

OVERVIEW OF THE ESSENTIAL SCIENCE NOTEBOOK

Goals for KASC's Essential Science Notebook:

- To elevate the mindset toward science education
- To provide tools and resources to improve science instruction based on the standards
- To simplify information on Kentucky's Science Assessment System
- To provide resources to improve classroom assessments

	SECTION	SUMMARY
0	Introduction	The introduction provides context for new tools and strategies within the new standards.
1	Mindset	Background and tools to develop a Growth Mindset and a Science Mindset are provided for teachers and students.
2	Classroom Embedded Assessments (CEA)	CEA basics are provided with several formative assessment strategies. Examples of formative assessments are included, along with steps to take, guidelines, and methods for providing effective feedback to students.
3	Through Course Tasks (TCT)	Background information and Q/A for TCT is explained. Many resources are given for teachers to develop better quality instruction that includes effective assessment practices. Other resources on the CD include Project-Based Learning and how other states are using TCT.
4	Statewide Summative Assessment (SSA)	Information and a prototype for Kentucky's SSA is given, but the greater focus of this section is on improving classroom summative assessments. Tools for improving the quality of questions and developing assessments will support teachers as they work to improve their own classroom assessments.
5	Brain Compatible Teaching and Learning	The research on brain-compatible classrooms is well suited to the science classroom. Strategies are provided for teachers to focus on Meaning, Movement, Challenge, and Variety in their classrooms. Strategies for providing effective feedback are also included.
6	Science Standards Checklists	These quick, well-organized checklists let you track how the standards are being delivered, item-by-item. The Checklists are great for helping teachers become familiar with the new standards and are useful for planning formative assessments or quick checks of student learning.
7	Science Standards Progression	Learning progressions provide teachers with the opportunity to determine whether students have navigated successfully through the mileposts and support curriculum planning. The progressions further provide teachers with the opportunity to identify students who are in need of accelerated curriculum.
8	Vocabulary Instruction	Easy-to-use activities to incorporate into instruction are based on the three stages of memory. This section is useful for all content areas, not just science. Science vocabulary lists based on the standards are included on the CD.