The Next Generation STEM Teacher Preparation in Washington State:
Moving Forward to Achieve the Vision, 2016-2020

Goals:

- Improve the majority of STEM teacher preparation programs in the State of Washington
- Increase the recruitment of qualified and diverse STEM students into teaching
- Create an adaptive, research-based model for improving STEM teacher preparation through collaboration

Methods:

- **Cross-Institutional Critical Component Working Groups** create, adapt, present, and pilot resources, models, and tools related to critical areas for STEM teacher preparation, as well as present these products in workshops across Washington. Working Groups identified so far are:
    - Clinical Practice and Induction
    - Computer Science Integration [into teacher education]
    - Pedagogical Content Knowledge
    - Education for Sustainability
    - Engineering Integration [into teacher education]
    - Math and STEM
- **Implementation Teams** across Washington State evaluate models, tools, and curriculum, etc., developed by the Cross-Institutional Working Groups. These teams provide formative feedback to Working Groups, create action plans for their institutions, and support institutional/regional transformation
- **Cross-Institutional Capacity Building Working Groups** address areas that are foundational to the success of all components of this project, specifically by helping to build leaders' capacity to overcome common barriers to change. Capacity Building Working Groups develop and present resources to the Critical Component Working Groups and the Implementation Teams. Capacity-Building themes identified are:
    - Understanding and supporting productive organizational change
    - Increasing the diversity of the STEM teaching workforce
    - Collaboration-building within and across institutions and disciplines
- A **Management Team, a National Advisory Board, and a Statewide Implementation Council** will support the project by providing expertise, communication and logistical support, and diverse perspectives.

Evaluation and Research:

We will collect baseline data for institutions in the areas relevant to all Working Groups and Implementation Teams, in order to formatively assess progress towards goals and support summative evaluation.

Project Framework: Collective Impact Model for Organizational Change

(Hanleybrown, Kania, and Kramer. 2012. Channeling Change: Making Collective Impact Work. Stanford Innovation Review)

- Common Vision: One size does not fit all, but shared goals and visions are more likely to be realized.
- Shared Measurement: Results are measured consistently, with shared accountability.
- Mutually Reinforcing Activities: Activities of each group inform others' plans.
- Continuous Communication: Builds and maintains trust, collaboration, and motivation.
- Backbone Support: Overall coordination and management.

Partners: The Current NextGen-WA Consortium Includes:**

- All 6 public, four-year Institutions of Higher Education (IHEs) in WA, Education and STEM faculty and administrators from 6 private, four-year IHEs, Western Governors University (WGU), Faculty and administrators from two-year colleges,
- OSPI, PESB, ESD's, Pacific Northwest National Lab (PNNL), NGO's and business representatives
- P-12: science and math teachers, principals, and district administrators around the state

**Note: Additional members of the consortium with an interest in improving STEM teacher preparation in Washington State are welcome