# Response to Education Minnesota Questionnaire

Dr. Mark Peterson, Ph.D. 2018/Sep/25

Below are my responses to a questionnaire from the local chapter of Education Minnesota. They have asked that I do not share their questions, but they have approved the posting of my replies. The section headers indicate the general scope of each question. I believe that these positions are likely relevant to voters beyond this organization. If you would like to discuss any of my positions (including those posted at MarkForNLS.com/positions), please connect through Facebook.com/MarkForNLS or at MarkForNLS.com/contact.

## Background

For a more complete catalog of my background, including links to my publications, please see my full CV at MarkForNLS.com/CV. I also have a longer, narrative version of my background at MarkForNLS.com/about. The condensed version, with activities during each stop:

- Graduated from NL-S in 2004
  - Student council member
  - Lettered in three sports
  - Captain of Knowledgebowl and Academic Challenge
  - T-ball coach and baseball/softball umpire
- B.S in Biology (double major in EEB and GCD) from the University of Minnesota, Twin Cities in 2008
  - Sigma Nu Fraternity, multiple leadership potions, including member development and risk management chair
  - Interfraternity Council, VP of Public Relations and Executive Vice President
  - Stephens' research lab manager
  - Hockey referee
- Ph.D. in Biology from Indiana University, Bloomington in 2013
  - Dissertation title: "A genomic perspective on the evolution of sexual dimorphism:
    The role of hormones and gene expression."
  - Guest lecturer at NL-S High School (Biology and A.P. Biology)
  - Center for the Integrative Study of Animal Behavior, including conference planning
  - Institutional Animal Care and Use Committee member
  - Founding member of a book club, member of multiple journal clubs
  - Captain of rec volleyball team, member of rec hockey league team

- Postdoctoral fellowship at Juniata College and Penn State University (Huntingdon, PA) 2013-2014
  - Student research adviser
  - Scholarship of Teaching and Learning group member
  - Member of the Ethical, legal and social implications of genomics group
  - Member of multiple intramural athletics teams (faculty team)
- Assistant Professor of Biology and Mathematics at Viterbo University (La Crosse, WI) 2014-2016
  - Student research adviser
  - Elections committee, organizing faculty elections
  - Faculty compensation working group, including running multivariate analyses to identify a comparison/reference group and then assessing our compensation in relation to that group
  - Co-captain of rec volleyball team, including a supervisory role for the league
- Data Scientist at Life-Science Innovations, (Willmar, MN) 2016 Present
  - Member of NL-S Strategic Planning Committee
  - Contributor to NL-S school projects including data analysis and website improvements
  - Working with other parents to found an elementary/preschool robotics club
  - Member of rec hockey teams

#### Value of unions

Unions serve a crucial role in society by providing a means for employees to collectively advocate for their interests. Unions are not necessary in all contexts, but I believe that they are foundational to our current model of education.

Teachers, as a general rule, enter the profession because of a passion for teaching and a desire to have a positive impact on students. This is admirable, and it means that teachers are often the best advocates for students' best interests. However, it also means that it is very hard for teachers to advocate for their own needs – they are unwilling to see students harmed by any attempt to leverage for improvements for themselves. A teachers' union provides the means to push for the changes educators need (and deserve).

At Viterbo University, we did not have a union, and that led directly to many of the problems that drove me out of higher education. Despite Federal rules limiting the ability to unionize at some private institutions, I was among a vocal group of faculty advocating to pursue unionization. Unions in education are the best tool to improve fairness and to have the frank and open conversations necessary to find the best possible balance between funding limitations and compensation for employees.

#### Informing myself about public education

I have been a part of the education system my entire life. Throughout my graduate education, I actively sought out training in pedagogy and discussed the structural issues facing our education system with anyone that was interested. At Juniata College, I was heavily involved in the Scholarship of Teaching and Learning group, and at Viterbo University, I was part of our discussions regarding the preparation of students for college. I worked closely with others in the math department to discuss the (positive) change we were expecting to see as students came through the Common Core approaches to math education.

Since leaving academia, I have read extensively to stay current on issues, particularly funding. I have sought out many opportunities to be involved with the school, including contributing to the Strategic Planning Committee and analyzing data where I am able. I have attended several school board meetings and discussed censorship issues with the administration. Since deciding to run for school board, I have spoken with several current NL-S teachers about the issues they see as most critical. I will continue to reach out to those that are the most involved in education for their insights.

## Role of faculty and staff in decision making

Teachers and support professionals are often the people with the most direct knowledge of issues and the ones most affected by the decisions that are made – they should be heavily involved with decision-making processes. The final decision making may still lie with an administrator, but only for large issues, and even then, the input of the teachers and support professionals should guide decision making, and any decision that goes against their recommendations would need to be thoroughly justified.

The role of each decision-making level is to integrate the needs of all stakeholders, which are often in conflict. In my understanding, the school board's role is to set big-picture guidance and policy. The Superintendent, in addition to helping build that policy, helps to translate the big-picture to concrete guidance for the building principals. From there, the principals put in place guidance to implement those policies. The teachers and support professionals then make almost all day-to-day decisions, with those guides in mind.

There are times when those most involved cannot see the full-scope or impact of a decision, but that does not mean that their input should be dismissed. Even if an administrator knows that making decision X will have a positive impact on students by eighth grade, ze should listen to the first-grade faculty if it will cause a negative impact at that level. In the end, the balance may favor the later benefit, but it is necessary in any decision-making process to investigate all potential impact – often known only to those most directly involved. In the end, it is incumbent upon the final decision making authority to make sure that all stakeholders are heard and that any decision that impacts them is fully explained.

## Addressing funding shortages

In my opinion, our district (and all of public education) is *currently* lacking in financial resources. Funding formulas have barely kept pace with inflation (in FY2016, the most recent year available, Census Bureau data shows that Minnesota is still just behind FY2009 per-pupil funding of 2009), and that does not account for the true increase in costs as some costs have risen rapidly (e.g., health insurance) and as the need to prepare students for new technologies requires substantial increases in costs (e.g., smart boards are more expensive than chalkboards). Add to this the increased number of students being taken out of public schools (for private or home schools) – taking their funding with them – and it is easy to see why budgeting is a perennial concern at all school districts, including NL-S.

Approaches to address this long-term shortage are different than approaches to address single-year shortages. For long-term, as a school board member, I hope to:

- Explore additional funding sources
  - One-time grants could potentially offset some capital outlays
  - In addition to traditional grants, I would like to work with area businesses to fund programs that support skill-sets important for their future employees
  - We should, in coordination with the MSBA, proactively lobby for funding increases
  - Where necessary, we should work with the community to increase funding (e.g., through levies), though this should only be used if the community supports the expenditures that we seek to add
- Identify long-term cost savings for fixed costs
  - There are several areas where the school could enjoy substantial cost savings from a push towards sustainability
  - Usage reductions (e.g., from increased insulation or from moderating HVAC settings when the building is unoccupied)
  - Some of these savings may require capital outlay, though this could be offset by some grants above (e.g., electrifying our vehicle fleet and/or installing solar)
  - There are other budget areas that could see similar reductions, and we should not be afraid to invest money now to achieve the savings (e.g., 1-to-1 computer/tablet program may be expensive up-front, but if it is paired with a move from textbooks toward usage of digital and open-source resources, it could save money long-term)
- Move as many programs as possible to revenue-neutral
  - The extracurricular programs that NL-S offers are incredible, particularly the breadth that they are able to offer a huge portion of our students participate in at least one activity, and we should be expanding (not contracting) programs to move that towards 100% participation
  - However, this breadth means that everyone thinks that *at least* one program that ze is not interested in is a waste of money (e.g., some think sports are a waste, while others think that theater should be cut)
  - To counteract this concern, we should push to make each activity as close to revenue-neutral as possible
  - For spectator events, this can include setting ticket prices to offset expenses

- This also may mean increasing participant input in the form of fees and/or fundraising
- To be clear, the district may still choose to subsidize some programs and should ensure that financial concerns are not a barrier to participation
- Campaign and recruit to reduce the number of students that our district loses annually
  - Our school loses over \$6,000 per year for each student that leaves the district
  - Open enrollment is a net-positive for our district (in 2017-2018, 127 students left our district and 313 students came to our district for a net increase of 186 students through open enrollment)
  - Students lost to home and private schools, however, are not offset by any incoming students
  - In both of these categories, convincing even one student to stay in the district could be worth tens of thousands of dollars over their time in school
  - This could be achieved through communication (helping parents understand the value our district offers) and by building programs that those students are seeking

However, the question also implies an interest in addressing an acute (and unexpected) budget shortfall. My approaches are still roughly the same, though in this case, we would likely be unable to afford capital investments no matter how helpful they would be long-term.

My first priority, as above, would be to identify and secure any additional revenue streams possible. I would exhaust every option before supporting cuts to any program that benefits students or to compensation. As above, this may include seeking out grants or local funding. Depending on the degree of the shortage, we may need to get a bit creative – could we sell naming rights to some businesses (the "Glen Oaks Auxiliary Gymnasium" has a bit of a ring to it), could we partner with local organizations to support programs directly? I would also be supportive of direct fundraising from the community. Our school provides great value to the community, and the community is incredibly supportive of (and involved with) the school. If we make a strong case, I think that we could raise funds to cover a moderate gap in our budget (though this would not be sustainable over time without formal mechanisms like a levy, which would likely take too long to address an acute shortfall).

If it became absolutely necessary after securing additional funds, I would identify the programs with the highest cost to value, and temporarily suspend them. A program that costs \$5,000 to support 10 students would be suspended before one that cost \$7,000 to support 100 students. Any program that was identified for suspension would be given the opportunity to find alternative sources of funding. In an ideal world, the district would use such a list to inform potential donors of what they are saving. If football made the list for cuts, for example, I imagine that there would be a substantial outpouring of community and alumni support.

One thing you will note has been absent from this list so far: employee compensation. I was part of such a cut, which was issued after the faculty had been promised their first raise in several years. That abrupt cut helped (along with other issues) to trigger 15% of the faculty to leave that year. While many point to teacher pay as an early option for cost savings, I understand the true cost of such abrupt cuts. The reduction in morale – and the increase in turnover – cost far more than the cuts themselves save. Teachers are already underpaid (see funding shortages above), and we should be finding ways to increase, not decrease, their

## Employee contracts and negotiation

I admit that I am more naive than I would like to be about the current structure of the employee contracts in the NL-S school district. To my understanding, from conversations with employees over the past several years, the contracts provide for an equitable division of salaries across employees. That is, most people agree that their share of the pie is fair, even if nearly everyone agrees that the pie should be larger.

Unlike other districts in the area, NL-S appears to have had quite amicable contract negotiations over the past several years. Both sides enter the discussions in good faith and with a recognition of what the budget situation allows and what the teachers deserve. When both sides agree that the compensation packages should be larger (particularly as we edge closer to a potentially catastrophic teacher shortage), the conversations can focus openly on the balance that needs to be struck between compensation and other district needs.

As a school board member, I intend to make teacher recruitment, retention, and development a key priority. This includes many facets (see *Support for teachers* below), but absolutely must include compensation considerations. We will not be able to recruit top talent, much less retain it, if we do not offer competitive wages. Our competition is not just other districts, but also alternative careers – both to draw new graduates into teaching and to keep experienced teachers from leaving the profession. This will require extensive input from (and discussion with) educators in our district and throughout the state to understand their needs.

#### Support for teachers

Teachers need to be provided with the training, equipment, and resources that they require and then to be given the freedom to do what they do best: teach.

As a distrcit, NL-S commits substantial resources to providing instructors with the physical spaces that they require to be effective in their jobs. We have invested in state-of-the-art spaces for a number of our departments (most recently, the PAC), and we need to continue to upgrade additional spaces. This also means providing the materials needed to teach in a discipline, such as smart boards and basic classroom equipment. No teacher should have to forgo a lesson because they lack access to some material that could be acquired by the school. If I am elected, I hope to streamline the process by which we identify and secure new supplies for classrooms, particularly as new pedagogical approaches emerge.

While there is a role for the school board in overseeing instructional activities, it should not be micro-managing classrooms. Censorship in any form is antithetical to my belief in academic freedom – it should only be used in cases where legal boundaries are crossed or when demonstrably false information is being provided to students (e.g., if a science teacher we to

instruct on alchemy, geocentrism, flat-earth, or some other similarly falsified pseudoscience). Beyond those cases, however, I would be loath to see the district do anything besides support teachers in their efforts to help students reach the general standards set for them.

#### Additional comments

NL-S provided me an incredibly strong foundation – I owe much of my success in life to the teachers who helped to push me to higher and higher levels of understanding. Beginning in elementary, I was constantly pushed to do more. Nearly every teacher I interacted with did everything they could to make me better. I didn't understand then how far out of their way they went to give me those opportunities, or how lucky I was to be raised in such a wonderful district. I am thankful every day for those teachers, many of whom I now count as friends. A substantial part of my drive to run for school board is to ensure that generations-to-come find the same welcoming, supportive, and generally fantastic district that I was privileged to call my own.

While nearly every teacher had a positive impact on me, a few instances stand out for their role in pushing me down the trajectory to my current career where my background in statistics and programming combines with my biology education and writing skills to help me push the envelope of understanding in the unique domain-specific contexts that I encounter weekly. In 5th grade, Mr. Gustafson and Mrs. Sawatzky pulled me out of math lessons (for topics that I already understood) and pushed me to analyze statistics for the varsity basketball team. In high school, Mr. Schmiesing pushed me to learn to program my calculator. Mrs. Schmiesing exposed me to the biology that would build the bedrock of my education, and she was always willing to discuss beyond the planned material. Ms. Duly pushed my writing to the absolute brink, never allowing "good enough", teaching me to always improve (and shorten) my writing whenever possible, and to still find time to do that under exacting deadlines. I would be remiss not to mention Mr. Kelly, who always found a way to support my efforts to push beyond the material and drew me back into an interest in science at a crucial time in my education. There are many other teachers that I did not name here that had similar impacts on me – if my life had gone a different direction, their inputs would stand out just as strongly as these memories do for their formational role in my life.

I have worked hard to build on the foundation that NL-S helped me to establish, and I am excited for the opportunity to now turn those skills to shaping and guiding NL-S through the changing world that will greet our new superintendent, school board, and future graduates. If any of you would like to speak with me please, do not hesitate to reach out. The best contact for me is email (mark.phillip.peterson@gmail.com), though it is not hard to get a hold of my cell number if you would rather talk. I would be thrilled to hear your concerns and make them my own.