols, 2016). Furthermore, SAILS has a 92% completion rate for students who experience the interventional math curriculum through MyMathLab.

Several benefits are realized by increasing college-readiness. The most obvious result is fewer students in developmental math, which will directly impact CTE students as they comprise over 45% of enrollment in CCC development courses (CCC Spring 2018 credit-bearing students; CCC Institutional Research, 2018). This has impacts on the cost and affordability of postsecondary education for a student. The reduction of developmental coursework means that a student can take and pay for credit-bearing coursework quicker, thus, assisting them in completing postsecondary education with less debt. Another barrier relates to the extra time developmental coursework can require of a student, which can impact a student’s persistence. The Nebraska Math Readiness Project can greatly impact a student who might otherwise fail to complete by preparing them for success prior to entry at a college. The personalized, adaptive nature of the MyMathLab software can impact a student’s success with the developmental coursework and impact whether the student chooses to continue their educational pathway. Finally, by attaining math skills at a college-ready level during high school, students can start college-level coursework in their primary field of study sooner and either start a math sequence or have solid math skills for Career and Technical Education fields of study that need a solid math background.

Nebraska’s community colleges have articulated the MyMathLab course and it will be accepted across the state for high school participants who successfully complete the experience prior to entering college. This allows the student to advance into college-level math immediately; propelling them beyond the foundations/developmental courses that require additional time and funding which is often a barrier to postsecondary student persistence and completion. This capability stands to provide an even more solid footing for students, who may have chosen not to continue their education prior to this intervention, to begin their educational and professional careers upon. By increasing affordability and avoiding developmental coursework that prevents a student from initially partaking in program of study coursework, many benefits and impacts are anticipated. For example, “In 2015, Tennessee began using a co-requisite math model for all entering community college students in need of remediation, enrolling them into a college-level math class with additional academic support. The students entering in 2015 passed the relevant first-level college math course within one year at four times the rate of the students who had entered in 2012” (Rutschow, Diamond, & Serna-Wallender, 2017). With this in mind, the Nebraska Math Readiness Project includes an evaluation component to ensure that data is collected and analyzed to offer evidence-based knowledge on the impacts to student educational success from entry through completion of their postsecondary experience.

## **3. *Describe how the project/activity is relevant to the Nebraska Career Field Model, Economic and/or Workforce Development***

In highly technical and rigorous CTE courses, the demand on students’ skills are increasingly intense. To compete in today’s competitive labor market for these high-skilled, high-demand jobs,

students must possess the necessary skills for both career and academic success. By increasing the ability of students to enter college math-ready, students will ultimately be better prepared to succeed in their coursework and better prepared for both college and the workforce.

**Statewide Impact:** *Communicate how the activity will impact the entire state*

**1. Outline how the activity will reach secondary and/or postsecondary consortia members**

While community colleges, high schools, and numerous other entities are concerned about the college-readiness of students graduating from high school; the community colleges are in a prime position to lead a collaborative partnership of multiple entities across the state to take action. Each community college's mission speaks to the importance of a student success focus. Furthermore, community colleges are prime to lead the charge in pursuing a Nebraska Math Readiness Project due to established structures and partnerships and the minimal number of entities leading the charge (five). This is important as it would be much more difficult to organize and manage a lead group if it consisted of the 424 high schools in Nebraska.

Community colleges possess experience in teaching foundations/developmental level math courses and can provide guidance based upon this experience during the implementation and training for the project. Faculty from both the participating high schools and the community colleges will collaborate during the training sessions to enhance the success of the program. Furthermore, due to an articulation agreement across Nebraska's community colleges, high school students who successfully complete the MyMathLab experience prior to entering college will be accepted into college-level math coursework.

Implementation of this project will be based upon the Tennessee SAILS model and on the previous work of a similar pilot program at Metropolitan Community College. Summer training sessions with faculty, counselors and administrators will work to incorporate lessons learned by Metropolitan through their first year by including Metropolitan program personnel as expert presenters and moderators during the training sessions. Additionally, this program will address and implement several lessons learned by Metropolitan, such as the need for data sharing agreements and the importance of including counselors. As we support high school students in being college-ready in math upon their high school graduation, the two programs will further collaborate together via the external evaluator who will be working with both programs to gather data that can support a systemic change.

To serve participating students, a project coordinator and liaisons amongst the community colleges and the pilot high schools in their areas are necessary. The project coordinator will oversee management of the project, work with liaisons and technical support, assist with data collection through each college's Institutional Research department, and be responsible for working with the evaluator for reporting purposes. The liaisons will be hired through and be employees of the community college in their support area. These individuals' primary role will be in working with the high schools to ensure that the program is being implemented and offered to students consistently. The technical support individual will act as the main point of contact for technical support questions. Pearson's MyMathLab 24-hour technical support line will also be utilized as a technical resource. Additional personnel will be the high school faculty instructors, and aids for any section with more than 15 students. The instructors and teacher aids will be required to possess accredited credentials. As the "Anticipated Enrollment" numbers (Table 1, above) show, it is anticipated that 15 instructors (20 in year three) and 11 teacher aids (16 in year three), employed by the partner high schools, will be



needed for the first three programmatic years of the grant. Thus, the request for an annual training conference and training support for faculty throughout the life of the grant. It is expected that the faculty instructors will take information from the training sessions back with them and share the information with the teacher aids. Metropolitan Community College has agreed to consult during the training sessions on the course and to assist with technical aspects of program implementation. The Chief Academic Officer at each community college will be responsible for the administrative oversight of the project and work in conjunction with the project coordinator. These individuals are already employed by the community colleges and will take the project on as a part of their current positions. Finally, an external evaluator will be hired to assist with evaluative support, including qualitative and quantitative data collection, assessment, and analysis. The management and coordination of the Nebraska Math Readiness personnel (coordinator and liaisons in particular) will need to work seamlessly with the high schools and their administrative teams to successfully implement this program and impact student academic achievement.

**2. Identify which of the Nebraska Career Clusters or Fields are addressed/identified**

All Career Clusters and Fields may be impacted by this project. As the overall goal of the Nebraska Math Readiness project is to address and increase students who are college-ready in mathematics prior to high school graduation, it is possible that a student may be interested in pursuing any of the Nebraska Career Clusters/Fields.

**3. Describe the collaboration with external stakeholders/partners such as: Business, community, state or private colleges/universities, Nebraska Department of Education, professional career education association groups, etc.**

The proposed project establishes a collaboration amongst the community colleges and fifteen identified high school partners (twenty in year three) to assist students in achieving their academic goals. The community colleges will work with identified high school partners to communicate expectations of college-readiness, provide a consistent assessment level of what it means to be college-ready, and assist with program implementation. Additionally, this project will work with the sixth community college's program that was started in 2016 to implement best practices and share beneficial information across programs. This is imperative as the programs work towards a shared goal of a statewide, systematic approach that addresses the low percentage of Nebraska high school students who are college-ready in math (less than a third met benchmarks according to 2016 Nebraska ACT scores) upon high school graduation. Both qualitative and quantitative data will be obtained to provide evidence-based information showcasing the impact and benefits of the project on students across the state from small, medium, and large high schools as they enter and complete postsecondary education.

As this is a large, multi-year program, multiple financial supporters will be required to support the efforts. The consortium has currently secured over half a million dollars in addition to matching funds to support the program over the next three years and will be securing support from additional funders to ensure the success of the program for the twenty high school partners before the end of year three.

**4. Address the proposed delivery method: statewide, regional meetings, face-to-face, distance education, online, conference, etc.**

Secondary and postsecondary participants will utilize face-to-face, small group, distance learning IP systems, or teleconference meetings. Annual faculty, counselor, administrative training sessions will be conducted to introduce the program, especially to new instructors who will be overseeing the curricula in the classroom. These annual meetings will provide an opportunity for faculty to gain knowledge of the program, access educational materials, and explore the system prior to classroom implementation of the MyMathLab software.

**Evaluation:** *Describe the project evaluation plan as it relates to the goals and objectives*

**1. Provide evidence of the impact based on the project goals and objectives**

The goals and objectives will be evaluated based on the number of students who utilize the MyMathLab software as a bridge to postsecondary math coursework. In addition, data from the MyMathLab software and a survey tool will be used to gauge the students' preparedness to enter postsecondary education. Postsecondary graduation data can be collected starting in Spring 2022, however, an annual report will be generated and created in 2019 primarily using qualitative data as well as some preliminary but representative quantitative data. This will allow an opportunity for alterations to the program based upon student, administrator, and instructor feedback. Assessing the program at this stage and taking the opportunity to implement a fix or an enhancement will mean greater impact on the project as a whole.

An external evaluator, hired by another partner, will work with the Nebraska Math Readiness consortium and Metropolitan Community College. The ongoing evaluation will consist of a team of three experienced evaluators. The team has combined, over 60-years of experience in evaluating projects of this nature. The external evaluation team includes quantitative and qualitative expertise with special experience in mathematics education. Dr. Neal Grandgenett, Community Chair of STEM Education at the University of Nebraska at Omaha, has conducted evaluation and quantitative analysis for over 30 high level grants as funded by the National Science Foundation, U.S. Department of Education and many other federal and state organizations. He is also a mathematics education specialist with over 140 published articles, book chapters and a book related to mathematics education, STEM learning environment innovation and program evaluation. Dr. Kelly Gomez-Johnson is a new Mathematics Education Assistant Professor at UNO, who has taught mathematics at all levels, including Nebraska high school, community college and university mathematics coursework. She has also taught University of Nebraska graduate courses in mathematics content and pedagogy to in-service teachers across the state. She has a doctorate in educational leadership, and two Masters Degrees, one in mathematics and one in mathematics education. She is also a former high school mathematics teacher with six years of instruction at that level. Dr. Michael Shain, the third member of the team is a well-known program evaluator in the state, an expert in qualitative techniques, including online feedback surveys, focus groups, and document analysis. He is also a former high school counselor and is a former Director of School Counseling for the Nebraska Department of Education, he is very familiar with the success challenges that confront students as they try to move from a high school to a college learning environment.

Evaluation questions have been designed to align with overall project goals, and to generate data that will serve both formative and summative purposes, and to facilitate examination of the four

phases of a curriculum intervention and related research project—design, implementation, outputs, and accountability. The evaluation will utilize data from multiple sources and in multiple formats. As appropriate, the evaluators will work collaboratively with the project leadership and team to review, develop, and modify data collection protocols and measures. Further, the evaluation takes into account the extensive partnership that will be in place with the different community colleges, the more than 20 school districts and more than 1,000 students expected to be involved in the project over the three-year duration.

Should promising results be determined after the first three years of programmatic activities, the partners anticipate requesting funding for additional schools in future years and to continue evaluation in subsequent years for the initial three cohort groups for persistence, retention, completion and overall success as a result of partaking in the academic intervention. Additionally, should the formative evaluation for the first three cohort groups show promising results, the partners in collaboration with funding partners, can begin discussions for the long-term future of this piloted math readiness bridge to success.

**Dissemination of Knowledge:** *Recipients will report-out results in the following methods:*

**1. Draft a brief executive summary for publication in the PFI newsletter and/or state/national education association publications**

The annual report will serve as a base for an executive summary for publication to be completed by the Nebraska Math Readiness project coordinator.

**2. Present at the Nebraska Career Education Conference and other state/national conferences**

A representative group from the Nebraska Math Readiness project will report on their experience and share the progress and impacts of the MyMathLab software on students at the NCE conference.

**3. Report to the PFI Leadership Council either orally or in written format**

A final report of the project activities and outcomes will be submitted to the PFI Leadership Council within 45 days of the project end date.

**Other Ideas/Thoughts to Consider: Share additional ideas or thoughts relating to the activity the PFI Leadership Council not previously highlighted.**

As this is a three-year project, the budget presented reflects only the first 18-month timeframe allowed by PFI and activities in relation to this application. This project is a large, statewide effort that will coordinate math-readiness from secondary to postsecondary education. Thus, funding is being requested from multiple sources over the three-year pilot project. To date, the three-year, \$2 million project has been successful in securing funding and matching from a private funder, and secondary and postsecondary partners. As a result, over \$1.1 million dollars has been directed for this project, leaving approximately \$900,000. Thus, we are requesting support from organizations such as yours to secure this remaining need, specifically we are asking PFI to directly support the purchase of the MyMathLab software licenses (\$51,066.50) for the high school students partaking in the pilot program during the first 18-months of Nebraska Math Readiness.

**Budget Plan & Narrative: PFI 2017-2018 GRANT PROPOSAL**

Budget	Personnel	Supplies	Travel	Conf. Expense	In-Kind	Total	Goal/Obj./Act.
<b>Central</b>							
Software - MyMathLab program software and licensing fees for classroom and lab instruction. \$127.50 per student x Y1 (46) students; Y2 (55) students		12,877.50				\$12,877.50	Goal 1, Obj 1, Act 1-3
<b>Mid-Plains</b>							
Software - MyMathLab program software and licensing fees for classroom and lab instruction. \$127.50 per student x Y1 (31) students; Y2 (16) students		7,905.00				\$ 7,905.00	Goal 1, Obj 1, Act 1-3
<b>Northeast</b>							
Software - MyMathLab program software and licensing fees for classroom and lab instruction. \$127.50 per student x Y1 (46) students; Y2 (23) students		8,797.50				\$ 8,797.50	Goal 1, Obj 1, Act 1-3
<b>Southeast</b>							
Software - MyMathLab program software and licensing fees for classroom and lab instruction. \$127.50 per student x Y1 (76) students; Y2 (46) students		15,494.00				\$15,494.00	Goal 1, Obj 1, Act 1-3
<b>Western</b>							
Software - MyMathLab program software and licensing fees for classroom and lab instruction. \$127.50 per student x Y1 (31) students; Y2 (16) students		5,992.50				\$ 5,992.50	Goal 1, Obj 1, Act 1-3
<b>TOTAL</b>	\$ -	\$ 51,066.50	\$ -	\$ -	\$ -	\$51,066.50	