Recommendations for School Leaders

Effective school leaders create school environments that nurture new teachers to succeed at teaching and reach their potential. Our research suggests the following policies and practices:

**Pay Attention to Working Conditions**
- Hire early and assign classes so that the new teacher can start planning to teach before they have to start school.
- Assign new teachers only one class preparation so they have time to reflect and revise lessons between class periods to perfect their teaching skills.
- Provide new science teachers their own room in which to teach instead of having them float between classrooms with a cart.
- Protect new teachers from additional school duties beyond those directly related to teaching their own classes.

**Provide Support**
- Nurture new teachers in a supportive school environment where teachers help each other and the entire faculty is focused on helping students.
- Establish a plan and identify a person or team to provide new teachers with an orientation to the school, policies, and procedures.
- Provide teaching resources including teaching supplies, computer equipment, and science equipment, along with a person to demonstrate effective equipment use.
- Provide an in-class coach/mentor to support the new teachers while learning to teach, such as a retired science teacher with experience teaching the same content area as the new teacher who has time to observe the new teachers teaching over an extended period of time and suggest how to more effectively impact student learning.

**In-Class Support**
To encourage effective teaching and learning, coaches/mentors who spend extended time in and out of the classroom with the new teacher can:
- Observe new science teachers teaching and provide constructive feedback,
- Assist in establishing classroom routines,
- Problem solve classroom management challenges,
- Share about the school’s culture,
- Participate in long and short-term planning with emphasis on sequence and pace,
- Identify students’ common misconceptions and assist with planning to mitigate them,
- Provide lesson ideas, materials, and equipment or help locate equipment,
- Perform experiments with new science teachers prior to use with students,
- Model effective, safe instruction for large and small groups, and
- Focus on increasing student learning.

**Quality training**
- Establish a partnership with a local college or university to provide quality courses for new teachers in how to teach and assess science.
- Provide quality training for those who provide in-class support in how to support and mentor new teachers.