

Some challenges of an integrative STEM program that incorporates characteristics of inquiry include changing teachers mind sets.

First, letting students determine topics of study or even have a say, would be a challenge for some staff to wrap their heads around. Having evaluations tied to high stakes tests and with the time constraints teachers face in today's classrooms, it is difficult to change the way things are done as we still need to follow outdated conventions.

Next, allowing students to work in groups in some teacher's classes is a treat for special occasions only and is not the norm. Some of our students struggle to follow behavior expectations as an individual let alone in the group setting making it difficult to implement collaboration successfully for all.

In our middle school, we are still in the silo approach. We no longer have teams and cannot find time to communicate and collaborate with other teachers during a common planning period that we once enjoyed. There is little to no integration of subject area due to scheduling and budget constraints.

Finally, funding and outdated facilities/technology make implementing a STEM program based on inquiry challenging. Most of the buildings in my district are outdated and the technology in the buildings has been let go and not updated in the last ten years. The movie "Lovely Bones" was filmed at our school in 2009 because they literally needed a school that looked like it was in the 1960's.

Some successes of an STEM program that incorporates characteristics of inquiry include what is going on in the math classes in my district. The district has implemented the College Prep Math program and most teachers have completed two years of training that accompanies a

new curriculum. As a group, we struggled to implement the program and were resistant to change. Over time we have become facilitators instead of the sage on stage which is a key component to inquiry. We also have successfully implemented groups into most math classrooms which has elevated the level of student communication which is another component of inquiry.

It shows that there is hope as bits and pieces of inquiry have made it into the math classrooms in my district. As this change in philosophy occurred from the implementation of CPM and most math teachers have bought in, it gives me hope that the other subject areas can implement the best practices of inquiry and one day we can get out of our silos and be an integrative school.