

Developing and Piloting Culturally Respectful and Inclusive School Nutrition Interventions

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Project Background

The Portland Supplemental Nutrition Assistance Program-Education (SNAP-Ed) team, part of Oregon State University Extension Service, uses the Food Hero social marketing campaign to influence behaviors and affect higher levels of the socio-ecological model through a combination of policy, systems, and environmental change approaches, social marketing and nutrition education. Portland SNAP-Ed partners with Portland Public Schools, the largest school district in Oregon, to serve students from diverse cultural backgrounds. In the summer of 2021, the PPS Health Education team received a grant to revise their K-5 nutrition education curriculum to be more culturally responsive and trauma-informed. As part of this effort, the Health Education team inquired about how Food Hero's cultural resources might be implemented in a K-5 setting. In response, Portland SNAP-Ed organized a cross-functional collaboration between the co-leads of the Indigenous Peoples Workgroup (IPWG), the Oregon Department of Education's (ODE) Office of Indian Education, and the PPS Health Education and Nutrition Services (NS) teams to develop a lesson plan with an integrated cafeteria-classroom approach featuring Indigenous food traditions and culture. Respectfully, the NS team conducted a recipe test of Harissa Roasted Butternut Squash, a recipe developed by Indigenous Chef Nephi Craig (Western Apache and Diné) for the IPWG, to pilot on their menu. The recipe and optional lesson* were finalized and delivered in November 2022 to support Native American Heritage Month and to highlight the PPS Harvest of the Month featured food, butternut squash.

Lesson Distribution

Aligned with Oregon Health Education standards, the lesson is divided by grade bands, K-2 and 3-5, and designed using Google Workspace applications, including Docs, Slides, and Sites. Google Sites, a website-building platform with open access, was constructed for this project's communication and delivery mechanism. This method served as a low-cost electronic distribution as Google Workspace accounts are provided to all teachers by the district. On November 8th, the Health Education team shared the Google Site link with >800 K-5 teachers covering 81 schools via Teacher Connect, a weekly email featuring important department announcements.



The Food Hero Monthly Edition, Respecting Indigenous Foods: Squash and coloring sheet featuring Chef Nephi Craig were used to promote the lesson at home. On the Google Site and within the lesson, PPS teachers were encouraged to share these resources with families. Portland SNAP-Ed provided additional support by delivering 2,379 English and 235 Spanish print copies of the monthly and 1,859 print copies of the coloring sheet to eight SNAP-eligible schools for those teachers to distribute. These resources can be found in the [IPWG Cultural Toolkit](#).

Harissa Roasted Butternut Squash was served to nearly 18,000 students at 81 PPS locations on November 17th, 2022. Taste-tasting events were organized by Portland SNAP-Ed at two NE Portland schools using Food Hero survey tools. These schools also received the print materials above.

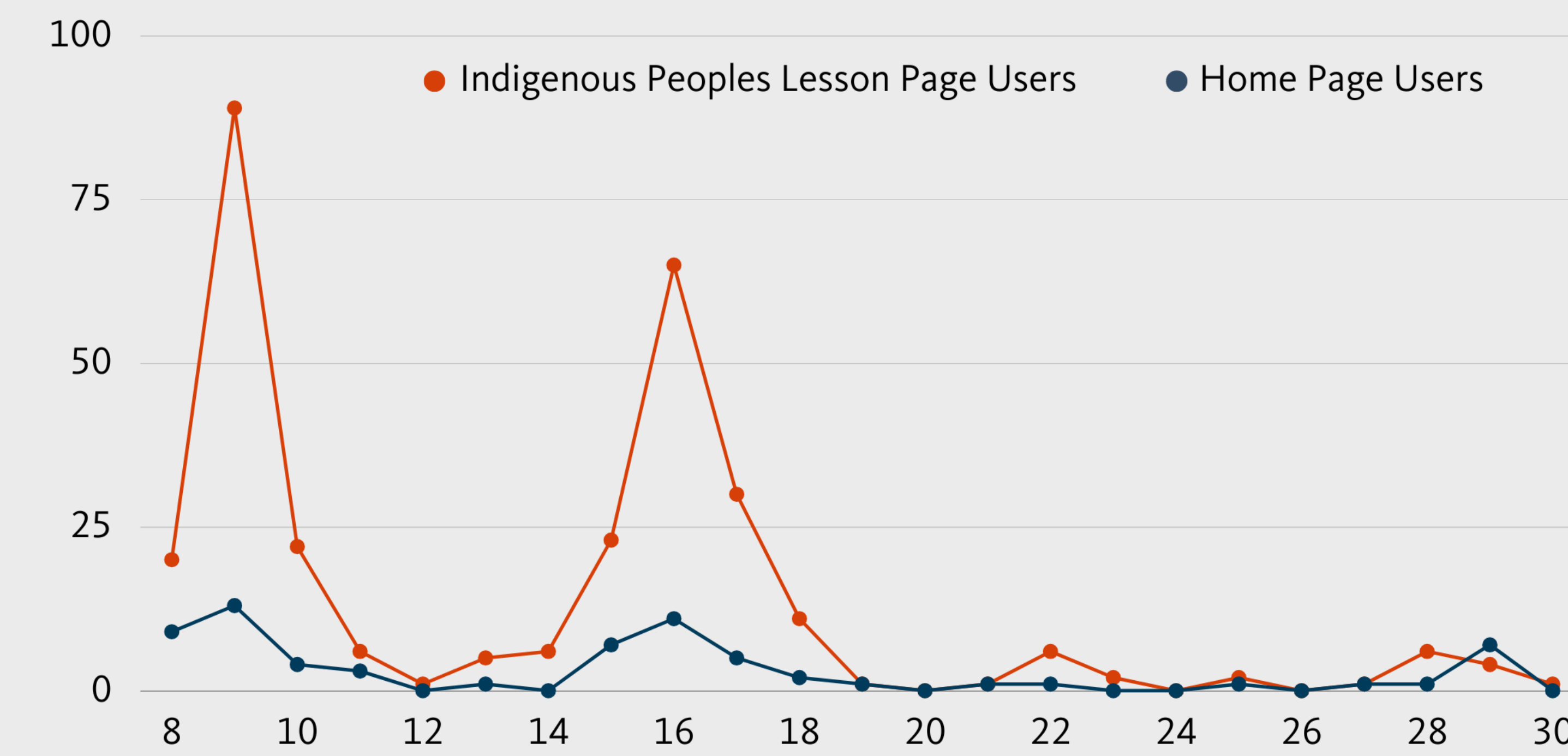


Left: PPSNS Harissa Roasted Butternut Squash recipe testing. Right: Oregon Health Sciences University (OHSU) dietetic intern handing out samples at Woodlawn Elementary.

*This lesson does not supplant the ODE "Tribal History/Shared History" lessons that are required education for Oregon students.

Gathering Feedback

Google Analytics collected Google Site traffic, recording 292 users between November 8th and 30th. Data shows users peaked the day after the lesson was shared, and the day before Harissa Roasted Butternut Squash was served in the cafeteria.



According to Google, 'users' are the total number of visitors to the site.

Qualtrics, a web-based survey tool, collected teacher feedback about the lesson plan (n=16). While more data is needed to generate results, open-ended comments were collected. The quote below is representative of all comments received:

"This was awesome. Having the opportunity for teaching the content, followed by the real-world application of actually trying the food in the cafeteria, was incredible. I want to make this lesson a permanent part of student learning."

| Harissa Roasted Butternut Squash Tasting Survey Results | | | |
|---|--------------------|-----------------|-----------------|
| Do you like the way the food <i>tastes</i> ? | ☹️ Don't like yet! | 😊 Sort of... | 😄 Like! |
| Woodlawn Elementary (Disc voting in cafeteria) | 60 | 50 | 38 |
| Faubion School (Paper survey in 4 th grade classroom) | 7 | 19 | 7 |
| Total (n= 181) | 67 (37%) | 69 (38%) | 45 (25%) |

Disc voting suits large groups for quick voting using plastic discs and labeled containers. This method collects feedback on taste only. Paper surveys ask three questions and are best used in a classroom setting. Kids' Tasting surveys and voting with counting chips help identify recipes that have been tested and approved by at least 25 kids. "Kid Approved" means that at least 70% of the kids who tried a recipe in a taste test "Liked!" the taste. These results can be helpful to nutrition services when piloting new recipes on the menu. Kids tasting materials available here: <https://www.foodhero.org/kids-taste>.

Comprehensive Multi-Level Interventions

Many factors influence a child's food choice, including their knowledge, skills, the foods available at school and home, and the policies and practices that shape those environments.

Policy, systems, and environmental (PSE) change approaches can improve the health of a school community by addressing multiple levels of influence on health behaviors. These approaches work together to create and support environments that encourage healthy food choices.



Under the guidance of existing policies, the Portland SNAP-Ed team coordinated system changes to effectively collaborate across departments and work respectfully with Tribal and Indigenous communities. This approach resulted in a greater reach across the school district, impacting cafeterias, classrooms and homes. The cafeteria is an example of an environmental change by nutrition services increasing the availability of culturally important foods on the menu.

Lessons Learned

Strong partnerships and feedback from teachers are essential to this project's success. Because schools and teachers face many demands, strategies to build and strengthen relationships are needed to improve the delivery of Food Hero's resources. Some strategies might include teacher trainings, offering reinforcement materials and a direct online sign-up process for teachers.

Next Steps

This project is part one of three cultural interventions the Portland SNAP-Ed team is working to pilot for the 2022-2023 school year. Replicating the process/components from the Indigenous Peoples' intervention, Portland SNAP-Ed will continue collaborating with the Food Hero Cultural Workgroups and the PPS Health Education and NS teams to promote and uplift African Heritage and Latinx food traditions and cultures.

To learn more about this pilot project, visit <https://beav.es/SSI>. For questions or comments, contact Rebecca Marson at rebecca.marson@oregonstate.edu.



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