

BSOP - PRC 258 - Plasma Games Competitive Grant Program JLEOC Report

April, 2025

Dr. Stacy Wilson-Norman, Chief Academic Officer

Dr. Kristi Day, Director, Office of Teaching and Learning

Dr. Charles Aiken, Section Chief, Science, Mathematics, & STEM



Background

LEGISLATION:

- Session Law 2021-180 established the Plasma Games Grant program which was continued under Session law 2023-134.
 - Legislation directed the Department to establish a grant program for PSUs to be able to apply to receive funding to contract with Plasma Games
 - The software to be used in science, technology, engineering, and math (STEM) and career and technical education (CTE) courses.
 - Professional development and cost directly related to implementation
- Legislation requires NCDPI to report on the status of Plasma Games Grant implementation by May 15 of each year.
- The 2025 report summarizes data regarding the FY24 grant award implementation and details of the FY25 awards approved in March 2025.

Funding

Allotted funds

A total of \$7,300,000 million has been allotted for Plasma Games grants

- Session Law 2021-180 appropriated up to **\$2,500,000** in funding from **ESSER 3**
- Session law 2023-134 provided **\$3,000,000 (Non-recurring from ARPA Temporary Savings Fund in FY 2023-24)** for FY24 and **\$1,800,000 (Recurring from State funds)** for FY25

Of the \$7,300,000 million allotted:

- Funding requests from the 3 funding cycles totaled **\$5,508,336**
- **\$1,791,664 less** than what was allotted

Funding

Awarded funds:

First round of funds was approved in July 2022

- Department received **22 application** with a total request of **\$1,788,900.00**
- Funding requested **\$711,100 less** than appropriated

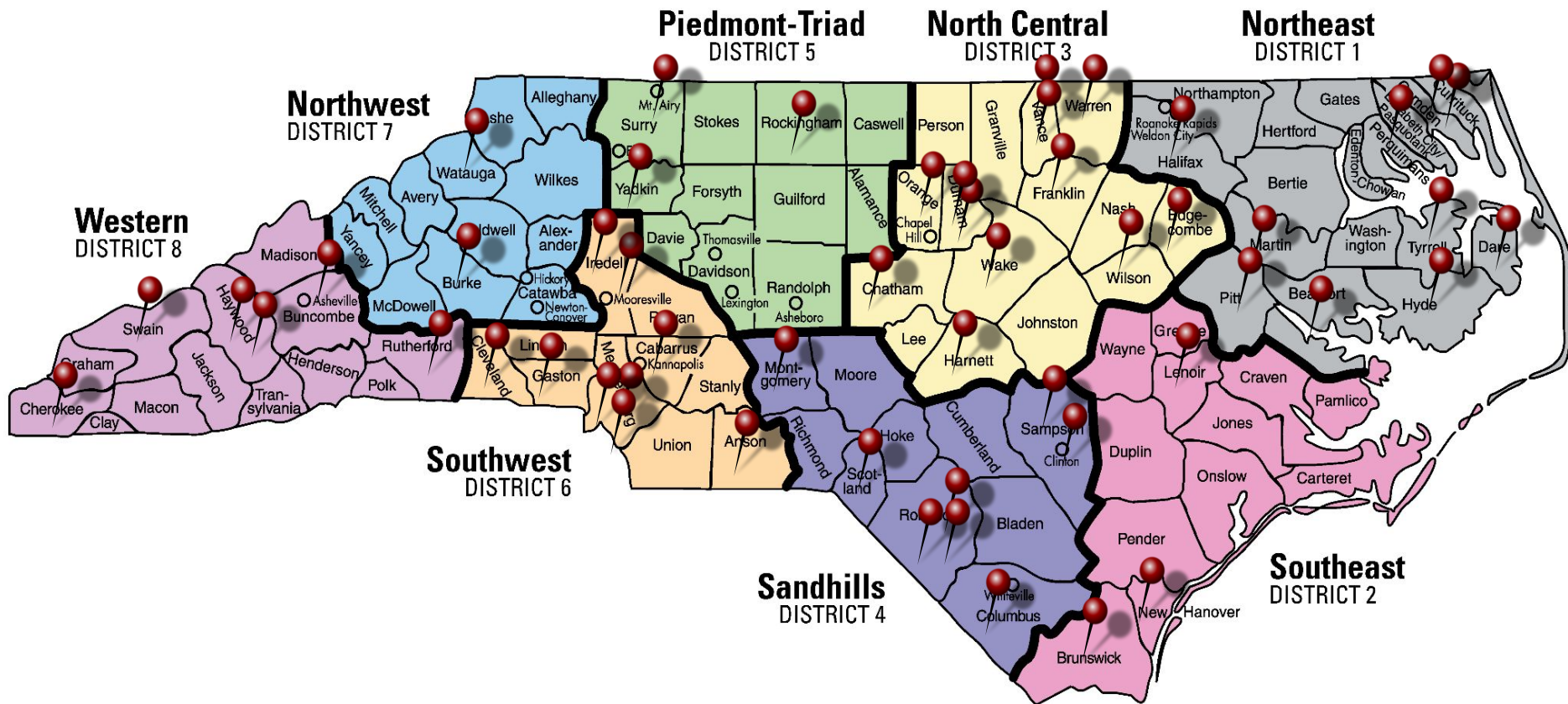
Second round of awards were approved March of 2024

- Department received **29 applications** with a total request of **\$1,378,414.00**
- Funding requested was **\$1,621,586.00 less** than appropriated

Third round of awards approved February 2025

- Department received **21 applications** with a total request of **\$2,341,022.00**
- Funding requested was **\$1,080,564.00 less** than available

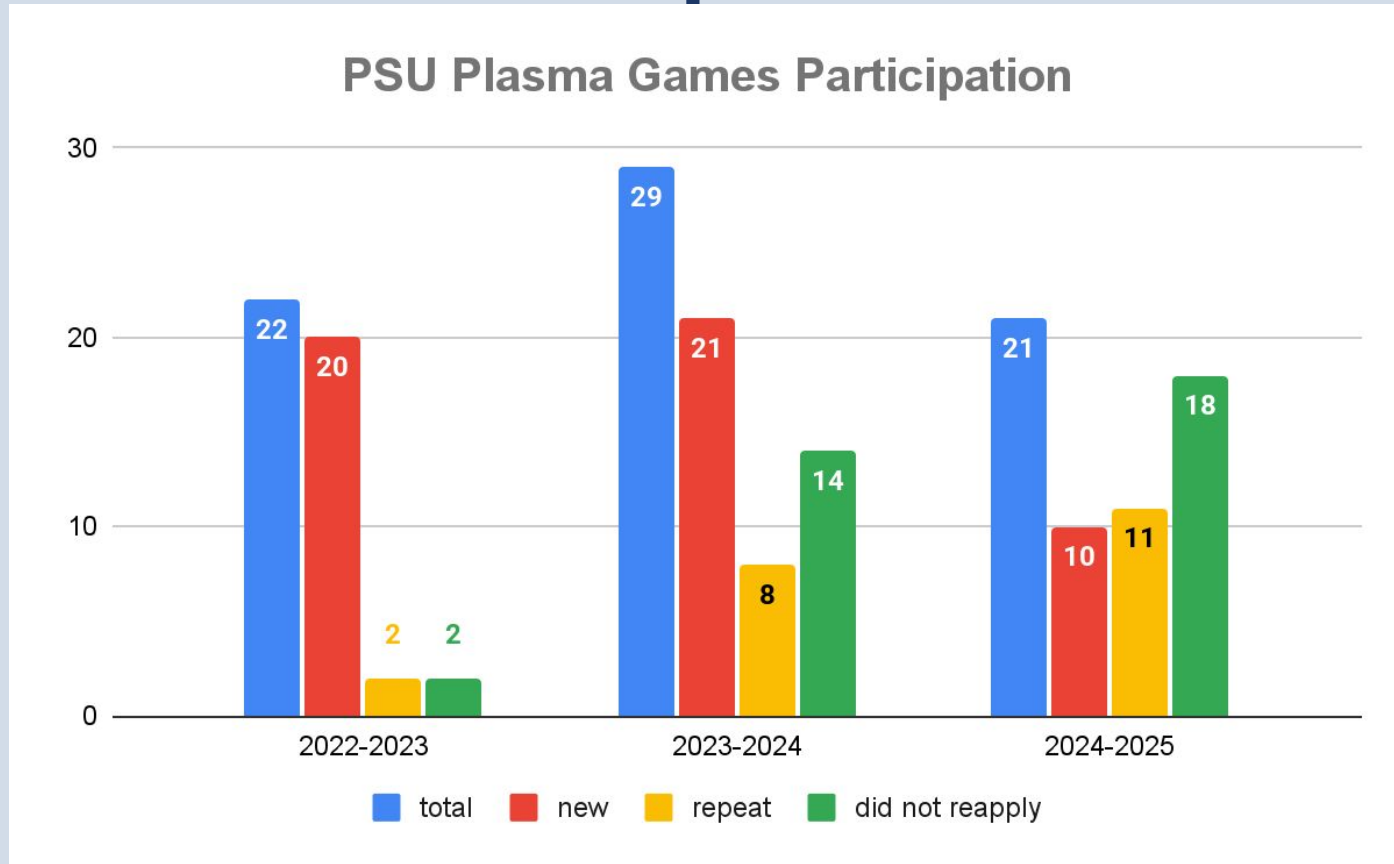
Geographic Distribution of Grant Awards



Geographic Distribution of Grant Awards

Distribution by State Board Region	
Northeast	10
Southeast	3
North Central	12
Sandhills	8
Piedmont-Triad	3
Southwest	9
Northwest	2
Western	6
	53

Grant Participation Trends



Implementation

- The number of students **actually participating** in Plasma Games has not matched the number of **anticipated students**.
 - The FY22 cohort reported the rate was as low as 30.6% of the total 29,825 licenses purchased.
 - Initial contracts between PSUs and Plasma Games were based on an individual student license. Plasma has since encouraged PSUs to switch to a district license.
 - FY24 cohort reported 64% of anticipated students had used Plasma Games.
 - 55% of PSUs reported using all purchased licenses or meeting expected usage.

FY2024 Grant Implementation

Grade Span	# of Schools	# of Students anticipated to use Plasma	# of Students who used Plasma	Percent of anticipated students who used Plasma
K-5	9	445	383	86.07%
6-8	72	9,635	6,790	70.47%
9-12	88	8,798	4,859	55.23%
	169	18,878	12,032	63.74%

Implementation

- When factoring the number of students who were reported to have used Plasma Games by the amount awarded in FY24, the per-student cost of Plasma Games was \$114.56
 - Based on the percentage of anticipated students who have used Plasma compared to the amount spent by PSUs, **\$1,492,167.42 has been awarded but not yet realized.**
- PSUs implemented Plasma Games in a variety of settings including:
 - Elementary - Reading, Science, STEM periods
 - Middle School - 6th, 7th, and 8th grade science, STEM classes, and in one case Earth/Environmental Science
 - High School - Predominantly in Physical Science and Chemistry, with some also offering in Biology, Physics, and through CTE courses.

Grant Highlights and Challenges

Highlights of grant implementation as reported by PSUs

- The game-based format appears to have increased student engagement based on teacher feedback
- Professional development has supported teachers in using the program and is not difficult for teachers to learn.
- Teachers report an appreciation of the STEM-related resources provided in the teacher portal.

In terms of challenges

- Inconsistent use among staff and students
- Weather closures and delays impacting implementation
- Continued challenges with changes in staffing impacting when and how many students were using the platform.
- Difficulty in determining impact on student outcomes
- Concerns about finding the best placement of Plasma Games to ensure alignment with course standards.

FINAL NOTES

Feedback obtained from Plasma Games grant participants for the FY24 cycle is similar to that received previously.

- Teacher participation and interest vary from school to school. Those teachers who regularly participate report an observed increase in student engagement, but actual participation rates fall far below the number of students PSUs anticipate participating when applying for grant funding.
- PSUs are unable to directly connect student participation in Plasma Games to specific academic outcomes.
 - PSUs report relying on feedback from emailed Plasma Games which was limited to teacher usage.
- PSUs report positive qualitative data related to student engagement and interest in STEM careers but are unable to report specific quantitative data related to those points.

Questions?