KENTUCKY DEPARTMENT OF EDUCATION

STAFF NOTE

Action Item:

Numeracy Rubric

Staff Recommendation:

The Education Professional Standards Board (EPSB) should approve the Kentucky Mathematics Innovation Tool (KMIT) as the numeracy rubric.

Rationale:

The EPSB, through legislative action, has been tasked with developing "an evaluation rubric for observing teacher candidates with focus on mathematics content and pedagogical knowledge" by January 1, 2025. The Education Preparation Program Numeracy Cohort expert faculty have researched several reliable and valid rubrics piloted during the Spring 2025 academic term. Based on the pilot, the cohort recommends that EPSB adopt the KMIT as the numeracy rubric.

Action Question:

Should the EPSB adopt the KMIT as the numeracy rubric?

Applicable Statute or Regulation:

KRS 164.3061

History/Background:

Existing Policy: House Bill 162 from the 2024 Legislative Session, also known as the Numeracy Counts Act, established KRS 164.3061 which requires teacher preparation programs for elementary education to include instructional strategies and resources for mathematics instruction. Included in (3)(b) of that statute is the requirement that by January 1, 2025, the EPSB shall "Develop an evaluation rubric for observing teacher candidates with focus on mathematics content and pedagogical knowledge."

Summary: The Numeracy Cohort formed by the Office of Educator Licensure and Effectiveness under the High-Quality Instructional Resources (HQIR) work met in August, September, and October 2024 to discuss the various mathematics content and pedagogy rubrics that may meet the requirements of KRS 164.3061. The following rubrics were considered in this review: KMIT, Ky IPG; TNTP Math Observation Protocol, MCOP2, Reformed Teaching Observation Protocol (RTOP); The Oregon Collaborative for Excellence in the Preparation of Teachers (OCEPT); and BPC Rubric (NIET Best Practices Center). A protocol sheet was created for each instrument to assess if the rubric met the intent of the legislation's focus on mathematics content and pedagogical knowledge, the reliability and validity of the rubric, the Council for the Accreditation of Educator Preparation (CAEP) Sufficiency Criteria, and whether members believed the rubric should be recommended to the EPSB.

Through this review the Numeracy Cohort narrowed down the rubrics to four that meet the overall criteria: the KMIT, Ky IPG, TNTP Math Observation Protocol, and MCOP2. In December 2024, the EPSB approved the rubrics to be piloted during the Spring 2025 academic term.

Pilot responses were gathered for the four rubrics from a range of educational settings to evaluate the design of the rubrics for observing and assessing math content and pedagogy. Feedback was provided by faculty across multiple teacher preparation contexts, including "Math Methods," "Student Teachers," "Methods," "Elementary Methods," and "MAT Methods." A total of 8 observation groups were represented, with student observation counts ranging from 5 to 47. Overall, the KMIT received the highest ratings. The KMIT was appreciated for its comprehensive nature, clear indicators, and structured categories, making it generally objective and easy to use, especially for those with a math background who were able to identify rubric components effectively and support their scores with specific examples. Many found the tool user-friendly, concise, and simple to apply without formal training, particularly with its three-category rating system and suitability for shorter observations. Additional support materials, such as a crosswalk for Standards for Mathematical Practice (SMP) connections and access to a repository, were requested. Users valued the descriptive clarity and Likert scale for helping place teachers along a continuum, and many expressed a desire for proper training to fully leverage the capabilities of the instrument.

Based on the pilot, the cohort recommends that the EPSB adopt the KMIT as the numeracy rubric.

Budget Impact: There is no budgetary impact.

Contact Person:

Dr. Melissa Diebel, Academic Program Manager Division of Educator Preparation and Certification Office of Educator Licensure and Effectiveness (502) 564-4606

Email: melissa.diebel@education.ky.gov