

BSOP - PRC 201 - Educational and Competitive After-School Robotics Grant Awards

January 31, 2024

Background

FUNDING SOURCE/AMOUNT:

- Session Law 2023-134 provides **\$1,000,000** from **Federal ESSER III funds** to continue the **Educational and Competitive After-School Robotics Grant Program** during the **2023-2024 school year**.

LEGISLATIVE PURPOSE:

- **A continuation** of the After School Robotics Grant originally established by Session law 2021-180.
- **Increase** the number of students demonstrating **proficiency in science and math**.
- Support schools in their efforts to **increase** the number of **students** interested in pursuing **education and career opportunities** in Science, Technology, Engineering and Mathematics (**STEM**).
- Allow participating students to enhance their **experiences in STEM** and enable them to practice **durable skills** (communication, collaboration, etc) to support their educational growth.

Timeline

<ul style="list-style-type: none">• October, 2023	<ul style="list-style-type: none">• Budget approved with funding for PRC 201- Robotics
<ul style="list-style-type: none">• November 15, 2023	<ul style="list-style-type: none">• Guidance and Proposal documentation released to all PSUs
<ul style="list-style-type: none">• December 31, 2023	<ul style="list-style-type: none">• Application closed per legislation
<ul style="list-style-type: none">• January 7, 2024	<ul style="list-style-type: none">• Review committee established with representation from Office of Academic Standards, Digital Teaching and Learning, Office of Charter Schools, Learning Recovery and Acceleration, and Business Operations
<ul style="list-style-type: none">• January 26, 2024	<ul style="list-style-type: none">• Review committee met to finalize recommendations
<ul style="list-style-type: none">• January 31, 2024	<ul style="list-style-type: none">• Present recommendations to State Board of Education

Request For Proposal

Robotics Request for Proposal (RFP) Key Points

- Same process used for the previous grant. Timeline for PSUs to use the funds limited to the ESSER III requirements.

Funds may be used for:

- Establishing a relationship with a **robotics partner**.
- Purchasing **robotics kits**.
- Paying **fees** (registration, membership, etc.) incurred as part of the administration of a robotics team.
- Making payments associated with **participation** in a **robotics league or robotics competition** (e.g., travel, tools, equipment, uniforms, promotional items, etc).
- Providing **stipends** for coaches

Robotics Partner

Defined in Statute:

- **Third-party entity** (e.g., nonprofit organization or institution of higher education)
- **Approved** by the Department of Public Instruction
- Ability to provide adequate **support** for an **after-school robotics program**

In order to provide adequate support, a robotics partner must meet ***all*** of the following criteria:

- Have a **national presence** in robotics education and competition.
- Provide adequate **instruction and programming** for students and adult volunteers in (i) robotics education, (ii) **project-based** learning, and (iii) **competitive robotics**.
- Promote a **safe and equitable** social environment (live or virtual).

Review Process

- **46 applications with just over \$2.1 million** in requests
- **Inter-agency Review Team**
- **All applications were evaluated by each reviewer.**
- **Robotics Rubric: 5 Components with each component receiving a rating and a maximum overall score for the application of 75**
 - Demographics
 - Description of Service Model
 - Operational Capacity
 - Evaluation Capacity
 - Budget Narrative and Alignment

Budget Requirements

The proposed budget must:

- Clearly **align** with program activities.
- Be **reasonable** and **necessary**.
- Provide a **breakdown** of costs by category.
- The district, charter, or lab must verify **no supplanting** occurs.

Targeted Areas for Consideration

- **Quality** of the application based on the grant rubric
- Priority for **new** applications or those who did not receive an award under the previous grant application
- **Sought to maximize** funding to serve the greatest number of robotics teams to **increase student participation** across a **broad geographical distribution**.
- Schools serving **economically disadvantaged** populations.
- **First time teams** participating in Robotics competitions.
- Districts establishing **feeder teams to build sustainability**.
- Schools ready and able to implement in the **2023-24 season**

Recommendations

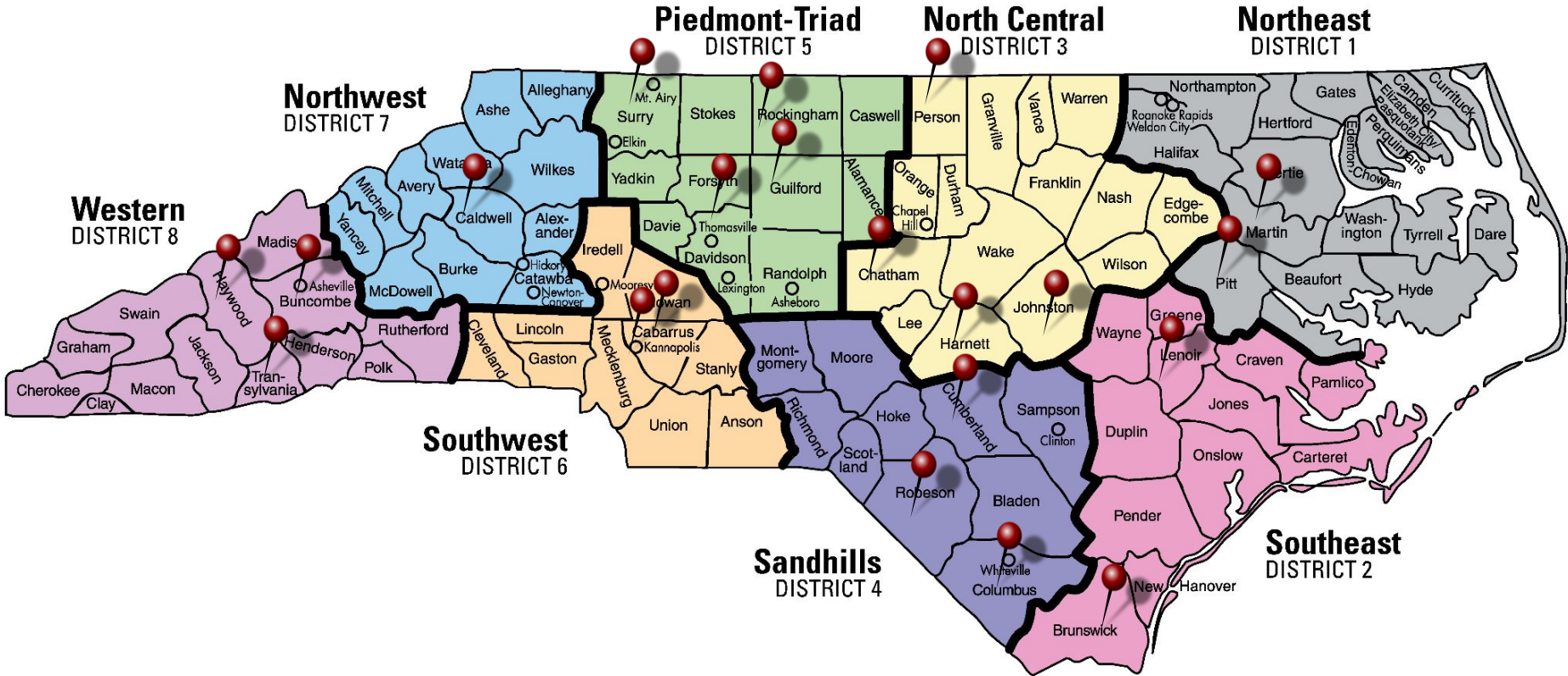
22 applications were recommended from the 46 PSUs who submitted grant applications

- Requests from the 46 PSUs totaled \$2,165,495.47
 - Recommendations totaled \$1,000,000 of the \$1,000,000.00 provided.
- Recommended PSUs represent:
 - All 8 State Board Regions
 - 20 LEAs and 2 Charter Schools
 - Potentially reaching as many as 1,900 students

Applications Recommended for Funding

Region	Number of Applicants	Number of Applications Recommended for Funding	Amount of Funding Recommended
Northeast	7	3	\$85,021.00
Southeast	4	1	\$33,895.00
North Central	8	4	\$174,252.00
Sandhills	5	4	\$213,021.12
Piedmont - Triad	6	4	\$163,319.50
Southwest	8	2	\$111,126.68
Northwest	2	1	\$75,000.00
Western	6	3	\$144,364.70
TOTALS	46	22	\$1,000,000.00

Geographic Distribution of Recommended Grant Recipients



Applications Recommended for Funding

PSU	Region	Award Amount
Asheville City Schools	Western	\$73,671.16
Brevard Academy	Western	\$11,805.50
Cabarrus County Schools	Southwest	\$73,949.94
Caldwell County Schools	Northwest	\$75,000.00
Chatham County Schools	North Central	\$50,332.00
Columbus County Schools	Sandhills	\$39,600.00
Cumberland County Schools	Sandhills	\$23,466.12
Harnett County Schools	North Central	\$42,532.00

Applications Recommended for Funding

PSU	Region	Award Amount
Haywood County Schools	Western	\$58,888.04
Johnston County Public Schools	North Central	\$57,370.00
Kannapolis City Schools	Southwest	\$37,176.74
Lenoir County Public Schools	Southeast	\$33,895.00
Martin County Schools	Northeast	\$25,421.00
Mount Airy City Schools	Piedmont-Triad	\$16,686.90
Next Generation Academy	Piedmont-Triad	\$66,493.60
Person County Schools	North Central	\$24,018.00

Applications Recommended for Funding

PSU	Region	Award Amount
Pitt County Schools	Northeast	\$34,000.00
Public Schools of Robeson County	Sandhills	\$74,955.00
Richmond County Schools	Sandhills	\$75,000.00
Roanoke Rapids City Schools	Northeast	\$25,600.00
Rockingham County Schools	Piedmont-Triad	\$40,000.00
Winston Salem / Forsyth County Schools	Piedmont-Triad	\$40,139.00
		\$1,000,000.00

Reporting Requirements

Session Law 2023-134 Section 7.23 requires the Department to report on the use of funds to the Joint Legislative Education Oversight Committee (JLEOC)

- A total of \$2.6 million in ESSER III funds has been provided for After School Robotics programming through the past two budget cycles
 - S.L. 2021-180 allotted \$1.6million and S.L. 2023-134 allotted \$1million.
 - The Department was able to award 19 PSUs in 2022, and 21 in 2024.
- Over the 2 cycles of grant awards the Department has received 111 applications requesting an approximate total of \$8.2million in request
 - In June, 2022 the Department received 65 applications with a total request of \$6.1 million.
 - In December, 2024 the Department received 46 applications with just over \$2.1 million in requests.
- Grant participants include PSUs from all 8 SBE regions, all grade levels, and both LEAs and Charter Schools.

Reporting Requirements

School Level Participation for 2022-2023 and 2023-2024

	2022-2023 (As of 3/22)					2023-2024 (As of 01/24)				
Grade Span	Number of Schools	Number of Teams	New Teams	Number of Students	Number of Staff	Number of Schools	Number of Teams	New Team	Number of Students	Number of Staff
Elementary	80	103	65	925	131	69	93	10	921	118
Middle	35	57	23	447	55	29	51	7	397	48
High School	25	18	4	253	37	21	23	6	295	31
Other	4	4	3	60	7	2	5	1	35	3
TOTAL	144	182	95	1685	230	121	172	24	1648	200

Reporting Requirements

Highlights -

“This year, we **expanded** the program to two additional schools, bringing the **joy of robotics to more students**. We also **integrated advanced programming concepts**, seeing a **remarkable improvement** in students’ **problem-solving skills**.”

“Students have successfully **worked together** to build all mission models. Teams are meshing well and **learning to work together as a team** as they collaborate/work towards achieving goals. Students have completed extensive research, and have used **critical thinking skills to apply and extend that knowledge**.”

“All four schools **completed at the regional level** and the middle school advanced to the **state level**. It was an **amazing experience!** This year, two elementary schools and the middle school have successfully created FLL teams that are preparing for a spring competition. Other successes include a **heightened interest in the STEM areas and the gaining of a wealth of knowledge**.”

“The grant has enabled our district to produce impressive results, **improving the quality of children's instruction**. The program has seen a **rise in student engagement** and excitement, and as a result, robotics programs have **grown significantly** every year.”

Reporting Requirements

Challenges -

- Changes in leadership at the school and district level
- Transportation
- Scheduling conflicts
- Finding enough coaches/mentors/volunteers
- Future funding

Conclusion

A quote from a participating PSU...

*“Perhaps the most rewarding outcome has been the **palpable excitement** among our students. The grant-funded programs sparked **genuine enthusiasm for learning**, evident in increased **engagement, participation, and a newfound curiosity.**”*

Questions?

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