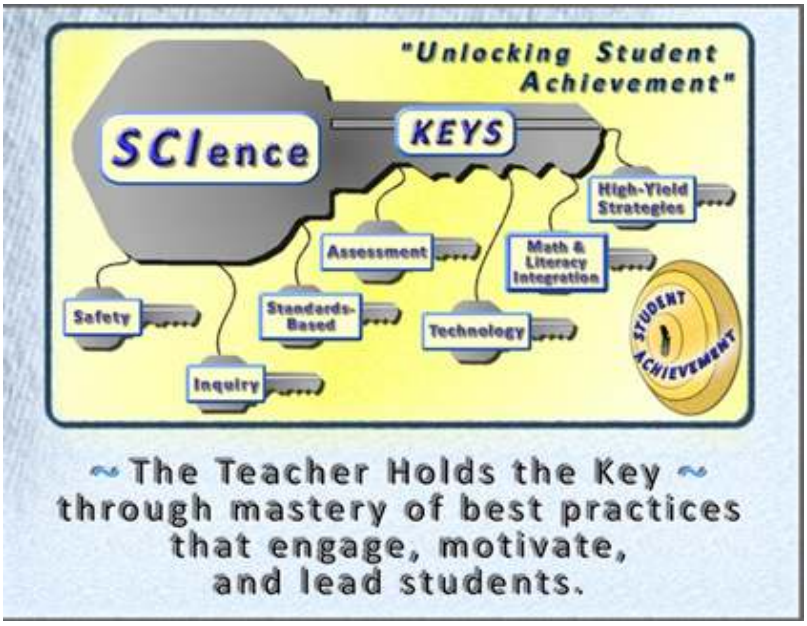
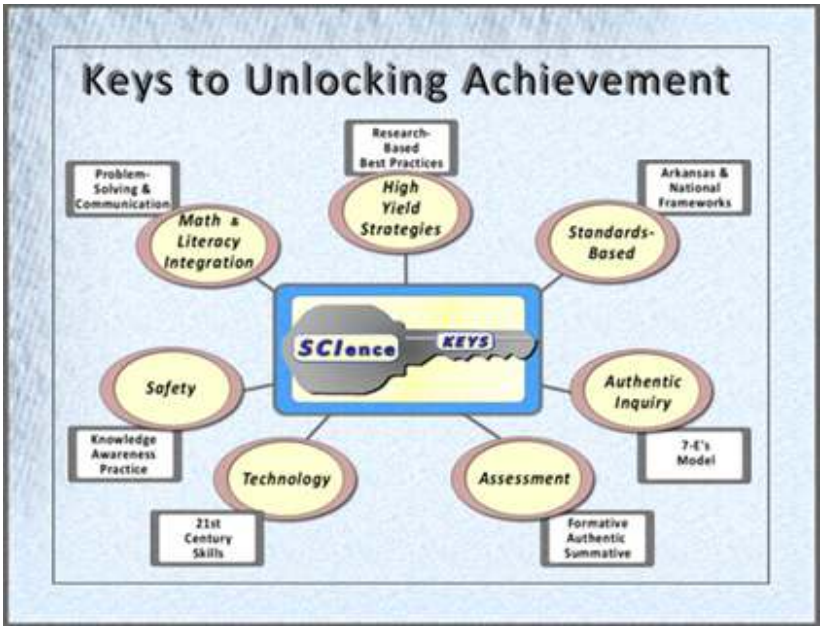
Science Keys Introductory Slideshow Notes

Arkansas Science Keys – The Science Specialists from Co-ops and Centers across Arkansas have created a Science Professional Learning program called "Sci~Keys." Science Keys is based on new learning from work on impacting student achievement, and grounded in research-based knowledge on best practices in classroom instruction. An authentic inquiry approach is at the core of the SCIence Keys experience.

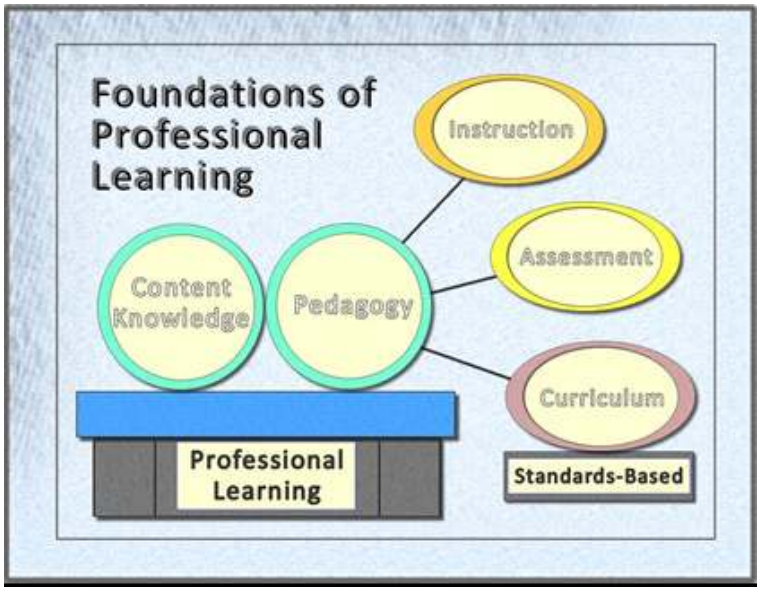


Educational research indicates that the teacher plays the key role in unlocking student achievement. For this to occur, the teacher must be **committed** to learning, **committed** to their students, and be a skilled facilitator in their practice. Mastery of these 7 keys of best practices will engage, motivate, and lead students to reaching their potential as learners.



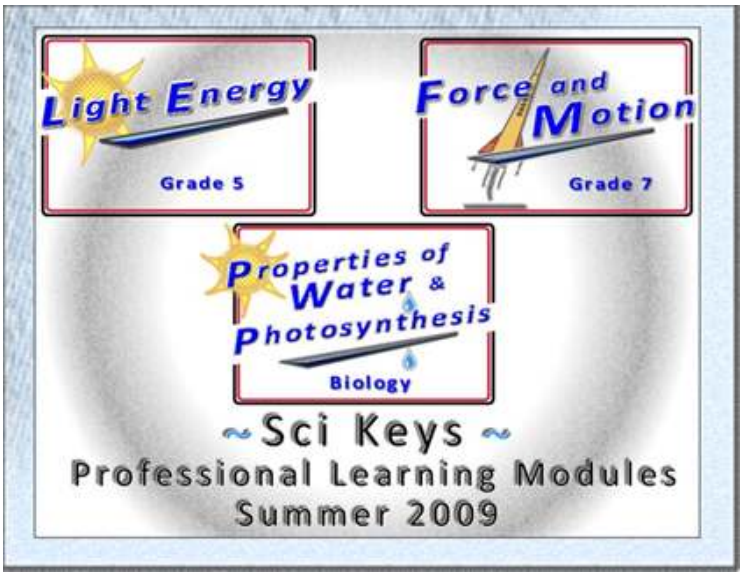
Seven Science Keys to Unlocking Achievement

1. Integration of both math and literacy in science instruction to enhance reading, writing, communication and mathematical skills.
2. Application of research-based High-yield instructional strategies.
3. A standards-based curriculum anchored to both state and national frameworks.
4. Authentic inquiry that engages students in solving real world problems within the scope of the scientific process.
5. Leveraging of formative, authentic, and summative Ensuring the safety of students in the laboratory and classroom through knowledge, awareness, and practice.
6. Experience with relevant technology to prepare students with a 21st century skill set.
7. Ensuring the safety of both the student and the teacher in the science classroom, through knowledge, awareness, and practice.



Content knowledge and mastery of pedagogy are two central elements of quality professional learning. One objective of “Sci~Keys” is to offer an opportunity for teachers to grow in their practice The alignment of instruction, assessment, and a standards-based curriculum are all necessary components that drive student achievement.

The Sci~Keys professional learning experience focuses on the teacher as an adult learner who needs to be engaged in the planning and evaluation of their instruction, and involved in problem-centered learning around issues that have immediate relevance to their practice.



This series of integrated, authentic inquiry-based modules are aligned to the Arkansas Science Standards for 5th grade, 7th grade, and biology teachers. This extensive two-day training will include all materials free of charge for this initial year of training.

Instructional facilitation (coaching) will also be provided to the teacher with on-site visits upon completion of this professional learning.