Budget

Portsmouth City (044669) - Scioto County - 2014 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (367)

U.S.A.S. Fund #:
Plus/Minus Sheet (opens new window)

Object Code / Purpose Code	Salaries 100	Retirement Fringe Benefits 200	Purchased Services 400	Supplies 500	Capital Outlay 600	Other 800	Total
Instruction	0.00	0.00	225,426.00	128,000.00	0.00	0.00	353,426.00
Support Services	0.00	0.00	35,000.00	8,000.00	0.00	0.00	43,000.00
Governance/Admin	10,000.00	1,700.00	12,000.00	0.00	0.00	0.00	23,700.00
Prof Development	0.00	0.00	19,345.00	0.00	0.00	0.00	19,345.00
Family/Community	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Safety	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Facilities	0.00	0.00	5,000.00	0.00	0.00	0.00	5,000.00
Transportation	0.00	0.00	3,390.00	0.00	0.00	0.00	3,390.00
Total	10,000.00	1,700.00	300,161.00	136,000.00	0.00	0.00	447,861.00
						Adjusted Allocation	0.00
						Remaining	-447,861.00

Application

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Applicants shall respond to the prompts or questions in the areas listed below in a narrative form.

A) APPLICANT INFORMATION - General Information, Experience and Capacity

1. Project Title:Dual Enrollment Access in Mathematics using the Flipped Format to Increase Student Achievement (DEAMFISA)

2.Executive summary: Provide an executive summary of your project proposal and which goal(s) in question 9 you seek to achieve. Please limit your responses to no more than three sentences.

The primary goal of DEAMFISA is to increase the achievement of students in the Southern Appalachian region of Ohio by giving them the opportunity to learn Mathematics at a college level through "flipped" dual enrollment courses. The secondary goal is to increase the number of dual credit opportunities in the region by supporting area math teachers seeking to earn the credentials to offer dual credit courses with the resources necessary to start the Master's in mathematics program at Shawnee State University (offered in an accessible format allowing teachers to continue their current teaching responsibilities). Teachers will also receive tools and professional development (teams of teachers will work with SSU mathematics faculty) to facilitate the creation of the dual enrollment courses in the "flipped" format.

500 3. Total Students Impacted:

4. Lead applicant primary contact: - Provide the following information:

First Name, last Name of contact for lead applicant: Scott Dutey

Organizational name of lead applicant: Portsmouth City Schools

Unique Identifier (IRN/Fed Tax ID): 44669

Address of lead applicant: 724 Findlay Street; Portsmouth, OH 45662

Phone Number of lead applicant: 740-354-4810

Email Address of lead applicant: Scott.Dutey@Portsmouthtrojans.net

5. Secondary applicant contact: - Provide the following information, if applicable:

First Name, last Name of contact for secondary applicant: N/A

Organizational name of secondary applicant: N/A

Unique Identifier (IRN/Fed Tax ID): N/A

Address of secondary applicant: N/A

Phone number of secondary applicant: N/A

Email address of secondary applicant: N/A

6. List all other participating entities by name: Provide the following information for each additional participating entity, if applicable: Mention First Name, Last Name, Organizational Name, Unique Identifier (IRN/Fed Tax ID), Address, Phone Number, Email Address of Contact for All Secondary Applicants in the box below.

*Rodney Wallace 061903 Adams County/Ohio Valley Local 141 Lloyd Rd West Union 45693 Superintendent rodney.wallace@ovsd.us *Neil Leist 049122 Eastern Local 1170 Tile Mill Rd Beaver 45613 Superintendent nleist@mail.gsn.k12.oh.us *Mike Staggs 044461 New Boston Local #1 Glenwood Tiger Trail New Boston 45662 Superintendent mstaggs@newboston.k12.oh.us *Anthony Mantell 049601 Clay Local 44 Clay High St Portsmouth 45662 Superintendent mantellt@claylocalschools.org *Sandra Mers 049619 Green Local 4070 Gallia Pike Franklin Furnace 45629 Superintendent sandy.mers@green.k12.oh.us *Barbara Dever 049627 Minford Local PO Box 204 Minford 45653 Superintendent bdever@minfordfalcons.net *Anthony Jenkins 049635 Northwest Local 800 Mohawk Dr Mc Dermott 45652 Superintendent todd.jenkins@nwmohawks.net *Donald Stricklett 049650 Washington-Nile Local 15332 Us Highway 52 West Portsmouth 45663 Superintendent jeff.stricklett@west.k12.oh.us *Krista Maxson TAX:[redacted] Shawnee State University 940 Second Street Portsmouth OH 45662 Professor and Chair kmaxson@shawnee.edu *Lesli K. Johnson TAX:[redacted] W Ohio University's Voinovich Center 19 Circle Dr. Athens OH 45701 Faculty johnso12@ohio.edu *Kenneth Tam TAX:[redacted] Pearson Education 501 Boylston Street Boston MA 02116 Director, Digital Programs kenneth.tam@pearson.co

7. Partnership and consortia agreements and letters of support: - (Click on the link below to upload necessary documents).

* Letters of support are for districts in academic or fiscal distress only. If school or district is in academic or fiscal distress and has a commission assigned, please include a resolution from the commission in support of the project.

* If a partnership or consortium will be established, please include the signed Straight A Description of Nature of Partnership or Description of Nature of Consortium Agreement.

UploadGrantApplicationAttachment.aspx

8. Please provide a brief description of the team or individuals responsible for the implementation of this project including relevant experience in other innovative projects. You should also include descriptions and experiences of partnering entities.

Dianna Reedy is the treasurer of Portsmouth City Schools. She is responsible for a 22 million dollar budget. Before that, she was the treasurer of Northwest Local Schools. Prior to the she was the assistant Treasurer at Portsmouth City Schools and Business Manager of Scioto County MRDD. She obtained her bachelors of Business Administration at University of Northwestern Ohio. She currently serves as the treasurer for a school that has over 1900 ADM and 300 employees. She controls all aspects of the finances of the school system including payroll and benefits. Krista Maxson is currently serving as (SSU) Shawnee State University's Interim Associate Provost for Research and Graduate Programs as well as the chair of the Department of Mathematical Sciences. She coordinated the development of the M.S. in Mathematics degree which is being offered in the "flipped" model. Maxson led a Project NExT open discussion on the flipped classroom at the 2013 Joint Mathematics Meeting (JMM) which led to the creation of a Google community of faculty interested in the inverted classroom she moderates. She is co-organizing the "Flipping the Classroom" contributed paper session at the 2014 JMM and will be presenting at the 31st annual Academic Chairs conference on the issues facing chairs associated with flipped classes. She has served as the faculty lead in the high school - higher education alignment initiative and as associate director of the Southeast Ohio Center for Excellence in Mathematics and Science working with regional public school mathematics teachers. She currently serves on the Ohio Mathematics Steering Committee and was an invited panelist for the Athens Mathematics Circle. Dr. Maxson has experience administering grants such as the NOYCE Scholarship Grant through SEOCEMS and Teach Ohio Grant partnering with SSU's department of Teacher Education. The Voinovich School has extensive experience in program evaluation and the development of performance measurement systems to help expand the capacity of organizations at the local and state level. Using both qualitative and quantitative methodologies, the School has conducted evaluations to meet the needs of health care providers, community agencies, school districts, foundations and local government. Related services provided by the Voinovich School include assessment of program effectiveness, design of program objectives, development of self-evaluation mechanisms, establishment of benchmark indicators and integration of performance measures throughout the planning, development and implementation of services. Our evaluation staff includes individuals with specialized skills in the fields of statistics, education, public health, computer science, social work, political science and public administration. Recent examples of evaluation projects are the Statewide Evaluation Consultants for the Tobacco Use Prevention and Control Foundation; Reading Excellence Initiative Grant Evaluation; Evaluation of 21st Century Learning Programs; Evaluation of School Wellness Initiatives; and The Development of a Web-based Outcome System for the Ohio Association of Child Caring Agencies. The implementation of the Professional Development for teachers on Flipped Learning will be managed by Kenneth Tam / Pearson. Pearson developed the Foundations of Flipped Learning (FLN) program with the Flipped Learning Network and will be overseeing the roll out of the program to the teachers. Pearson's staff and FLN cadre members will facilitate the course and provide mentoring/coaching to participants. Pearson has a twenty-year history of successful educational change implementation and standards-based instructional support and has led implementations of the Foundations of Flipped Learning program in districts in PA, TX, MA, KS, and AL

B) PROJECT DESCRIPTION - Overall description of project and alignment with Outcomes

9. Which of the stated Straight A Fund goals does the proposal aim to achieve? - (Check all that apply)

- [x] Student achievement
- [ ] Spending reductions in the five-year fiscal forecast
- [ ] Utilization of a greater share of resources in the classroom

10. Which of the following best describes the proposed project? - (Select one:)

- [x] New - never before implemented
- [ ] Existing and researched-based - never implemented in your district or community school but proven successful in other educational environments

☐ Mixed Concept - incorporates new and existing elements

☐ Enhancing/Scale Up - elevating or expanding an effective program that is already implemented in your district, school, or consortia partnership

11. Describe the innovative project.

The DEAMFISA program will provide Dual Enrollment opportunities in Mathematics to approximately 500 students in the Southern Appalachian region of Ohio. The courses will be offered in the flipped format. High school teachers will work in teams under the guidance of SSU faculty to develop the courses. The participating teachers will enroll in three graduate courses in mathematics leading towards dual credentialing. They will receive tuition, fees, books and other incidentals required for completion of the coursework. The program includes providing the teachers and faculty with the tools and professional development (PD) in the methodology of flipped learning. The creator of the Flipped Learning Network (FLN), Jerry Overmyer has agreed to serve as our trainer and mentor (please see his letter in the uploaded letters of support). High school teachers and SSU faculty will participate in "The Foundations of Flipped Learning", a blended course with four self-paced online modules, all-day onsite training, followed by two remote mentoring sessions. The PD course was developed and written by FLN Cadre members and Pearson. Teachers will be placed into teams of 4-5 with a pair of SSU faculty coaches to develop the dual enrollment mathematics courses. Each team will be assigned one of SSU's mathematics courses to develop. Over the course of the spring term, 4 teams of teachers and SSU faculty will create the resources associated with 4 college level mathematics courses in the flipped format under the supervision of the Institution of Higher Education (IHE) liaison. The IHE liaison will work with the program coordinator to schedule the team meetings during the spring term with a separation of at most 3 weeks between. This intrusive scheduling is to ensure that all participants are making progress and to continually review and improve upon the videos, assignments, activities and assessments. Starting in 2016, instructors of college level mathematics courses will need to hold a Master's in mathematics or a Master's degree with 18 hours of a cohesive set of graduate coursework in mathematics. The majority of the teachers in this area do not hold these credentials and so part of this grant will provide them with the opportunity to start the credentialing process. Approximately twenty teachers from nine school districts will * Receive $2000 worth of tools (tablet, software, etc.) associated with the flipped learning approach * Receive a $1500 stipend to work with a team of teachers under the guidance of faculty at SSU to create the flipped version of SSU's entry-level college mathematics courses including videos, assignments, activities and assessments for use in the flipped classroom. * Courses to be created are: i. College Algebra ii. Trigonometry iii. Calculus iv. Principle of Statistics * Participate in the PD developed and written by the FLN Cadre members and Pearson. * Participate in the PD on the statistical software, R, to be used in the statistics course. * Receive tuition and books associated with the summer 2014 Math Master's courses at SSU (3 courses = 9 credit hours).

12. Describe how it will meet the goal(s) selected above. - If school/district receives school improvement funds/support, include a brief explanation of how this project will advance the improvement plan.

Increases in student achievement will be met by providing high school students in Appalachian Southern Ohio an opportunity to take dual enrollment mathematics courses with teachers trained in the flipped format. The participating teachers will have completed at least one semester's worth of graduate mathematics aimed at providing them the advanced content knowledge necessary for the teaching of college level mathematics. - Teachers will be highly qualified to offer the dual enrollment math courses they helped create under the guidance of faculty at SSU. * They will have increased their advanced content knowledge in mathematics having completed 3 graduate mathematics courses. * They will have completed the PD course on the flipped format and received follow-up remote mentoring to ensure a seamless transition to the pedagogy of the flipped classroom. * The teachers will have access to the SSU faculty mentors to answer questions and provide any additional support needed for the successful implementation of the dual enrollment course. - Students that participate in dual enrollment tend to have better educational outcomes. * They demonstrate an increased high school graduation rate compared with students who do not receive college credit during high school. * They demonstrate a greater rate of college enrollment and persistence compared with students who do not receive college credit during high school. - Students that take courses in the flipped format become more active learners taking more responsibility for their own learning. In a flipped learning classroom, the teacher's lecture is delivered outside of the traditional class time, typically via a video students view on their own. In-class time is used for active problem solving by students and one-to-one or small group tutoring with the teacher. The flipped classroom uses modern technology to create a sustainable, reproducible, and manageable environment for student-centered learning. Students can watch the short lectures as many times as they need to fully understand the content and then come to class ready to jump into the lesson, ask and answer questions, work on collaborative projects, and explore the content further. With the transfer of foundational knowledge outside of class time, students are asked to take ownership of their own learning. Educators are able to personalize each class and increase time spent with each student.

C) SUSTAINABILITY - Planning for ongoing funding of the project, cost breakdown

13. Financial Documentation - All applicants must enter or upload the following supporting information. Responses should refer to specific information in the financial documents when applicable:

a. Enter a project budget

b. Upload the Straight A Financial Impact Template forecasting the expected changes to the five-year forecast resulting from implementation of this project. If applying as a consortia or partnership, please include the five-year forecasts of each school district, community school or STEM school member for review.

c. If subsection (b) is not applicable, please explain why, in addition to how the project will demonstrate sustainability and impact.

Budget attached

14. What is the total cost for implementing the innovative project?

447,861.00 * Total project cost

* Provide a brief narrative explanation of the overall budget. The narrative should include the source and amount of other funds that may be used to support this concept (e.g., Title I funding, RttT money, local funding, foundation support, etc.), and provide details on the cost of items included in the budget (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc).

The total cost for implementing the project is $447,861.00. The budget of the project is divided into administrative costs, tuition and fees, Dual Enrollment Course Development, participant costs, contractual costs and facilities and supplies. * Administrative costs total $23,700.00 and account for approximately 5% of the budget. These costs are allocated to salary and fringe benefits for the IHE Liaison and Project coordinator who will provide oversight and coordination of the project. * Tuition and fees total $171,426.00 (approximately 38% of the budget). This is the cost to provide area math teachers seeking to earn the credentials to offer dual credit courses with the resources necessary to start the Master's in mathematics program at Shawnee State University. This also includes the cost of enrolling 500 students in the Southern Appalachian region of Ohio in the dual enrollment mathematics courses. * Participant costs total $13,695.00 (approximately 3% of the budget). This represents the cost of books, travel and lodging for the participation in the three graduate mathematics courses. * Dual enrollment course development costs total $131,040.00 (approximately 29% of the budget). These costs include the professional development for the flipped learning and statistical software, faculty mentor and teacher stipends, instructional tools and substitute pay. * Contractual costs total $35,000.00 (approximately 7% of the budget). This will cover the costs of evaluation of the DEAMFISA project by Ohio University's Voinovich Center. * Facilities and Supplies total $73,000.00 (approximately 18% of the budget). These include printing and associated costs of developing the dual enrollment courses and classroom supplies including text books for each of the dual enrollment courses for each district. Shawnee State University is providing $9,000.00 in matching funds to cover facilities rental costs necessary for the required dual enrollment course development meetings.

15. What **new/recurring costs** of your innovative project will continue once the grant has expired? If there are no new/recurring costs, please explain why.

72,000.00 * Specific amount of new/recurring cost (annual cost after project is implemented)

* Narrative explanation/rationale: Provide details on the cost of items included in the budget (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc.). If there are no new/recurring costs, please explain why.

The new/recurring costs are the tuition and fees for the completion of the credentialing of the high school teachers and the tuition of the dual enrollment courses that the high school students enroll in. The cost associated with the high school student's tuition is the $50 per credit hour. It will either fall on the individual student or school district to pay for this discounted rate. To continue the program at the current number of students, the average amount of funds needed from each school district is approximately $8,000. The new costs associated with the tuition and fees for the completion of the teachers credentialing will fall on the individual teachers themselves. Since the funds awarded must be spent by September 30, 2014 and setting up a fund earmarked for tuition reimbursement in the development foundation was not allowed, the cost to complete the dual credentialing will come from them. As long as they are making progress towards the M.S. in Mathematics, they will be allowed to offer the dual enrollment courses to their students. SSU is committed to continually looking for ways to help support our local teachers in pursuit of a graduate degree and hopes to find funding (i.e.: graduate assistantships, additional grants, etc.) to continue their education, although such funding is not guaranteed. The college-level mathematics courses developed utilizing the flipped model of instruction will be available for use by any teachers credentialed to teach college-level mathematics, including the teachers that participated in the program. The materials associated with the courses will be maintained by the faculty in the department of Mathematical Sciences at SSU. The courses will have all activities, assignments and assessments built in to ensure rigor and consistency among sections offered by different teachers. SSU will provide faculty mentors for all teachers when they offer a dual enrollment course for the first time. SSU faculty will receive a stipend paid by the University to support this mentoring.

16. Are there **expected savings** that may result from the implementation of the innovative project?

333,000.00 * Specific amount of expected savings (annual)

* Narrative explanation/rationale: Provide details on the anticipated savings (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc.)

It is expected that the provision of dual enrollment coursework will result in cost savings in terms of encouraging high school students to exercise this option over the Post-Secondary Education Option (PSEO) which results in significant costs for school districts. According to the Ohio Department of Education website, the school districts in the consortium currently send 144 students to SSU through PSEO. This equates to $432,000 (144 x $3000). If each of these students took eight (8) 3-credit dual enrollment courses per year, the costs would be reduced to $172,800 (144 x $1200). Further, several schools in the consortium offer CAP classes in which the school district pays for an instructor to teach a class at the high school. The current cost of CAP courses is $90,000 (9 x $10,000). Replacing those courses with a dual enrollment course taught by the assigned high school teacher would reduce the costs to $16,200 (this assumes approximately 12 students per classroom x 9 classes x $150). The total projected cost savings are $333,000 annually.

17. Provide a brief explanation of how the project is self-sustaining. If there are ongoing costs associated with the project after the term of the grant, this explanation should provide details on the cost reductions that will be made that are at least equal to the amount of new/recurring costs detailed above. If there are no new/recurring costs, explain in detail how this project will sustain itself beyond the life of the grant.

The project is sustaining because the college-level mathematics courses developed utilizing the flipped model of instruction will be available for use by any teachers credentialed to teach college-level mathematics, including the teachers that participated in the program. The course materials will be maintained and updated if necessary by the faculty in the department of mathematical sciences. The courses will have all activities, assignments and assessments built in to ensure rigor and consistency among sections offered by different teachers. SSU will provide faculty mentors for all teachers when they offer a dual enrollment course for the first time. SSU faculty will receive a stipend paid by the University to support this mentoring. The participating teachers will engage in an intensive, hands-on,

personally relevant professional development experience in the creation of the flipped courses that will serve to improve the teachers' level of comfort in the development of resources for flipped learning, while simultaneously developing a viable teaching product. They will have the tools necessary to convert other courses they teach to the flipped format. It is expected that the participating teachers will become advocates for flipped learning; further, they will be able to train or mentor other instructors in this pedagogical methodology. The costs persisting after the term of the grant are the ongoing costs of tuition and fees for high school teachers pursuing their Master's of Science in Mathematics. These costs will fall upon the teachers. At least two of the participating teachers already have the credentials necessary to teach college level mathematics, and others only need an additional 9 credit hours of graduate mathematics not covered by the grant. These teachers will be able to continue to offer the dual enrollment courses each academic year as long as they are making progress towards the M.S. in Mathematics or the requirements for credentialing. SSU is committed to continually looking for ways to help support our local teachers in pursuit of a graduate degree and hopes to find funding (i.e.: graduate assistantships, additional grants, etc.) to continue their education, although such funding is not guaranteed. Additional costs will be the tuition for the students enrolling in the dual enrollment courses. It will either fall on the individual student or school district to pay for this discounted rate. To continue the program at the current number of students, the average amount of funds needed from each school district is approximately $8,000.

D) IMPLEMENTATION - Timeline, communication and contingency planning

18. Fill in the appropriate dates and an explanation of the timeline for the successful implementation of this project. In each explanation, be sure to briefly describe the largest barriers that could derail your concept or timeline for implementation and your plan to proactively mitigate such barriers. In addition, the narrative should list the stakeholders that will be engaged during that stage of the project and describe the communication that occurred as the application was developed.

Describe the ongoing communication plan with the stakeholders as the project is implemented. (Stakeholders can include parents, community leaders, foundation support and businesses, as well as educational personnel in the affected entities.)

* Proposal Timeline Dates

Plan (MM/DD/YYYY): 10/25/2013

* Narrative explanation

Initialization of Program by Program Coordinator and IHE Liaison (Present until notice of funding) * Program Coordinator and IHE Liaison will coordinate with HS teachers to establish preferred contact information, available meeting dates, preferred course to develop, and preference for tools

Implement (MM/DD/YYYY): 12/17/2013

* Narrative explanation

*Notice of Funding (December 2013) *Memorandum of Understanding sent to teachers (December 2013) *Teachers will need to sign the MOU indicating their intention of participating in all activities associated with the program. The instructional tools will be delivered to teachers upon receipt of signed MOU. Teachers will begin development of dual enrollment courses alongside SSU faculty mentors. Stipends will be awarded when the IHE liaison is satisfied with the progress made on the development of the dual enrollment course(s). Purchase of Professional Development (PD) and tools for use in the development of the flipped dual enrollment courses (December 2013). *The PD includes 20 hours of online videos, which will be viewed by participants prior to their attendance of a one day workshop (to be scheduled between 1/20/14 and 2/9/14). *At the one day workshop, the teams will schedule 4 follow up meetings. The content they have created will be reviewed, edited and completed at the meeting. Substitute pay and transportation will be paid for by the grant. - 1st Follow up day scheduled no later than week of February 23rd - 2nd Follow up day scheduled no later than week of March 23rd - 3rd Follow up day scheduled no later than week of April 20th - 4th Follow up day scheduled no later than week of May 11th * It is expected that the majority (if not all) of the course(s) content will be completed by May 19th. - Participating teachers will participate in three graduate Mathematics courses (5/19/14 - 7/26/14). *Lectures are delivered online via blackboard along with assignments *Courses to be offered are as follows: - MATH 5610 - Mathematical Analysis I (3 credit hours) - MATH 5400 - Probability I (3 credit hours) - MATH 5300 - Number Theory (3 credit hours) - MATH 5500 - Regression I (3 credit hours) *Graduate course on-campus meetings are approximately every two weeks on Friday and Saturday. - Transportation and lodging are provided through the grant - Books are provided through the grant - Tuition and fees are paid for by grant - Application fee is paid for by grant *High School students will enroll in dual courses in August 2014. *Discounted tuition for these courses is paid for by grant Contingency plan * If one or more teachers discontinue their involvement, the IHE liaison and program coordinator will actively recruit more teachers. - It is expected that additional teachers will indicate an interest to participate between submission of the grant application and notice of award. * It is possible that the dual enrollment courses may not be completed by the end of spring term. - The work to complete the dual enrollment courses can continue while they are being offered; team meetings can occur after school via an online meeting system. - As part of the PD there are two remote mentoring sessions that will take place during the 2014/2015 academic year which may lead to revision of the already created content.

Summative evaluation (MM/DD/YYYY): 09/30/2014

* Narrative explanation

Ohio University's Voinovich School of Leadership and Public Affairs will serve as the external evaluator for the program. The evaluation plan includes both formative and summative components. The formative evaluation will address the following evaluation questions: 1. Do teachers who participate in the 2014 Math Master's courses feel prepared to develop and teach new dual enrollment courses in math? 2. Do participating high school teachers and university faculty work collaboratively to design dual enrollment courses. 3. Do teachers who participate in the flipped classroom workshops feel competent to design and deliver blended learning coursework? The summative evaluation will address the following evaluation questions: 1. What percentage of participating teachers completed the summer 2014 Math Master's courses at Shawnee State University? 2. What percentage of teachers who were trained in the flipped format actually created dual enrollment and/or blended learning math courses? 3. How many new courses are offered as dual enrollment/blended learning course in the next four academic years as a result of the program? 4. How many students are enrolled in new dual enrollment/blended learning math courses beginning in the Fall of 2014 and continuing through the 2015-2016 academic year 5. How many students successfully complete the dual enrollment/blended learning courses and receive both high school and post-secondary credit over the next two academic years, beginning in 2014 and continuing through the 2015-2016 academic year. 6. How many students enroll in post-secondary education? 7. How many students persist in post-secondary education? Methodology: ? Observation selected Math Master's courses and flipped classroom/blended learning workshops. ? Interviews with teachers participating in Math Master's courses and flipped classroom workshops. ? Document review of new dual enrollment course syllabi. ? Document review and interviews with administrators in the 9 participating school districts to verify the number of new dual enrollment/blended learning courses being offered beginning in the 2014-2015 academic year through the 2018-2019 academic year, the number of students enrolled each year, and the number of students who receive credit for both high school and post-secondary for each year. The initial evaluation report will address the formative and summative evaluation questions and be delivered on September 30, 2014 and a final report will be issued by July 30, 2019.

19. Describe the expected changes to the instructional and/or organizational practices in your institution.

The DEAMFISA project will provide local mathematics teachers with both the credentials needed to teach dual enrollment courses and the skills necessary to offer the courses in the flipped format. It is expected that the number of dual enrollment courses offered in the local high schools will increase through the use of the developed courses. Through these offerings, the number of students completing college-level mathematics coursework will increase, leading to improved high school graduation rates, college enrollment, and college persistence. It is anticipated that the teachers participating in the DEAMFISA project will become proficient in the development of resources required to offer courses in the flipped format. They will have completed a rigorous, hands-on professional development experience that will provide the skills and comfort level necessary to flip other courses that they teach. It is expected that the participating teachers will become advocates for flipped learning; further, they will be able to train or mentor other instructors in this pedagogical methodology Through the collaboration of the teachers and faculty at SSU it is foreseeable that relationships will form between the participants. Through these relationships a line of communication between area high schools and SSU will be established which will increase the ability to partner towards the common goal of increased student achievement. By aligning the expectations of college faculty with the practice of high school teachers the gap between K-12 and higher education can be bridged.

E) SUBSTANTIAL IMPACT AND LASTING VALUE - Impact, evaluation and replication

20. Describe the rationale, research or past success that supports the innovative project and its impact on student achievement, spending reduction in the five-year fiscal forecast or utilization of a greater share of resources in the classroom.

The DEAMFISA program intends to increase student achievement by using the flipped format to offer dual credit mathematics courses to the students of 9 school districts in the Appalachian region of Southern Ohio. Offering these courses in the flipped format shifts the focus of learning onto the student by providing active learning opportunities in class with self-paced review available through the content video library. Studies on dual credit in California, Oregon, Florida and New York indicate that students who participate in dual enrollment courses achieve greater educational outcomes (5,7,8). They are more likely to graduate high school, persist in postsecondary education, earn more college credit, and test out of basic skills courses in college(8). Students in Florida who took a dual enrollment college algebra course were 23% more likely to earn an associate or bachelor's degree than similar students(10). The flipped(1) or inverted classroom(9) has grown in popularity with the increase in user-friendly technology that enables instructors to deliver content outside of class via video or other modes of delivery. This model of instruction frees up class time to allow for collaborative and interactive learning along with one-on-one time with the instructor, shifting the focus from a teacher-centered to a learner-centered environment. Research into flipped classrooms supports the idea that this approach to teaching and learning is likely to increase connectedness amongst students and instructors (2,4). Studies also show improved student's awareness of their own learning processes (3). Flipped classes allow for increased flexibility in time management within the classroom for more student-centered interaction and problem solving that has positive effects on both student learning and student attitudes toward mathematics (2,6). 1.Baker, J. W. (2000). The "classroom flip": Using web course management tools to become the guide by the side. 11th International Conference on College Teaching and Learning, Jacksonville, Florida, United States. 2. Bergmann, J. & Sams, A. (2012). Flip Your Classroom: Reach Every Student in Every Class Every Day. International Society for Technology in Education. 3. Frederickson, N., Reed, P., & Clifford, V. (2005). Evaluating web-supported learning versus lecture-based teaching: Quantitative and qualitative perspectives. Higher Education, 50, 645-664. 4. Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. Internet and Higher Education, 7(2), 95-105. 5. Golann, J.W., and Hughes, K.L. (2008). Dual enrollment policies and practices: Earning college credit in California high schools. New York, NY: Columbia University, Teachers College, Community College Research Center. Funded by and published with The James Irvine Foundation, San Francisco, CA. 6. Guerrero, Baumgartel, & Zobott (2013). The Use of Screen casting to Transform Traditional Pedagogy in a Preservice Mathematics Content Course. Journal of Computers in Mathematics Science and Teaching, 32(2). 7. Hughes, K. L., Rodriguez, O., Edwards, L., & Belfield, C. (2012). Broadening the Benefits of Dual Enrollment: Reaching Underachieving and Underrepresented Students with Career-Focused Programs. New York, NY: Columbia University, Teachers College, Community College Research Center 8. Jacobs, J. and North, T. (2010). Dual Credit in Oregon, 20120 Follow-up: An Analysis of Students taking Dual Credit in High School in 2007-08. Office of institutional Research, Oregon University System 9. Lage, M. J., Platt, G. J., & Treglia, M. (2000). Inverting the classroom: A gateway to creating an inclusive learning environment. The Journal of Economic Education, 31 (1), 30-43. 10.Speroni, C. (2011). High school dual enrollment programs: Are we fast-tracking students too fast? (NCPR Working Paper). New York, NY: National Center for Postsecondary Research.

21. Is this project able to be replicated in other districts in Ohio?

☑ Yes ☐ No

22. If so, how?

The DEAMFISA project can be replicated in other districts in part or in whole where there are Masters programs that are accessible to current high school teachers - The professional development in flipped learning is a course that is offered through Pearson that can be replicated for groups of teachers anywhere in the United States * Training teachers in the flipped model of instruction can be done independently from the entirety of the project as well as with the creation of dual enrollment courses - The instructional tools associated with flipped learning are readily available - The model can be replicated in other disciplines * Findley and Ohio Dominican are offering English Language Arts programs specifically aimed at credentialing current high school teachers - The M.S. in Mathematics degree is being offered in an accessible format that math teachers from anywhere in the state of Ohio could participate * In the pilot cohort, there are 4 teachers that travel 3 hours to attend the on campus portion of the program. * Teachers that pursue the M.S. in Mathematics will be able to use the already developed content under the guidance of a faculty mentor while they are making sufficient progress toward the degree. The time frame of this project is ambitious but not impossible to achieve. Without the restrictions of the timeframe inherent to particular RFP, other districts would be able to take an entire year to develop the flipped model of any courses they intend to offer. It would also be possible for the high school teachers to complete a full semester of graduate coursework prior to beginning the development of the dual enrollment course. It is likely that the courses created through this project will require some adjustment or revision to address issues that arise during their implementation. As such, it is important to have the faculty mentor available to the teachers through the first offering of the course to answer questions and help with revisions to the content.

23. Describe the substantial value and lasting impact that the project hopes to achieve.

The substantial value and lasting impact that the DEAMFISA project will produce stem from the rigorous, sustainable and cost-effective nature of the dual enrollment courses. As previously noted, students who participate in dual enrollment courses demonstrate higher high school graduation rates, college entrance rates, and college persistence rates compared to their peers who do not receive college credit during high schools. These courses are also a particularly cost-effective tool to provide that college credit. They are significantly less expensive than standard college tuition, PSEO or CAP courses (as noted in section 16, if PSEO and CAP courses are replaced with dual enrollment courses, it could save the districts in the consortium approximately $333,000 annually). These courses can continue to be offered as long as a high school has the appropriately credentialed teacher capable of offering the class. The DEAMFISA project also provides value to the region by increasing the number of appropriately credentialed Mathematics teachers in Appalachian Southern Ohio. These teachers are able to develop additional dual-credit courses, and will receive the education necessary to ensure improved rigor in their classrooms. This will help to bridge the gap between high school and higher education in terms of student achievement expectations. Finally, by providing high school teachers with professional development and mentoring in the use of flipped classroom approaches to teaching, the DEAMFISA project encourages increased use of this innovative and effective pedagogy. The teachers can serve as mentors to other high school teachers who may desire to flip their own classrooms.

24. What are the specific benchmarks related to the fund goals identified in question 9 that the project aims to achieve in five years? Include any other anticipated outcomes of the project that you hope to achieve that may not be easily benchmarked.

The benchmark to indicate increased student achievement will be: 1. Number and percent of participating students completing a dual enrollment mathematics course successfully 2. Number and percent of participating students that enroll in college 3. Number and percent of participating students that persist to their sophomore year. Intermediate goals: 1. Completion of the college mathematics courses to be offered in the flipped format a. College Algebra b. Calculus c. Principles of Statistics d. Trigonometry 2. Number and percent of participating teachers that complete the graduate courses 3. Number of courses offered as dual enrollment 4. Number of teaches trained in the flipped format that participate in the creation of the college mathematics courses 5. Number of courses that these teachers begin to offer in the flipped format beyond the dual enrollment courses created as part of the grant 6. Number of additional teachers mentored/coached by the initial cohort of teachers that participate in the grant

25. Describe the plan to evaluate the impact of the concept, strategy or approaches used.

* Include the method by which progress toward short- and long-term objectives will be measured. (This section should include the types of data to be collected, the formative outputs and outcomes and the systems in place to track the program's progress).

* Include the method, process and/or procedure by which the program will modify or change the program plan if measured progress is insufficient to meet program objectives.

Ohio University's Voinovich School of Leadership and Public Affairs will serve as the external evaluator for the program. The evaluation plan includes both formative and summative components. The formative evaluation will address the following evaluation questions: 1. Do teachers who participate in the 2014 Math Master's courses feel prepared to develop and teach new dual enrollment courses in math? 2. Do participating high school teachers and university faculty work collaboratively to design dual enrollment courses. 3. Do teachers who participate in the flipped classroom workshops feel competent to design and deliver blended learning coursework? The summative evaluation will address the following evaluation questions: 1. What percentage of participating teachers completed the summer 2014 Math Master's courses at Shawnee State University? 2. What percentage of teachers who were trained in the flipped format actually created dual enrollment and/or blended learning math courses? 3. How many new courses are offered as dual enrollment/blended learning course in the next four academic years as a result of the program? 4. How many students are enrolled in new dual enrollment/blended learning math courses beginning in the Fall of 2014 and continuing through the 2015-2016 academic year 5. How many students successfully complete the dual enrollment/blended learning courses and receive both high school and post-secondary credit over the next two academic years, beginning in 2014 and continuing through the 2015-2016 academic year. 6. How many students enroll in post-secondary education? 7. How many students persist in post-secondary education? Methodology: ? Observation selected Math Master's courses and flipped classroom/blended learning workshops. ? Interviews with teachers participating in Math Master's courses and flipped classroom workshops. ? Document review of new dual enrollment course syllabi. ? Document review and interviews with administrators in the 9 participating school districts to verify the number of new dual enrollment/blended learning courses being offered beginning in the 2014-2015 academic year through the 2018-2019 academic year, the number of students enrolled each year, and the number of students who receive credit for both high school and post-secondary for each year. The initial evaluation report will address the formative and summative evaluation questions and be delivered on September 30, 2014 and a final report will be issued by July 30, 2019.

By virtue of applying for the Straight A Fund, all applicants agree to participate in the overall evaluation of the Straight A Fund for the duration of the evaluation timeframe. The Governing Board of the Straight A Fund reserves the right to conduct evaluation of the plan and request additional information in the form of data, surveys, interviews, focus groups, and any other related data to the legislature, governor, and other interested parties for an overall evaluation of the Straight A Fund.

PROGRAM ASSURANCES: I agree, on behalf of this applicant agency and/or all identified partners to abide by all assurances outlined in the Assurance section of the CCIP. In the box below, enter "I Accept" and indicate your name, title, agency/organization and today's date.

Dianna Reedy - Portsmouth City Schools - October 25, 2013