2010 Math and Science Partnership (MSP) Learning Network Conference

*MSP: An Intergenerational Learning Network*

January 24-26, 2010

**Goals of the Conference**

- Define ‘Learning Network’ and challenge ourselves to enrich the MSP Learning Network
- Contribute to the collective wisdom of the Learning Network and learn from each other
- Increase understanding and perspective on the value and work of the MSP endeavor

**Purpose and Implementation of the Conference Strands**

We envision the strands as a way to make the conference more deliberately and clearly purposeful. These strands are posted publicly for MSP projects to use in deciding on abstracts to submit for presentations ("papers") at the conference. Each strand will function concurrently, with LNC Planning Committee members and NSF program officers as co-chairs of the strand. Strand co-chairs will review abstracts submitted to their strand in a similar way that session chairs at professional conferences review abstracts proposed to those sessions. Once they have reviewed the abstracts submitted, they may ask authors to revise and resubmit abstracts, in order to bring strands into closer focus. There will be two breakout presentation sessions at the conference; each of these breakout sessions will include papers from all three strands. Papers will be labeled according to which strand they fall under, and in addition to the strand label, papers to be presented by RETA projects will be specially labeled "RETA."

The technical program of abstracts will be posted on MSPnet at least one week in advance of the conference, so that conference participants can plan ahead of time which presentations they would like to participate in during the breakout sessions. The agenda of the conference is being planned by LNC Planning Committee members and NSF staff so that keynote and plenary addresses, activities, and discussions will be focused on learning from and with each other in the context of the strands.

**Conference Strands**

*Strand 1: Generating Knowledge through MSP*

This strand focuses on the value and meaning of MSP writ large, asking the fundamental question, how is the MSP endeavor generating new knowledge about STEM education? We are interested in synthesizing knowledge across MSP projects, assessing where the MSP endeavor stands, and determining and moving to next stages. Evidence-based practices and measures of impact, or plans to measure impact, through evaluation and research should be the basis of presentations. Questions of interest include: What are we learning about how the MSP program nationwide is shaping STEM education? What are we learning about how collaboration between K12 teachers and STEM faculty changes these participants, how they teach, and how and what their students learn? What are we learning about the evolution of the nature and engagement of STEM faculty in K12 education, how the scholarship of teaching and learning informs this process, and how these processes change STEM faculty and K12 teachers who are directly involved as well as their colleagues who are not? We ask every presentation to pose questions about what might be next stages in experimentation. We additionally invite veteran projects to be explicit about how they are turning a research-informed critical eye toward their work in the context of the broader MSP program goals.
*Strand 2: Our MSP Work*
This strand asks how MSP projects are integrating implementation, research, and sustainability. How do projects balance the agendas they undertake? Questions of interest include: How are projects using their own research and evaluation to inform implementation and sustainability? What types of sustainability are valued and achievable: sustaining formal partnerships that survive beyond NSF funding, sustaining the ideas learned by partnerships through scholarship that embeds research into practice, and/or contributing to models of institutional change, teacher preparation, STEM teaching and learning, and partnerships? Projects are invited to share lessons learned that will challenge and inform the work of other projects and the community as a whole. In particular, newer projects may wish to share challenges they face with start-up and strategies they have found to be successful in doing the work of MSP. Veteran projects may wish to share lessons learned on balancing implementation, research, and sustainability.

*Strand 3: How MSP Transforms Institutions, Stakeholders, and Participants*
This strand focuses on how projects engage participants and stakeholders (those external to the formal partnership) in the work of MSP. What cultural exchanges occur within and between groups involved in the work? Questions of interest include: How have the roles of STEM faculty, education faculty, and K-12 teachers developed and evolved as a result of MSP collaborative work? What are we learning about the evolution of the nature and engagement of STEM faculty in K12 education and how these processes change the higher education institutions of STEM faculty, and the schools and school districts of K12 teachers involved? For example: How have the cultures of STEM departments and colleges changed? What are the characteristics of professional learning communities formed in schools and districts, and how have they impacted the nature and focus of conversations about teaching and learning? How have higher education institutions and schools/districts responded to sustain the progress and changes ensuing from MSP work? We invite projects to share findings particularly on the challenges and opportunities in engaging participants and stakeholders, and the sustainability of progress in institutional changes.