



Education
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Center

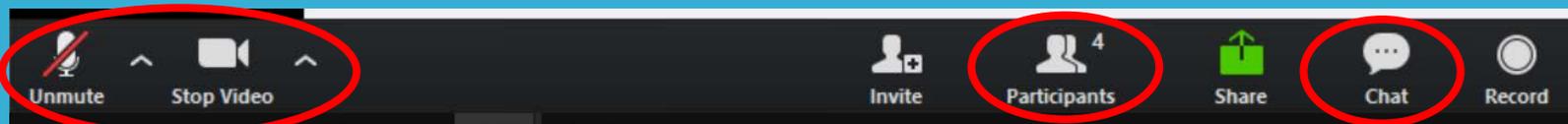
AGEP ALLIANCE EVALUATION PLANS & LOGIC MODELS, PART 2

An AGEP ECBC Webinar

August 5, 2020

Suggested Webinar Etiquette

1. Make sure your screen name has your name and alliance
2. Mute yourself unless you are talking
3. Stop video if you have bandwidth issues
4. Use the chat to share thoughts, comments, questions at any time



Today's Agenda

1. Revisit NSF's updated AGEP Alliance Model
2. Examples of Alliance plans and logic models
 - Robbie Matz, California HSI Alliance
 - Molly Stuhlsatz, AGEP Engineering Alliance
 - Jack Mills, Pacific Northwest Alliance for American Indians and Native Alaskans
3. Discussion and looking ahead

Future AGEP ECBC Webinars

Date	Topic
Wednesday October 7 th 3:00pm – 4:30pm ET	Culturally Responsive Evaluation with Veronica Thomas and Patricia Campbell
Early December	PI and Evaluator Communication and Collaboration with Jan Middendorf

We are developing a website to share
webinar recordings, presentations, and resources. Stay tuned!

THE AGEP ALLIANCE MODEL

June 2020 Components of the AGEP Alliance Model

Institutions & Teams	Targets/Transitions/Change Agents	Strategies & Interventions	Outcomes
<p>Institutions</p> <ul style="list-style-type: none"> ○ History & Size ○ Type (e.g., Carnegie Classification) ○ Climate & Culture-Based Conditions ○ Policies & Practices ○ Governance ○ Physical location ○ Local economy <p>Alliance Leadership & Participation</p> <ul style="list-style-type: none"> ○ Each institution must have an equal role in the Alliance, making a significant contribution to Alliance management & activities. ○ Each institution, & all personnel, must have well-identified roles & responsibilities. 	<p>Initial Target Groups Participating in Interventions</p> <p>URM graduate students (what stage?) and/or</p> <p>URM postdoctoral scholars (what stage?) and/or</p> <p>URM faculty (what stage?)</p> <p>Transition(s) for the Target Groups</p> <p>Graduate school into new postdoctoral scholar positions and/or new faculty and/or</p> <p>Postdoctoral scholars into new faculty and/or</p> <p>Faculty into retention and/or tenure & promotion</p> <p>Which Change Agents for Strategies & Interventions</p> <p>Institution leaders (Provosts/Deans), department chairs, faculty advisors & mentors, administrators, staff, family members, community, peers, and/or others: _____</p>	<p>Strategies</p> <ol style="list-style-type: none"> 1. Collaborations 2. Institutionalization 3. Sustainability 4. Dissemination 5. Parallel & Integrated Research <p>Participant Level Interventions (must be evidence-base)</p> <ol style="list-style-type: none"> 1. ... 2. ... 3. ... 4. ... <p>Institution Level Interventions (must be evidence-base)</p> <ol style="list-style-type: none"> 1. ... 2. ... 3. ... 4. ... 	<p>Resulting in:</p> <ul style="list-style-type: none"> • PhD Candidate and/or Postdoctoral Research Scholars transition into Faculty positions • Faculty promoted & tenured • <u>Model is fully developed, implemented, studied, evaluated, disseminated (DIS-ED), institutionalized and/or reproduced</u> • Peer reviewed publications about the model & integrated research

California Hispanic Serving Institutions (HSI) Alliance to Broaden URM Students' Participation in the Professoriate

Robbie Matz, PhD



THE MARK

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Overview of project

- The project recruited 10 student participants (i.e. mentees or fellows from UCs) and 10 mentor participants (faculty at CSUs)
- All student participants are Ph.D. students from the research-intensive institutions and come from underrepresented groups
- 12 PIs total – PIs from both the research-intensive institutions (UCSB, UC Merced) and teaching intensive institutions (CSUCI, CSU Fresno)

How does the logic model reflect/represent the Alliance's model?

- Implementation, collaboration, and replication
- Broadening of professoriate and greater partnerships between UC and CSU systems
- Need for top down capacity and relationship building to make the model successful

How was the logic model developed? Who participated in the conversations?

- Collaboration among evaluators, PIs, advisory board, and executive board
- Refinement through site visit and goal of focusing on model more than student outcomes
- Process of refining logic model is representative of the successes of PIs utilizing feedback and overcoming challenges in the first two years

What are key elements of the evaluation approach and plan?

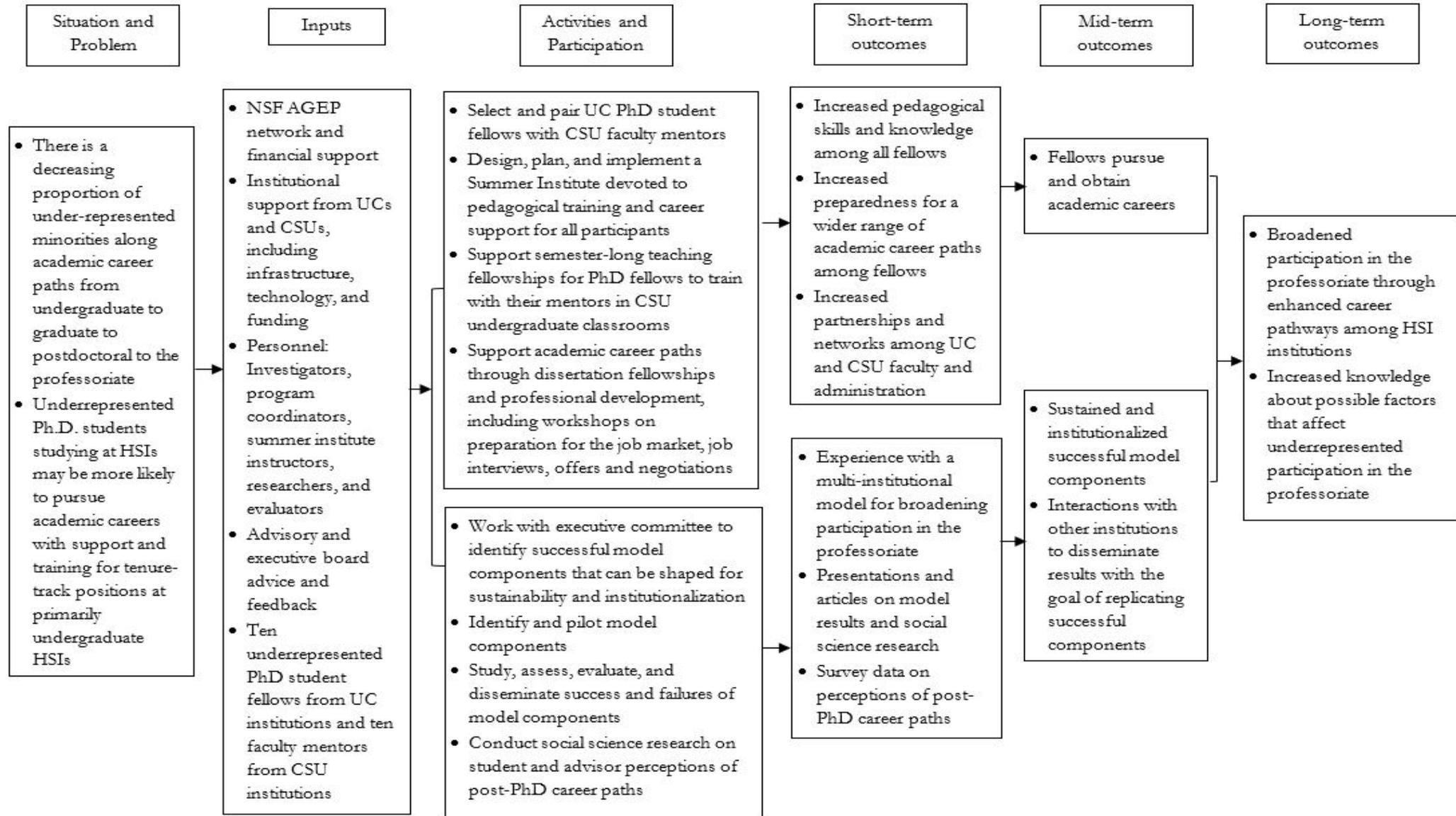
- 360° approach to understanding the strengths and weaknesses of model
- Promote equity among all stakeholders
- Open communication with PIs, ability to make adjustments to evaluation plan
- Similarities to an action research approach

Are there any challenges?

- Equity among the research-intensive institutions (UCs) and teaching intensive institutions (CSUs) and overcoming historical institutional silos between the UC and CSU systems
- Differences in resources based on type of institutions and position of PIs within each institution
- Replication of model in current state

Purpose of this Program

The purpose of the program is to broaden participation in the profession by establishing a partnership among four Hispanic Serving Institutions (HSI), two research-intensive universities and two more focused on undergraduate education. The partnership will provide underrepresented Ph.D. students from the research-intensive institutions with pedagogical training at the undergraduate institutions, and a network of support and guidance for academic career paths that emphasize undergraduate education and research



Questions?



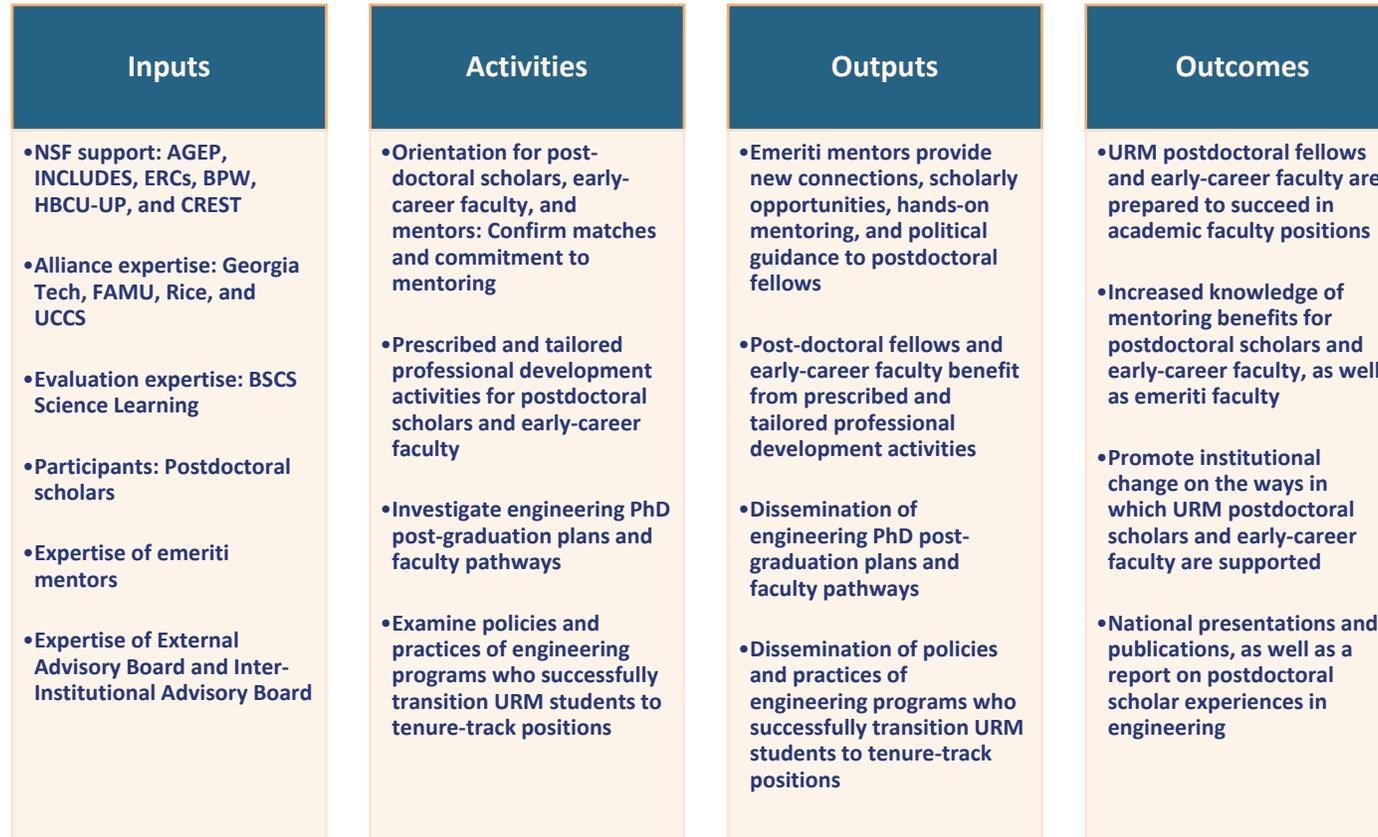
THE AGEP ENGINEERING ALLIANCE: A MODEL TO ADVANCE HISTORICALLY UNDERREPRESENTED MINORITY POSTDOCTORAL SCHOLARS AND EARLY CAREER FACULTY IN ENGINEERING

Evaluator: Molly Stuhlsatz

AGEP Engineering Alliance

The AGEP Engineering Alliance model focuses on career development for historically underrepresented minority (URM) engineering postdoctoral scholars who successfully transition into early career faculty positions, and eventually become tenured and promoted in engineering academic departments.

AGEP Engineering Alliance – Logic Model #1



AGEP Engineering Alliance - Elaboration

Activities	Participants	Short-Medium Term Outcomes	Long-Term Outcomes	Notes	What do we need to measure? (Who will measure?)
Mentoring needs Interview Mentoring/Development	AGEP postdocs SSR Team	SSR Team secures IRB approval with theoretically-driven interview protocol using the adapted Ideal Mentoring Model	SSR Team completes all interviews and develops a better understanding of the AGEP postdocs mentoring needs	Individual findings and summary in the Dropbox folder	SSR Team provides individual mentoring needs and summary to project team to inform mentor selection and mentee/mentor orientation
Identify mentors – Emeriti and other Faculty Mentoring/Implementation	EFac AGEP postdocs	Matches made	Matches persist	Leverage the findings from the interview and strengths finder to match mentors See literature in Dropbox	Document the process of mentor matching

June 2020

June 2020 Components of the AGEP Alliance Model

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Reflection

- Adjust LM to align with the June 2020 template
 - The new model helps to clarify the bigger picture – institutional impact or institutional change
- Logic models can be very useful in alliance planning
 - Outcomes are emphasized – keeping the goals in mind
 - Roles and responsibilities – for instance, who should collect data (evaluation, social science research, self-study)
 - Iteration and documentation

Questions?



Building a Model to Serve Indigenous Graduate Students in STEM: The PNW-COSMOS Experience



Jack I. Mills-Independent Program Evaluation
Consultant

AGEP Alliance Evaluators
August 5, 2020

Pacific Northwest Circle of Success: Mentoring Opportunities in STEM

PNW-COSMOS Goals

- Develop a model facilitating recruitment pathways and mentoring to support the unique needs of American Indian/Alaska Native STEM graduate students.
- Model attributes:
 - Culturally relevant: AI/AN graduate students' unique cultural considerations warrant specific attention and effort.
 - Discipline focused within STEM.
- Implement the model via newly developed Alliance activities and interventions. Coordinate existing activities and resources.
- Study the effectiveness of the model and explore adaptation to STEM graduate students from other URM populations.

The PNW-COSMOS Alliance



Model Basics

- Different disciplines build and test models. We used the “logic model” process from program planning and evaluation.
- Program planning and evaluation are trans-disciplinary fields. No single organization governs the protocols or terminology for logic models.
- Yet, there are established conventions, at least for describing how a program achieves its outcomes.

Reference: Knowlton & Phillips, 2013.

Our Approach to Model Displays

- There are different ways to display the PNW-COSMOS model.
- Each type of display serves a different purpose or audience.
- The elements of the display can overlap, because they all describe the same initiative.
- Ultimately, the goal of the model is to describe the relationships between resources, activities, outcomes and impacts.

Examples of Displays

- Theory of Change: A high level strategy linking major interventions to major outcomes.
- Project Management: An organizational model describing the operation of the program, such as stakeholder involvements, leadership, decision making, timelines, budgets, collaboration and communication.
- Theoretical: Indigenous and social science theories that identify testable propositions about the underlying mechanisms that lead to changes in beliefs, motivations, or behaviors.
- Recruitment Pathways: A display of the routes Indigenous students could take to matriculate into STEM graduate programs.
- Program Activities: A display of the intervention's resources, participants, activities, and intended outcomes.
- Institutional Support: A view of the resources that institutions can make available to support the goals of the intervention.

Social Science Theory: Indigenous Perspectives

Assuming a more traditional Indigenous identity, students' worldview may include:

- Respect--for Indigenous cultural values and Traditional Ecological Knowledge
- Responsibility—to protect tribal sovereignty and self-determination
- Reciprocity—value caring for others, community and the earth
- Relationality—view of human and natural systems as interconnected
- Relevance—desire for education to be relevant to tribal concerns

References: Brayboy, et al, (2012); Kirkness & Barnhardt, 1991.

Social Science Theory: Reasons for Caution

We must use caution in generalizing about AI/AN STEM graduate students for multiple reasons:

- Strength of Indigenous identity
- Tribal affiliation and culture
- STEM discipline
- Previous educational experiences
- Gender & sexual orientation--intersectionality
- Career objectives
- Individual differences

Figure 1: PNW-COSMOS Theory of Change

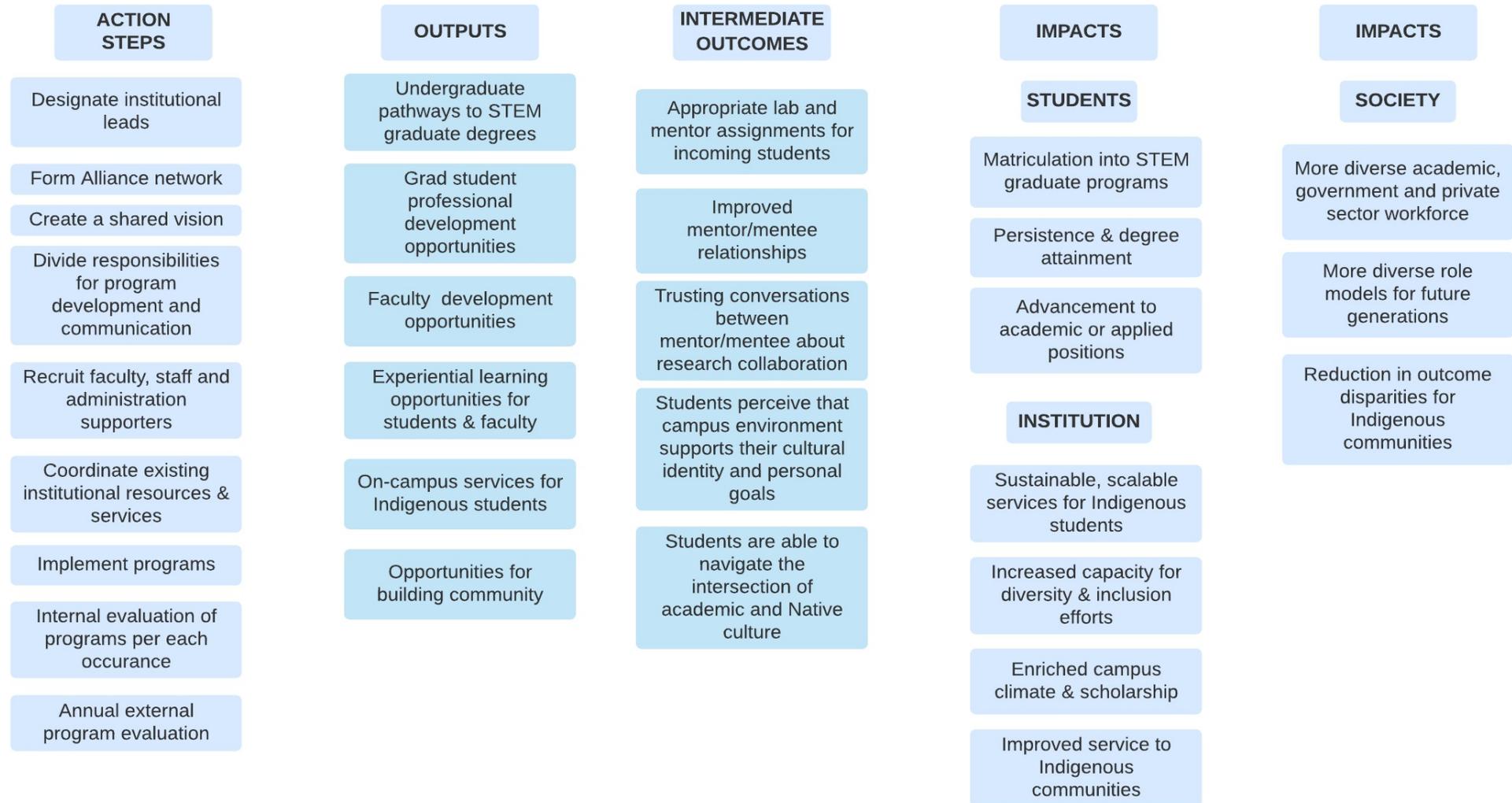


Figure 2: PNW-COSMOS Alliance--Project Management Display

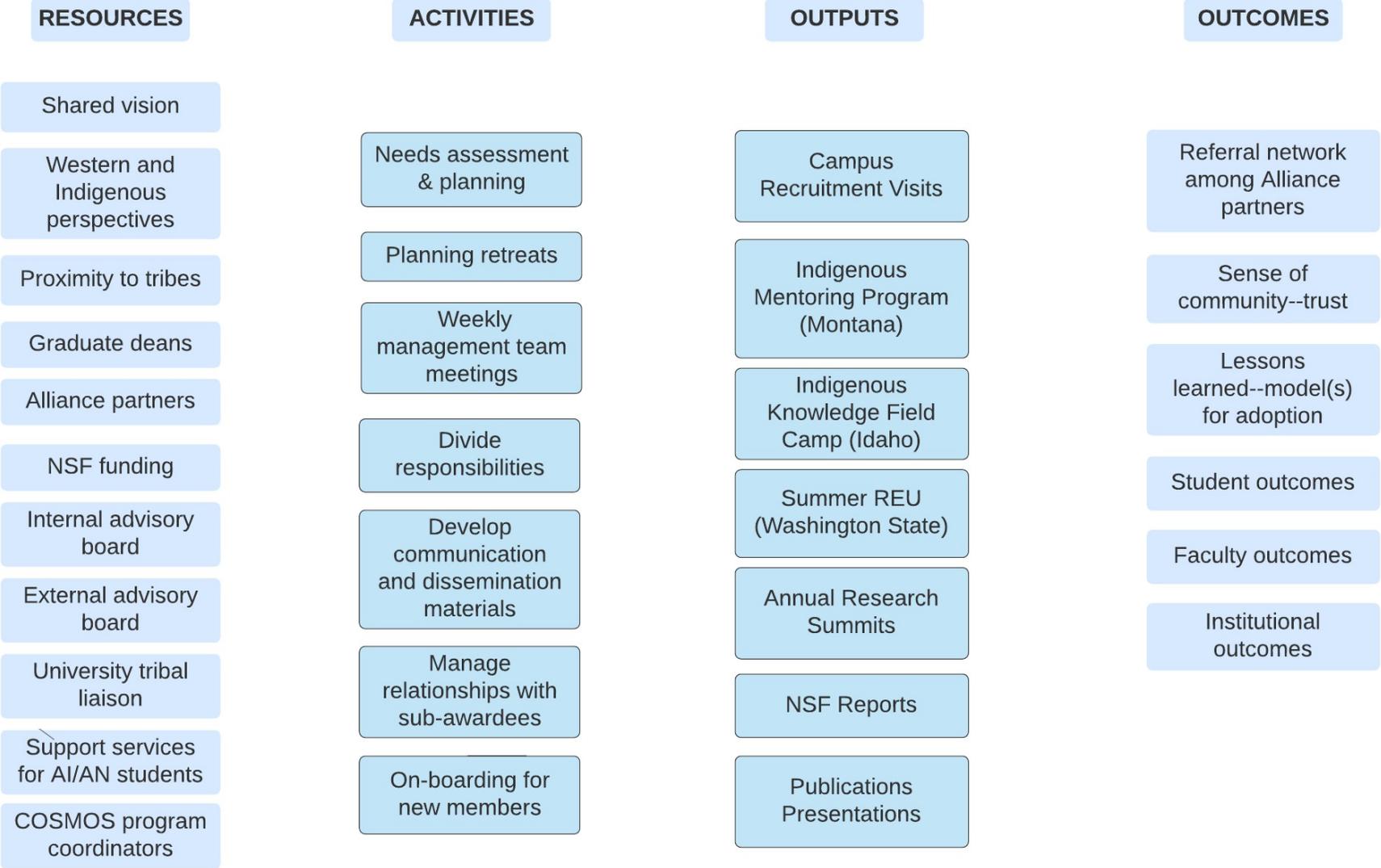


Figure 3: Recruitment Pathways Display

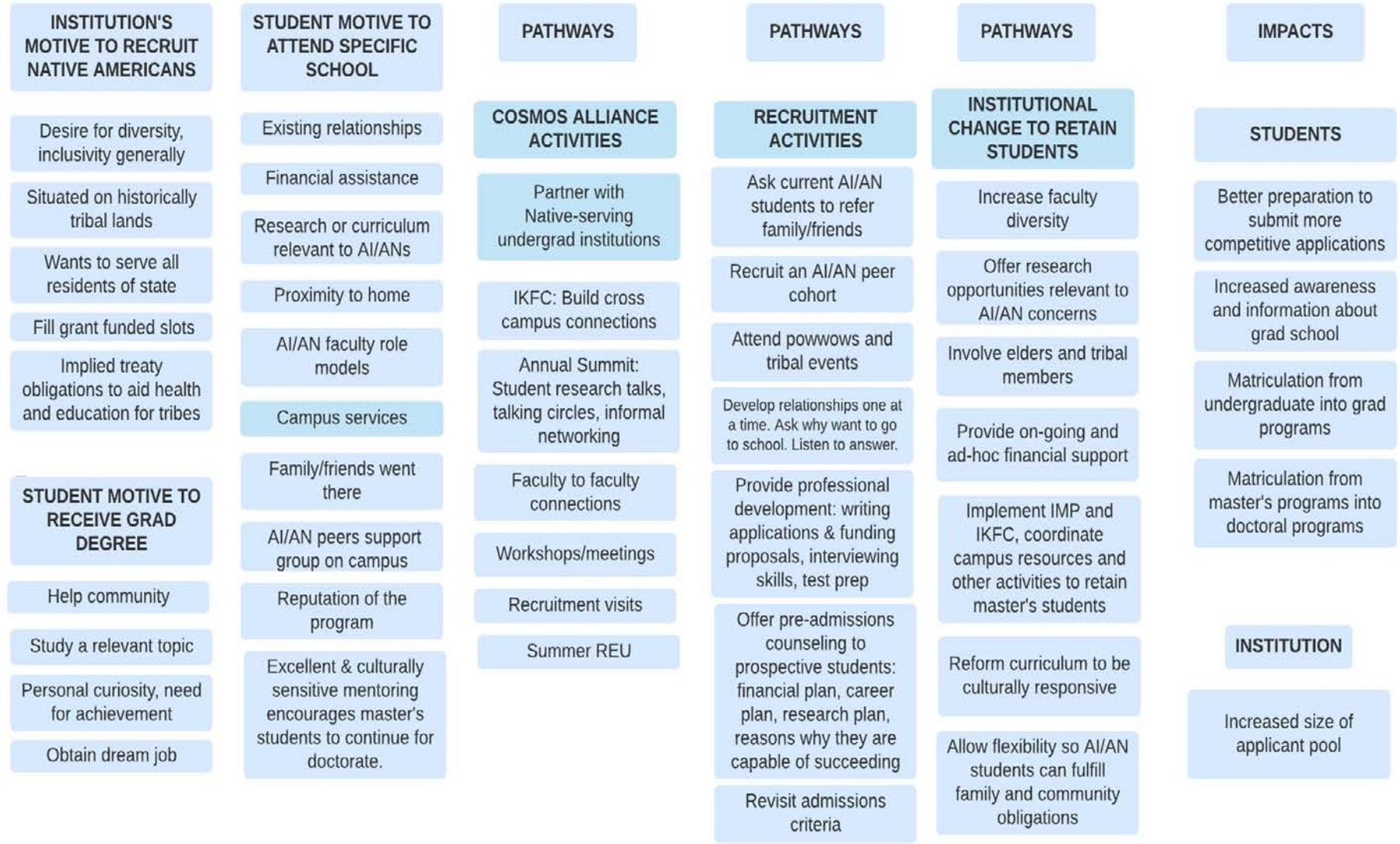


Figure 4: PNW-COSMOS Indigenous Mentoring Program Display

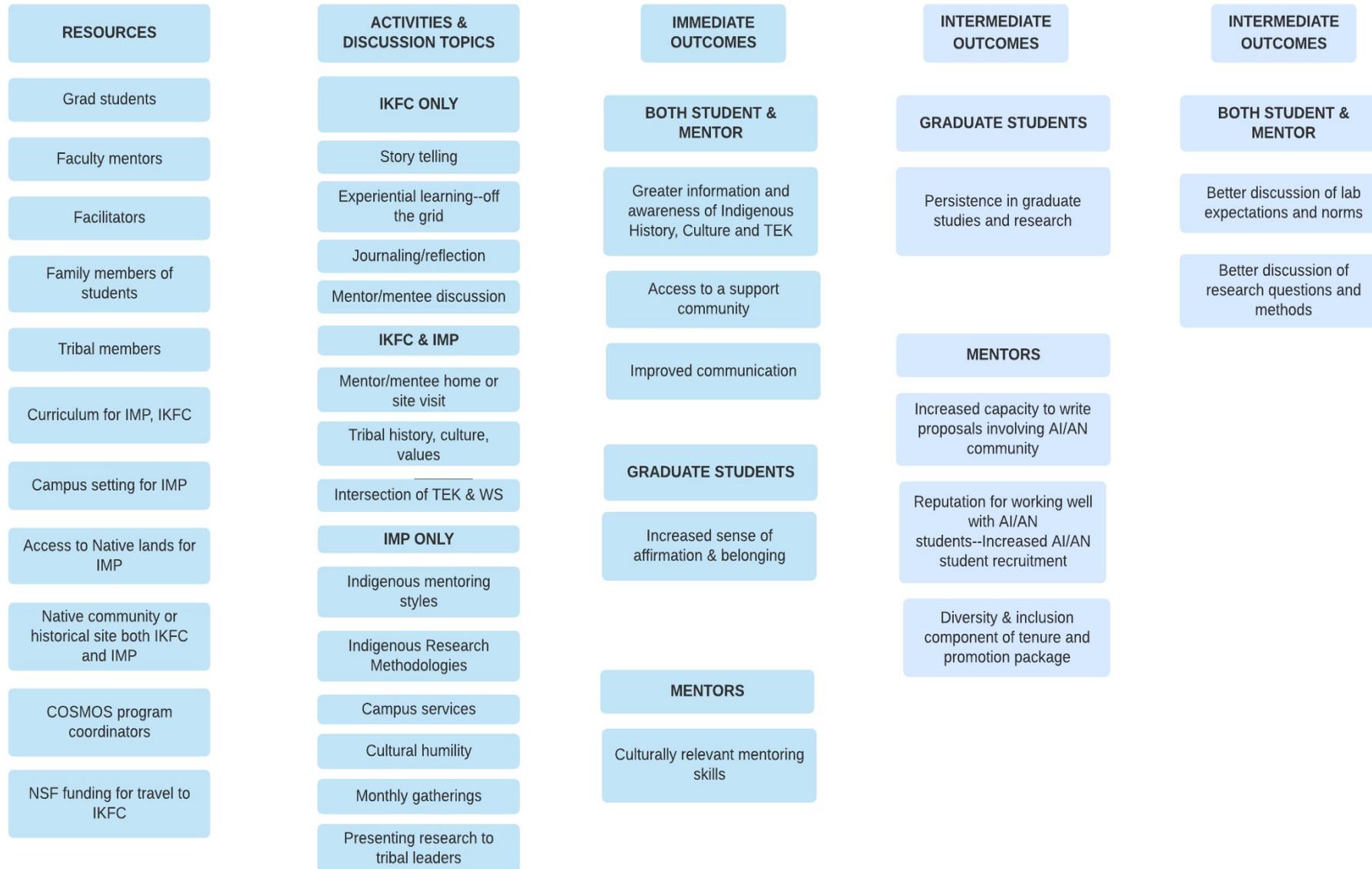
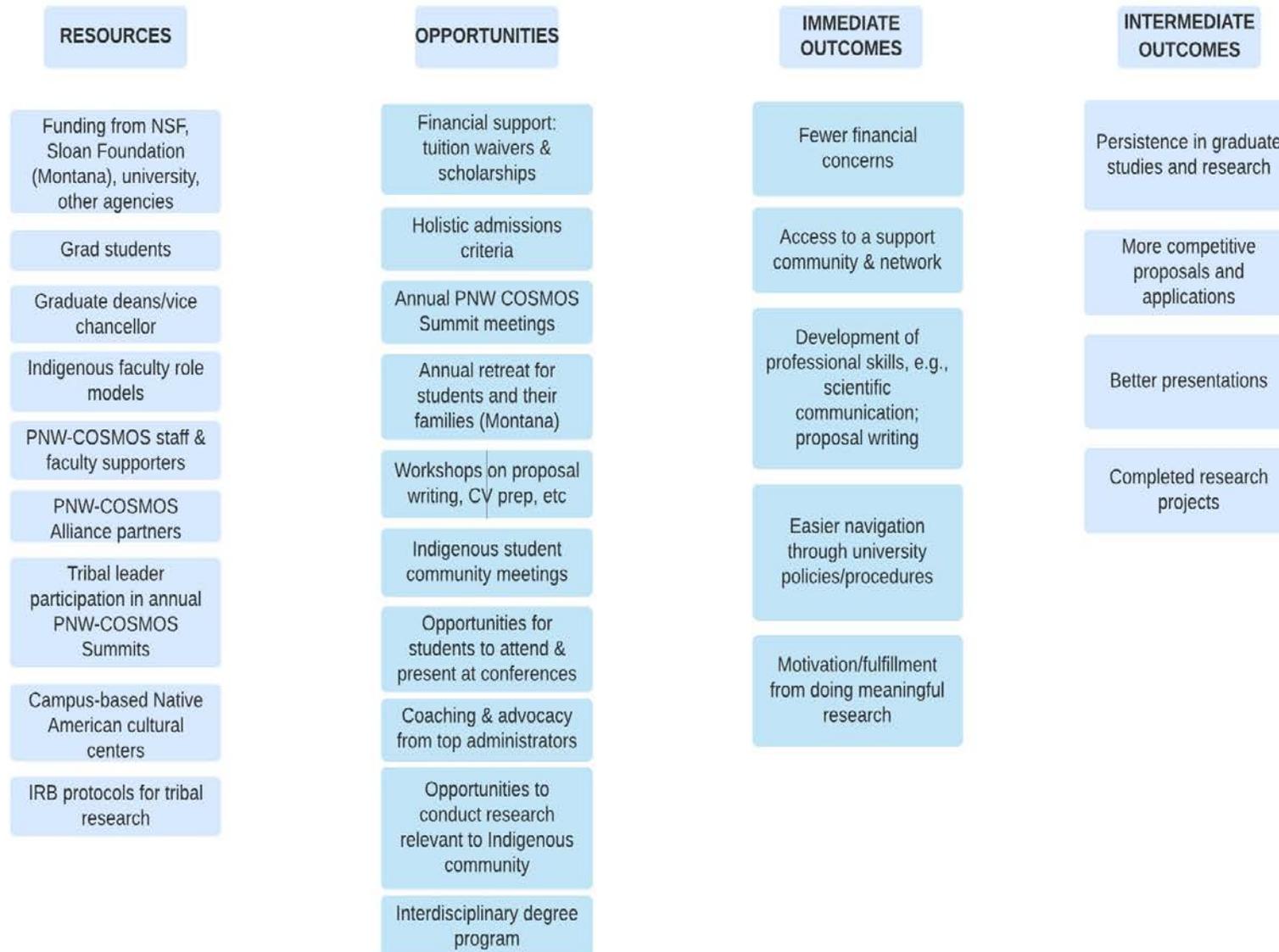


Figure 5: PNW-COSMOS Institutional Support Display



Evaluation criteria: Does the model have merit?

- Reciprocity: Did the Alliance create benefits for Indigenous students and communities?
- Respect: Did the Alliance respect Indigenous cultural values and traditions?
- Qualitative feedback: is there a perception among stakeholders that the model has merit?
- Quantitative results: was there an increase in the graduate school application pool, applications, admissions, persistence, graduation and career outcomes? Did students who completed MS degrees matriculate into PhD programs?
- Can the model (or some parts) be sustained?
- Can the model (or some parts) be adapted?
- Was the model disseminated through publications & presentations?
- Did other institutions adopt elements from the model?

Discussion Questions

- **How does model shown here reflect the PNW-COSMOS Alliance model?**
 - It blends the explicit Alliance model with evaluation findings re the “implicit” model.
- **How was logic model developed.**
 - Not textbook, i.e., did not build consensus through group process. Process was iterative through reports, publications, interviews. Stakeholders (minus NSF) have now blessed the model displays.
- **Key elements of evaluation approach and plan.**
 - A) “Helper Angel” and not “Wrecking Ball”
 - B) Interviews and participant observation
 - C) More of a “developmental” focus
- **Key evaluation challenges.**
 - A) Undefined role for evaluator/evaluation
 - B) Scope of project versus resources allocated
 - C) Attempt to ensure culturally responsive evaluation
 - D) Key interventions not designed/implemented until Year Two or later.

Questions?



Let's Chat



GOING FORWARD

What suggestions do you have for making webinars engaging and constructive for you?

Share suggestions in the chat or email us!



THANK YOU

Contact the AGEP ECBC team any time!

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