

1.1.f. Coach inservice teachers to build deep understanding of number and operations through different approaches.

1.2. g. Coach inservice teachers in developing algebraic reasoning through knowledge of numbers and operations.

1.3.e. Coach in service teachers in connections between geometric and algebraic concepts through use of technology.

1.4.d. Coach inservice teachers in identifying and selecting the appropriate unit and tool for measuring various shapes.

1.5.f. Coach inservice teachers in using methods for gathering, analyzing, and interpreting data in raw form, tables, and graphs.

2.1.d. Identify, explain, and create appropriate assessment strategies based on mathematics learning theory.

2.1. e. Model the application of mathematics learning theory.

2.2.e. Support classroom teachers in using a wide range of suitable instructional practices.

2.3.e Support classroom teachers in using a wide range of instructional practices to meet diverse student needs.

3.1a-f

- a. Acquaint teachers with successful and innovative strategies, including translating research findings into practice.
- b. Assist other teachers in developing significant mathematical tasks and leading classroom discourse that promote mathematical thinking.
- c. Support classroom teachers in developing a climate of inquiry, incorporating the process standards (problem solving, reasoning and proof, communication, connections, and representation) in their classrooms.
- d. Assist other teachers in implementing early intervention strategies with low-performing students, including differentiation of time and teaching strategies.
- e. Coach teachers in a variety of instructional grouping options and methods to promote a positive learning environment.
- f. Assist other teachers by modeling effective instructional strategies

3.2.d. Coach teachers in effectively implementing the use of a wide variety of technology in their classrooms (from “low tech” options to computer software).

3.3.a Use a variety of professional development models (e.g., peer coaching, lesson study, and action research).

4.1.f . Coach inservice teachers to administer and interpret assessments appropriate for selected purposes.

4.2.e. Coach inservice teachers to apply student assessment results to make inferences and draw conclusions about future instructional plans and goals.

4.2.f. Coach inservice teachers to use assessment results to inform intervention practices for current students.

4.3.a. Coach inservice teachers to communicate in a variety of formats (including but not limited to: newsletter, internet, flyers, email, letters, etc.) to specific individuals and groups (students, parents, caregivers, colleagues, administrators, policymakers, community members, etc.).

4.4.d Coach inservice teachers to use statewide assessment tools and results to inform instruction and revise curriculum and programs.

4.5.d Coach inservice teachers to administer and interpret assessments appropriate for selected purposes.

4.6.c. Coach inservice teachers to develop student self-monitoring skills to use in their mathematics learning.

5.4.a-c

a. Use appropriate search behaviors to identify and critique research resources related to professional development and adult learners.

b. Read, critique, and synthesize research related to professional development and adult learners. Articulate research findings and use these findings to design professional development activities.

c. Articulate research findings and use these findings to design professional development activities.

6.1.a-e

a. Actively engage in collaboration and dialogue with other teachers and mathematics specialists to obtain recommendations and advise on teaching practices and ideas on assessment, instruction, and all areas of mathematics practice.

b. Positively and constructively provide analysis and reflection of teaching practices.

c. Read related research studies and use reflection to actively engage in dialogue with other professionals in observation, evaluation, and feedback activities.

d. Coach colleagues toward exemplary practice in mathematics assessment and instruction.

e. Model and/or team teach lessons to give peer teachers opportunities to observe appropriate learning environments.

6.2.a-c

a. Indicate knowledge of and membership in some professional organizations related to mathematics and mathematics leadership.

b. Conduct professional study groups for paraprofessionals and teachers.

c. Engage in continuous, life-long learning in the area of mathematics as indicated by a cohesive plan for professional development.

6.3.a-e.

a. Exhibit leadership skills in professional development.

b. Perform needs assessments with the staff to determine long and short term goals for mathematics professional development.

- c. Plan, implement and evaluate professional development efforts at the grade, school, and/or district level.
- d. Identify and describe the evidence-based research regarding mathematics instruction.
- e. Articulate the characteristics of sound professional development programs.

6.4.a-d

- a. Initiate, promote, and sustain professional learning communities.
- b. Model effective verbal and non-verbal communication strategies while facilitating professional development sessions or modeling classroom instruction.
- c. Establish positive rapport with all stakeholders.
- d. Encourage positive school culture that adapts to reform in mathematics education.

6.5.a-d

- a. Articulate the theories and research related to the connections between teacher dispositions and student achievement.
- b. Demonstrate and model a personal commitment to life-long learning in the areas of mathematics and mathematics education.
- c. Demonstrate the value of mathematics as a way of thinking and its application in other disciplines and in society.
- d. Promote teachers' confidence, flexibility, perseverance, curiosity, and inventiveness in doing mathematics by engaging teachers in appropriate tasks and professional discourse about mathematics and mathematics teaching.