

Plasma Games Grant Program Report

Dr. Michael Maher, Deputy Superintendent of Standards, Accountability, & Research

Dr. Kristi Day, Director of Academic Standards

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

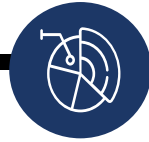
Background Timeline



2020-2021

Pilot with NC Dept of
Commerce

Report submitted in
June 2021



S.L. 2021

2.5 mil from ESSER III

PSUs can spend until
Sept. 2024

Competitive grant
process

Specific to CTE and
Science courses in HS



S.L. 2023

3 mil for FY 2024

1.8 mil for FY 2025

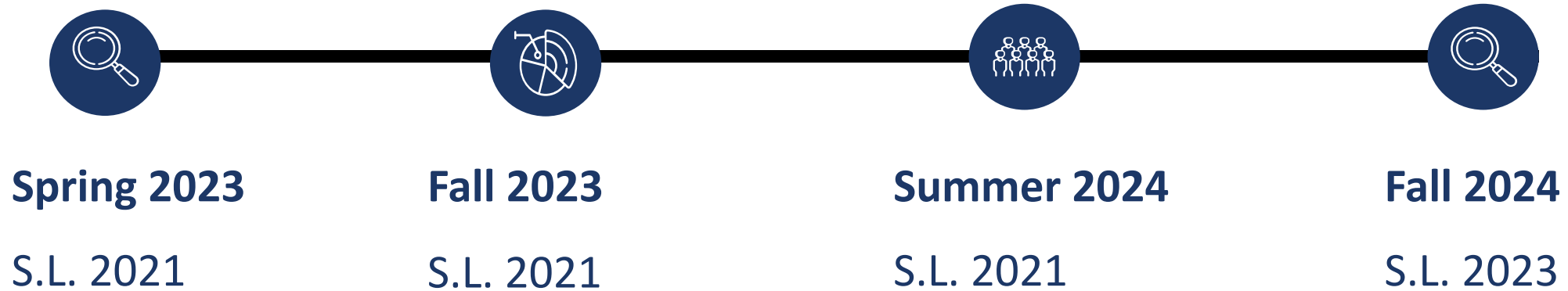
State funds

Competitive grant
process

Report Requirements

- Both S.L. 2021-180 and S.L. 2023-134 require reports to the Joint Legislative Education Oversight Committee
- Established requirements from S.L. 2021-180 include:
 - use of funds
 - number of student impacted
 - number of teachers using the program and their feedback regarding the use of the program
 - number of students impacted by the pilot and the number of students pursuing STEM-related CTE career pathways
- S.L. 2023-134 added additional reporting requirements including:
 - number of public school units that submitted grant applications and the number of grants awarded
 - percentage of grants that were awarded to PSUs that participated in the program pursuant S.L. 2021-180
 - average size of grants awarded
 - average daily membership of each public school unit that received grant awards
 - ratio of grant funds received by each public school unit to the average daily membership of the public school unit
 - total number of licenses in active use in the state

Reporting Timeline



Survey includes:

- Collecting quantitative data on student usage, teacher professional development and budgeting.
- Collecting qualitative data on teacher feedback, implementation progress, and highlights and challenges to implementation.

Summary Report Findings - S.L. 2021

- The Department received 22 applications for the FY22-FY23 grant period under S.L. 2021
 - S.L. 2021 allotted up to \$2.5 million with \$1,788,900.00 requested and fully funded
- 15 out of 20 PSUs who participated in Commerce Department Pilot did not apply for a grant under S.L. 2021.

Summary Report Findings - S.L. 2021

- As of the February 29, 2024 ESSER III expenditures report, all but \$48 of the \$1,788,900.00 had been spent.
- Based on the data reported by PSUs, of the total \$1,788,852 spent, 31% has been utilized as of the Fall of 2023 reporting.
 - \$548,520 of the allotted funds have been, or are being, actively utilized.
 - \$1.252 million has been paid to Plasma Games for student licenses not utilized as of January 2024.
- PSUs originally planned for a total of 29,825 students to participate in the Plasma Games platform over the 2022-2023 and 2023-2024 school years.
 - 6,180 licenses were used in the 2022-2023 school year
 - PSUs reported an expectation to use a total of 5,348 by the end of the 2023-2024 school year
 - A total of 11,528 licenses used out of 29,825 purchased.
 - As of the Fall of 2024, 2,962 students from 39 high schools who have or are currently participating in the Plasma Games program.

Summary Report Findings - S.L. 2021

- PSUs reported an increase in their expectation for the overall use of Plasma Games by teachers in FY 2023 compared to FY 2022.
- PSUs reported a greater number of professional development opportunities in the 2023-2024 school year, increasing teacher and student engagement.
- PSUs indicated 102 staff are participating in the program in the Fall of 2023, compared with 241 for all of the 2022-2023 year.
- 91 staff members received all or some of the training offered by Plasma Games.
- PSUs report an intentional effort to increase the use of Plasma Games licenses purchased with grant funding, however PSUs reported:
 - Changes in staffing and the fluctuating number of Chemistry, Physical Science, Physics, and CTE classes impacted when, and how many, students were using the platform.
 - Variations in how teachers implemented the program have made tracking the number of students actively using the licenses difficult.
 - Many PSUs reported using Plasma Games as an extension, supplemental resource, or optional student activity.

Summary Report Findings - S.L. 2023

- 2 of the original 24 applicants for the FY 2021 NC Commerce Department pilot have applied for all three the grant opportunities.
- 4 of the original 24 applicants for the FY 2021 Commerce Department pilot applied for funding with the FY 2024 Plasma Games grant period.
- 8 of the 22 PSUs that received funding from S.L. 2021 applied for continued funding for the FY 2024 grant period under S.L. 2023.

Summary Report Findings - S.L. 2023

- The total funding amount requested was \$1,378,414, for an average of \$47,531.52 with a median request of \$34,380.
- The average cost when comparing the amount requested by the number of students the PSU intends to participate is \$117.75 with a range from \$15.11 to \$458.18.
 - As of the Fall 2023, 4 out of 22 PSUs in the previous grant had used 80% or more of the licenses they purchased based on the number of students they had intended to participate.
 - 3 of these 4 did reapply for funding.

Summary Report Findings -

- Overall, similar to the Spring 2023 report, PSU feedback indicates a range of results with some PSUs reporting stronger teacher and staff interest and student engagement, with others reporting little interest or benefits.
- PSUs reported a increase in the opportunities for teacher professional development and the number of teachers participating in Plasma Games professional development, but a reduction in the number of teachers implementing Plasma Games in their classrooms.
- As of late Fall 2023, 69% of licenses purchased by PSUs have NOT been used.
- Changes in staffing at the classroom, school, and district level have created challenges for consistent implementation.
- There is not a consistent pattern of implementation across PSUs, and oftentimes within PSUs that are using Plasma Games software at multiple schools.
- PSUs have not provided evidence of improvements in student academic outcomes and only limited anecdotal responses related to evidence of increased interest in STEM careers.

Questions?