Session Title:
Building a Distributed Leadership Model for Systemic Change and Sustainability in an MSP Middle School Science Project

MSP Project Name:
SF Bay Integrated Middle School Science Project

Presenters:
Robert Curtis, Alameda County Office of Education
Susan Tucker, E & D Associates
Rachelle DiStefano, CSU East Bay
Dawn O’Connor, Alameda County Office of Education
Jeff Seitz, CSU East Bay
Deb Sims, Fremont Unified School District

Authors:
Robert Curtis, Alameda County Office of Education

Project Session

Strand 1

Summary:
This session will explore a model for building distributed leadership capacity to support scaling and sustaining of middle school science MSP project. We will share structures and processes developed for systemic change and distributed leadership. Research shows that leaders primarily exert their influence by setting directions for school improvement, cultivating shared goals and norms, developing human capacity, and modifying structures to create conditions to support student achievement (Leithwood and Riehl 2005). IMSS has cultivated leadership teams from each of our ten districts to partner with project staff in building shared goals, setting a clear direction and building capacity of teachers and administrators to support systemic K12 improvements in science education as part of our MSP project.

Section 1: Description of product, tool, process, curriculum, or instrument:
The session will describe the distributed leadership (DL) model of the Middle School Science (IMSS) project, a targeted MSP grant in its third year of operation and composed of the following partners: a comprehensive state university in the San Francisco Bay area (i.e., CSU East Bay), three county offices of education (i.e., Alameda County, Santa Clara, San Mateo), eight districts, Exploratorium and science institutions (e.g., NASA Ames).

We are using Spillane’s (2004) framework on distributed leadership as our primary theoretical lens to better understand how leadership is distributed and supported in the context of a systemic MSP initiative. According to Spillane, Halverson & Diamond (2004), a distributed perspective is primarily about leadership practice. The practice is a...
product of the joint interactions of school leaders, followers and the aspects of their situation such as tools and routines. As Spillane, Halverson and Diamond (2004) explain:  

*Leadership is not simply a function of what a school principal, or indeed any other individual or group of leaders, knows or does. Rather it is the activities engaged in by leaders, in interaction with others in particular contexts around specific tasks (p. 5)*

Our rationale for investing effort in a DL model is that we want to be able to better understand how to engage leaders throughout a district to support a systemic transformation of science education that is scaleable and sustainable. We want to be able to scale IMSS elements to other universities across the 23 institutions of the CSU system as well as with the districts that they serve in order to better respond to the rigorous demands of Common Core and NGSS impacts in the state.

Today’s session will focus on sharing strengths and weaknesses of IMSS District Leadership Institute structures, processes and products which have evolved over the first three years of the grant. Our model consists of the following elements: three leadership institutes each year, development of a set of teacher leaders for each district, the involvement of all site administrators and the development and implementation of a systemic science professional development program aligned to IMSS project goals.

IMSS leadership institutes have involved eight partner districts and over 70 site and district leaders at each institute. Each partner district sends a team of 7-12 leaders to each event. These leaders make up the district’s science leadership team. The team is also composed of site and district administrators as well as teacher leaders. These district leadership teams are responsible for supporting, scaling and sustaining the IMSS project systemically in their districts within the context of district and school improvement plans.

**The goals of the IMSS Leadership Institute series includes:**

1. Understand the IMSS program and how it can be leveraged for systemic changes in science education in each district.
2. Build leadership capacity for science in each district at all levels of the organization.
3. Have each district leadership team identify systemic challenges in science education and design system changes to address these challenges.
4. Build a network learning community or community of practice both within and between districts and with IMSS partners to improve science education.

Specific activities to support these goals during the past three years include:

- **Year 1: Conducting a needs and capacity assessment of each district:**
  - Evaluators collaborated with project leadership to co-design logic models related to the Leadership Institute and aligned surveys and interview questions.
  - Districts worked with project management to study their districts in the areas of professional development plans, other district or site initiatives that might synergize with IMSS, leadership capacity, district and site
priorities as well as data that is available to support decision making about science education.

○ Began developing plans to improve both individual and site capacity.

● Year 2: Applying systems thinking to support effective implementation of district plans:
  ○ District Action planning consisted of specific plans to support development of a systemic approach to science professional development in each district.
  ○ Networking across districts consisted of sharing out results of needs and capacity assessment and serving as critical friends for development and implementation of district action plans. Teacher leaders have also provided or supported professional development in other partner districts.

● Year 3: Planning implementation of NGSS and common Common Core state standards
  ○ Each district is piloting PD on NGSS and Common Core State Standards as part of their district science professional development supported by IMSS and partners.
  ○ Networking across districts includes sharing results of professional development and modifying district implementation plans.

Two intensive case studies have been implemented in order to better understand district dynamics and contextual factors as they engage with IMSS content, timelines, and processes. A mixed methods model of data collection has supported our work. This includes: observation of DL professional development, analysis of district plans, focus groups with district teams as well as participant surveys.

Findings to date suggest support for the following IMSS DL elements:

● Strengths:
  ○ Importance of bringing together leaders across the system to support systemic changes
  ○ 90% of leadership teams attended all institutes.
  ○ Large majority of leaders feel that IMSS is an important element to their school and district improvement efforts.
  ○ Large majority find the networking within and between districts support their implementation efforts.
  ○ Teachers view site and district administrators as very supportive of improving science education.

● Challenges:
  ○ Ability to scale IMSS project to a majority of district middle school science teachers for all districts given limited capacity of IMSS staff to support all eight districts as local capacity is being developed. District coaches support multiple districts and do not have sufficient time.
  ○ Need to differentiate IMSS project to align with district and site priorities. Common Core is what most districts are currently focused on and prioritizing. Need to incorporate this into our project goals for science teachers.
Section 2: Question, issue, or challenge that is the primary focus of the session:
Core question:
How do MSP’s actively engage district and site administrators in a model of distributed leadership with teacher leaders to collectively support systemic project implementation, scaling and sustainability? While this is a question which will become increasingly critical to our being able to lay the foundation of long term work, today’s session will focus on sharing strengths and weaknesses of the IMSS District Leadership Institute structures, processes and products which have evolved over the first three years of the grant.

Rationale: We have found that the DL institutes are the foundation to our long-term work. Specifically, we are finding that the districts are allocating resources to support the scaling of the initial IMSS work and that district and site leaders are finding value in the IMSS work and see it as central to their overall site and district improvement strategies and plans.

Section 3: Types of people who you think might be most interested in discussing this and offering feedback:
PIs, project directors, K-12 administrators, K-12 teachers, higher education ED faculty, evaluators, researchers.

Section 4: How will you structure this session? What is your plan for participant interaction?
1. Share overview of IMSS Leadership Institute model, timeline, products and outcomes through a logic model.
2. Share structures, processes, and outcomes from IMSS Leadership Institutes over the last 2.5 years.
3. Share a case study of one district presented by the Assistant Superintendent of the District
4. Brainstorm how other MSP projects are distributing leadership and building leadership capacity to scale and sustain in K-12 districts. Identify key strategies that have been successful in different contexts and key challenges.