

Monday, June 25, 2018

MINUTES OF THE MEETING OF THE TEACHING AND LEARNING COMMITTEE OF THE BRIDGEPORT BOARD OF EDUCATION, held June 25, 2018, at Bridgeport City Hall, 45 Lyon Terrace, Bridgeport, Connecticut.

The meeting was called to order at 3:01 p.m. Present were members Chair Ben Walker and Joseph Sokolovic. Member Maria Pereira arrived subsequently as noted.

Mr. Walker said the board approved a new science curriculum back in April and now there is a new proposal.

Angela Bhushan, director of science, said the first proposal had textbooks and online licenses. After it was approved, it was brought to her attention that the entire program was dependent on kits that accompanied the textbooks. The teachers, who were very enthusiastic about the program, said they would rather have the kits than books. She said she revisited the whole program again and received another presentation from the book company. The teachers indicated it would be in the interests of the students to have the kits added.

Ms. Bhushan demonstrated the textbooks, which she said look like workbooks. She said the proposal is now to get a class set of eight books with each kit. There will be an interactive piece where students will work on their science journals online. The interactive portion will be provided free this year. She said Next Generation Science Standards(NGSS) are all about learning from everything that you do the day before.

Ms. Bhushan said each textbook is designed with driving questions. She said the interactive piece covers all teachers and students.

Ms. Bhushan said the previous proposal was to get a whole class set of textbooks and the interactive digital component. She said teachers indicated it makes more sense to get fewer texts and add on the kits.

Mr. Walker said we're trading half of the textbooks and five years of our online service for the science kits. Ms. Bhushan said the latest price quote is that we're not paying for the interactive piece in the coming year. She said for the following year IQWST has assured us they are working with GE for a grant to continue to give the interactive digital piece for free.

Ms. Bhushan said NGSS is not about one lesson, but a phenomenon based on a driving questions. The teacher then guides the students along the lessons. A big scenario is presented and you are expected to process it and figure out the answers as you go. She said the book's author is one of the founders of NGSS.

Ms. Pereira arrived at the meeting.

Ms. Bhushan said the students will log all their information online instead of in the textbooks. Mr. Walker said it appeared the textbook is merely a guide, not a consumable.

Ms. Bhushan said the purchase of the kits is a one-time deal. She said there is one for each class; each kit has enough material for four classes or 144 students per kit.

Assistant Superintendent Deborah Santacapita said the kits can be used year to year. New supplies to do experiments must be replenished. She said it will be at the school level to order the replenishment. She said the teachers were aware of this when the tradeoff was made.

Ms. Bhushan demonstrated the contents of a 6th grade kit. She talked about the costs to replace the consumables. She said the science classrooms had materials in the classroom as well that can be used.

Ms. Bhushan said 28 kits per school would be purchased. As an example, Barnum would have one kit for Grade 6, one for Grade 7 and one for Grade 8 because there is only one science teacher in the school for Grades 7 and 8.

Mr. Walker said the total order would be 72 kits for almost \$300,000.

There was a discussion of the breakdown of the costs.

Mr. Walker said it appeared the replenishment of 8th grade kits would cost \$8,591. Ms. Pereira said it appeared the replenishment for 7th grade would be \$15,000.

Ms. Bhushan said consumables such as food coloring, aluminum foil, bath soap, and white chalk were simple, everyday items. She said she believed the teachers were okay with that. She said she provided the number to building principals and they said they were okay buying the consumables from their budgets.

Mr. Walker said if 22 kits were purchased for 7th grade, it would cost \$567.50 to replenish each kit, which would be \$12,485 per year for the whole district.

Ms. Bhushan said the whole curriculum is depending on the hands-on piece. In response to a question, Ms. Bhushan said she did not include the kits previously because the cost was prohibitive at that time. Mr. Walker said it looked kind of prohibitive now. Ms. Bhushan said the change was made because the teachers feel they can't implement the program without the kits.

Ms. Bhushan said the curriculum is no longer traditional. Ms. Pereira said the board approved the Grade 6-8 science curriculum and a large expenditure for textbooks. Ms. Bhushan said the change was based on the responses of the teachers. She said the science books are like a science journal.

Ms. Pereira said the teachers must have been at the table when the textbooks were previously chosen. Ms. Bhushan said after a second look the kits give us way more than the books. She said the interactive access makes sense because NGSS assessment is all online.

Mr. Walker said he could see cutting the textbooks and applying it to the kits, but what bothered him most was the original contract had six years of online licensing while the new one only has one. Ms. Bhushan responded that the grant is intended to cover that. Mr. Walker said grants come and go.

Mr. Sokolovic said we currently have a bird in hand to teach the kids with the online licenses and the textbooks. He said he understood the value of the hands-on.

In response to a question, Ms. Bhushan said due to expense the kits can't be obtained through the grant. She said the

interactive access would have been \$107,000 for Grade 6, \$92,000 for Grade 7, and \$92,000 for Grade 8.

Ms. Bhushan said she believed 99 percent we were getting the grant for Year 2. She said there is a built-in cushion for the next four years for the worst-case scenario. She said she has started working on an online component called PHET Simulations, which is a free online resource. She said she has matched it up with NGSS standards and online activity

Ms. Pereira said this feels very discombobulated. She said here we are the very end of the school year looking at changing the previously approved program quite a bit.

Ms. Pereira said she did not like the idea of every children not having a textbook. She said studies show children learn more effectively from handwritten materials than online.

Ms. Bhushan said she was aware of such studies, but if students start writing in the textbooks we have to get a new set every year, which was not part of the plan. She said, rather, they will be writing on the interactive piece.

Mr. Walker said the interactive access is already covered by the contract with IQWST.

In response to a question, Ms. Bhushan said the teachers were so concerned about the kits because we are all dealing with a new set of standards. She said it was a learning curve for the whole state. She noted, unlike Common Core, we have not been given any support from the state for the rollout of NGSS.

Mr. Walker said he couldn't go to the board with the figures he's seeing here. He said it appears the cost for the kits is

\$350,000 in Year 1. Each year the replenishments would cost \$50,000 if we replace each one. He said the cost would be nearly three quarters of a million dollars in six years. He said the original plan in April was for \$353,000, while the new plan is \$411,000 before the replenishment.

Mr. Walker said the new plan has five years less online access, half the number of books, and it costs more. He said if this had been proposed in April with fewer kits, perhaps by eliminating a grade, we might have been to sell this to the board. He said every time he turns around we're getting hit with another budget cut.

Mr. Walker said if he tries to add this to the agenda tonight the board members are going to look at that like he's trying to pull something over on them.

Ms. Bhushan said the deal she has proposed with the teachers is they just want a one-time purchase of the kits, and they are perfectly okay with that because the teacher editions provide them with guides through use of the kits. She said the teachers indicated that they wanted the coherence for Year 1 when they are on a learning curve for NGSS. She said in subsequent years, once they get the hang of it, they will be able to improvise, if necessary.

Ms. Bhushan said the approach was mentioned at the general administration meeting but the costs were not provided.

Ms. Pereira said this seemed very haphazard, especially at the end of the school year. She said she had a problem with every child not having a book because of the digital divide of children living in poverty and their limited access to the

Internet. Ms. Bhushan said such children could use the books from the classroom supply.

Ms. Pereira said we should try to get the kits from a grant. Ms. Bhushan said they are not willing to do that. She said IQWST told her they are working with GE for the grant on online access.

Mr. Sokolovic said Ms. Bhushan would find no stronger supporter of science than himself. He agreed there is no substitute for hands-on learning. He said he was reluctant to give up the bird in the hand of the online access. He suggested trying to get funding for the kits as a separate entity. He said perhaps there were other grants out there that could be pursued.

Ms. Bhushan said IQWST works with GE to get the grant. Ms. Pereira said we would have to see the grant and read the parameters.

Mr. Walker said had this been presented in April, he would have stood up and supported the \$700,000 proposal. He said the previous proposal was only \$350,000. He said he would support the \$350,000 for next year if we start with it in the fall and we work the other members of the board to tell them how important this is. He said he could not move forward with it tonight with the board.

Mr. Sokolovic said even though it's a poor substitute, perhaps video demonstrations could be used in place of the hands-on portion. He said he agreed it could not be sold to the board.

Ms. Bhushan said the free online PHET simulations has been aligned to NGSS standards.

Ms. Pereira said she did not understand why Ms. Bhushan did not have everything here.

Ms. Bhushan demonstrated an online simulation to the committee.

Ms. Pereira and Mr. Walker advised Ms. Bhushan to reach out to the publisher and ask for help in funding the kits. Mr. Walker said there are often tax incentives for companies like GE to help districts such as Bridgeport.

Mr. Walker said we're going to have to stay with the plan put in place in April, with the caveat that we're on Ms. Bhushan's side. He said we want the students to have the hands-on experiences. He said board meetings are often us three preaching to the choir and the choir turning their back. He said we will fail if we put this before the board tonight.

Mr. Walker said he was more convinced than ever that the hands-on kits were needed. He said this was not an indictment of Ms. Bhushan, but an indictment of the financial situation we find ourselves in. He noted there was still a deficit in the budget for next year.

Mr. Walker said after Ms. Bhushan pursues the grant, he would still go to bat for the kits.

Mr. Sokolovic suggested approaching IQWST for at least one kit for evaluative purposes, with Ms. Bhushan picking some random classrooms in 6th, 7th and 8th grade. If the metrics goes up, it will be a greater selling point to the board.

Ms. Bhushan said the teachers were resistant to only kits for one grade level. Ms. Pereira suggested an approach to Nadira Clarke to explore grants.

Mr. Walker said we're sold on the six-year online access for teachers and students and the textbook purchase.

Ms. Pereira suggested Ms. Bhushan contact the superintendent and Dr. Santacapita if a committee meeting is needed in the summer.

Mr. Walker noted what was approved by the board at the April 23rd is what the district has permission to move forward on at this particular time.

Mr. Sokolovic moved the meeting be adjourned. The motion was seconded by Ms. Pereira and unanimously approved.

The meeting was adjourned at 4:10 p.m.

Respectfully submitted,

John McLeod

Approved by the committee on June 25, 2018