

Appendix A

A systems' check to answer the question: Where does intervention for novice reduction fit into what Kentucky already knows about the *Characteristics of Highly Effective Teaching and Learning* that are common to all content areas and the *Kentucky Framework for Teaching* used in the Professional Growth and Effectiveness System (PGES)?

| Characteristics of Highly Effective Teaching and Learning (CHETL) | Novice Reduction Work Process | PGES Alignment Kentucky Framework for Teaching (KfT) | Leverage process/component system for novice reduction |
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| Instructional rigor and student engagement | Instruction; Environment and Support | Domain 1: Planning and Preparation Domain 3: Instruction | Culturally Responsive Instruction; Literacy Design Collaborative (LDC); Math Design Collaborative (MDC); Co-Teaching For Gap Closure (CT4GC); Academic Continuum; Advising |
| Teacher instructs the complex processes, concepts and principles contained in state and national standards using differentiated strategies that make instruction accessible to all students. | Instruction; Environment and Support | 1A-Knowledge of Content and Pedagogy 1E-Designing Coherent Instruction | CT4GC; LDC; MDC; Standards and Curriculum; Continuum for Success; Advising; Continuous Improvement |
| Teacher scaffolds instruction to help students reason and develop problem-solving strategies. | Instruction; Environment and Support | 1E-Designing Coherent Instruction 3A-Communication with Students | CT4GC; LDC; MDC; Academic Continuum |
| Teacher orchestrates effective classroom discussions, questioning, and learning tasks that promote higher-order thinking skills. | Instruction; Environment and Support | 3B-Using Questioning and Discussion Techniques | CT4GC; LDC; MDC; Academic Continuum |
| Teacher provides meaningful learning opportunities for students. | Instruction; Environment and Support | 1E-Designing Coherent Instruction | Assessment Literacy; Academic Continuum; Culturally Responsive Instruction |

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| Teacher challenges students to think deeply about problems and encourages/models a variety of approaches to a solution. | Instruction; Environment and Support | 1E-Designing Coherent Instruction 3C-Engaging Students in Learning | CT4GC; LDC; MDC; Academic Continuum; Culturally Responsive Instruction; Continuous Improvement |
| Teacher integrates a variety of learning resources with classroom instruction to increase learning options. | Instruction; Environment and Support | 1B-Demonstrating Knowledge of Students 1D-Demonstrating Knowledge of Resources | CT4GC; LDC; MDC; Academic Continuum; Culturally Responsive Instruction; Continuous Improvement |
| Teacher structures and facilitates ongoing formal and informal discussions based on a shared understanding of rules and discourse. | Instruction; Environment and Support | 3A-Communicating with Students 3B-Using Questioning and Discussion Techniques | Behavior Continuum; Academic Continuum; Continuous Improvement; Assessment Literacy |
| Teacher integrates the application of inquiry skills into learning experiences | Instruction; Environment and Support | 3C-Engaging Students in the Learning | CT4GC; LDC; MDC; Academic Continuum; Culturally Responsive Instruction; Continuous Improvement |
| Teacher clarifies and shares with students learning intentions/targets and criteria for success. | Instruction; Environment and Support | 1C-Selecting Instructional Outcomes 3A-Communicating with Students | Continuum For Success; Academic Continuum; Behavior Continuum; Continuous Improvement |
| Student articulates and understands learning intentions/targets and criteria for success. | Instruction; Environment and Support | Student Voice | Continuum For Success; Academic Continuum; Behavior Continuum; CT4GC; Continuous Improvement |
| Student reads with understanding a variety of texts. | Instruction; Environment and Support | Student Voice | Standards, LDC |
| Student applies and refines inquiry skills. | Instruction; Environment and Support | Student Voice | LDC; MDC; Assessment Literacy; Continuous Improvement; Culturally Responsive Instruction |

| Instructional Relevance | Instruction; Environment and Support; Curriculum and Standards; Continuous Improvement; Assessment | Domain 1: Planning and Preparation Domain 2: Classroom Environment Domain 4: Professional Responsibilities | Culturally Responsive Instruction; LDC; MDC; CT4GC; Deploying Standards; Career Pathways; Continuum for Success; Academic Continuum; Advising; Data Analysis; Continuous Improvement |
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| Teacher designs learning opportunities that allow students to participate in empowering activities in which they understand that learning is a process and mistakes are a natural part of the learning. | Instruction; Environment and Support Curriculum and Standards Continuous improvement and assessment | 1E-Designing Coherent Instruction 2B-Establishing a Culture for Learning | LDC; MDC, Culturally Responsive Instruction, CT4GC |
| Teacher links concepts and key ideas to students' prior experiences and understandings, uses multiple representations, examples and explanations. | Instruction; Environment and Support Curriculum and Standards Continuous improvement and assessment | 1B-Demonstrating Knowledge of Students | Standards and Curriculum |
| Teacher incorporates student experiences, interests and real life situations in instruction. | Instruction; Environment and Support Curriculum and Standards Continuous improvement and assessment | 1B-Demonstrating Knowledge of Students | Standards and Curriculum; Culturally Responsive Instruction |
| Teacher selects and utilizes a variety of technology that support student learning. | Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment | 1D-Demonstrating Knowledge of Resources 1E-Designing Coherent Instruction | Standards and Curriculum; Continuum for Success |

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| Teacher effectively incorporates 21st Century Learning Skills that prepare students to meet future challenges. | Instruction; Environment and Support; Curriculum and Standards; Continuous Improvement; Assessment | 1E-Designing Coherent Instruction | Standards and Curriculum, Continuum for Success |
| Teacher works with other teachers to make connections between and among disciplines. | Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment | 4D-Participating in a Professional Community 4E-Growing and Developing Professionally | Data Review, Analysis and Use; Continuous Improvement |
| Teacher makes lesson connections to community, society and current events. | Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment | 1D-Demonstrating Knowledge of Resources | Standards and Curriculum; Culturally Responsive Instruction; Advising |
| Student poses and responds to meaningful questions. | Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment | Student Voice and engagement | Culturally Responsive Instruction; Standards and Curriculum; LDC; MDC; CT4GC |
| Student uses appropriate tools and techniques to gather, analyze and interpret information from quantitative and qualitative evidence. | Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment | Student Voice and engagement | Standards and Curriculum; Assessment Literacy; Tiered Academic Interventions; Continuous Improvement |

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| Student develops descriptions, explanation, predictions and models using evidence. | Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment | Student Voice and engagement | Standards and Curriculum; Assessment Literacy; Tiered Academic Interventions; Continuous Improvement |
| Student works collaboratively to address complex, authentic problems, which require innovative approaches to solve. | Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment | Student Voice and engagement | Standards and Curriculum; Assessment Literacy; Tiered Academic Interventions; Continuous Improvement; LDC; MDC; CT4GC |
| Student communicates knowledge and understanding in a variety of real-world forms. | Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment | Student Voice and engagement | Standards and Curriculum; Assessment Literacy; Academic Continuum; Continuous Improvement; LDC; MDC; CT4GC |
| Student communicates knowledge and understanding for a variety of purposes. | Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment | Student Voice and engagement | Standards and Curriculum; Assessment Literacy; Academic Continuum; Continuous Improvement; LDC; MDC; CT4GC |
| Knowledge of Content | Standards and Curriculum; Instruction; Environment and Support | Domain 1: Planning and Preparation Domain 2: Classroom Environment Domain 3: Instruction Domain 4: | Deploying Standards; Career Pathways; Continuum For Success; Culturally Responsive Instruction; LDC; MDC; CT4GC; Academic Continuum; Advising |

| | | Professional Responsibilities | |
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| Teacher demonstrates an understanding and in depth knowledge of content and maintains an ability to convey this content to students. | Standards and Curriculum; Instruction; Environment and Support | 1A-Demonstrating Knowledge of Content and Pedagogy 3A-Communicating with Students | Standards and Curriculum; LDC; MDC; CT4C; Academic Continuum |
| Teacher maintains on going knowledge and awareness of current content developments. | Standards and Curriculum; Instruction; Environment and Support | 1A-Demonstrating Knowledge of Content and Pedagogy 4E-Growing and Developing Professionally | Standards and Curriculum; Continuous Improvement |
| Teacher designs and implements standards based courses/lessons/units using state and national standards. | Standards and Curriculum; Instruction; Environment and Support | 1E-Designing Coherent Instruction | Standards and Curriculum; Continuous Improvement; Culturally Responsive Instruction |
| Teacher uses and promotes the understanding of appropriate content vocabulary. | Standards and Curriculum; Instruction; Environment and Support | 1A-Demonstrating Knowledge of Content and Pedagogy | Standards and Curriculum; Continuous Improvement; Culturally Responsive Instruction |
| Teacher provides essential supports for students who are struggling with the content. | Standards and Curriculum; Instruction; Environment and Support | 3C-Engaging Students in the Learning 3E-Demonstrating Flexibility and Responsiveness | Academic Continuum; Assessment Literacy; Advising; Continuous Improvement; Culturally Responsive Instruction, Behavior Continuum |
| Teacher accesses a rich repertoire of instructional practices, strategies, resources and applies them appropriately. | Standards and Curriculum; Instruction; Environment and Support | 1A-Demonstrating Knowledge of Content and Pedagogy 1E-Designing Coherent Instruction | Academic Continuum; Assessment Literacy; Advising; Continuous Improvement; Culturally Responsive Instruction; Behavior Continuum |

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| Student demonstrates growth in content knowledge. | Standards and Curriculum; Instruction; Environment and Support | Student Voice and engagement | Academic Continuum; Assessment Literacy; Advising; Continuous Improvement; Culturally Responsive Instruction; Behavior Continuum; Standards and Curriculum |
| Student uses and seeks to expand appropriate content vocabulary. | Standards and Curriculum; Instruction; Environment and Support | Student Voice and engagement | Academic Continuum; Assessment Literacy; Advising; Continuous Improvement; Culturally Responsive Instruction; Behavior Continuum; Standards and Curriculum |
| Student connects ideas across content areas. | Standards and Curriculum; Instruction; Environment and Support | Student Voice and engagement | Academic Continuum; Assessment Literacy; Advising, Continuous Improvement; Culturally Responsive Instruction; Behavior Continuum; Standards and Curriculum |
| Student uses ideas in realistic problem situations. | Standards and Curriculum; Instruction; Environment and Support | Student Voice and engagement | Continuum for Student Success; Standards and Curriculum |
| Learning Climate | Instruction; Environment and Support | Domain 1: Planning and Preparation Domain 2: Classroom Environment Domain 3: Instruction | Academic Continuum; Advising; Bullying Prevention; Positive Behavioral Interventions and Supports (PBIS); Behavior Continuum; Culturally Responsive Instruction; LDC; MDC; CT4GC |
| Teacher creates learning environments where students are active participants as individuals and as members of collaborative groups. | Instruction; Environment and Support | 2B-Establishing a Culture for Learning | Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction |

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| Teacher motivates students and nurtures their desire to learn in a safe, healthy and supportive environment which develops compassion and mutual respect. | Instruction; Environment and Support | 2A-Creating an Environment of Respect and Rapport 2E-Organizing Physical Space | Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction |
| Teacher cultivates cross cultural understandings and the value of diversity | Instruction; Environment and Support | 1B-Demonstrating Knowledge of Students 2A-Creating an Environment of Respect and Rapport | Culturally Responsive Instruction; Continuous Improvement |
| Teacher encourages students to accept responsibility for their own learning and accommodates the diverse learning needs of all students. | Instruction; Environment and Support | 1C-Selecting Instructional Outcomes 2B-Establishing a Culture for Learning | Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction; Continuous Improvement |
| Teacher displays effective and efficient classroom management that includes classroom routines that promote comfort, order and appropriate student behaviors. | Instruction; Environment and Support | 2C-Managing Classroom Procedures 2D-Managing Student Behavior | Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction |
| Teacher provides student equitable access to technology, space tools and time. | Instruction; Environment and Support | 1D-Demonstrating Knowledge of Resources 2E-Organizing Physical Space | Academic And Behavior Continuum, LDC; MDC; CT4GC |
| Teacher effectively allocates times for students to engage in hands on experiences, discuss and process content, and make meaningful connections. | Instruction; Environment and Support | 2C-Managing Classroom Procedures 3C-Engaging Students in the Learning | Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction |
| Teacher designs lessons that allow students to participate in empowering | Instruction; Environment and Support | 1E-Designing Coherent Instruction | Academic Continuum; Advising; Bullying Prevention; PBIS; |

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| activities in which they understand that learning is a process and mistakes are a natural part of learning. | | 2B-Establishing a Culture for Learning | Behavior Continuum; Culturally Responsive Instruction |
| Teacher creates an environment where student work is valued, appreciated and used as a learning tool. | Instruction; Environment and Support | 2B-Establishing a Culture for Learning 3D-Using Assessment in Instruction | Academic Continuum, Advising, Bullying Prevention, PBIS, Behavior Continuum, Culturally Responsive, |
| Student accepts responsibility for his/her own learning | Instruction; Environment and Support | Student Voice and engagement | Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction |
| Student actively participates and is authentically engaged. | Instruction; Environment and Support | Student Voice and engagement | Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction |
| Student collaborates/teams with other students | Instruction; Environment and Support | Student Voice and engagement | Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction |
| Student exhibits a sense of accomplishment and confidence | Instruction; Environment and Support | Student Voice and engagement | Academic Continuum, Advising, Bullying Prevention, PBIS, Behavior Continuum, Culturally Responsive, |
| Student takes educational risks in class. | Instruction; Environment and Support | Student Voice and engagement | Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction |
| Student practices and engages in safe, responsible and ethical use of technology. | Instruction; Environment and Support | Student Voice and engagement | Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; |

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| | | | Culturally Responsive Instruction; Continuous Improvement |
| Classroom Assessment and Reflection | Assessment Literacy; Data, Analysis and Use | Domain 1: Planning and Preparation Domain 2: Classroom Environment Domain 3: Instruction Domain 4: Professional Responsibilities | Continuous Improvement; Assessment Literacy |
| Teacher uses multiple methods to systematically gather data about student understanding and ability. | Assessment Literacy; Data, Analysis and Use | 1F-Designing Student Assessment 3D-Using Assessment in Instruction 4A-Reflecting on Teaching | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement |
| Teacher uses student work/data, observations of instruction, assignments and interactions with colleagues to reflect on and improve teaching practice. | Assessment Literacy; Data, Analysis and Use | 1F-Designing Student Assessment 3D-Using Assessment in Instruction 4A-Reflecting on Teaching | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement |
| Teacher revises instructional strategies based upon student achievement data. | Assessment Literacy; Data, Analysis and Use | 1F-Designing Student Assessments 3D-Using Assessment in Instruction 4A-Reflecting on Teaching | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum |
| Teacher uncovers students' prior understanding of the concepts to be addressed and addresses students' | Assessment Literacy; Data, Analysis and Use | 1F-Designing Student Assessments 3D-Using Assessment in Instruction | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum |

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| Misconceptions/incomplete conceptions. | | | |
| Teacher co-develops scoring guides/rubrics with students and provides adequate modeling to make clear the expectations for quality performance. | Assessment Literacy; Data, Analysis and Use | 1C-Selecting Instructional Outcomes 3D-Using Assessment in Instruction | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum |
| Teacher guides students to apply rubrics to assess their performance and identify improvement strategies. | Assessment Literacy; Data, Analysis and Use | 2B-Establishing a Culture for Learning 3D-Using Assessment in Instruction | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum |
| Teacher provides regular timely feedback to students and parents that moves learners forward. | Assessment Literacy; Data, Analysis and Use | 3D-Using Assessment in Instruction 4C-Communicating with Families | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum |
| Teacher allows students to use feedback to improve their work before a grade is assigned. | Assessment Literacy; Data, Analysis and Use | 3D-Using Assessment in Instruction 3E-Demonstrating Flexibility and Responsibility | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum |
| Teacher facilitates students in self- and peer-assessments. | Assessment Literacy; Data, Analysis and Use | 2B-Establishing a Culture for Learning 3D-Using Assessment in Instruction | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum |
| Teacher reflects on instruction and makes adjustments as student learning occurs. | Assessment Literacy. Data, Analysis and Use | 3D-Using Assessment in Instruction 3E-Demonstrating Flexibility and Responsibility 4A-Reflecting on Instruction | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum |
| Student recognizes what proficient work looks like and determines steps | Assessment Literacy; | Student Voice and engagement | Assessment Literacy; Data Review, Analysis and Use; Continuous |

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| necessary for improving his/her work. | Data, Analysis and Use | | Improvement; Academic Continuum |
| Teacher and student monitors progress toward reaching learning targets. | Assessment Literacy; Data, Analysis and Use | Student Voice and engagement | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum |
| Student develops and/or uses scoring guides periodically to assess his/her own work or that of peers. | Assessment Literacy; Data, Analysis and Use | Student Voice and engagement | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum |
| Student uses teacher and peer feedback to improve his/her work. | Assessment Literacy; Data, Analysis and Use | Student Voice and engagement | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum |
| Both teacher and students reflect on work and make adjustments as learning occurs. | Assessment Literacy; Data, Analysis and Use | Student Voice and engagement | Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum |