

Sustainability and lasting impact of inquiry

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Definition of inquiry:

- thinking
- discovery
- student leads investigation
- collaborating
- generating and evaluating hypothesis
- hands on activity
- real life application
- emphasizing process skills
- learning through trial and error

How do you get teachers and fellows to sustain inquiry after the fellow has left

- lesson has to be simple enough that the teacher can implement them without the fellow in the future, easy enough to do alone.
- Fellow and teacher work activity together
- Focus on fellow and teacher as well, learning how to make a great inquiry activity by modifying already present labs
- Teaching teachers how to ask the right questions
- Learn how to change cookbook activities
- Give the students the hypothesis, or problem and material and ask the student to figure it out
- Teacher has to buy into the activity in order to sustain it.

What kind of profession development is provided to help train and support teacher and fellow

- 1 day seminar, seminar
- Summer institute: she comes and 1 week with new fellow and teach them all parts of inquiry, teacher and fellows are there for two weeks and figure out partnership, do fieldtrip, and work with different teachers.
- DO the same as UNC, fellow demonstrate activity to work with teachers.
- At Emory, paired teachers and fellows write the problem base cases together.
- Adapt to adapt, teach teacher how to develop questioning skills.
- Demos
- Role playing
- Set up scene, lab safety scene: victim on floor, (violating all safety lab rules laying in the room) and ask the kid to give observations and see what is wrong with the guy, ask them to give problem and hypothesis. The kids give him idea how to be safer, ask kids to make up safety poster to hang up around laboratory.
- Another fellow did something like that always a victim of wrong lab doing. Always a victim of wrong lab procedures
- ROLE PLAYING
- www.prism.emory.edu examples of inquiry

What type of support is there for inquiry in the schools, district and or university?

- the principal is the support at ones of the schools because they believe in the program
- very little at the university level because of another education culture
- at UCF we have a center for teaching development
- in other university teachers at university are having a hard time changing culture.
- Mixed reactions among the different public schools that are participating, principal always talk about FCAT
- Deffineteley takes more time therefore it is hard to balance, sometimes is not always good to do only INQUIRY, (UF)

General climate of science education in the school, district and or university?

- science in the forefront because of FCAT, and science counting towards school grade.
- FCAT standards are driving what the teachers teach, inquiry is a way to get to those standards because the kids are learning through experience
- Nationally FL is in the bottom rank of education, internationally US is at bottom too
- Do something to change that
- In emory the main push is math and reading, but not science
- What are the other countries doing to be avobe US education: European countries have a very strong discipline, the school system the kids don't have much choice or freedom like kids in US, you either get it or get it or get place in a lower level, they separate the kids into level, in US we try to teach everybody therefore we don't advance, educator from India and China, said that US is loosing status in terms of technological advances because eof having to bring peoples from other countries to satisfy thecnological advantages, witness said that is not competition at the proffessional level, that it should be the same at the educational level. We are not challenging our smarter kids enough to really make them advance, US economical status is not fair, usually smarter peoples don't get paid as much in US and not in other countries
- Teacher don't get paid enough
- Different cultures have different approaches

Is inquiry effective for learning science?? HOW

- a necessary part, but you need to not only do inquiry, inquiry alone doesn't work, but it is crucial to catch all learning styles because it engages the student
- inquiry needs to come from the student itself, not from the facilitator
- know where kids are coming from to find a better relation
- very effective in teaching them how to think
- is very good at tricking kids to learn
- trying to get to a predisposition of the mind so when ideas come to the mind the mind is train to think and inquire itself.
- Stimulating brain is hard to teach

What other aspect of GK12 can be sustained, or have long lasting results beyond the life of funding period

- teachers could keep doing inquiry
- what we create has the ability to endure beyond what we do in classroom, but teachers have to have material available
- hard to make them teach outside the textbook, don't give textbook