Creating a STEM Community of Practice to Support STEM Teacher Retention

Over the past five years we have cultivated STEM teacher leaders within the Indiana Science Initiative (ISI) districts to support the implementation of the ISI curriculum. In those five years we have seen a large amount of teacher turnover and have sought mechanisms to increase teacher retention. We have begun work on an 18 month grant-funded project that involves 50 STEM Mentor teachers in each of 10 participating districts mentoring over 100 STEM Mentee teachers that have 0-5 years of teaching experience. Our goals for the project are: 1. to increase STEM teacher retention by providing ongoing, just-in-time support to new STEM teachers with grade level and district STEM Mentor teachers; 2. to improve new STEM Mentee teacher’s abilities to implement science and mathematics instructional practices by increasing their pedagogical and subject matter content knowledge; and 3. to develop a STEM community of practice, utilizing an online platform to support interaction and sharing of resources across Indiana. The districts participating in the grant are concentrated in four regions: Evansville, Indianapolis, Fort Wayne and South Bend. Each of these regions has a higher education partner who is responsible for providing the professional development in the summer to the mentee teachers. Mentor teachers will receive professional development in a residential training at Purdue University. Mentee teachers will receive regional professional development from the higher education partners which will support their instruction in science and mathematics.