

2.7 Utilizes Colorado P-12 Academic Standards in Mathematics for the improvement of instruction. (C: 2.2)

Basic (1.0 - 1.9)	Developing (2.0 - 2.9)	Proficient (3.0 - 3.9)	Advanced (4.0)
No evidence Or teaching plans in the content area do not include mathematics	Embeds mathematics in at least one content lesson plan in order to improve instruction in the content area (e.g., monitoring fitness, acquiring skills at perspective); student may not have the opportunity to teach the plan	Plans and implements instruction in at least one content areas (e.g., art, science) in order to improve instruction in the content area (e.g., monitoring fitness, acquiring skills at perspective)	Meets the criteria for "Proficient" and demonstrates advanced understanding of the integration of mathematics across domains by addressing mathematics across a variety of lessons; can do so incidentally, without prior planning

Operationalization/Criteria:

Guidelines for Admission to Education: *Not evaluated at admission to education*

Guidelines for Admission to Student Teaching:

1. Benchmark for admission is the development of at least one lesson plan in the teacher's content area that demonstrates explicit instruction in mathematics.
2. Benchmark is a rating of "Developing" based on the criteria in the rubric.

Evidence to Be Evaluated: Lesson plans, possible videoclip of teaching a lesson, reflection if the lesson was taught

Guidelines for Program Completion/Student Teaching:

1. Required for program completion are ratings of "Proficient" on all dimensions.
2. Observe a variety of lessons in different content areas of responsibility for alignment with standard and effective teaching of mathematics.
3. Observe the variety of strategies used to integrate math across the curriculum.
4. Evaluate TWS/unit plans to determine appropriateness of mathematics in the content area, alignment, and quality of instruction.
5. Evaluate teacher reflections and/or K-12 student work samples to review effects of instruction.
6. Consistency = requires fluency/repetition, including documentation of competence in different content lessons.
7. The narrative for the Inventory should specify an example of a skill/observation that led to the rating, e.g.: *In her TWS on Colonial American History, she implemented a lesson that required quantifying information, developing a variety of visual displays, and interpreting the information mathematically and historically.*

Evidence to Be Evaluated: TWS, lesson plans, lesson plan book, unit plans, reflections and weekly logs, direct observation of teaching, videoclips of teaching, student work and assessment results

Rationale:

Colorado Department of Education Model Content Standards. Available at <http://www.cde.state.co.us/>.

Morrison, G.R., Ross, S.M., Kemp, J.E., & Kalman, H.K. (2007), *Designing effective instruction*, 5th ed. Hoboken, NJ: John Wiley & Sons, Inc.

Parkay, F., & Hass, G. (2005). *Curriculum planning: A comprehensive approach*, 7th ed. Boston: Allyn & Bacon.

Roberts, P.L., & Kellough, R.D. (2008). *A guide for developing interdisciplinary thematic units*, 4th ed. Upper Saddle River, NJ: Merrill/Prentice Hall.

The Renaissance Partnership for Improving Teacher Quality: Teacher Work Sample. Available at http://www.uni.edu/itq/PDF_files/June2002promptandrubic.pdf.

Wood, K.E.(2010). *Interdisciplinary instruction for all learners K-8: A practical guide* , 4th ed. Upper Saddle Rivers, NJ: Allyn & Bacon.