## Pennsylvania STI

Brandywine high school is a pioneer school in BSD, we have a leading program to diminish the achievement gap between colored and white students. BHS gives students the privilege of ownership to make decisions in relation to course selections.

Science classes are equipped with computers and new technology such as Venires' Pro. Professional Development days are designed to implement new ideas of teaching and independent analysis, new programs in BHS such as Saturday academy, freshmen orientation, cluster elective classes (concentrate on certain areas such as Science or language arts). BHS also works with the AFG program, which helps mentor the focus in challenging students in school. Inclusion gives our challenged kids to be in a stimulating environment. Many members of our staff share in national conferences for training in model schools and have national certification. This continuous training and brings enriching experiences to the entire staff and students of Brandywine High School.

2-The provided definition of teacher leadership completely matches my visions and experience with teacher leadership, although it doesn't exist in many schools, especially due to the workload of any teacher. Brandywine School District offers a well-organized mandatory mentor program for new teachers, this programs has three cycles where new teachers either new to the proficient or to the district have to finish the three years cycles. Working on certain areas, attending many work shops, being visited and helped by a district mentor, as the first year of this program there is a leader teacher in the school building to mentor and help new teachers. As I believe leader teacher needs to be highly qualified experienced open minded, as being good to teach his own students should also be good to coach new teachers, also leader teacher should be involved in his school

development, has the sight and the character of a leader.

3- The use of technology in Science is growing and expanding everyday. My classroom is equipped with 12 computers which gives my students the opportunity to do online research, take quizzes and tests on line and also email their scores to me, students can review their grades on line and find out about their homework and projects. As in Chemistry, technology gives me the chance to use the Vernier lab Pro, amazing devices save time and give accurate data, verbally sharing files between teachers is not needed, flash drives for easy data transfer, teachers website and how we share and swap labs and problems. Technology also facilitates the communication between teachers-parents and teacher- students. Sharing files and labs is not only limited to school or district wide but also nationally and internationally.

4-My unforgettable experience about engaging my students in scientific inquiry was last year when I gave them a project about air Ozone pollution in Wilmington, DE area, the topic touched students' lives and their city, all racecourses were available to them (video tapes, booklets, website...).

In this project my students had to go through 3 steps, first gain basic knowledge and write a paper about the problem, second raise the awareness of this problem in their community starting with our school (this part included posters, flyers, bumpers' stickers, newsletters....).

The final part was a proposal to solve the problem in our area and honestly come up with wonderful ideas and great work to put into action.

I believe when it comes to a student's daily life science would work in a perfect way, investigating and inquiring gives the best lasting experience.