

# Budget Detail Request - Fiscal Year 2016-17

Your request will not be officially submitted unless all questions and applicable sub parts are answered.

1. Title of Project: Algebra Nation
2. Date of Submission: 12/03/2015
3. House Member Sponsor(s): H. O'Toole

## 4. DETAILS OF AMOUNT REQUESTED:

- a. Has funding been provided in a previous state budget for this activity? Yes  
***If answer to 4a is ?NO? skip 4b and 4c and proceed to 4d***
- b. What is the most recent fiscal year the project was funded? 2015-16
- c. Were the funds provided in the most recent fiscal year subsequently vetoed? No
- d. Complete the following Project Request Worksheet to develop your request (Note that Column E will be the total of Recurring funds requested and Column F will be the total Nonrecurring funds requested, the sum of which is the Total of the Funds you are requesting in Column G):

FY:	Input Prior Year Appropriation for this project for FY 2015-16 (If appropriated in FY 2015-16 enter the appropriated amount, even if vetoed.)			Develop New Funds Request for FY 2016-17 (If no new Recurring or Nonrecurring funding is requested, enter zeros.)			
	Column: A	B	C	D	E	F	G
Funds Description:	Prior Year Recurring Funds	Prior Year Nonrecurring Funds	Total Funds Appropriated  (Recurring plus Nonrecurring: Column A + Column B)	Recurring Base Budget  (Will equal non-vetoed amounts provided in Column A )	<b>INCREASED or NEW Recurring Requested</b>	<b>TOTAL Nonrecurring Requested</b>  (Nonrecurring is one time funding & must be re-requested every year)	<b>Total Funds Requested Over Base Funding</b>  (Recurring plus Nonrecurring: Column E + Column F)
Input Amounts:	0	2,000,000	2,000,000	0	0	2,000,000	2,000,000

- e. New Nonrecurring Funding Requested for FY 16-17 will be used for:  
 Operating Expenses     Fixed Capital Construction     Other one-time costs
- f. New Recurring Funding Requested for FY 16-17 will be used for:  
 Operating Expenses     Fixed Capital Construction     Other one-time costs

5. Requester:

- a. Name: Donald Pemberton
- b. Organization: University of Florida Lastinger Center for Learning
- c. Email: dpemberton@coe.ufl.edu
- d. Phone #: (352)273-4103

6. Organization or Name of Entity Receiving Funds:

- a. Name: University of Florida Lastinger Center for Learning
- b. County (County where funds are to be expended) Statewide
- c. Service Area (Counties being served by the service(s) provided with funding) Statewide

7. Write a project description that will serve as a stand-alone summary of the project for legislative review. The description should summarize the entire project's intended purpose, the purpose of the funds requested (if request is a sub-part of the entire project), and most importantly the detail on how the funds requested will be spent - for example how much will be spent on positions and associated salaries, specifics on capital costs, and detail of operational expenses. The summary must list what local, regional or statewide interests or areas are served. It should also document the need for the funds, the community support and expected results when applicable. Be sure to include the type and amount of services as well as the number of the specific target population that will be served (such as number of home health visits to X, # of elderly, # of school aged children to receive mentoring, # of violent crime victims to receive once a week counseling etc.)

With strong leadership from the Florida Legislature, Algebra Nation was developed by the University of Florida Lastinger Center to improve students' performance on the Algebra 1 End-of-Course (EOC) exam, provide powerful new learning technologies to deepen students' acquisition of foundational math concepts, reduce the dropout rates which are impacted by students' repeated failure of Algebra 1 EOC, extend mathematics learning beyond the school day, and to prepare Florida students to successfully compete in the STEM work force. The essential components of Algebra Nation include: ? Micro-instructional videos aligned to the Mathematics Florida Standards (MAFS). The videos feature top Algebra study experts and the state's most successful algebra teachers. Thus, all students in Florida have direct access to the best Algebra teachers in Florida. Standards and materials are presented in easy to navigate sections. Videos are available online, on smart phones and tablets on a 24/7 basis. ? Algebra Wall (24/7 homework help and tutoring) extends learning beyond the classroom. Moderated by Study Experts and top algebra teachers, the Algebra Wall allows students from throughout Florida to receive immediate assistance with their homework or class work. Anytime, day or night, any Florida algebra student can post a question to the Algebra wall and immediately receive assistance. Think about it: a student late at night struggling to complete a homework assignment on factoring polynomials can reach out to Algebra Nation and immediately receive tutoring support in order to complete the assignment and master new learning. ? Algebra Nation Workbook. Algebra Nation provides an Algebra Nation Workbook to every student. The Workbook, developed by University of Florida professors and our partner, Study Edge, are aligned to MAFS and accompany each Algebra Nation video. In essence, the workbook, along with the other elements of Algebra Nation, provides a powerful and cost-effective alternative to more expensive and expendable textbooks. ? Assessment System. Algebra Nation features an assessment system designed to help algebra students continuously measure their acquisition of new algebra learning and to direct them to the appropriate resources when they haven't yet mastered the material. Aligned to the Mathematics Florida Standards, the Algebra Nation assessment system provides immediate evaluation data to students and teachers to

allow them to personalize learning. ? Teacher Professional Learning. Built entirely with philanthropic funding, the Algebra Nation Teacher Professional Learning component allows teachers to collaborate on lesson plans, share resources and learn the new Florida math standards. The Teacher Professional Learning area of Algebra Nation includes a Teacher Wall where algebra educators from throughout Florida can request and receive help 24/7. In addition to the online resources, Algebra Nation Study Experts provide workshops directly to teachers in school districts throughout the state. ? Utilization and integration by school systems in Florida. Algebra Nation has been integrated into the technology systems of school districts throughout Florida so that students and teachers can use their existing school credentials to seamlessly and easily access Algebra Nation. ? Competency-based, mastery-based system that accelerates and individualizes learning. Algebra Nation, aligned with the Mathematics Florida Standards, is designed and presented as micro instructional units where learning can be evaluated immediately. This competency-based system draws from industry models where mastery is continuously developed and evaluated . ? Digital, blended learning, flipped classroom. Many teachers throughout Florida are using Algebra Nation as a blended learning, flipped classroom resource, where students watch the standards-assessment system, and then receive in-classroom instruction for those concepts they have not mastered yet. By any measure, Algebra Nation stands out for producing extraordinarily impressive Return on Investment as evidenced by the following data which demonstrates that Florida students and teachers greatly value Algebra Nation as demonstrated by high utilization usage and value; significant improvements in student achievement and learning; and measurable cost savings. As the data below indicates, Florida's students and teachers see immense value in Algebra Nation. Every district in Florida and all of their middle and high schools are using Algebra Nation as is virtually every algebra teacher in the state. This usage data confirms that Algebra Nation has become algebra students' and teachers' most valuable teaching and learning resource. ROI Measure Percent of Districts in Florida Using Algebra Nation

100%	Number of Middle and High Schools using Algebra Nation	2,400 schools per year	Annual Student Usage
250,000	students per year	Annual Teacher Usage	6,400 teachers per year
100%	Number of Algebra Nation Wall posts (monitored collaboration)	450,000	per year
2,610,000	per year*	Number of Algebra Nation assessment items answered	6,100,000 per year
250,000	per year	Number of Algebra Nation Workbooks distributed	250,000 per year
105	per year	*This number is an underestimation of viewership since at least 20% of views occur in the classroom setting where 1 video is being viewed by an average of 25 students. In those cases, one recorded view is equal to 25 actual views.	Number of Professional Development teacher trainings
8.1%	EOC Pass Rate Improvement (all districts)	18%	ROI: Algebra Nation Student Outcomes As measured by student outcomes, Algebra Nation is producing quantifiable return on investment.
6%	EOC Pass Rate Improvement (high usage districts)	6%	EOC Pass Rate Improvement for re-takers
\$8	Algebra Nation Cost Effectiveness and Cost Savings As measured by cost effectiveness and cost savings, Algebra Nation has provided Florida's citizens with high return on investment.		Cost per student

performance data is unequivocal: This online/blended learning resource is producing improvements in students' EOC results. The program has improved overall EOC results by 6%. High usage districts have seen results improve by 8.1%. Students who had previously failed the EOC and utilized Algebra Nation prior to retaking the exam saw an 18% improvement in EOC pass rates. We expect this trend to continue as usage is skyrocketing. Algebra Nation is being utilized by 100% of school districts in Florida. More than 250,000 students are utilizing the program and in excess of 6,000 teachers are infusing Algebra Nation into their teaching. Utilization data is impressive: 250,000 workbooks distributed to algebra students in Florida, more than 6,000,000 assessment questions answered in the last year and in excess of 2,000,000 video views. We are pleased to report that all of the content on Algebra Nation is aligned to Florida's math standards. In fact, the entire resource (including workbook, assessment questions, videos and professional development) were custom-designed for Florida. In addition to

improving EOC test results, Algebra Nation provides all algebra students in Florida with 24/7 learning support. Through the Algebra Wall, students can seek personalized tutoring and support at any time of day or night. Other funding was received from a private foundation to support the teacher professional learning section of Algebra Nation. Below is a summary of Algebra Nation Budget: \$491,979 ? Professional Development Workshops & Personnel \$647,059 ? Programming, Tech Support & Technology Platform \$481,283 ? Workbooks for Students \$379,679? Content Development \$2,000,000 ? Total Funding \*UF Indirect Costs are included in each budget category. 8. Provide the Total Cost of the project for FY 2016-17 from all sources of funding: a. Federal \$0 b. State \$0 c. Local \$0 d. Other \$250,000 9. Is this a multi-year project requiring funding from the state for more than one year a. Algebra Nation funding is renewed on an annual basis to ensure the success of Florida's Algebra students.

8. Provide the total cost of the project for FY 2016-17 from all sources of funding:

Federal: 0

State: 0 (Excluding the requested Total Amount in #4d, Column G)

Local: 0

Other: 0

9. Is this a multi-year project requiring funding from the state for more than one year?

Yes