Natives Who Code

27 February 2023

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Natives Who Code: Overview and Updates

Presenters:
Michelle Higgins, UArizona Societal Impact
Angela Marquez, UArizona Data Sciences Academy

Meet our Team and Supporters

Meet our Inspiration

Corey Ashley
BS Science, Technology, & Society,
Stanford University

Self-proclaimed "Cultural Technologist"

https://www.csedweek.org/cs-heroes/corey-ashley

How do you define success?

Western approach

- College degree
- Big house
- Luxury car

Indigenous approach - as heard from our listening circles so far

- Personal well-being
- Building a home
- Having a steady career where you are happy and with family
- Learning the value of your native language
- Appreciating your relationship with mother earth

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Aim: Create CS Curriculum Centering Indigenous Values & Perspectives

1. Listening Circles

Listening to understand Tribal perspectives, values, and priorities, as well as youth interests.
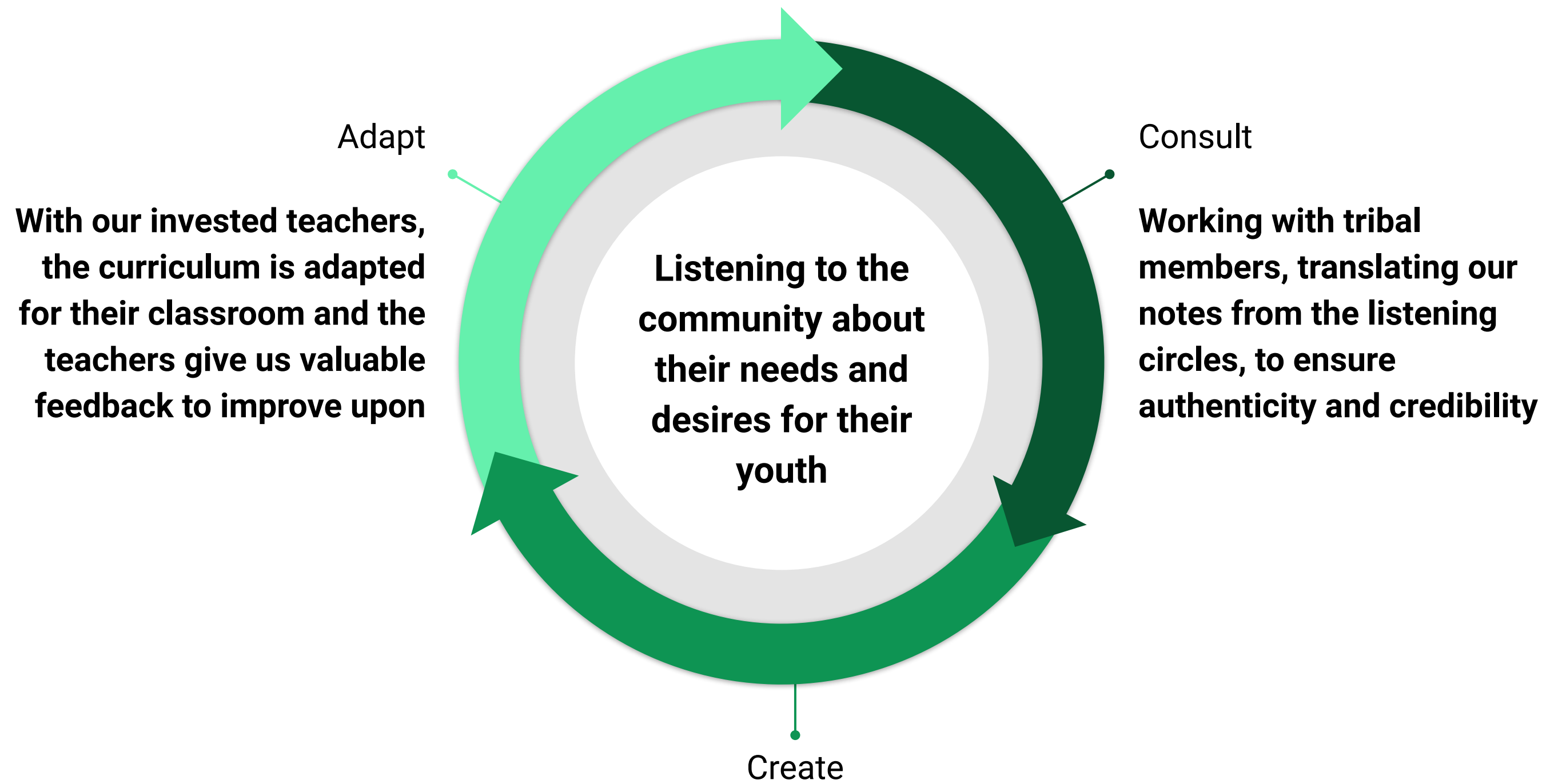
2. Creating Curriculum

Creating a rigorous curriculum that prepares Native youth to use technology for sustaining cultural perspectives, values, and priorities that promotes Native Nation building.

3. PD & Implementation

Introducing educators to the Indigenous perspective or CS education and preparing them to implement a CS curriculum that centers Indigenous priorities.

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Iterative Design Cycle

Listening to the community about their needs and desires for their youth

Adapt

With our invested teachers, the curriculum is adapted for their classroom and the teachers give us valuable feedback to improve upon

Consult

Working with tribal members, translating our notes from the listening circles, to ensure authenticity and credibility

Create

Starting with the AP CS principles, reimagined through efforts in native nation building

1. Listening Circles

In Progress
- Tribal Elder Circles
- Tucson Indian Center
- 3 TUSD High Schools
- San Xavier DEC
- Ha:San Prep High School
- Quechan Tribal community
- Baboquivari & Haiki High Schools

Next
- 2 SUSD High Schools

2. Creating Curriculum

In Progress
- Discussions with Indigenous CS education organizations for potential co-developers
- AISES Seeding Innovation/ Kapor Center
- Indigitize.org

Next
- Bring in NMSI
- APCS Principles
- Invested Educator Core Co-Development Team

3. PD & Implementation

Next
- PD based on <u>Indigenizing Education: Transformative Research, Theories, and Praxis</u>, Garcia & Shirley, 2022

Progress + Next Steps

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Internships

In Progress
- Working with Pascua Yaqui and Tohono O'odham Workforce Development offices
- Continue conversations with collaborator at IBM
- Tucson Indian Center
- UA Indigenous Circles

Next
- Connect with Quechan Workforce Development and Education departments
- Connect with collaborator at Raytheon
- Connect with UA Indigenous FORGE

Malia Bule-Garcia, a 2022 Summer Intern at Pascua Yaqui IT Department

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Thank you

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