**Research Plan**

**Research Questions:**

How does the AIHEC Indigenous Evaluation Framework provide guidance and direction for evaluation of STEM programs in tribal colleges and their communities? Specifically, how does the implementation of the IEF:

* Adapt to different tribal communities?
* Increase evaluation capacity in tribal colleges and communities?
* Change attitudes about the importance and value of evaluation?
* Result in an increased sense of ownership of the evaluation process?

How does using the essential elements of the IEF result in the following?

* An evaluation design that integrates well into the tribal/community setting
* An evaluation that effectively assesses the contribution of the program in meeting outcomes (rigor)
* Stakeholder use of evaluation findings for both formative improvements and a summative assessment

**Research Methodology and Plan**

The research will employ a mixed-method design using a case study approach. The IEF will be implemented in three different tribal college communities that have NSF funded STEM projects. Each of these communities will be considered a case. The case study sites are located in three different cultural and geographic areas to test the adaptability of the IEF.

The research will include a pre-assessment of capacity within the college for doing evaluation and attitudes regarding the value of and use of evaluation. The assessment will be done through surveys of college staff and faculty and key individuals within the community (cultural experts, elders, tribal education staff, etc.). Survey data will be triangulated with interviews and focus groups with these same stakeholders.

After the pre-assessment is completed, the co-PIs will conduct workshops in the IEF at each site for TCU STEM faculty and staff and members of the community. At the workshop, participants will develop an evaluation plan to assess one or more college and STEM programs. The plans will incorporate the elements of the IEF and will be culturally appropriate for their community context, inclusive in their engagement of community, transparent to the community, and designed to have appropriate rigor to assess both the effects of the program and its value to the school and community. The evaluations will be implemented over a two year period. The co-PIs will be participant observers during the implementation period, while providing continuing consultation to community based staff conducting the evaluation. As participant observers, the co-PI will keep field notes of the implementation process and meet regularly with those conducting the evaluation to reflect on and assess the evaluation process.

After two years of implementation, a post-assessment of capacity within the college for doing evaluation and attitudes regarding the value of and use of evaluation will be conducted using the same surveys for the pre-assessment as well as interviews and focus groups. The post assessment will also explore the issues of ownership and use of evaluation findings.

**Research Teams**

The research will be conducted by two teams, one of which will be external and independent from the training and support for the implementation of the IEF in each case site. The external evaluators will serve as this team. Their role is to conduct both the pre- and post-assessments in each of the communities. In addition, this team will review evaluation plans from each of the communities and assess their methodological rigor, assess the integrity of the case sites evaluation findings. They will also assess the evaluations’ adherence to the elements of the IEF. (Describe who this is – Dawn, or Janet Gordon or both or some other combination)

The second team is composed of the co-PIs who will serve as participant observers internal to the research. Through their field experiences during the training and implementation of the evaluations in each site they will be able to document the implementation process. This documentation will address issues of adaptability, the ability of tribal college staff to be inclusive in their evaluation practice, the role of cultural experts and elders in enhancing the value of the assessment and evaluation, use of evaluation for both formative and summative purposes, etc.

*Need to say something about the role of the Advisory Committee – they will serve as a third group with the capacity to advise both teams and assist in interpreting the data and findings.*