Impact of ASAP Professional Development

Arizona STEM Acceleration Project (ASAP) provided support to STEM teachers across Arizona through a variety of channels. One area where teachers were given ample opportunity to develop not only their pedagogical skills but also their professional networks was in **professional development training**. During each year of ASAP, fellows were asked to complete at least 30 hours of STEM professional development (PD); fellows were limited in the number of online PD hours that they could complete. Fellows could choose from hundreds of events from more than 25 Arizona PD partner organizations. After the PD events, fellows were asked to complete post-PD workshop surveys, these surveys were also available to non-participant educators in attendance at funded professional development events. The survey included questions about teachers' experiences and feedback regarding the workshops they attended (e.g., ease of access, quality and satisfaction with the content, attendees' knowledge before and after the workshop, and how attendees intended to apply what they learned in their classrooms). Teachers were asked to complete a survey for each PD workshop they attended.

PD Partners

ASAP professional development partners are critical agents in establishing a robust STEM ecosystem in Arizona. Not only do these partners host events that help teachers incur new knowledge, but they also provide a context for teachers from across Arizona to build relationships with their colleagues and peers. In addition to the ASAP-partnered professional development organizations, ASAP leadership also encouraged fellows' collaboration with non-ASAP funded non-profit professional development organizations, thus contributing to the development of a **robust and diverse Arizona STEM ecosystem**.

Findings

This data brief seeks to identify findings associated with the following ASAP program goals:

- » Objective 1: Combine high-quality professional development with curriculum development time for teachers to implement pedagogical knowledge, and STEM resources for schools to create STEM ecosystems.

- » Objective 2: Target rural districts and under-resourced K-12 schools to address the need for equitable, quality STEM education across the state.

- » Evaluation Question: To what extent has ASAP provided high-quality PD for all Arizona teachers?

Please note that all findings are from analyses of combined year one and year two data.

Access

- Event modality was almost **equally split** between in-person and online (46.4%; 47.8% respectively).

- Most fellows (87.8%) either 'agree' or 'agree strongly' with the following statement: This session was scheduled at a convenient date and time.

- For both in-person and online events, there was strong agreement that accessing/getting to the professional development event was easy (90.5%; 96.2% respectively).

- For fellows attending in-person professional development events, more than one-third (35.7%) indicated that they had to travel over one hour from where the participants teach/live to get to the event.

Quality

- **Nearly 90% of respondents** indicated that their expectations of professional development were met.

- 83% of respondents indicated that they 'agree' or 'agree strongly' that the content covered in the PD was aligned with their usual classroom content.

- Online professional development events were reported to be **high-quality**, both in terms of presentation (94.7%) and overall experience (93.6%).

- Nearly all (94.1%) of the professional development workshops observed by evaluators were assessed to have met or exceeded the expectations outlined in the observational rubric.

Impact

- Most educators (91.2%) either 'agree' or 'agree strongly' that the content at PD helped them improve STEM learning for their students.

- Most educators either 'agree' or 'agree strongly' that they were provided with helpful content (87.4%) and tools (88.9%) that they can use in their schools and classrooms.

- 88.2% of respondents 'agree' or 'agree strongly' that they would use methods learned at the PD in their class(es), while 85.5% of respondents 'agree' or 'agree strongly' that they would use the activities from the PD in their class(es).

Based on participant responses, professional development organizations were quite successful in ensuring events were not only accessible, but also high quality.