AN ACT relating to mathematics education.

Be it enacted by the General Assembly of the Commonwealth of Kentucky:

➔Section 1. KRS 158.791 is amended to read as follows:

(1) The General Assembly hereby finds that***:***

(a) Reading proficiency is a gateway skill necessary for all of Kentucky students to achieve the academic goals established in KRS 158.6451. It is Kentucky's goal that all children learn to read well before exiting grade three (3) and that all middle and high school students have the skills necessary to read complex materials in specific core subjects and comprehend and constructively apply the information***; and***

(b) Mathematics proficiency is essential for all Kentucky students to achieve the academic goals established in KRS 158.6451. It is Kentucky's goal that all children have the skills necessary to demonstrate procedural skill and fluency, building from conceptual understanding to application, in order to solve real-world problems.

(2) It is the intent of the General Assembly that:

(a) Every elementary school:

1. Provide comprehensive schoolwide reading ***and mathematics*** instruction aligned to reading***,*** ~~[and]~~writing***, and mathematics*** standards required by KRS 158.6453 and outlined in administrative regulation promulgated by the Kentucky Board of Education;

2. Provide a multitiered system of supports, as set forth in and required by KRS 158.305, to support and engage all students in learning to read at the proficient level, meaning a level that reflects developmentally appropriate grade-level performance, by the end of grade three (3);

3. ***Provide a multitiered system of supports, as set forth in Section 3 of this Act, to support and engage all students in learning to apply***

mathematical content and practices at a proficient level, meaning a level that reflects developmentally appropriate grade-level performance, by the end of grade five (5);

4. Ensure quality instruction ***for reading and mathematics*** by highly trained teachers and intervention by individuals most qualified to provide the intervention; and

5. ~~[4.]~~ Provide high quality library media programs;

(b) Every middle and high school:

1. Provide direct, explicit instruction to students lacking skills in how to read, learn, and analyze information in key subjects, including language, reading, English, mathematics, science, social studies, arts and humanities, practical living skills, and career studies;~~[and]~~

2. Ensure that teachers have the skills to help all students develop critical ***content knowledge,*** strategies***,*** and skills for subject-based reading ***and grade-level appropriate mathematics***;

3. Provide a multitiered system of supports, as set forth in Section 3 of this Act, to support and engage all students in learning to apply mathematical content and practices at a proficient level, meaning a level that reflects developmentally appropriate grade-level performance, by the end of grade eight (8); and

4. Ensure all students routinely have opportunities to experience high-quality mathematics instruction, learn challenging, grade-level appropriate mathematics content and practices, and receive the necessary support to make progress toward proficiency;

(c) The Kentucky Department of Education ***shall*** provide technical assistance to local school districts in the identification of ***high-quality*** professional development~~[activities]~~, including teaching strategies to help teachers in each

subject area to:

1. Implement evidence-based reading, intervention, and instructional strategies that emphasize phonemic awareness, phonics, fluency, vocabulary, comprehension, and connections between reading and writing acquisition, and motivation to read to address the diverse needs of students;

2. ***Implement evidence-based mathematics instruction, intervention, and instructional strategies that emphasize algebraic reasoning, conceptual understanding, procedural skill and fluency, geometry, data and measurement, statistics and probability, number sense, place value understanding, spatial reasoning and subitizing for multiplicative reasoning;***

3. Identify and teach the ***grade-level content, practices, and*** skills that students need to comprehend the concepts and content of each subject area; and

4. ~~[3.]~~ Use ***learning experiences*** ~~[activities]~~ and ***high-quality instructional*** materials that will help the students comprehend***, meet grade-level expectations,*** and constructively apply information based on the unique content of each subject area;

(d) The Education Professional Standards Board ***shall*** review and revise when deemed necessary the teacher certification and licensure requirements to ensure that all teachers, regardless of the subject area taught, are prepared to improve students' subject reading ***and mathematics*** skills; and

(e) The department shall collaborate with***:***

1. The Department for Libraries and Archives, the Governor's Office of Early Childhood, and Kentucky Educational Television to establish and maintain a partnership to support the use of high-quality, evidence-based

year-round programming, materials, and activities for elementary-aged children in the areas of reading***; and***

2. AdvanceKentucky, the Kentucky Center for Mathematics, and the Partnership Institute for Math and Science Education Reform to support educator access to high-quality, evidence-based professional learning, student engagement in grade-level learning aligned to Kentucky academic standards for mathematics, and leadership support networks for the purpose of increasing student outcomes in kindergarten through grade twelve (12) mathematics.

➔Section 2. KRS 158.840 (Effective July 1, 2024) is amended to read as follows:

(1) The General Assembly hereby finds that reading and mathematics proficiency are gateway skills necessary for all Kentucky students to achieve the academic goals established in KRS 158.6451. It is the General Assembly's intent that:

(a) All students in kindergarten through grade three (3) having difficulty in reading and mathematics receive early diagnosis and intervention services from highly trained teachers;

(b) ***All students in grade four (4) through grade eight (8) needing to make accelerated progress toward proficiency in mathematics based on data from valid and reliable universal screening and diagnostic assessments receive high-quality, evidence-based mathematics instruction and intervention aligned to grade-level learning as established in the Kentucky academic standards for mathematics;***

(c) All students demonstrate proficiency in reading and mathematics as they progress through the relevant curricula and complete each assessment level required by the Kentucky Board of Education for the state assessment program established under KRS 158.6453 and in compliance with the requirements of the federal Every Student Succeeds Act of 2015, Pub. L. No.

114-95, or its successor; and

(d)~~[(c)]~~ Students who are struggling in reading and mathematics or are not at the proficient level on statewide assessments ***shall*** be provided evidence-based and developmentally appropriate diagnostic and intervention services, and instructional modifications necessary to learn.

The General Assembly, the Kentucky Board of Education, the Kentucky Department of Education, the Council on Postsecondary Education, colleges and universities, local boards of education, school administrators, school councils, teachers, parents ***and families***, and other educational entities, such as the Education Professional Standards Board, ***the Commonwealth Education Continuum***~~[P-16 councils]~~, the statewide reading research center established under KRS 164.0207, and the Center for Middle School ***Academic*** Achievement must collaborate if the intentions specified in this subsection are to be met. Intensive focus on student achievement in reading and mathematics does not negate the responsibility of any entity to help students obtain proficiency in other core curriculum content areas.

(2) The General Assembly's role is to set policies that address the achievement levels of all students and provide resources for the professional growth of teachers and administrators, assessing students' academic achievement, including ***valid and reliable universal screening and*** diagnostic assessment and instructional interventions, technology innovations, targeted reading and mathematics statewide initiatives, research and the distribution of research findings, services for students beyond the regular school day, and other services needed to help struggling learners.

(3) The Kentucky Board of Education shall regularly review and modify, when appropriate, its statewide assessment policies and practices to enable local school districts and schools to carry out the provisions of the statewide assessment and accountability system, required under KRS 158.6453 to improve student

achievement in mathematics and reading.

(4) The Kentucky Department of Education shall:

(a) Provide assistance to schools and teachers, including publicizing professional development opportunities, methods of measuring effective professional development, the availability of high quality instructional materials, and developmentally appropriate***, valid, and reliable*** screening and diagnostic assessments of student competency in mathematics and reading. The department shall provide access to samples of units of study, annotated student work, diagnostic instruments, and research findings, and give guidance on parental engagement;

(b) Work with state and national educators and subject-matter experts to identify student reading ***and mathematical*** skills in each subject area that align with the state content standards adopted under KRS 158.6453 and identify teaching strategies in each subject area that can be used explicitly to develop the identified reading ***and mathematical*** skills under this paragraph;

(c) Encourage the development of comprehensive middle and high school adolescent reading ***and mathematics*** plans to be incorporated into the curricula of each subject area to improve the reading comprehension ***and mathematical skills*** of all students;

(d) Conduct an annual review of the state grant programs it manages and make recommendations, when needed, to the Interim Joint Committee on Education for changes to statutory requirements that are necessary to gain a greater return on investment;

(e) Provide administrative support and oversight to programs to train classroom coaches and mentors to help teachers with reading and mathematics instruction; and

(f) Require no reporting of instructional plans, formative assessment results, staff

effectiveness processes, or interventions implemented in the classroom, except for:

1. Interventions implemented under KRS 158.305(2) ***and Section 3 of this Act***;
2. Funds provided under KRS 158.792 or 158.844; or
3. Schools that are identified for comprehensive support and improvement and fail to exit comprehensive support and improvement status after three (3) consecutive years of implementing the turnaround intervention process as described in KRS 160.346.

(5) The Council on Postsecondary Education, in cooperation with the Education Professional Standards Board, shall exercise its duties and functions under KRS 164.020 to ensure that teacher education programs are fulfilling the needs of Kentucky for highly skilled teachers. The council shall:

(a) Coordinate the federal and state grant programs it administers with other statewide initiatives relating to improving student achievement in reading and mathematics to avoid duplication of effort and to make efficient use of resources;

(b) ***No later than November 1 of each year,*** submit ***an annual*** ~~[a]~~ report to ***the Legislative Research Commission for referral to*** the Interim Joint Committee on Education~~,[no later than November 1 of each year]~~ summarizing the compliance of each teacher preparation program for~~:~~

1. Interdisciplinary early childhood education or elementary regular education to the instructional requirements set forth in KRS 164.306(1) ***and Section 4 of this Act; and***

2. Middle school mathematics education set forth in Section 4 of this Act; and

(c) Regularly report program data to an external evaluator for an analysis of the

progress of teacher preparation programs for interdisciplinary early childhood education**.**~~[and]~~ elementary regular education***, and middle school mathematics education*** to increase the success of new teacher candidates in demonstrating reading ***and mathematics*** instruction knowledge and skills.

(6) The Education Professional Standards Board shall exercise its duties and responsibilities under KRS 161.030 and 161.048 to ensure highly qualified teachers.

(7) Colleges and universities shall:

(a) Utilize institution-wide resources to work with elementary and secondary educators and other entities to align curriculum content to ensure that students who achieve proficiency on standards established at the prekindergarten through secondary levels will require no remediation to successfully enter a postsecondary education program;

(b) Provide quality undergraduate teacher preparation programs to ensure that those preparing to teach reading or mathematics at all grade levels have the necessary content knowledge, assessment and diagnostic skills, and teaching methodologies and that teachers in all subject areas have the requisite skills for helping students at all grade levels develop critical strategies and skills for reading and comprehending subject matter;

(c) Deliver ***evidence-based***~~[appropriate]~~ continuing education ***opportunities*** for teachers in reading and mathematics through institutes, graduate level courses, and other professional development activities that support a statewide agenda for improving student achievement in reading and mathematics;

(d) Conduct or assist with research on best practices in assessment, intervention strategies, teaching methodologies, costs and effectiveness of instructional models, and other factors as appropriate to reading and mathematics;

(e) Provide staff to consult and provide technical assistance to teachers, staff, and

administrators at elementary, middle, and secondary school sites;

(f) Assume active roles in the statewide initiatives referenced in KRS 156.553 and 158.842; and

(g) Develop written procedures for measuring the effectiveness of activities outlined in paragraphs (a) to ***(f)*** ~~[(e)]~~ of this subsection.

(8) School councils at all school levels are encouraged to identify and allocate resources to qualified teachers to become coaches or mentors in mathematics or coaches or mentors in reading with a focus on improving student achievement in their respective schools.

(9) Local school boards and superintendents shall provide local resources~~[, whenever possible,]~~ to supplement or match state and federal resources to support teachers, school administrators, and school councils in helping students achieve proficiency in reading and mathematics.

(10) Local school superintendents shall provide leadership and resources to the principals of all schools to facilitate curriculum alignment, communications, and technical support among schools to ensure that students are academically prepared to move to the next level of schooling.

➔SECTION 3. A NEW SECTION OF KRS CHAPTER 158 IS CREATED TO READ AS FOLLOWS:

(1) As used in this section:

(a) "Application" means learning to select an efficient method to find a solution given a meaningful problem, determining whether the solution makes sense by reasoning, and thinking critically;

(b) "Conceptual understanding" means connecting prior knowledge to new ideas and concepts, and making sense of why a mathematical idea is important and the kinds of contexts in which it is useful;

(c) "Dyscalculia" has the same meaning as in KRS 158.305;

(d) "Enrichment program" means accelerated intervention within the school day or outside of the school day or school calendar, led by individuals most qualified to provide the intervention and specifically determined to address the individual learning needs of students based on universal screening and diagnostics assessments in mathematics. This includes evidence-based mathematics instructional programming and other instructional content, skills and strategies aligned to mathematics standards required by KRS 158.6453 and outlined in administrative regulations promulgated by the Kentucky Board of Education;

(e) "Evidence-based" has the same meaning as in 20 U.S.C. sec. 7801(21);

(f) "Mathematics diagnostic assessment" has the same meaning as in Section 5 of this Act;

(g) "Mathematics improvement plan" means an accelerated intervention plan for a student in grade four (4) through grade eight (8) that is developed to increase a student's rate of progress toward proficient performance in mathematics, that is identified as necessary based on the student's results on an approved mathematics diagnostic assessment. This plan should be developed in collaboration and accordance with any existing program services plan, individualized education program, or Section 504 Plan as defined in KRS 156.027, unless the program services plan, individualized education program, or Section 504 Plan already addresses improving mathematics;

(h) "Mathematics improvement team" means a team that develops and oversees the progress of a mathematics improvement plan and includes:

1. The parents or guardians of the student that is the subject of the mathematics improvement plan;

2. No less than one (1) regular education teacher of the student, to

provide information about the general curriculum for same-aged peers;

3. A representative of the local education agency who is knowledgeable about the mathematics curriculum and the availability of the evidence-based mathematics resources of the local education agency; and

4. Any specialized certified school employees, including but not limited to mathematics teachers, specialists or coaches, for students receiving mathematics instruction educational programming or special education services;

(i) "Number sense" means the ability to represent whole and rational numbers in multiple ways, numerical magnitude estimation, selecting and using benchmarks such as tens or hundreds, decomposing and recomposing numbers, understanding the effects of operations on numbers, and performing mental calculation and estimation;

(j) "Numeracy" has the same meaning as in Section 5 of this Act;

(k) "Place value understanding" means the understanding of representations and concepts necessary to successfully process multi-digit numbers;

(l) "Spatial reasoning" means the capacity to mentally generate, transform, and rotate a visual image and thus understand and recall spatial relationships between objects;

(m) "Subitizing" means quickly recognizing and naming how many objects are in a group without counting; and

(n) "Universal screener" means a process of providing a brief assessment to all students within a grade level to assess the students' performance in mathematical content and practices.

(2) Notwithstanding any other statute or administrative regulation to the contrary, the board shall promulgate administrative regulations in accordance with KRS

Chapter 13A to further define a multitiered system of supports for district-wide use of a system for students in grade four (4) through grade eight (8), that includes a tiered continuum of interventions with varying levels of intensity and duration and which connects general, compensatory, and special education programs to provide interventions implemented with fidelity to evidence-based research and matched to individual student strengths and needs. At a minimum, the administrative regulations shall require that evidence of implementation shall be submitted by each district to the department by October 1 of each year and shall include but not be limited to implementation of the activities required under KRS 158.649 for mathematics by December 1, 2025.

(3) Implementation of a district-wide multitiered system of supports shall include evidence-based mathematics instruction, intervention and instructional strategies that emphasize conceptual understanding, procedural skill and fluency, geometry, data and measurement, statistics and probability, number sense, place value understanding, spatial reasoning and subitizing for multiplicative reasoning.

(4) Explicit and systematic instruction shall include conceptual understanding, procedural skill and fluency, and application with a specific focus on rational numbers, ratios and proportional reasoning, geometry, statistical reasoning, and modeling relationships between two (2) quantities using multiple representations including tables, graphs, and equations.

(5) The department shall provide technical assistance and training, if requested by a local district, to assist in the implementation of the district-wide, multitiered system of supports as a means to identify and assist any student experiencing difficulty in mathematics and to determine appropriate instructional modifications needed by advanced learners to make continuous progress.

(6) The technical assistance and training shall be designed to improve:

(a) The use of specific screening processes and diagnostic assessments to identify student strengths and needs;

(b) The use of universal screening and diagnostic data for implementing instruction and intervention, as needed;

(c) The use of valid and reliable evidence-based instructional strategies and interventions for mathematics education;

(d) Progress monitoring of student performance; and

(e) Accelerated, intensive, direct instruction that addresses students' individual differences, including advanced learners, and enables students that are experiencing difficulty to catch up with typically performing peers.

(7) (a) By January 1, 2025, each superintendent or public charter school board of directors shall select:

1. At least one (1) universal screener for mathematics that is determined by the department to be valid and reliable to be administered to all students in grade four (4) through grade eight (8); and

2. At least one (1) diagnostic assessment for mathematics that is determined by the department to be reliable and valid to be administered as part of a multitiered system of supports for students in grade four (4) through grade eight (8).

(b) Each superintendent or public charter school board of directors shall adopt a common Tier 1 universal high-quality instructional resource for mathematics that is determined by the department to be reliable, valid, and aligned to Kentucky academic standards for mathematics required by KRS 158.6453 and outlined in administrative regulation promulgated by the Kentucky Board of Education for grade four (4) through grade eight (8) for all schools or a subset of schools, with consultation of all affected school councils.

(c) All teachers of students in grade four (4) through grade eight (8), including public charter school teachers, shall be trained on any mathematics universal screener and diagnostic assessment selected by the superintendent or public charter school board prior to administration of the assessment. The training shall address:

1. How to properly administer the mathematics universal screener and diagnostic assessment;

2. How to interpret the results of the mathematics universal screener and diagnostic assessment to identify students needing interventions;

3. How to use the assessment results to design instruction and interventions;

4. The use of the assessment to monitor the progress of student performance; and

5. The use of accelerated, intensive, and direct instruction that addresses students' individual differences and enables students to achieve proficiency in mathematics, including but not limited to daily, one-on-one instruction.

(8) Beginning with the 2025-2026 school year, a universal screener determined by the department to be valid and reliable shall be given in the first thirty (30) calendar days of the school year to each student in grades four (4) through eight (8) at a public school or public charter school.

(9) Those students determined to be at risk for not meeting grade-level benchmarks in mathematics for grades four (4) through eight (8) based on the universal screener shall be given a mathematics diagnostic assessment determined by the department to be valid and reliable to identify the individual student deficits in numeracy and other mathematical content and practices as listed in subsection (1) of this section in the first forty-five (45) calendar days of the school year.

(10) A mathematics improvement plan shall be developed and implemented in the first sixty (60) calendar days of the school year by a mathematics improvement team for any student in grades four (4) through eight (8) identified as needing accelerated interventions to progress toward proficient performance in mathematics. The mathematics improvement plan shall require:

(a) Intensive intervention that includes effective instructional strategies and high-quality instructional resources necessary to help the student make accelerated progress toward proficient performance in mathematics and become ready for the next grade, including but not limited to daily, one-on-one instruction with students the most in need provided by certified teachers specifically trained and most qualified to provide one-on-one instruction in numeracy;

(b) Written quarterly progress reports provided by the school to a parent or guardian of any student subject to a mathematics improvement plan. The written quarterly progress report for the mathematics improvement plan may be included in the school's existing quarterly student progress report; and

(c) Individual placement decisions for children who are eligible for special education and related services to be determined by the appropriate admissions and release committee in accordance with administrative regulations promulgated by the Kentucky Board of Education.

(11) Beginning in the 2025-2026 school year, if a student's rate of progress toward proficient performance in mathematics needs accelerated interventions as demonstrated by the results of an approved universal screener and mathematics diagnostic assessment, the local school district shall provide:

(a) Enrichment programs for students in grades four (4) through eight (8) using evidence-based mathematics instruction and other strategies;

(b) Intensive instructional services, progress monitoring measures, and supports to students in grade four (4) through grade eight (8); and

(c) Parents and legal guardians of students identified for accelerated interventions in mathematics in grade four (4) through grade eight (8) with information on how to encourage mathematics success at home.

(12) By September 1, 2025, if funds are available, the department shall establish teacher academies or coaching models for teachers of students in grade four (4) through grade eight (8). The teacher academies or coaching models shall be related to evidence-based practices in instruction, instructional materials, and assessment in mathematics.

(13) The department shall develop and maintain a web based resource providing teachers access to:

(a) Information on the use of specific screening processes and programs to identify student strengths and needs, including those for advanced learners in mathematics for grade four (4) through grade eight (8);

(b) Current, evidence-based research and age-appropriate instructional resources that may be used for substantial, steady improvement in mathematics in grades four (4) through eight (8) when a student is experiencing difficulty with basic math facts, conceptual understanding, procedural skill, fluency, or application, or is exhibiting characteristics of dyscalculia or other mathematical difficulties; and

(c) Current evidence-based research and age-appropriate high-quality instructional resources that may be used for continuous progress of advanced learners in mathematics for grade four (4) through grade eight (8).

(14) The department shall encourage districts to utilize both state and federal funds, as appropriate, to implement a district-wide multitiered system of supports,

including high-quality mathematics instruction and instructional resources, evidence-based intervention strategies and materials, aligned curriculum-based professional learning, and ongoing, job-embedded coaching supports.

(15) The department shall coordinate technical assistance and training on current evidence-based mathematics instructional practices and interventions with state postsecondary education institutions.

(16) The department shall collaborate with AdvanceKentucky, the Kentucky Center for Mathematics, the Partnership Institute for Math and Science Education Reform, the Education Professional Standards Board, the Council on Postsecondary Education, postsecondary teacher education programs, and other agencies and organizations as deemed appropriate, to ensure that teachers are prepared to utilize evidence-based instruction, high-quality instructional resources, and interventions in mathematics for grade four (4) through grade eight (8).

(17) In compliance with 20 U.S.C. sec. 1414(a)(1)(E), screening of a student to determine appropriate instructional strategies for curriculum implementation shall not be considered an evaluation for eligibility for special education and related services, and nothing in this section shall limit a school district from completing an initial evaluation of a student suspected of having a disability.

➔SECTION 4. A NEW SECTION OF KRS CHAPTER 164 IS CREATED TO READ AS FOLLOWS:

(1) As used in this section, "department" means the Kentucky Department of Education.

(2) Beginning with the 2025-2026 school year, postsecondary institutions offering teacher preparation programs for elementary regular education or middle school mathematics education shall include kindergarten through grade twelve (12) evidence-based instructional strategies, department-identified valid and reliable

high-quality resources for mathematics instruction related to Section 3 of this Act, and:

(a) Evidence-based instructional strategies determined by the department to be effective at improving student learning for the range of students in their classrooms, including students needing to make accelerated progress toward proficiency, exceptional students, and students who are multilingual learners;

(b) High-quality instructional resources as determined by the department to be effective at improving student learning for the range of students in their classrooms, including students needing to make accelerated progress toward proficiency, exceptional students, and students who are multilingual learners;

(c) The use of a range of assessment data for designing instruction and intervention;

(d) Progress monitoring of student performance that attends to learning trajectories in mathematics; and

(e) Field experience placements, including student teaching, with teachers that model paragraphs (a) to (d) of this subsection and are evaluated by supervisors that are knowledgeable in paragraphs (a) to (d) of this subsection.

(3) By January 1, 2025, the Education Professional Standards Board shall:

(a) Develop and maintain a list of approved teacher preparation assessments that are determined by the board to be an effective evaluation of mathematics instruction, content and practice standards, and skills; and

(b) Develop an evaluation rubric for observing teacher candidates with focus on mathematics content and pedagogical knowledge.

(4) The Education Professional Standards Board shall report program data to an

external evaluator for analysis of postsecondary teacher preparation programs for elementary regular education or middle school mathematics education for the goal of increasing the success of new teacher candidates in demonstrating mathematics instruction, content knowledge, and skills.

➔Section 5. KRS 158.842 is amended to read as follows:

(1) As used in KRS 158.840 to 158.844~~[, unless the context requires otherwise]~~:

(a) "Concepts" means mathematical ideas that serve as the basis for understanding mathematics;

(b) "Mathematics" means the curriculum of numbers and computations, geometry and measurements, probability and statistics, and algebraic ideas;

(c) "Mathematics coach" means a mathematics leader whose primary responsibility is to provide ongoing support for one (1) or more mathematics teachers. The role of the coach is to improve mathematics teaching practices by working with teachers in their classrooms, observing and providing feedback to them, modeling appropriate teaching practices, conducting workshops or institutes, establishing learning communities, and gathering appropriate and useful resources;

(d) "Mathematics diagnostic assessment" means an assessment that identifies a student at risk of failure in mathematics or a student with major deficits in numeracy and other mathematical concepts and skills;

(e) "Mathematics intervention program" means an intensive instructional program that is based on valid research and is provided by a highly trained teacher to specifically meet individual students' needs;

(f) "Mathematics leader" means any educator with a specialization in mathematics who:

1. Serves in a supervisory capacity, such as mathematics department chair, school-based mathematics specialist, or district mathematics supervisor

or coordinator; or

2. Regularly conducts or facilitates teacher professional development, such as higher education faculty or other mathematics teachers;

(g) "Mathematics mentor" means an experienced mathematics coach who typically works with beginning or novice teachers only. The responsibilities and roles of the mentor are the same as those of the coach;

(h) "Numeracy" means the development of the basic concepts which include counting, place value, addition and subtraction strategies, multiplication and division strategies, and the concepts of time, money, and length. To be numerate is to have and be able to use appropriate mathematical knowledge, concepts, skills, intuition, and experience in relationship to every day life;

(i) "Relationships" means connections of mathematical concepts and skills within mathematics; and

(j) "Skills" means actions of mathematics.

(2) The Committee for Mathematics Achievement is hereby created for the purposes of developing a multifaceted strategic plan to improve student achievement in mathematics at all levels of schooling, prekindergarten through postsecondary and adult. At a minimum the plan shall address:

(a) Challenging curriculum that is aligned prekindergarten through postsecondary, including consensus among high school teachers and postsecondary education faculty about expectations, curriculum, and assessment;

(b) Attitudes and beliefs of teachers about mathematics;

(c) Teachers' knowledge of mathematics;

(d) Diagnostic assessment, intervention services, and instructional strategies;

(e) Shortages of teachers of mathematics, including incentives to attract strong candidates to mathematics teaching;

(f) Statewide institutes that prepare cadres of mathematics leaders in local school districts, which may include highly skilled retired mathematics teachers, to serve as coaches and mentors in districts and schools;

(g) Cohesive continuing education options for experienced mathematics classroom teachers;

(h) Closing the student achievement gap among various student subpopulations;

(i) Curriculum expectations and assessments of students among the various school levels, prekindergarten, primary, elementary, middle, and high school;

(j) ***Curriculum expectations and assessments for adult education centers***~~[Content standards for adult education centers providing mathematics curricula]~~;

(k) Introductory postsecondary education mathematics courses that are appropriate to the wide array of academic programs and majors;

(l) Research to analyze further the issues of transition from high school or High School Equivalency Diploma programs to postsecondary education mathematics; and

(m) The early mathematics testing program under KRS 158.803.

Other factors may be included in the strategic plan as deemed appropriate by the committee to improve mathematics achievement of Kentucky students.

(3) ~~[In carrying out its responsibility under subsection (2)(f) of this section, the committee shall:~~

~~(a) Design a statewide professional development program that includes summer mathematics institutes at colleges and universities, follow-up, and school-based support services, beginning no later than June 1, 2006, to prepare teams of teachers as coaches and mentors of mathematics at all school levels to improve student achievement. Teachers shall receive training in diagnostic assessment and intervention. The statewide initiative shall be funded, based~~

~~on available funds, from the Teachers' Professional Growth Fund described in KRS 156.553. The design shall:~~

~~1. Define the curricula focus;~~

~~2. Build on the expertise of specific colleges and universities;~~

~~3. Place emphasis on mathematics concepts, skills and relationships, diagnostic assessment, intervention services, and instructional strategies;~~

~~4. Identify quality control measures for the delivery of each institute;~~

~~5. Establish evaluation procedures for the summer institutes and the other professional development components;~~

~~6. Provide updates and networking opportunities for coaches and mentors throughout the school year; and~~

~~7. Define other components within the initiative that are necessary to meet the goal of increasing student achievement in mathematics;~~

~~(b) Require schools and districts approved to have participants in the mathematics leader institutes to provide assurances that:~~

~~1. The district and schools have, or will develop, local mathematics curricula and assessments that align with state standards for mathematics;~~

~~2. There is a local commitment to build a cadre of mathematics leaders within the district;~~

~~3. The district and participating schools will provide in-school support for coaching and mentoring activities;~~

~~4. The mathematics teachers are willing to develop classroom assessments that align with state assessments; and~~

~~5. Students who need modified instructional and intervention services will have opportunity for continuing education services beyond the regular school day, week, or year; and~~

~~(c) In addition to the conditions specified in paragraph (b) of this subsection, the committee shall make recommendations to the Kentucky Department of Education and the Kentucky Board of Education for criteria to be included in administrative regulations promulgated by the board which define:~~

~~1. Eligible grant recipients, taking into consideration how this program relates to other funded mathematics initiatives;~~

~~2. The application process and review;~~

~~3. The responsibilities of schools and districts, including but not limited to matching funds requirements, released or extended time for coaches and mentors during the school year, continuing education requirements for teachers and administrators in participating schools, data to be collected, and local evaluation requirements; and~~

~~4. Other recommendations requested by the Kentucky Department of Education.~~

~~(4) ~~The committee shall ~~[initially]~~be composed of ***twenty-three (23)*** ~~[twenty-five (25)]~~ members as follows:

(a) The commissioner of education or his or her designee;

(b) The president of the Council on Postsecondary Education or his or her designee;

(c) The president of the Association of Independent Kentucky Colleges and Universities or his or her designee;

(d) ~~[The executive director of the Education Professional Standards Board or his or her designee;~~

~~(e) ~~The secretary of the Education and Labor Cabinet or his or her designee;

(e) ~~[(f)]~~ ***Four (4) representatives*** ~~[A representative]~~ with a specialty in mathematics or mathematics education who ***have*** ~~[has]~~ expertise and experience in professional development, especially with coaching and

mentoring of teachers, from ***any of the***~~[each of the nine (9)]~~ public postsecondary education institutions defined in KRS 164.001. The representatives shall be selected by mutual agreement of the president of the Council on Postsecondary Education and the commissioner of education;

(f)~~[(g)]~~ ***One (1)***~~[Two (2)]~~ adult education ***mathematics instructor***~~[instructors]~~ selected by the secretary of the Education and Labor Cabinet;

(g)~~[(h)]~~ Two (2) elementary, two (2) middle, and two (2) high school mathematics teachers, appointed by the ***commissioner of education;***~~[board of the statewide professional education association having the largest paid membership with approval from their respective local principals and superintendents of schools; and]~~

(h)~~[(i)]~~ Three (3) school administrators ***or building-level mathematics instructional coaches***, with one (1) each representing elementary, middle, and high school, appointed by the ***commissioner of education;***~~[board of the statewide administrators' association having the largest paid membership with approval from their respective local superintendents of schools.]~~

(i) Two (2) district administrators or district-level mathematics instructional coaches appointed by the commissioner of education;

(j) The executive director of~~[When]~~ the Center for Mathematics created under KRS 164.525 ***or his or her designee;***~~[becomes operational, the executive director of the center shall be added to the committee, which shall then be composed of twenty-six (26) members. Appointments to the committee shall be made no later than thirty (30) days following March 18, 2005, and the first meeting of the committee shall occur no later than thirty (30) days following appointment of the members.]~~

(k) The executive director of AdvanceKentucky or his or her designee; and

(l) The executive director of the Partnership Institute for Math and Science

Education Reform or his or her designee.

(4) ~~[(5)]~~ A majority of the ~~[full]~~membership ***present*** shall constitute a quorum.

(5) ~~[(6)]~~ Each member of the committee, other than members who serve by virtue of their positions, shall serve for a term of three (3) years or until a successor is appointed and qualified~~[, except that the initial appointments shall be made in the following manner: six (6) members shall serve a one (1) year term, six (6) members shall serve a two (2) year term, and eight (8) members shall serve a three (3) year term]~~.

(6) ~~[(7)]~~ A ~~[temporary chair of the committee shall be appointed prior to the first meeting of the committee through consensus of the president of the Council on Postsecondary Education and the commissioner of education, to serve ninety (90) days after his or her appointment. Prior to the end of the ninety (90) days, the committee shall elect a chair by majority vote. The temporary chair may be a nominee for the chair by majority vote. Thereafter, a]~~chair ***of the committee*** shall be elected each calendar year. An individual may not serve as chair for more than three (3) consecutive years. The chair shall be the presiding officer of the committee, and coordinate the functions and activities of the committee.

(7) ~~[(8)]~~ The committee shall be attached to the Kentucky Department of Education for administrative purposes. The commissioner of education ***shall*** ~~[may]~~ contract with a mathematics-trained professional to provide part-time staff support to the committee. The commissioner of education and the president of the council shall reach consensus in the selection of a person to fill the position. The person selected shall have a graduate degree, a mathematics ***or mathematics education*** major, and teaching or administrative experience in elementary and secondary education. The person shall not be a current employee of any entity represented on the committee. The department shall provide office space and other resources necessary to support the staff position and the work of the committee.

(8)~~[(9)]~~ The committee, under the leadership of the chair, may organize itself into appropriate subcommittees and work structures to accomplish the purposes of the committee.

(9)~~[(10)]~~ Members of the committee shall serve without compensation but shall be reimbursed for necessary travel and expenses while attending meetings at the same per diem rate promulgated in administrative regulation for state employees under provisions of KRS Chapter 45. Funds shall be provided school districts to cover the cost of substitute teachers for those teachers on the committee at each district's established rate for substitute teachers.

(10)~~[(11)]~~ If a vacancy occurs within the committee during its duration, the ***vacancy shall be filled in the same manner as set forth in the original appointment***~~[board of the statewide professional education association having the largest paid membership or the board of the statewide administrators association having the largest paid membership or the president of the Council on Postsecondary Education, as appropriate, shall appoint a person to fill the vacancy]~~.

(11)~~[(12)]~~ The committee shall~~[:~~

~~(a) Present a draft strategic plan addressing the requirements in subsection (1) of this section and other issues that arose during the work of the committee to the Education Assessment and Accountability Review Subcommittee no later than August 2005;~~

~~(b) Present the strategic plan for improving mathematics achievement to the Interim Joint Committee on Education by July 15, 2006, which shall include any recommendations that require legislative action; and~~

~~(c)]~~ provide a final written report of committee activities ***and progress regarding the strategic plan required under subsection (2) of this section*** to the Interim Joint Committee on Education and the Legislative Research Commission by December 1, ***2024***~~[2006]~~.

(12) ~~[(13)]~~ The committee shall have ongoing responsibility for providing advice and guidance to policymakers in the development of statewide policies and in the identification and allocation of resources to improve mathematics achievement. In carrying out this responsibility, the committee shall periodically review the strategic plan and make modifications as deemed appropriate and report those to the Interim Joint Committee on Education.

(13) ~~[(14)]~~ The committee shall collaborate with the Center for Mathematics to ensure that there is ongoing identification of research ***and evidence***-based intervention programs for K-12 students who have fallen behind in mathematics, rigorous mathematics curricula that prepare students for the next level of schooling, research ***and evidence***-based professional development models that prepare teachers in mathematics and pedagogy, and strategies for closing the gap between high school or a High School Equivalency Diploma program and postsecondary mathematics preparation.

➔SECTION 6. A NEW SECTION OF KRS CHAPTER 158 IS CREATED TO READ AS FOLLOWS:

(1) The Kentucky numeracy counts fund is hereby created for the purpose of training and supporting teachers to improve the mathematics content and practices of students in grades four (4) through grade eight (8), as set forth in subsection (2) of this section and subsection (12) of Section 3 of this Act. The fund shall consist of all moneys received from state appropriations, gifts, grants, and federal funds for this purpose. The department shall administer the fund.

(2) The department shall implement teacher professional learning academies related to evidence-based practices in instruction, instructional materials, and assessment in mathematics using moneys appropriated to or otherwise received by the Kentucky numeracy counts fund.

(3) The department shall create a mathematics coaching program using moneys

appropriated to or otherwise received by the Kentucky numeracy counts fund. The program shall:

(a) Use data coaches to improve mathematics instruction and intervention;

(b) Determine the effectiveness of intensive data-focused professional development; and

(c) Provide expert support in mathematics instruction and intervention.

(4) (a) The department may provide grants to local school districts and public charter schools. The grant shall only be used to purchase approved high-quality, research and evidence-based curriculum aligned to kindergarten through grade twelve (12) academic standards in mathematics and expenditures for curriculum-based professional learning to implement new curriculum.

(b) To be eligible to receive a grant, a local school district or public charter school shall:

1. Submit an application in accordance with paragraph (4)(c) of this section; and

2. Agree to adopt a common comprehensive mathematics program that is determined by the department to be reliable, valid, and aligned to mathematics standards required by KRS 158.6453 and outlined in an administrative regulation promulgated by the Kentucky Board of Education.

(c) Local school districts shall submit applications that include a district-wide plan and public charter schools shall submit applications that include a school plan for implementation of mathematics curriculum that includes:

1. How the district or public charter school will implement the new curriculum by school and by grade level; and

2. The timeline for the rollout of upgraded curriculum materials for core

instruction in classrooms.

(d) Available grant funding shall be distributed to eligible applicants based on a rubric developed by the department. The rubric shall consider the information provided in accordance with subsection (4) of this section and prioritize applications from local school districts or public charter schools:

1. In which more than fifty percent (50%) of the enrolled students scored below the statewide average on the statewide assessments in mathematics administered for the preceding school year;

2. With the greatest need for financial assistance; and

3. That propose comprehensive plans most likely to increase student achievement in mathematics.

(e) The department shall distribute the awarded grant money to a public charter school authorizer, and the authorizer shall distribute one hundred percent (100%) of the grant money to the charter school.

(5) Notwithstanding the provisions of KRS 45.229, unexpended funds in the Kentucky numeracy counts fund shall not lapse but shall carry forward to the next fiscal year and shall be used for the purposes established in this section.

(6) Any interest earned on moneys in the fund shall become part of the fund and shall not lapse.

➔Section 7. This Act may be cited as the Kentucky Numeracy Counts Act.