This document elaborates on the terms used in the District Policy Ratings forms, providing examples of how particular items might be rated.

I. District Policies and Practices

1. Mathematics/science curriculum framework/scope and sequence

   Major barrier: some districts specify lists of topics/concepts (or use state lists) that are inconsistent with standards-based mathematics/science instruction, e.g., are developmentally inappropriate or include considerably too much content to allow for appropriate treatment. If a district uses such a document, AND many teachers attend to it, curriculum scope and sequence would be a major barrier to reform.

   Major facilitator: if the district scope and sequence documents are well-aligned with standards-based instruction, and teachers know they are expected to gear their instruction to those documents, then scope and sequence would serve as a major facilitator to reform.

2. Selection of instructional materials

   Major barrier: district expects teachers to base instruction on textbooks/programs that are not aligned with standards-based mathematics/science instruction.

   Major facilitator: district selects standards-based instructional materials and expects teachers to use them as the basis for instruction.

3. System for purchasing and managing materials and supplies

   Major barrier: teachers do not have access to the materials and supplies they need for standards-based instruction, e.g., funds are not available for initial purchase or replacing consumables is difficult; teachers need to exert a great deal of effort or use their own funds in order to have adequate materials and supplies.

   Major facilitator: a system is in place for providing teachers adequate supplies in a timely fashion; there is an expectation that teachers will make use of the materials, and teachers have assistance in keeping them in good order.

4. State-wide student assessment

   Major barrier: state assessment is high stakes for teachers and/or students AND poorly aligned with standards (e.g., emphasizes knowledge and skills that are developmentally inappropriate, or requires teachers to cover so much material that it cannot be taught in a standards-based fashion); or state assessment is high stakes, but does not include mathematics/science.

   Neutral or mixed impact: state assessment is either non-existent or not high stakes; or state assessment is high stakes and includes some elements that are inconsistent with standards and others that are aligned with standards.

   Major facilitator: state assessment is high stakes and very well-aligned with standards, reinforcing the use of standards-based curriculum and instruction, and consistent with the kind of assessment teachers would use in a standards-based classroom.
5. District-wide student assessment

Major barrier: district assessment is high stakes for teachers and/or students AND poorly aligned with standards (e.g., emphasizes knowledge and skills that are developmentally inappropriate, or requires teachers to cover so much material that it cannot be taught in a standards-based fashion); or district assessment is high stakes, but does not include mathematics/science.

Neutral or mixed impact: district assessment is either non-existent or is not high stakes; or district assessment is high stakes and assessment includes some elements that are inconsistent with standards and others that are aligned with standards.

Major facilitator: district assessment is high stakes and well-aligned with standards, reinforcing the use of standards-based curriculum and instruction, and consistent with the kind of assessment teachers would use in a standards-based classroom.

6. Evaluation of teacher performance

Major barrier: teachers are evaluated based on a non-aligned vision of mathematics/science instruction, either because the criteria are not aligned with standards, the evaluators do not recognize standards-based mathematics/science instruction, or mathematics/science is not given equal treatment with other subjects in teacher evaluation.

Major facilitator: mathematics/science is considered equally with other subjects in the teacher evaluation process AND teachers are evaluated based on a standards-aligned vision of mathematics/science instruction.

7. Consistency of LSC mathematics/science reforms with other district reforms

Major barrier: district is advocating an approach in other subjects that discourages investigation and emphasizes memorization of factual information; district accepts lower standards for some student subgroups.

Major facilitator: reforms are mutually reinforcing, emphasizing investigation and teaching for understanding as well as high expectations for all students.

8. Organizational structures/policies within schools

Major barrier: school administrators do not consider mathematics/science important; teachers do not have adequate time to plan mathematics/science instruction or time to work with their peers on mathematics/science instruction.

Neutral or mixed impact: There is considerable variation among schools in the district.

Major facilitator: school administrators are supportive of standards-based mathematics/science instruction; the school schedule provides adequate time for hands-on, investigative lessons, as well as time for teachers to plan mathematics/science instruction individually and with their peers.

II. Attitudes and Beliefs of Various Stakeholders

In this section, describe the extent to which there is active opposition versus active support for mathematics/science reform efforts among each of the groups/institutions listed.
III. Capacity, Infrastructure, and Resources for Reform

A. Planning and implementing mathematics/science professional development

1. Structures in place for assessing teachers’ needs

At the high end of the scale are districts with procedures in place for periodic needs assessments or mechanisms for ongoing feedback from teachers regarding areas of need. At the low end of the scale are districts in which teacher needs are not assessed in a systematic way.

2. Capacity to plan and deliver high-quality mathematics/science professional development

At the high end of the scale are cases where professional development providers have the necessary background in content and pedagogy and have dedicated time and responsibility to plan and deliver high-quality professional development; at the low end of the scale are districts that must rely primarily on ad hoc sources for professional development.

Be sure to distinguish between (a) internal capacity, which includes district staff (e.g., mathematics/science supervisors, teacher leaders from the district or intermediate service unit) and (b) external capacity, which includes providers outside the district/intermediate service unit.

3. Professional development tied specifically to the mathematics/science curriculum

At the high end of the scale are districts in which professional development is integrally linked to the curriculum teachers are using in their classrooms. Districts at the low end might provide professional development on generic topics with no direct link to the curriculum.

4. Opportunity for a coherent professional development program

At the high end are districts that provide teachers with activities for professional development that are coordinated, ongoing, and well-matched and responsive to teachers’ needs. On the low end of the scale are districts in which professional development is a one-shot experience, or professional development lacks continuity from one event to the next.

5. Incentives in place for teachers to participate in ongoing professional development

At the high end of the scale are districts where teachers are required to participate in a substantial amount of professional development related to mathematics/science curriculum and instruction, provided a wide range of high-quality offerings, encouraged to develop an individualized professional development plan, and provided release time, stipends, salary increases, or other remuneration for their participation.

6. Staff development days for mathematics/science professional development

At the high end are districts that devote five or more staff development days each academic year for meaningful professional development activities in mathematics/science.
7. Use of district’s federal funds to support mathematics/science professional development

At the high end of the scale are districts that routinely use available resources for mathematics/science professional development. Not applicable if districts don’t receive these federal funds.

8. Support for teacher implementation

At the high end, districts provide coaching, time for teachers to meet together with skilled facilitators, or otherwise have a coherent means of providing teachers the support they need as they use mathematics/science instructional materials in their classrooms. Support is well-matched with their needs, timely, and readily accessible.

9. System in place for orienting new teachers

At the high end of the scale are districts that provide orientation and on-going support for new teachers as a normal operating procedure.

B. Other district policies and practices for mathematics/science education

In each of these cases, districts at the high end of the scale have a system in place to ensure alignment with the mathematics/science reform vision, including mechanisms for revisiting the policies/practices to make sure alignment is maintained.

“Not at all” means there is no system to ensure that the policy/practice is aligned with the mathematics/science reform vision.

C. Stakeholder support for mathematics/science reform

For each of these stakeholder groups, districts at the high end of the scale have a system in place for garnering and maintaining support for the mathematics/science reforms.

“Not at all” means there is no system for garnering support of the participant group.