

# A WORLD-CLASS EDUCATION

Model Laboratory Schools' curricular program of studies provides a world-class education that prepares students for college and career by addressing the following competencies known as *The Model Core*.

Model Laboratory Schools guarantee a world-class education for its students through a viable curriculum that:

- Provides opportunities for students to develop as **leaders and entrepreneurs**.
- Develops **transferable, transportable skills** through practice with feedback.
- Requires students to think critically, creatively, computationally, and quantitatively.
- Challenges students to develop **creative solutions** to authentic and relevant real-world problems.
- Provides opportunities for students to make cross-curricular and **interdisciplinary connections**.
- Provides opportunities for school-wide and grade-level **shared experiences** and courses.
- Emphasizes persistence through sustained inquiry, **capstone projects**, and presentations.
- Develops strong written and oral **communicators**.
- Facilitates students' abilities to design, perform, engineer, innovate, create, and reflect.
- Promotes participation in civic activities as an **informed** citizen.
- Fosters an **inclusive** community by promoting diversity and equity.
- Fosters community through **service (learning)** and teamwork.
- Promotes individual **physical** and **emotional** well-being.
- Builds ability to **communicate in a second language** and engage in culturally appropriate interactions.

## INQUIRY, COMMUNICATION, & DATA ANALYTICS

- Plan and conduct sustained research investigations using appropriate tools and media.
- Read, analyze, and evaluate sources and information in qualitative, non-fiction texts, including primary and secondary sources.
- Analyze and interpret quantitative data and information represented in tables, charts, graphs, maps, and infographics.
- Analyze quantitative data and perform statistical tests on the data to draw conclusions.
- Represent quantitative data and information visually through tables, charts, graphs, maps, and infographics.
- Develop logical and valid evidence-based written arguments.
- Communicate a perspective using appropriate media to a targeted audience for a particular situation.
- Strategically select and employ purposeful rhetorical and correct syntactical choices.

## QUANTITATIVE & COMPUTATIONAL REASONING

- Analyze a real-world mathematical problem and determine a method and the tools needed for solving it.
- Translate mathematical information from a single representation or across multiple representations.
- Construct viable mathematical arguments.
- Evaluate the reasoning and validity of a mathematical argument or method.
- Identify and make use of structure and patterns in authentic mathematical contexts.
- Attend to precision, using appropriate notation and mathematical conventions.
- Write and implement program code by applying logic and rules to achieve outcomes or results.
- Analyze program code to explain the behavior and conditions that produce results in a program.

## SCIENTIFIC INQUIRY

- Analyze and explain scientific concepts, processes, and models in real-world contexts.
- Classify and explain phenomena found in real-world contexts.
- Create visual representations and/or models of scientific concepts and processes.

## FITNESS & WELLNESS

- Analyze choices and behavior on fitness, physical and mental health, and emotional wellbeing.
- Participate in activities that promote lifelong physical activity and wellness.
- Demonstrate individual strategies and effective teamwork.

## GLOBAL COMMUNICATION & UNDERSTANDING

- Contextualize and compare perspectives.
- Analyze current events, including through cultural comparison.
- Draw conclusions about political, social, economic, and geographic developments.
- Analyze geographic patterns and spatial relationships.
- Apply effective interpersonal skills appropriate for the social or professional context.
- Communicate ideas effectively in written and spoken discourse in a second language to a variety of audiences demonstrating cultural sensitivity and understanding while emulating native speakers.

## CREATING, PERFORMING, & DESIGNING

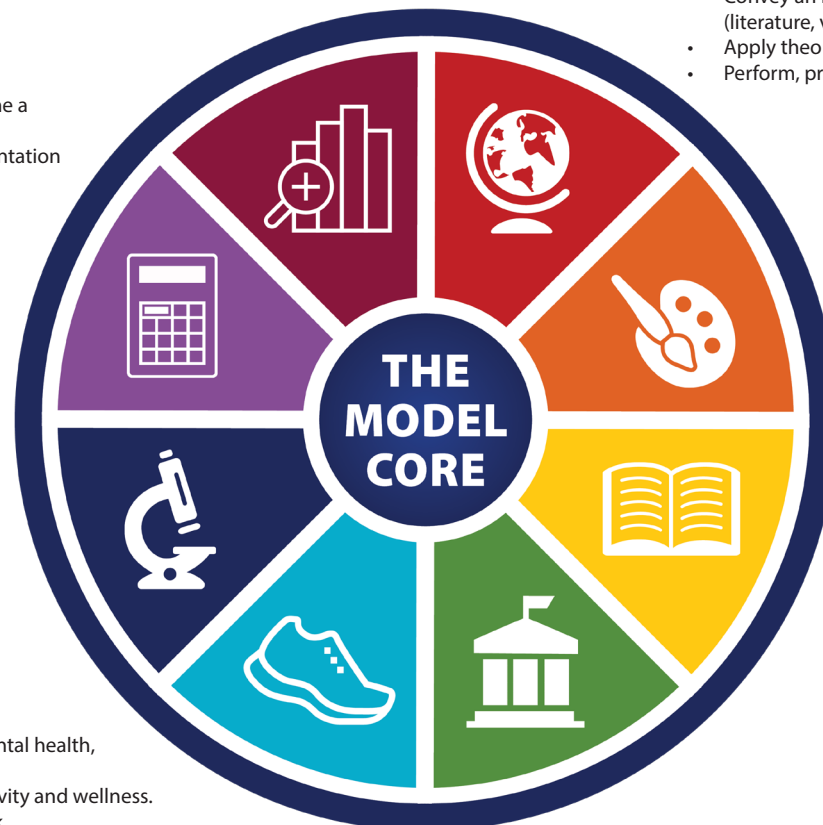
- Convey an idea, message, or theme through original works or creations of art (literature, visual art, music, dance, drama).
- Apply theories and principles when creating, performing, designing, or engineering.
- Perform, present, or publish works of art (literature, visual art, music, dance, drama).
  - Apply recursive processes that emphasize practice and persistence and that incorporate collaboration, iteration, critique, reflection, and revision.
  - Design innovative and creative solutions (products, algorithms, program code, lighting designs, stage sets) that solve a problem or achieve a purpose.

## HUMANITIES

- Read/view/listen to, analyze, and interpret a work of art (literature, music, visual art, drama, dance).
- Explain the historical and cultural significance of a work of art (literature, music, visual art, drama, dance).
- Draw conclusions about historical and cultural developments.

## CIVIC ENGAGEMENT, ENTREPRENEURSHIP, & FINANCIAL LITERACY

- Analyze and evaluate economic, financial, and consumer options and choices.
- Apply political and economic theories, perspectives, and models in authentic contexts in order to make sound economic and financial decisions.



**MODEL LABORATORY SCHOOLS**  
AT EASTERN KENTUCKY UNIVERSITY