

2024 NSF LSAMP PI/PD Meeting: Enhancing Mobility through STEM: The CHIPS & Science Act



NSF LSAMP
NATIONAL COORDINATION HUB

Visualizing and Utilizing LSAMP Data from the Alliance Partner Institutions

Presented by Alan Peterfreund, Talia Goldwasser, Joyce Wang, and Tyler Clark

SageFox Consulting Group, Amherst Massachusetts

tgoldwasser@sagefoxgroup.com

Objectives:

- 1) Fun with Data
- 2) Insights into your Alliances and Institutions
- 3) Promote new partnerships with TIP awardees in your area
- 4) Provide you with a tool you can use with your own Alliance

Find the tool at <https://www.sagefoxgroup.com/lisamp-data>

Key definitions:

- **IPEDS:** Integrated Postsecondary Education Data System (data collected from your institution by Dept of Ed)
- **BIPOC:** Students included in the BIPOC category in this tool are those classed by IPEDS as American Indian or Alaska Native, Black or African American, Hispanic or Latino, Native Hawaiian or Other Pacific Islander, or Two or more races.
- **Gender:** only binary available
- **STEM degrees:** those identified by CIP codes associated with the current LSAMP accepted degrees consistent with WebAMP

If you think there is an error in representation of your Alliance, please let us know.

Workshop Questions:

- 1) What are the characteristics of and changes occurring in the K–12 population(s) that serve as potential feeders into your LSAMP? (Tab 6)
 - a) Use the State filter to find your state(s)
- 2) How have degree completions for BIPOC students at schools in your Alliance changed over time? (Tab 1) Can you see evidence of change associated with the work of your Alliance? Does it relate to when the LSAMP started or institutions joined? Are there institutions that are doing exceptionally well that can serve as a focus for deep learning? Are there “laggards” that need attention?
 - a) Find your Alliance in the LSAMP entity name filter
 - b) Note degree will only show schools for that degree. If you have 2 year institutions, select Associate degree. If you are a BD Alliance (Bridge to Doctorate) also select Masters, or PhD.
 - c) Under race/ethnicity, start by selecting BIPOC
 - d) Note display options include a graph and table format



3) What can you see at the intersection of gender, and race/ethnicity of who is engaged in STEM at your partnering institutions? (Tabs 2&3)

a) Using the Examine by filter, start with gender then look at Gender & R/E

4) Look at your institution to see if you understand the trend represented by the data. (Tabs 5)

a) Go to institution filter and start typing name in box

b) Make sure you are looking at the degree of choice. Schools with Associate degree programs will not show unless they are selected

5) Which programs (STEM fields) have most successfully broadened participation over time and which have not? Does this vary by partnering institution? (Tab 5)

a) Start with a view of the participation associated with these majors (race/ethnicity set to total) and then look by Total BIPOC

i) To see more specific CIP categories, hover the mouse to the top left of the chart where it says "STEM field," and click the "+" button that appears.

b) Three degrees are likely to stand out, biological and biomedical sciences (CIP code 26), Engineering (CIP 14) and Computer and Information Sciences (CIP 11).

i) You can look at the partnering schools in two ways - select another institution OR on Tab 3 go to STEM field, deselect all, select a field and hit the apply button at the bottom.

6) How does this differ/synergize/replace the work you're doing for WebAMP?

7) TIME PERMITTING we want to look at an NSF website that allows you to appreciate where to find potential partners. This map of potential partners (<https://nsfmap.services.elsevierpure.com/map>) was generated by the TIP division (Friday AM plenary session).

a) The site allows you to look at areas of investment sorted on a map at the congressional district level.

b) Explore the site with an eye towards who can be your partner as a guest speaker, internship provider, collaborator in building pathways for your students.

Feedback: <https://forms.gle/fswSdvJkpzprifKPA>

(please visit link or provide your thoughts on the charts around the room)

- What did you discover / learn as you went through the data?
- How are you using / will you use these data in your work?
- What improvements or additions would you like to see in future iterations of the platform?