



Parents for Quality Math Education

Survey of Candidates for
State College Area School District Board of Directors

What the Candidates Were Asked

On May 5th, Parents for Quality Math Education posed the following question to the candidates for State College Area School District Board of Directors via e-mail:

“We are growing group of parents in the District who are concerned about the direction of the SCASD math curriculum, especially for grades K-8. You probably saw the front-page story in the CDT on this topic yesterday. Our group would like to hear your position on this important issue. Do you support the recommendation of the SCASD math coordinators that the 2nd edition of "Investigations" be adopted throughout the District as the core math curriculum with limited support for supplementary materials? Or would you rather that the District return to being a "multiple-resource" district with teachers free to choose from the resources they deem appropriate, including 'Investigations'? Or do you hold a position different from these?”

We asked the candidates to provide responses of any length, but with a suggested length of 300 words and urging that they clearly and concisely state their position on how they will or would vote.

The following responses were received by the deadline given (May 13th at 9:00 a.m.):

Tim Eden

No response received.

Penni Fishbaine

First of all, I hear your frustration. After reading the comments on the petition and conducting my own basic research, I have come to a conclusion. Regardless of how great a program may or may not be, if over 500 people in this community (mainly parents of school-age children) feel strongly enough to come forward to speak or sign a petition against that program, then the use of the program needs to be reevaluated. Something is wrong. It would not make sense at this time to invest in a new edition with so much controversy. I am not a curriculum or math expert, and I would not want to make an uninformed decision by recommending a math curriculum. That should be a task assigned to individuals who specialize in math curriculum.

During the reevaluation, I would want to see more empirical data (evidence of improvement or declining scores) on the use of Investigations in our district.

I do have two children who approached math in totally differently ways. It makes sense to me that since individuals learn differently; no single approach would work for everyone. Therefore, it stands to reason that a multi-faceted approach would be the most effective. I also understand the need for standards among our classrooms. Perhaps a combination program exists, or we may need to use

teachers that have taught the previous multi-resourced method to compile a combination approach and mentor the newer teachers. The teachers who have experience using many differing methods are most likely to reach the most students effectively.

Thank you for the opportunity to comment.

David K. Hutchinson

I fully support the recommendation to adopt the 2nd edition of "Investigations". The new edition will allow our teachers to build on the progress that our students have made over the past few years, while specifically addressing the aspects of the program that needed strengthening.

As I've stated previously, I certainly understand the frustration of parents, who having been taught Math the old, "algorithmic" way, struggle to help their children with their homework. I also think that more can be done to bridge the "old" and "new" approaches. The latest edition of Investigations Math addresses both of these issues.

The parental involvement piece is very important. Our children's success depends on a partnership of students, teachers and parents; we should do everything we can to ensure that parents are fully engaged in their children's education. I applaud the efforts of teachers, administrators and fellow board members who have reached out to address the legitimate concerns of parents, and the parents who have reached back.

We also need to recognize that for most of our elementary teachers, this was a new approach to math instruction. As with any new teaching strategy – particularly one that is being applied across an entire organization - even with good training, there is a learning curve. (As well there should be! Educators who aren't continually learning and getting better at what they do are in the wrong business.)

While it is important to allow teachers to adapt their strategies and resources to what works best for particular students, it's also important that we maintain curricular consistency across the district. The improvements in the new edition mean that our teachers will be less dependent on outside resources.

From my personal perspective - as someone whose best subject in school *was* Math - this conceptual approach to Math instruction is a very welcome change. Although I was taught the old, algorithmic way, the reason I excelled at Math – and perhaps, just as importantly, the reason I enjoyed it – was that I understood it conceptually.

It is a crime that generations of Americans have been trained to believe that "they're not good at Math" or that "Math is boring". Forty years ago, it may have been sufficient for 10-20% of our students to be "good at math". That is no longer acceptable; maintaining the status quo would have been a disservice to our students.

People are generally resistant to change, especially when the "way we used to do it" worked just fine for them. Clearly, if you're a university math professor, the "way we used to do it" worked exceedingly well for you.

But I also think there's an important distinction between having a deep knowledge in a particular field of study - as university professors have - and knowing how to impart that knowledge to others. Universities have struggled with this conundrum for generations.

If I need the solution to a difficult math problem, I'll go to a math professor. But if I need to know how to *teach* a math concept, I would look first to the professor in education who has that expertise.

Finally, the evidence in support of Investigations Math – as it is taught in the State College school

district – is overwhelming. It would be irresponsible for the school board to ignore that. Parents have a right and an obligation to advocate for their children. As school board members, we have the obligation to advocate for everyone’s children.

Brian Kaleita

I do not support mandatory use of the “Investigations” math curriculum. I believe that parents are and should be the primary decision makers in the education of their children, not SCASD “educrats.” SCASD should be a “multiple resource” district with parents having a primary and major role in determining preferred methods of instruction for their children. Teachers should not have to fear retaliation or intimidation for speaking out on curriculum issues in mathematics or other areas of study. I will vote against the adoption of “Investigations” as the core math curriculum for the State College Area School District.

Jim Leous

As a father of two children in the midst of the Investigations Program, there are times when I am frustrated because I can't provide the kind of help my child requires. My frustration is often multiplied because I believe that with my math background -- I'm trained as an astrophysicist -- I should be able to provide more help. As I read the names of those who have signed the petition and in particular, review the comments, I see that I am not alone. I am an Old "New Math" product trying to understand the New "New Math" and like most parents in this school district I want my children to do well.

I first began to look into the Math Investigations program two years ago when a friend of mine told me his brother's school district in California dropped the program. He was adamant that we should too. I've paid close attention since then to the homework which my elementary aged children bring home. In my experience, the program works best for our children if their teachers assess when and where Math Investigations concepts need to be supplemented with the more traditional math algorithms (which is how I learned it). After talking with some teachers both in my children's school and elsewhere throughout the district, this is their experience too. It is also my belief that the district does an excellent job providing professional development opportunities to our faculty. After talking with a Penn State Math Curriculum expert, I understand that virtually all "conceptual" math programs need to be supplemented in some way respecting the needs of each classroom and each student.

I am a firm believer that the skills our students need to compete in this global economy involve teamwork/collaboration; information creation and use; and creative problem solving. I believe that the U.S. as a society is the most creative in the world because we approach learning in ways which strengthen these skills.

As a district volunteer, I have been involved in the Patrick Wang Innovation Grant which awards a modest amount of money to student teams for a project which encourages teamwork, problem solving, and innovation in technology or information technology. This is a very rewarding annual venture. As a hockey coach, I seeded the idea for a "Hockey Stats Club" at the High School. One of our teachers agreed to be the adviser for the club and the participating students see the benefit of real-time statistical feedback ("Brian is winning 80% of the face-offs in our defensive zone") as well as free admission. I believe that we can demonstrate the utility of math while still making it enjoyable.

As a potential State College Area School Board member, I believe that we hire a superintendent and allow him to put his administrative and curricular teams together and then let the experts to do their job. We need to hire good people, and "get out of the way." As a rule, if elected I will not overreach

into areas which are better handled by our administrative and professional staff. That said, I believe the School Board can and should facilitate a community dialog between parents, teachers, and curriculum experts to better understand the needs of both parent and student. It would be inexcusable for us as a board to ignore such a motivated and concerned group of parents.

Our professional staff's ability along with parental involvement is one of the reasons our school district exceeds most in Pennsylvania. I wish to keep it that way.

James Pawelczyk

You have asked whether or not I will support a decision to adopt the second edition of the *Investigations* curriculum for the SCASD elementary math program. To answer your question at this time would require me to disregard my obligations as a sitting school board director.

The Pennsylvania School Boards Association (<http://www.psba.org/newmembers/resources/understanding-basics.asp>) states three important functions of school boards that are relevant to the current math discussions:

- School boards are a check on the proprietary interests of professionals. Thus, they carry out the American precept of checks and balances.
- School boards afford a means for bringing together varying points of view when formulating school policy.
- School boards make possible, but do not guarantee, the direct exercise of the people's will in regard to public education. School boards are expected to use the information at their disposal to make decisions in the best interest of the community.

I strongly endorse evidence-based decision making. The available evidence about *Investigations* in particular, and math curricula in general, ranges from anecdotes to expert opinion to validated research. Listed below is the type of information - all of it specific to the SCASD - that I will draw upon during future deliberations about the elementary math curriculum:

1. Review of the first and second edition *Investigations* materials.
2. Comments submitted by parents, most (but not all) of them expressing dissatisfaction with the math curriculum.
3. Comments submitted by teachers, most (but not all) of them expressing support of the curriculum.
4. Direct observation of several math classes and math nights that have been held at the elementary schools this year.
5. Understanding of district performance on the math PSSAs. These data are available at: http://www.pde.state.pa.us/a_and_t/cwp/browse.asp?a=3&bc=0&c=27525&a_and_tNav=|633|&a_and_tNav=

During the past year the SCASD has worked diligently to address concerns that have been raised about the math curriculum. The math nights initiated at the elementary schools seem to be improving understanding among many students, teachers and parents. I attended several of these gatherings and was highly impressed by everyone's dedication. There are a lot of reasons to be proud of public education in the SCASD, and there are reasons and opportunities to do better.

In conclusion, let me restate the following points:

- The litmus test you pose would require me to prejudge a decision before the matter has been discussed at a board meeting. This is inconsistent with the nature of school boards as deliberative public bodies.
- Education is the very reason that public schools exist. Every child is different, and your child's education is an individual matter. The best way to address a specific issue related to their learning is with their teacher.
- School board directors are not curriculum experts, but they have the responsibility of approving curricula. They invest considerable effort to ensure that professional educators have the right resources to help students learn, to make certain that education is contemporary and appropriate, and to analyze performance with validated assessment tools.
- The district continues to investigate ways to improve the education of the more than 7,000 children it serves. The curriculum is evolving continuously, and future decisions must be made thoughtfully and deliberately.
- I will use all sources of information available to reach a conclusion regarding the second edition of *Investigations*.

When the board discusses this issue I ask for your trust that I will make a knowledgeable and principled decision that best helps students.

Thank you for the opportunity to respond.

J. Gowen Roper

There is unfortunately a long and divisive history in this country over math curricula. I have a fundamental problem with what I see as the manufactured dichotomy that appears to be at the center of these conflicts, namely the dichotomy between conceptual or standards based and traditional or skill based curricula. I believe that our children need both kinds of learning to succeed in the 21st century, and that we need to teach both. Most curricula, including *Investigations*, do just that, though obviously to varying degrees. I believe that the district needs to continue to make the goals and the methods of their current curriculum more accessible to parents, and that our teachers and parents need to continue to work to find the common ground that I believe joins us. We all want all of our children to be the best mathematical problem solvers that they can be, and when we battle for one side or the other in this conflict, our children are the real losers.

The role of a Board member is to define what we want to do in the district, to direct the administration to determine how best to accomplish the goal we have defined, and then to assess their proposal and the outcome. There are no math curriculum experts on the Board, but I am convinced we all share the same goal: to develop the best possible math curriculum for our children. I believe that the district is on the correct path to find the necessary middle ground between the two approaches. Though I will be out of town for the Board Meeting on May 18th, if I were present, I would vote to support the administration proposal to buy the second edition of the *Investigations* program.

It is my responsibility as a Board member to make many decisions. I have learned that it is impossible to satisfy everyone all the time. Good people with the same goal will often disagree on how to accomplish the goal. I try to listen to all sides and then make my decision based on what I believe is best for all the children in the district. When you vote on May 19th, I hope that as parents you also look at the whole record of each candidate, and not use any single issue as a litmus test.

Peter Schempf

I support the parents who want their children taught math the traditional way and who do not want their children to be guinea pigs in a program that has not been fully tested and which nobody has a measure yet for its success. I think Investigations may be a good alternative method of teaching kids who can't grasp the tried and true method and probably should be made available on an individual basis. But I think the "educators/curriculum coordinators" got the cart before the horse at the expense of the students and the district. This district needs to remember that the students and parents are the customers and the district is the provider and the old adage that the customer is always right needs to be thoroughly reviewed. As a parent, I think kids need structure and basics upon which to build. The Investigations method doesn't seem to provide either and the unanswered question is what happens when the kids reach ninth grade and are thrust back into standard math.

Andrew A. Sicree

I generally support variety in the curriculum, and I don't like the one-size-fits-all approach.