

# NM130301 Mathematically Connected Communities (MC2) Project

## I. MSP Project Information

### A. Project

1. Partnership title:

Answer: Mathematically Connected Communities (MC2) Project

2. MSP project director:

Answer: Wanda Bulger-Tamez

3. Project director phone number:

Answer: (575) 646-2755

4. Project director email address:

Answer: wguzman@nmsu.edu

5. Sources of Funding for this MSP project for the 12-month reporting period. (DO NOT include dollar values of in-kind contributions.)

MSP Grant Funded through Title II, Part B (\$):

Answer: 1269260

Other State Funds(\$):

Answer: 77521

LEA Funds (\$):

Answer: 323125

### B. Lead Organization

1. Number of partner organizations/institutions (including the lead organization):

Answer: 40

2. Name of lead organization/institutions:

Answer: New Mexico State University

3. Type of lead organization/institution:

Answer: Institution of Higher Education (IHE)

### C. Partner Organizations

Answer:

-----  
Partner 1  
-----

1. Name of participating organization/institution:

Answer: Las Vegas City Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 2

1. Name of participating organization/institution:

Answer: Wagon Mound Public Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 3  
-----

1. Name of participating organization/institution:

Answer: Socorro Consolidated Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 4  
-----

1. Name of participating organization/institution:

Answer: Roswell Independent Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----

Partner 5

-----

1. Name of participating organization/institution:

Answer: Mountainair Publics Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 6

-----  
1. Name of participating organization/institution:  
Answer: Loving Municipal Schools

2. Type of participating organization/institution:  
Answer: Local education agency (LEA)

Other (Please Specify):  
Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)  
Answer: Yes

3. Partner's Roles on MSP Project:  
Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 7

-----  
1. Name of participating organization/institution:  
Answer: Los Lunas Public Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----

Partner 8

-----

1. Name of participating organization/institution:

Answer: Alamogordo Public Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 9  
-----

1. Name of participating organization/institution:

Answer: Artesia Public Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 10  
-----

1. Name of participating organization/institution:

Answer: Belen Consolidated Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----

Partner 11

-----

1. Name of participating organization/institution:

Answer: Carlsbad Municipal Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data



Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 12  
-----

1. Name of participating organization/institution:

Answer: Carrizozo Municipal School District

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 13  
-----

1. Name of participating organization/institution:

Answer: Central Consolidated School District

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)  
Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 14

-----

1. Name of participating organization/institution:

Answer: Chama Valley Independent Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)  
Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 15  
-----

1. Name of participating organization/institution:

Answer: Cobre School District

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 16  
-----

1. Name of participating organization/institution:

Answer: The Montessori Charter Schools in Albuquerque

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)  
Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 17

1. Name of participating organization/institution:

Answer: Corona Public Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)  
Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 18

-----  
1. Name of participating organization/institution:

Answer: Deming Public Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 19

-----  
1. Name of participating organization/institution:

Answer: Dexter Public Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)  
Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 20

-----  
1. Name of participating organization/institution:

Answer: Espanola Public Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)  
Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 21

-----  
1. Name of participating organization/institution:  
Answer: Farmington Municipal Schools

2. Type of participating organization/institution:  
Answer: Local education agency (LEA)

Other (Please Specify):  
Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)  
Answer: Yes

3. Partner's Roles on MSP Project:  
Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 22

-----  
1. Name of participating organization/institution:  
Answer: Floyd Municipal Schools

2. Type of participating organization/institution:  
Answer: Local education agency (LEA)

Other (Please Specify):  
Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be

included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)  
Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 23  
-----

1. Name of participating organization/institution:

Answer: Gadsden Independent School District

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)  
Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project



Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 24  
-----

1. Name of participating organization/institution:

Answer: Hatch Valley Public School

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 25  
-----

1. Name of participating organization/institution:

Answer: J. Paul Taylor Academy

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----

Partner 26

-----

1. Name of participating organization/institution:

Answer: Jemez Valley Public School

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 27  
-----

1. Name of participating organization/institution:

Answer: Mora Independent Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 28  
-----

1. Name of participating organization/institution:

Answer: Lovington Municipal School District

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----

Partner 29

-----

1. Name of participating organization/institution:

Answer: Pecos Independent Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 30  
-----

1. Name of participating organization/institution:

Answer: Taos Municipal School District

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 31  
-----

1. Name of participating organization/institution:

Answer: Tatum Municipal Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----

Partner 32

-----

1. Name of participating organization/institution:

Answer: Truth or Consequences Municipal Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 33  
-----

1. Name of participating organization/institution:

Answer: Des Moines Municipal Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 34  
-----

1. Name of participating organization/institution:

Answer: University of New Mexico - Center for Education Policy and Research

2. Type of participating organization/institution:

Answer: Institution of Higher Education (IHE)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

3. Partner's Roles on MSP Project:

Answer:

Advise project

-----

Partner 35

-----

1. Name of participating organization/institution:

Answer: Raton Public School

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----

Partner 36

-----

1. Name of participating organization/institution:

Answer: Cimarron Municipal Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be



included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)  
Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 37

1. Name of participating organization/institution:

Answer: Roy Municipal Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 38  
-----

1. Name of participating organization/institution:

Answer: Maxwell Municipal Schools

2. Type of participating organization/institution:

Answer: Local education agency (LEA)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

Answer: Yes

3. Partner's Roles on MSP Project:

Answer:

Identify and recruit teachers for professional development and/or comparison group

Participate in/receive professional development

Provide mentors/coaches/teacher leaders

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Provide teacher support (e.g., substitute teachers, release time, planning time, teacher leaders)

-----  
Partner 39  
-----

1. Name of participating organization/institution:

Answer: Western New Mexico University

2. Type of participating organization/institution:

Answer: Institution of Higher Education (IHE)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

3. Partner's Roles on MSP Project:

Answer:

Design professional development

Provide professional development

Provide technical assistance to teachers and/or project

Advise project

-----

Partner 40

-----

1. Name of participating organization/institution:

Answer: New Mexico State University

2. Type of participating organization/institution:

Answer: Institution of Higher Education (IHE)

Other (Please Specify):

Answer:

Does this partner meet your state's definition of a high-need LEA? (This definition may be included in Section X of this APR. Otherwise, it is the definition that was listed in the RFP)

3. Partner's Roles on MSP Project:

Answer: Lead organization

Project management and administration

Design professional development

Identify and recruit teachers for professional development and/or comparison group

Provide professional development

Provide mentors/coaches/teacher leaders

Evaluate the MSP

Collect and/or provide data

Analyze data

Provide technical assistance to teachers and/or project

Advise project

## II. MSP Project Abstract

### A. Project Abstract

Answer:

The Mathematically Connected Communities (MC2) is a partnership of mathematicians and math educators from two universities (New Mexico State University and Western New Mexico University) and teachers, principals, and district administrators from 37 school districts that represent all regions of the state with differing demographics. These include 15 rural districts, 8 small cities, 12 mid-size cities, and two charter schools which total a little more 100,000 students or about one-third of the states K-12 school population. The goal of MC2 is to improve the mathematics learning for students in grades K-12 through professional development that 1) builds teachers' mathematics knowledge and pedagogical skills for effective teaching quality, and 2) promotes district capacity for creating support systems and structures for educators' ongoing, job-embedded professional learning.

The MC2 capacity building model provides professional learning for teachers, math coaches, teacher leaders, principals and district administrators from each partner district. Each district establishes school Implementation Teams and a District Leadership Team to engage in MC2 professional learning. These teams create district and school implementation plans to engage and support all school teaching faculty in the implementation of Common Core State Standards for Mathematics (CCSS-M). The district teams participate in summer institutes, follow-up regional workshops, and site based implementation as part of the professional development model.

2013 Summer Professional Learning experiences were collaboratively developed for (1) Teacher Leaders attending a three-day mentoring workshop, (2) teachers, teacher leaders, and instructional coaches participating in summer institutes, and (3) principals and district administrators attending the leadership academy. The professional development content was designed and facilitated by seven research mathematicians, two math educators, teacher leaders from partnering districts, and project staff. Below is a brief description of the summer professional learning designed for the three groups:

1. Three Day Teacher Leader Workshops: Twenty-three teacher leaders serving as mentors for their colleagues in implementation of CCSS-M participated in a mentoring workshop to develop their leadership skills and deepen their knowledge of mathematics content and instructional strategies that promote student use of mathematical practices in the classroom. The leadership institute was held in Las Cruces the last week of May.
2. One-Week Geometry Institutes for Implementation Teams: 366 teachers and instructional coaches from 37 partnering school districts participated in the Summer Institutes that were held in five locations across the state. Teachers and coaches participated in the institutes as an Implementation Team from their school to study the CCSS-M geometry standards at their particular grade levels, identify instructional strategies for developing mathematical practices, and build classroom learning communities where students actively take ownership of their learning. Each morning of the academy, participants worked in grade bands (K-2, 3-5, 6-8, 9-12) to study the geometry progression and develop content knowledge for teaching. In the afternoon, participants selected a pedagogy session to deepen their understanding of effective practices for supporting students' mathematics learning. On the final afternoon of the institute, administrators and principals joined the teacher participants to develop a school implementation plan for communicating professional learning with other school faculty.

3. Two-Day Summer Leadership Academies for Principals/Administrators: Principals and district administrators from partnering schools participated in a leadership academy that was held in conjunction with each of the five institutes. The academies were designed for school policy makers to understand how to create an infrastructure for educators to continue to grow professionally in the knowledge and implementation of Common Core. Structures for collaborative planning, establishing professional learning communities, and developing a common vision for mathematics learning among all school faculty were shared and practiced. School leaders also joined the teacher participants the last afternoon of the institute to collaboratively develop a school implementation plan for mathematics.

Follow-up Regional Workshops: All the participants from summer learning experiences attended four days of follow-up professional development throughout the school year. Regional follow-up sessions were held in twelve locations across the state to ensure participation (and minimize travel time and expense) of all Implementation and Leadership Team members. Each follow-up workshop continued to build teachers' mathematics content knowledge and pedagogical strategies for implementing CCSS-M and provided opportunities for district teams to use data to reflect on the effectiveness of actions taken and modify implementation plans to address particular school needs.

School-Based Support: Each partner school was also assigned a mathematics education field specialist who work at the school site with Implementation and Leadership Team members to transfer learning into classroom practice and share professional knowledge with colleagues.

Activities at each school site included:

- aligning curriculum to CCSS-M,
- collaboratively planning lessons based on standards,
- designing instructional strategies that focus on mathematical practices, and
- supporting grade level teams in learning to collaboratively design lessons and formative assessments to improve classroom learning.

Four to eight days of individualized site-based support was provided for each of the 37 partner districts. Twelve math education specialists are regionally located and provide this direct support to classrooms and schools.

Math Virtual Learning Communities: Online modules were designed to expand teacher learning of CCSS-M content for teachers in rural communities who have little face to face interactions with other math teachers. The online communities met every other week for ten weeks in elementary or secondary grade bands. The modules for both grade bands follow a common format of (1) studying the content and progression of CCSS-M, (2) developing math lessons aligned to CCSS-M content and math practices, (3) studying student thinking through video and student work, and (4) planning appropriate instruction and interventions through a review of students' mathematics understanding and misconceptions. A combination of online conferencing and EdModo are used to share mathematical thinking, student work, and classroom video.

The overall mission of the MC2 partnership is to build school cultures where adults and children are actively engaged in continually seeking ways to enhance mathematics learning and ensuring success for all learners. All aspects of the project are intended to build a culture of professional learning in schools through shared leadership, develop the mathematics content and pedagogy of teachers, and develop a stance of reflective practice.

### **III. Responsibilities**

## **A. Administer Overall Program**

1. % Provided by K-12 Institutions:

Answer: 20

2. % Provided by IHE faculty (Institutions of Higher Education):

Answer: 10

3. % Provided by Other (Please specify): Project Staff

Answer: 70

## **B. Design Professional Development**

1. % Provided by K-12 Institutions:

Answer: 20

2. % Provided by IHE faculty (Institutions of Higher Education):

Answer: 40

3. % Provided by Other (Please specify): Project Staff

Answer: 40

## **C. Deliver Professional Development**

1. % Provided by K-12 Institutions:

Answer: 20

2. % Provided by IHE faculty (Institutions of Higher Education):

Answer: 40

3. % Provided by Other (Please specify): Project Staff

Answer: 40

## **D. Evaluate MSP**

1. % Provided by K-12 Institutions:

Answer: 20

2. % Provided by IHE faculty (Institutions of Higher Education):

Answer: 20

3. % Provided by Other (Please specify): Project Staff

Answer: 60

#### **IV. Professional Development**

##### **A. Number of University Faculty Involved in MSP Project**

1. Number of Mathematics faculty:

Answer: 7

2. Number of Science faculty:

Answer:

3. Number of Engineering faculty:

Answer:

4. Number of Education faculty:

Answer: 3

5. Number of Technology/Computer Science faculty:

Answer:

6. Number of other faculty involved:

Answer:

(Please specify discipline):

##### **B. Indicate the Primary Goal for the Intervention**

1. Please select the main goal of the MSP project:

Answer: Both - Improving individual teacher's content knowledge and training teacher leaders are equally important aspects of our program

##### **C. Total Number of Participating Educators**

1. Total number of teachers and/or administrators receiving MSP professional development in Math or Science: (Do not double-count teachers for this figure).

Answer: 422

##### **D. Elementary School Teachers**

1. Total number of elementary school teachers:

Answer: 206

A. Regular core content teachers: Elementary school:

Answer: 163

B. Gifted and talented teachers: Elementary school:

Answer: 0

C. Special education teachers: Elementary school:

Answer: 2

D. Teachers of English language learners: Elementary school:

Answer: 13

E. Non-teaching math teacher coaches (full or part time):Elementary school:

Answer: 28

F. Non-teaching science teacher coaches (full or part time):Elementary school:

Answer:

G. Paraprofessionals: Elementary school:

Answer:

2. Total number of elementary school teachers who primarily work in a high-need school, as defined by your state:

Answer: 163

## **E. Middle School Teachers**

1. Total number of middle school teachers:

Answer: 109

A. Regular core content teachers: Middle school:

Answer: 97

B. Gifted and talented teachers: Middle school:

Answer: 0

C. Special education teachers: Middle school:

Answer: 2

D. Teachers of English language learners: Middle school:

Answer: 7

E. Non-teaching math teacher coaches (full or part time): Middle school:

Answer: 3

F. Non-teaching science teacher coaches (full or part time): Middle school:



Answer:

G. Paraprofessionals: Middle school:

Answer:

2. Total number of middle school teachers who primarily work in a high-need school, as defined by your state:

Answer: 109

## **F. High School Teachers**

1. Total number of high school teachers:

Answer: 51

A. Regular core content teachers: High school:

Answer: 49

B. AP/IB: High school:

Answer:

C. Special education teachers: High school:

Answer:

D. Teachers of English language learners: High school:

Answer:

E. Non-teaching math teacher coaches: High school:

Answer: 2

F. Non-teaching science teacher coaches: High school:

Answer:

G. Paraprofessionals: High school:

Answer:

2. Total number high school teachers who primarily work in a high-need school, as defined by your state:

Answer: 51

## **G. Administrators**

1. Total number of administrators:

Answer: 56

A. Administrators: Elementary school:

Answer: 27

B. Administrators: Middle school:

Answer: 9

C. Administrators: High school:

Answer: 10

D. Other (please describe): District Administrator

Answer: 10

## H. Participant Students

1. Number of elementary school students taught by participating teachers:

Answer: 3280

2. Number of middle school students in math and/or science classes taught by participating teachers:

Answer: 7780

3. Number of high school students in math and/or science classes taught by participating teachers:

Answer: 3920

4. TOTAL number of students in math and/or science classes taught by participating teachers. (This should be the sum of the number of students in elementary school plus middle school plus high school, as reported above):

Answer:

## V. Professional Development Models

### A. Contact Hours

Answer: 71

### B. Type of Professional Development Activities

Answer: Activities other than Summer Institutes only or Summer Institutes with follow up activities. activities (This includes summer activities that total fewer than 60 hours)

B. iii. Others

1. Please indicate the type of activities used in your project during the 12-month reporting period  
Answer: Professional development during the summer totaling at *least 1 week* in duration *plus* other school year activities

2. Please indicate the primary focus of the professional development activities provided by your project during the academic year

Answer: On-site professional development

### **C. Description of Professional Development Model**

Answer: Summer institutes provided two levels of professional development (PD) designed and facilitated by mathematicians, mathematics education specialists, and teacher leaders. The first level was a teacher leadership component to develop the knowledge/skills of master teachers to be able to serve as teacher leaders at their districts. This component began with a three-day leadership workshop in May and continued for an additional week in June. 23 teacher leaders participated.

The second level of PD (with 366 participants in five locations) was a five-day summer institute held for Implementation Teams. Summer Institute topics were chosen to impact instructional decisions and student engagement for improved math learning. Topics included:

- Geometry Progression of CCSS-M, grades K-12
- Formative Assessment to improve classroom learning
- Instruction Models to support student engagement and math learning
- Planning with Standards at the Center
- Developing school/district implementation plans

District Leadership Teams were also designated to ensure coordination of PD efforts at the district sites and participated in 6 days of professional learning for school leaders. 56 administrators participated.

Follow-up support was provided through regional workshops, on-site mentoring by MC2 staff, and the online Math Virtual Learning Community (MVLC) for rural schools. MVLC was delivered via Zoom video-conferencing and EdModo web-sharing.

## **VI. Professional Development Content and Practices**

### **A. Mathematics Content and Practices**

1. Did your MSP project provide training in math content or processes in the MSP professional development during this 12-month reporting period?

Answer: Yes

2. Please indicate the major content, topics, or practices of mathematics taught to teachers in the MSP activities during this 12-month period. Select all that apply and indicate the GRADE LEVELS OF TEACHERS to whom each topic was taught.

2.1 Mathematical Practices:

Answer: Elementary School Teachers    Middle School Teachers    High School Teachers

2.2 Number and Operations:

Answer: Elementary School Teachers

2.3 Ratios and Proportional Relationships:

Answer: Middle School Teachers

2.4 Algebra:

Answer: Middle School Teachers      High School Teachers

2.5 Geometry:

Answer: Elementary School Teachers      Middle School Teachers      High School Teachers

2.6 Measurement and Data:

Answer:

2.7 Probability and Statistics:

Answer:

2.8 Problem Solving:

Answer: Elementary School Teachers      Middle School Teachers      High School Teachers

2.9 Reasoning and Proof:

Answer: High School Teachers

2.10 Modeling and Functions:

Answer:

2.11 Calculus:

Answer:

2.12 Other (Please Specify):

Answer:

## **B. Science Content and Practices**

1. Did your MSP project provide training in science content or processes in the MSP professional development during this 12-month reporting period?

Answer: No

2. Please indicate the major content, topics, or practices of science taught to teachers in the MSP activities during this 12-month period. Select all that apply and indicate the GRADE LEVELS OF TEACHERS to whom each topic was taught.

2.1 Scientific Practices:

Answer:

2.2 Physical Science/Physics:

Answer:

2.3 Chemistry:

Answer:

2.4 Life Science/Biology:

Answer:

2.5 Earth and Space Science:

Answer:

2.6 Technology:

Answer:

2.7 Engineering:

Answer:

2.8 Other (Please Specify):

Answer:

## **VII. Program Evaluation**

### **A. Type of Evaluator**

Please select from the list below the best description of your project's evaluator. (Select all that apply.)

Other (Please specify):

Answer: Internal Evaluator

### **B. Evaluation Design**

Other (Please Specify):

Answer: Mixed Methods

-----  
B. iv. One-Group, Qualitative/Descriptive, and Other Designs  
-----

Answer: The evaluation design provides for the collection and analysis of both quantitative and qualitative data. All evaluation measures are closely linked to the goals and outcomes of the partnership. All of Guskey's Five Levels of Professional Development Evaluation (Guskey, 2005) are addressed in the plan: 1) Participants' reactions, 2) Participants' learning, 3) Organizational support and change, 4) Participants' use of new knowledge and skills, and 5) Student learning outcomes.

Level 1 - Participants' Reactions: Summer Institute and Leadership Academy participants are asked to complete an evaluation survey to indicate the impact on learning and usefulness of the professional development. Approximately 300 participants (80%) submitted feedback. Attached is the full report.

Level 2 - Participant Learning: Teachers participating in the Summer Institute took a pre- and post- content knowledge assessment. Copies of the assessments given in each grade band (k-2, 3-5, 6-8, and high school) and the analysis of data can be found in supplemental documents.

Level 3 - Organizational support and change: Each district is asked to develop a CCSS-M implementation plan that becomes part of the school Educational Plan for Student Success (EPSS), the overall school plan to support and improve student learning that is required by the New Mexico Public Education Dept. Project staff survey district administration to assess the impact of the MC2/District Implementation Plans on the school EPSS.

Level 4 - Participants' use of new knowledge and skills: Currently the data gathered by the evaluators regarding participant use of new knowledge is through self-report. During the school year, participants are asked to self-report on what they plan to implement or have already implemented as a result of attending MC2 professional development. These data are shared with project staff in monthly staff meetings. Staff also assess the level of implementation through informal observations at school sites. Data are shared in staff meetings to inform the design of subsequent professional development.

Level 5 - Student learning outcomes: Student achievement data from the New Mexico Standards Based Assessment from each partner district is analyzed in relation to the overall achievement of students in the state. These data will become available in August 2014 for the 2013-2014 school year. Analysis of the data will be reported in Fall 2014.

Attached are copies of the evaluator report of MC2 Summer Institutes and Teacher Mathematics Content Knowledge.

### **C. Phase of Implementation**

1. Indicate your MSP project's stage of implementation.

Answer: Developing: Revising, enhancing, or further developing professional development model. May be building on a prior model, an earlier grant, or a planning year.

2. Current year of implementation:

Answer: 1st year of this grant cycle

3. Is this the final report that you will submit for this grant (i.e., this is the last APR you will complete to report on the funds you received for this MSP)?

Answer: No

### **D. Teacher Assessment Measures**

-----  
Assessment Measure 1  
-----

Assessment of Teacher Content Knowledge-Math  
Other (Please specify): Customized Pre/Post Test

1. Description of the assessment measure/test:

Answer: Locally developed test, not tested for validity and reliability

2. Were the results of this measure used in the reporting of GPRA indicators for participants in section VIII (Findings for MSP Participants and Their Students) of this APR?

Answer: Yes

### **E. Analysis of Changes in Teacher Practice**

1. How are you measuring the extent to which teachers are applying lessons from the MSP PD to their classroom instruction?

Answer: Questionnaire/Self-report

Other (Please specify):

### **F. Teacher Findings**

Answer: Teacher Findings are categorized into three main areas: (1) growth in professional knowledge of instructional practices required for effective implementation of Common Core State Standards, (2) increased teacher mathematics content knowledge, and (3) changes in classroom practice for improved student engagement in mathematics learning.

1 – Professional Knowledge: Data on teacher knowledge was gathered using an evaluation/survey form following professional development sessions. Teachers report on the knowledge gained from the experience as well as what they intend to implement as a result of the professional development. In all institutes, teachers reported greater depth of knowledge of CCSS-M and instructional practices needed to meet the expectations of the standards. Attached is a summary report from the 2013 institutes.

2 - Increased Content Knowledge: Individual teachers were evaluated utilizing a pre- and post-content knowledge test to assess the impact of the one-week summer institute on teacher mathematics content knowledge related to the grade they teach. A unique assessment was administered for each grade band as listed below. Data analysis showed overall growth in understanding of geometry concepts. Matched pairs of pre- and post-tests showed significant gains for teachers in the following grade bands:

- K-5 Teachers: 85 out of 171 showed significant growth
- 6-8 Teachers: 36 out of 62 showed significant growth
- 9-12 Teachers: 31 out of 39 showed significant growth

These data are found in the GPRA section of the report. Additionally, further analysis can be found in the uploaded Pre- and Post 2013 Summer Institute Report.

3 – Classroom Practice: In addition to teacher self-report, MC2 math education field specialists conduct classroom visits and observations to assess the impact of the professional development on classroom practice. Overall, the changes in instructional practice seen in classrooms are mixed. Many teachers in partner districts are attempting to change their curricular materials for greater alignment to CCSS-M content and mathematical practices. For example, they are providing students with mathematics tasks that require critical thinking and problem-solving, and encouraging more student to student discussion of the mathematics. Some schools have also adopted problem-solving based curriculum resources that lend themselves to classroom environments that promote high-level mathematical thinking. However, classroom teaching practice is slow to change on a large scale. While teachers are attempting to adopt instruction that promotes the CCSS-M mathematical practices and conceptual understanding, much of the

instruction is still procedural and teacher centered. New Mexico is in its first year of full implementation of CCSS-M. We know from research and our own experience that implementation of new instructional models and curriculum is a three to five year journey and will only be successful with a coherent and consistent support plan for professional learning. While we are encouraged with beginning steps towards implementation at the classroom level, the project is making a concerted effort to support teachers at the schools and partner with them in their classroom in the coming year. Collaborative MC2 mentorship with teachers via classroom based professional learning is an essential next step.

## **G. Student Findings**

Answer: In the 2013-2014 school year, district-wide student achievement data showed mixed results on the impact of the MSP on students' mathematics learning. While some districts showed significant gains in mathematics achievement, the majority remained flat or showed some losses. These achievement results were consistent with the state as a whole. Due to some of the factors listed below, our project staff anticipated limited results in student achievement gains this year. In anticipation, we adjusted our model to work more intensely with more teachers in fewer schools rather than rely on implementation teams to ensure transfer of practice at school sites. We will also continue to look at data patterns and determine why or how certain districts were more successful.

While the project looks at data over time, in this past year the results were unsatisfactory. Some reasons for the limited or isolated results in student achievement gains are described below in the bulleted list:

- A small percentage of teachers from each partner district participated in the summer institute and follow-up professional development. Because we partnered with a large number of districts (38), a small percentage of teachers from each partner district were able to participate in the summer institute and follow-up professional development. The 2013-2014 model of providing support for lead teachers and implementation teams provided resources and support for teachers to share MSP strategies and classroom practices with others at their schools. This "training of trainers" model proved challenging as most teachers reported very limited time to work with colleagues because of increased mandates within the school or district and the lack of professional learning structures for sharing information at school sites.
- Common Core State Standards (CCSS) were fully adopted in fall of 2013. All schools were required to fully implement CCSS-M at all grade levels. The state test, however, was still based on the prior New Mexico Mathematics Standards. While the move towards CCSS-M makes sense in the long-term since the content of CCSS is more coherent and rigorous than the previous standards, the mismatch of standards and tests plus the complexity of transitioning to a new set of standards resulted in very mixed results in student achievement this past year.
- 2013 was a mathematics textbook adoption year for New Mexico. Nearly all districts adopted a new and different textbook in order to support the transition to CCSS-M. In the 2013-2014 school year, teachers worked hard to make sense of the new expectation and textbook format. As happens with many changes in curriculum resources, many partner districts saw a dip in student achievement scores in mathematics and research documents that it takes 3-5 years with significant professional development to effectively understand the content and implement new curriculum resources. Most districts also adopted resources that do not adequately incorporate the Math Practices into daily lessons.
- In 2013-2014, the state adopted a new teacher evaluation system that provides each individual teacher a rating from ineffective to exemplary. The new system is substantially different from the previous evaluation system. In the long-term, the new system will provide more specific and accurate feedback to teachers in terms of effective instruction. However, in the first year of



implementation, the new evaluation system, as with the adoption of any new initiative, created high levels of stress and competed for teachers time and attention.

Individual teacher and student data are not yet accessible to the project staff for 2013-2014 and therefore, an aggregate of district-wide student achievement data was analyzed to consider impact of the MSP on student achievement. Below is a summary of achievement data from a sampling of sixteen partner districts. (Note: MSP evaluators are in the process of completing an agreement between the Public Education Department and university to be able access these data in order to accurately describe impact on student learning that results from teacher participation in the MSP project.)

Specific changes in the New Mexico mathematics achievement scores from 2013 to 2014 for a sampling of partner districts are summarized below. (Sampling is based on districts in which teachers from the reported grade level participate in MC<sup>2</sup> Summer Institutes and follow-up professional development.) The gains/losses for MC<sup>2</sup>districts are compared to the gains/losses for the state.

#### Elementary (Sixteen Districts):

In Grade 3, nine of sixteen MC<sup>2</sup> districts (56%) had gains in student math performance on the NMSBA from 2013 to 2014 (ranging from +1.1 to +9.8), compared to a mean loss (-1.6) for the state as a whole.

In Grade 4, ten of sixteen MC<sup>2</sup> districts (63%) had a greater gain/less loss than the state mean loss of -2.7. In fact, of these ten districts, 7 had gains ranging from +0.6 to +10.3.

In Grade 5, eleven of the sixteen MC<sup>2</sup> districts (69%) surpassed the state mean gain (+0.6). The gains for these districts ranged from +1.9 to +21.9.

#### Middle Grades:

In Grade 6, nine of seventeen MC<sup>2</sup> districts (53%) had an equal or greater gain/less loss than the state mean loss of -2.6. The change in student math performance for these nine districts ranged from (-2.6 to +17.2).

In Grade 7, eight of seventeen MC<sup>2</sup> districts (50%) had an equal or greater gain/less loss than the state mean loss of -1.4. The change in student math performance for these districts ranged from -1.4 to +9.8.

In Grade 8, six of sixteen MC<sup>2</sup> districts (38%) had a greater gain/less loss than the state mean loss of -2.2. The changes in math performance for these districts ranged from -1.3 to +13.2.

#### High School (Fourteen Districts):

In Grade 10 (H2), seven of fourteen MC<sup>2</sup> districts (50%) equaled or surpassed the state mean gain of +0.2. Gains for these districts ranged from +0.2 to +7.4.

In Grade 11 (H3), six of fourteen MC<sup>2</sup> districts (43%) surpassed the state mean gain of +0.8. Gains for these districts ranged from +3.7 to +13.2.

## **H. Impact on the Partnership**

Answer: See Impact on Partnership document for impact report.

## **I. Other Impacts (Optional)**

Answer: In addition to the project's impact on partner schools, teachers, and students, MC2 has played an active role in many efforts within higher education and in collaboration with other educational partners.

At the university level, MC2 is a major partner of the Institute for Excellence in Mathematics and Science Education (IEMSE) and the STEM Coalition at New Mexico State University (NMSU). As representatives of IEMSE, project staff often represent the university at legislative functions such as providing as sharing partnership activities and data with visiting state and federal legislators. MC2 has also forged partnerships between university and community college mathematicians and math educators creating stronger links between universities (University of New Mexico, Western New Mexico University, Central New Mexico Community College, and UNM-Taos Campus). Mathematicians and math educators from these different institutions partner to design mathematics content for teacher professional learning that addresses needs of teachers from various regions of the state. These relationships extend to discussing and collaboration in the design of teacher education mathematics content courses.

MC2 is also a part of statewide organizations and efforts such as New Mexico Council of Teachers of Mathematics and New Mexico Educator Leader Cadre - Common Core/PARCC dissemination efforts. MC2 mathematics field specialists and teacher leaders have provided regional information sessions about the Common Core Standards for Mathematics as part of our partnership with these organizations. These sessions have been attended by teachers and other educational leaders, parents and community members, and have served to promote research-based implementation of the CCSS-M in New Mexico schools. These sessions include:

- Regional Education Cooperative #10 Conference in Deming on Implementation of CCSS-M
- Regional Education Cooperative #6 (Portales) and #10 – PARCC Administrator Meetings
- Common Core Administrator Workshops in Gallup
- Common Core Town Hall Meetings in Las Cruces and Clovis
- PED STEM Symposium

In addition, MC2 staff have been asked to provide support in implementation of effective mathematics instruction and CCSS-M in other states. These include ongoing professional development in school districts in Utah, Kentucky, and Texas.

## **J. Upload Report**

Attachment:

## **VIII. Findings for MSP Participants and Their Students**

### **A. MSP Participants**

i. Total number of participants receiving MSP professional development in math: (If a participant receives PD in more than one discipline within Math, count that participant only once.)

Answer: 366

ii. Total number of participants receiving MSP professional development science: (If a participant receives PD in more than one discipline within Science, count that participant only once.)

Answer: 0

Mathematics

-----

1. Number of participants receiving MSP professional development in math (participants can be counted multiple times if they participate in multiple sets of independent professional development courses, particularly in different topics):

Answer: 366

2. Among those participants reported in 1 above, number of participants with both pretest and posttest scores in math content knowledge:

Answer: 272

3. Among those participants reported in 2 above, number of participants who showed significant gains in math content knowledge:

Answer: 152

Science

-----

4. Number of participants receiving MSP professional development in science (participants can be counted multiple times if they participate in multiple sets of independent professional development courses, particularly in different topics):

Answer: 0

5. Among those participants reported in 4 above, number of participants with both pretest and posttest scores in science content knowledge:

Answer: 0

6. Among those participants reported in 5 above, number of participants who showed significant gains in science content knowledge:

Answer: 0

## **B. Students**

Mathematics

-----

1. Number of students taught math by MSP teachers:

Answer: 14980

2. Number of students from question 1 with state assessment data in math:

Answer:

3. Number of students from question 2 who scored at basic or below in math:

Answer:

4. Number of students from question 2 who scored at proficient or above in math:

Answer:

## Science

-----

5. Number of students taught science by MSP teachers:

Answer:

6. Number of students from question 5 with state assessment data in science:

Answer:

7. Number of students from question 6 who scored at basic or below in science:

Answer:

8. Number of students from question 6 who scored at proficient or above in science:

Answer:

## IX. Lessons Learned

### A. MSP Implementation

Answer: In 2012-2013, with the state adoption of CCSS-M, our project focus was building awareness and knowledge of CCSS-math content, mathematical practices and instructional shifts necessary to realize the expectations and promise of the new standards. In our 2013-2014 year, we moved beyond awareness and knowledge to focus on impact. We saw both successes and challenges as the professional learning moved beyond the theoretical and into classrooms to impact children's learning.

One major success of this past year was the ability to provide relevant professional experiences that teachers could use in their classrooms immediately and see a positive change in classroom engagement and learning. Teachers reported that the summer topics were very useful to know how to begin the school year to develop a classroom culture that promotes a standards-based learning environment (SBLE). We define an SBLE as one that promotes opportunities for all students to make conjectures about mathematical ideas, builds conceptual understanding, values student explanations of their mathematical thinking, and honors multiple perspectives. The definition is credited to research by Tarr, Reys, Reys, and Chaves (2008). Research and our own experience show that student learning increases in a standards based learning environment. Project participants cite the content of summer institute and follow-up professional development, as well as modeling of effective practice by project mathematicians, teacher leaders, and staff, for their ability to effectively implement CCSS-M in their classrooms and schools.

Another success that is leading to greater impact on mathematics learning is the project's attention to situating the professional learning in the classroom. During institutes and workshops outside of school, classroom video of New Mexico students and authentic student work were used as tools to consider and plan for implementation of lessons utilizing effective instructional strategies. Teachers were also provided with resources they could apply in their teaching practices and share with colleagues like the "Thinking Protocol", a formative assessment process for students to gauge their understanding of mathematics and collaborate with their peers to build their understanding. School based support also provided classroom-based professional learning experiences. One example is teachers' engagement in Collaborative Lesson Design Cycle (CLDC) in which teachers: 1) collaboratively plan and design a lesson aligned to CCSS-M, 2) implement the lesson in the classroom with one teacher facilitating and the other teachers observing and documenting

learning, and 3) reflect on effectiveness of the lesson by assessing student engagement and proficiency with the CCSS-M math content and practices, and identifying next steps to improve learning. The CLDC has created a reflective process for teachers to learn from one another, engage in action research, develop and implement strategies to differentiate instruction, and work as a team to improve learning for all students. Overall, a major success has been to consciously consider how to collaboratively plan and implement instruction to maximize impact on students' mathematics learning.

A third success and strength of our project is the collaboration of mathematicians, teachers, and math educators to design mathematics learning experiences for teachers that show the application and usefulness of mathematics within the CCSS-M. In both the Summer Institutes and the Math Virtual Learning Communities (MVLC), mathematicians are an integral part of content learning for teachers, where all partners benefit. The teachers appreciate the depth of knowledge brought by the mathematicians who have learned how to create a safe learning situation that motivates and extends teachers' mathematical knowledge. The mathematicians draw on the experience of teacher leaders to identify common misconceptions and challenging content so that the mathematics activities designed for teachers are relevant to addressing issues of implementation and student learning. The mathematicians also report that partnering with teacher leaders helps them to develop their own pedagogical practices and has impacted their mathematics teaching at the university level.

Finally, a success to be noted was the connection and interaction of District Implementation and Leadership Teams. The intertwining of these teams meant schools had the expertise of teachers and the decision-making power of administrators working together to design school-based professional learning for the school staff. These teams met together throughout the school year to reflect on what was working well and what needed to change to meet both short- and long-term needs of the school. Principal had a trusted and knowledgeable team to make decisions about mathematics instruction and teachers had the support of the administration that could create structures for professional learning in the school week.

The major challenge of the MSP was the lack of consistency and commitment of some district partners.

The MC2 capacity building model is dependent on 1) consistency and commitment of district partners, particularly those on the Leadership Team, and 2) structures and cultures that allow Implementation Team members to go back to their respective sites and share professional learning about CCSS-M.

While there were MC2 partner districts that exemplified these components, some did not. Factors that contributed to problems with consistency and commitment included:

- No clear, unified vision for a K-12 district mathematics program based on CCSS-M. Some of our partner districts had taken the recommended steps to clarify the goals and outcomes of the Math Implementation Plan with stakeholders, which caused ambiguity, confusion, and limited implementation.
- Lack of understanding of the model by some district leaders, who seemed to view the professional learning from an older, "in-service" mindset, rather than a transformational, "collaborative and continuous professional learning" mindset. This was evidenced by key stakeholders in the district not attending sessions, even when it was made clear that their participation was critical. Teachers viewed administrator's lack of participation as symptomatic of a larger problem within the school district.
- Literal overwhelm from the sheer amount of state mandated and district adopted initiatives which presented enormous challenges for scheduling and attendance, particularly in small, rural districts.

Reference: J. Tarr, R. Reys, B. Reys, and O. Chavez. (2008). The Impact of Middle-Grades Mathematics Curricula and the Classroom Learning Environment on Student Achievement. *Journal for Research in Mathematical Education*. Vol. 39, No. 3, 247-280.

## **B. MSP Evaluation**

Answer: MC2 is fortunate to have an evaluation plan that provides continuous feedback to project staff. The major success of our evaluation plan is that we have several different data sources to consider the strengths and weaknesses of the project model and activities in terms of impact on teacher and student learning. Participant evaluations and surveys, observation of professional development sessions, pre- post assessments for participants in the summer institutes, and student achievement data provide sources of data to analyze our project effectiveness. The project evaluator also works closely with project staff to provide immediate feedback when possible so modifications can be made to improve our effectiveness. For example, while the vast majority of participant surveys are very complimentary of the professional development (PD) received, we take special care to always include space on the participant evaluations for them to tell us in what ways the PD could have better met their needs. These participant comments are always taken very seriously and are immediately reported to project staff so appropriate changes can be made to improve subsequent institutes.

Comparing student achievement data from year to year to analyze growth continues to be a challenge. It has been difficult to attain student achievement scores by teacher and therefore hard to compare teachers who have participated in MC2 professional development with other teachers in the district who have not participated in the PD. We are working with PED to find solutions to this challenge.

Also, with state modifications to the present mandated assessment, the New Mexico Standards Based Assessment (NMSBA), it is difficult to make year to year comparisons showing gains and/or losses in student mathematics achievement. We look forward to the new state and PARCC assessments that are aligned to CCSS-M starting in spring 2014.

Another challenge has been finding valid and reliable pre- post assessments for educators which closely align to the math content shared at the MC2 Summer Institutes. In summer 2013 we developed our own assessment using 1) released test items from the National Assessment of Academic Progress (NAEP); released items from other state assessments, and test items developed by MC2 staff. Participants showed statistically significant gains on these assessments. Since the content for the summer 2014 is different than the content from the 2013 institutes, different items must be found to develop a new assessment. While we have found a valid and reliable instrument that we could possibly use for summer 2014, its alignment with the proposed content (which is content we, working with our partner districts, deem important for teachers to know to improve their effectiveness in the classroom) is minimal, at best. We are presently working with PED to determine a solution to this challenge.

## **X. State Review**

### **A. Awards**

A high-need LEA in New Mexico is defined as a school or district in which at least 20% of the students receive free or reduced price lunches.

## **XI. Attached Supplementary Documents**

File 1: Impact\_on\_Partnership\_Final.docx

File 2: Evaluation\_Report\_for\_Summer\_2013.pdf

File 3: Pre-post\_report\_all\_grades\_2013\_MC2\_Summer\_Institutes.pdf

File 4:

File 5: