

AMITY REGIONAL SCHOOL DISTRICT NO. 5

Bethany Orange Woodbridge
25 Newton Road, Woodbridge Connecticut 06525
(203) 397-4811

Dr. John J. Brady
Superintendent of Schools

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AMITY REGIONAL BOARD OF EDUCATION

February 11, 2013

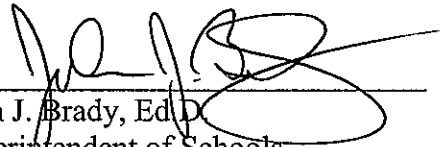
A regular meeting of the Amity Regional Board of Education will be held on Monday, February 11, 2013, at 6:30 p.m., in the Media Center at *Amity Middle School, Orange Campus, 100 Ohman Ave., Orange.

***Please note change of location**

Agenda

1. Call to Order
2. Pledge of Allegiance
3. Approval of Minutes
 - a. Regular BOE Meeting, January 14, 2013 (Enclosure)
 - b. Special BOE Meeting, February 4, 2013 (Enclosure)
4. Public Comment
5. Student Report
6. Discussion and Possible Action on 2013-2014 School Calendar (Enclosure)
7. Discussion and Possible Action on Bringing Costs Associated with Installation of an Artificial Turf Field to Referendum (Enclosure)
8. Discussion and Possible Action on Superintendent's Proposed 2013-2014 Operating Budget (Enclosure)
9. Information on Smarter Balanced Assessment Consortium (S-BAC) Test Items in Math and English/Language Arts (Enclosure)
10. Update on Long Range Planning Study
 - a. Discussion and Possible Action to Authorize the Administration to Conduct a Study at AMSB to Determine Capacity for Grade Six Programming (Enclosure)
11. Announcements from the Board and Administration
12. Correspondence

13. Superintendent's Report
 - a. Personnel Report (Enclosure)
14. Chairman's Report
 - a. Committee Reports
 1. ACES
 2. CABA
 3. Curriculum
 4. Facilities
 5. Finance
 - a. Discussion of Monthly Financial Statements
 - b. Director of Finance and Administration Approved Transfers Under \$3,000
 - c. Update on Financial Operations
 1. Information on Fourth Quarter 2012 Executive Summary Review of Amity Pension Fund, Sick and Severance Account, and OPEB Trust
 6. Policy
 7. Personnel
15. Items for the Next Agenda
16. Adjournment



John J. Brady, Ed.D.
Superintendent of Schools

JJB/kfw
pc: Town Clerks: Bethany
Orange
Woodbridge

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Working to "enable every Amity student to become a life-long learner and a literate, caring, creative and effective world citizen". District Mission statement

If you require accommodations to participate because of a disability, please contact the office of the Superintendent of Schools in advance at 397-4811.

MINUTES

AMITY BOARD MEMBERS PRESENT: Julie Altman, William Blake, Christopher Browe, Patricia Cardozo, Sue Cohen, Steven DeMaio, Rita Gedansky, James Horwitz, Thomas Hurley, James Stirling

AMITY BOARD MEMBERS ABSENT: Diane Crocco, John A. Grasso, Jr., Tracey Lane Russo

Staff Members Present: John Brady, Charles Britton, Richard Dellinger, Kathleen Fuller Cutler, Kevin Keller, Jack Levine, Marianne Lippard, Terry Lumas, Marie McPadden, Paul Mengold, Mary Raiola, Jim Saisa

Also Present: Peggy Choiniere, Thomas Falcigno, Sarah Hale, Robert Howard, Brian King, Jeff Kwolek, Bill McNeil, Matthew Miller, Jim O'Connor, Samantha Thomas, Joe Velardi, Jeffrey Walsh, others

A regular meeting of the Amity Regional Board of Education was held on Monday, January 14, 2013 at 6:30 p.m. in the cafeteria of Amity Regional High School.

1. **Call to Order:** William Blake called the meeting to order at 6:47 p.m.
2. **Pledge of Allegiance** was recited by those present.

Motion to change the order of the agenda, moving discussion of the audit from Item #17 to Item #5 (Mr. Hurley).

Vote in favor unanimous.

Motion passed.

3. **Recognition and Presentation of Awards to Amity Softball Team Players and Coaches – 2012 State Champions**

Dr. Brady said that he would like to take this opportunity tonight to congratulate the Amity Girls' Softball team. The team managed to earn the 2012 State Championship. Mr. Mengold noted that earning the State Championship was a great accomplishment. The varsity head coach has relocated to San Diego, but sent his best wishes to all of the players. Plaques were distributed. Those recognized included players: Haley Cologgi; Jillian DeMaio; Jenna DiLorenzo; Heather Ferranti; Mary Kozan; Julie Luce; Cassandra Madigan; Krista Reynolds; Heather Watt; Janaya Young; Corina Zdowski; Megan Aconfora; Tayler Baker; Dana Blydenburg; Jacqueline Ferraiolo; Emily Fox; Catherine Semones; and Stephanie Shepa. The Board recognized the dedication of coaches Bob Purcell, Sarah Hale, Loren Vorrass, and Lindsay Castano.

The Board took a two minute recess.

4. Presentation of the CABA Award of Excellence for Educational Communications

Amity received a CABA Award of Excellence for Educational Communications for its District calendar, which showcases the artwork of its students. Sheila McCreven presented the award.

Mr. Blake thanked Ms. McCreven for coming tonight to present the award.

5. Discussion on Audited Financial Statements

Robert L. Howard, Jr., Partner with Grant Thornton, offered an overview of the audit. He noted that the opinion was that this was an unqualified clean audit. There were no items of concern.

Mr. Stirling questioned whether any recommendations were made for changes in the future.

Mr. Howard said that there were not. He noted that this year's audit was performed by Grant Thornton and a somewhat different approach was taken, offering a fresh perspective. There were no issues whatsoever with journal entries.

Dr. Brady thanked Mr. Levine and Ms. Lumas, who were largely responsible for the audit.

6. Approval of Minutes

a. Regular BOE Meeting, December 10, 2012

Motion to approve the minutes as presented (Mr. Hurley, 2d Ms. Gedansky).
Vote in favor unanimous. Motion passed.

b. Special BOE Meeting, December 18, 2012

Motion to approve the minutes as presented (Mr. Hurley, 2d Ms. Cardozo).
Vote in favor: Patricia Cardozo, Steven DeMaio, Rita Gedansky, James Horwitz, Thomas Hurley, James Stirling

Vote opposed: none.

Abstain: Julie Altman, Christopher Browe, Sue Cohen

Motion passed.

7. Discussion of Consultant for Superintendent Search

Dr. Jacqueline Jacoby, CABA Senior Search Consultant, outlined the steps involved in the search for a new superintendent. The work performed last spring will be relevant to the search now underway. She noted that the Board should consider the timeline as to when a new superintendent should be in place. An appointment might be made in April effective July 1, for example. Strategic recruitment is an important piece of the process and it is important to move quickly. Interviewing will be addressed with the Board. Background checks,

transcript reviews, financial reviews and criminal background checks will all be performed.

Ms. Cohen questioned whether the contract includes assistance with the hiring of an interim superintendent until a permanent replacement is found.

Dr. Jacoby said that it does.

8. Public Comment

Joe Velardi, a Bethany resident who also serves as athletic director at Pomperaug, said that he knows firsthand the benefits of an artificial turf field, having seen one installed where he works. Cushioning and drainage are two key benefits. The field is used by multiple sports teams, including lacrosse, football, and field hockey. Most people in our community know of at least one child who would benefit from the new field. With a natural grass field, there is a lot of wear and tear and use is diminished. It puts athletes at a disadvantage to practice only on grass and compete on turf.

Sarah Hale, a field hockey coach at Amity, said she strongly supports the artificial turf field project. Practicing on a grass field and then playing games on artificial turf is difficult. Colleges play on turf.

Jim O'Connor, an elementary school principal and also a coach for youth sports, said that most towns have an artificial turf field now. With the current setup, Amity is limited because the fields at the High School can't be used for youth sports.

Matthew Miller, captain of the lacrosse team, said that he has seen a lot of injuries on the grass field. There are often divots in the fields and puddles in goals for days. He said that the team has had to be bussed to other towns to use fields elsewhere. The quality of the games has been better elsewhere.

James Semanella, captain of the football team, said that statistically there are more knee injuries on grass fields. Conditions at the field at the High School have been a problem. The team is sometimes unable to play and games have had to be cancelled. When several games take place close together, it isn't good for the safety of the players.

Parent Bill McNeil said that he has been very active in youth sports. There are up to 200 children in the girls' lacrosse program. When the team uses the practice field after football, the field is full of dirt and mud. The impact of this new field will be tremendous.

Peggy Choiniere of Bethany said that she takes pride in the Amity School District and has four sons who have participated in sports at Amity. The artificial turf field is something that has been talked about for many years. She had hoped that

this field would have been a reality, but her children are almost all out of high school. Parents are frustrated with Amity and it is time to make this new field a reality.

Brian King of Orange, a coach, said that without an artificial turf field, Amity is at a disadvantage. There are more injuries. He agrees with the points made by earlier speakers.

Jeff Kwolek said that it is time to make Amity premier in all areas.

Discussion:

Ms. Cardozo asked how much money has been raised thus far.

Mr. Kwolek said that two thousand dollars has been raised.

Dr. Brady said that the Facilities Committee has expressed support for moving this topic to the full Board. The administration isn't seeking action tonight. This item has been in the Capital Five-Year Forecast for a large number of years and was removed. Fundraising only produced \$2,000. Bonding is an option and financial details will be available at a later date. With the current low interest rates, now might be a good time to consider this option.

9. Discussion and Possible Action on Appointment of Superintendent Search Consultant

Motion to amend the agenda to include the appointment of the full Board as the Superintendent Search Committee (Ms. Cohen, 2d Mr. Browe).

Vote in favor unanimous.

Motion passed.

Motion to appoint the entire Board as the Superintendent Search Committee (Mr. Hurley, 2d Ms. Cohen).

Vote in favor unanimous.

Motion passed.

Motion to enlist the services of CAFE for a Regional Search for the Superintendent of Schools (Ms. Cardozo, 2d Mr. Browe).

Motion to amend the motion by Ms. Cardozo to include a cost of up to \$9,000 for the search (Mr. Hurley, Mr. Browe).

Vote in favor unanimous.

Motion passed.

10. Student Report

Thomas said that a clothing drive is going on now to benefit battered women. Boxes are located in the front hallway of the High School. The clothing drive runs until January 25th. He noted that students can still order yearbooks. Yearbook ads can also be placed through a yearbook sales representative. The end of the second quarter is approaching and midterms will take place at the end of January. The Link Crew is organizing an event to help freshmen study for exams. The annual winter concert at the High School was dedicated to the Newtown community. Tulips were sold honoring those that died. Efforts are

underway to have a green and white day. Another fundraiser involved the sale of “Amity Rally” towels. More than \$500 was raised selling these towels. Amity students raised \$1,500 in just one week. Thomas concluded by saying that he supports the artificial turf field proposed for the High School.

11. Information on Artificial Turf Field, Including Payment Option

Dr. Britton and Mr. Mengold provided a presentation about the artificial turf field. The mud bowl that took place on Thanksgiving weekend highlighted the problem with the football field. Use of the field could triple with artificial turf. The physical education program could be enhanced. Artificial turf fields have improved since the fields were last renovated in 1999. Amity has since added nine additional outdoor sports. We would like to improve the program, but we’re landlocked. A sample schedule was provided in the presentation. Research shows fewer injuries have been reported with artificial turf compared with grass. With improved technology, these fields can last longer than they did previously.

Discussion:

Mr. Hurley questioned what the numbers presented tonight include.

Mr. Mengold said that the numbers include everything.

Mr. Browe noted that he has heard of bacteria being trapped in these surfaces and questioned whether the field would be a problem for those with latex allergies.

Dr. Brady said that concerns about safety have been examined. The governor of New York had put a moratorium on these and former Connecticut Attorney General Blumenthal also looked into the safety of artificial turf fields. The moratorium was lifted and health concerns were not proven. Concerns at the time also had to do with decomposing rubber and the gases emitted.

Mr. Horwitz said that in looking at the mock schedule, he is concerned about gender equity. It appears that boys would be using the field 63 percent of the time, versus 37 percent for girls. The percentages concern him, although he generally supports the new field. He realizes this schedule was put together quickly, but questioned whether the goal is to have 50/50 access for both boys and girls.

Mr. Mengold said that it is. This has never been a problem in his 30 years as athletic director.

Mr. Stirling questioned whether there is any more space for a grass field.

Mr. Mengold said that there is not.

Mr. Levine discussed the cost of the field. The District could secure a 20-year bond. The field would last about 20 years with maintenance. The costs were considered while projecting an average of one percent growth in the Grand List. Costs for the three towns were based on the average home value and came out to \$4.48 per year for a homeowner in Bethany, \$3.93 per year for a homeowner in Orange and \$4.07 per year for a homeowner in Woodbridge. Mr. Levine noted that even if the one percent increase in Grand List growth didn't work out, the numbers don't change much.

Mr. Browe asked if the District could bond for 10 years, rather than 20.

Mr. Levine said that we could, but 20 years makes more sense financially speaking.

Mr. Horwitz asked about the tax impact of the maintenance and whether it would amount to anything significant for taxpayers.

Mr. Levine said that the maintenance cost would be very minimal in the breakdown.

Mr. DeMaio questioned whether this would affect bonding for other projects that the towns have going on.

Mr. Levine said that this would not have a negative impact on other projects in the towns. Dr. Brady said that this does not come close to the credit limit.

Ms. Altman questioned whether the small amount of fundraising dollars raised is indicative of the support for the bond. With the commitment of the Board, the project might be viewed differently by donors.

Mr. Mengold said that potential donors wouldn't get behind the project because they did not see commitment from the Board. He believes that there is support in the community for this.

Mr. Blake noted that this topic will come up next month.

12. Second Reading – Policy 4117.4 Technical Amendment to Non-Renewal/Suspension Policy

Motion to accept technical amendment to Non-Renewal/Suspension Policy (Mr. Hurley, 2d Mr. Stirling).

Vote in favor unanimous.

Motion passed.

13. Discussion of Hall of Honor

The question was raised as to why the application for the Hall of Honor isn't on the District's website. Dr. Brady said that when he came to Amity, he noticed

that there was an athletic Hall of Fame, but academic awards weren't visible. Now, banners pertaining to athletics are in the gymnasium and the trophy cases showcase academic awards. An academic wall of honor was established and maintained. Dr. Brady said that with the retirement of Sheila Wycinowski and significant work being done in other areas, there isn't time to pursue the Hall of Honor right now. Two members of the Board offered to take this on. He feels that this is administrative work and he feels it isn't appropriate to involve the Board.

Mr. Blake said that he agrees with Dr. Brady. Board members aren't supposed to be doing the work at the schools, but are here to set policy. He welcomed comments from other Board members.

Mr. Browe referred to the mission statement and said that he feels it is important to keep the Hall of Honor going. He said if the Hall of Honor is abandoned, it says that it's not that important. Perhaps another group could take this up, such as the PTA.

Ms. Cohen asked what the process is for determining who to honor.

Dr. Brady said that a committee of staff and volunteers work on this. Nominations are solicited. Usually, there are 12 to 15 people nominated. He agrees with Mr. Browe and the accomplishments are always very impressive. Although the administration is committed to this, with all the new requirements we are dealing with, there is the need to free up some time.

Mr. Hurley said that he is concerned because with Dr. Brady's retirement, the strongest supporter of the program won't be here. Ms. Wycinowski was very involved and she is now retired. Ms. McPadden has a lot to deal with in a new position and managing all the new state requirements.

14. Report on NEASC Five Year Progress Report

Dr. Brady said that the report on the work done since the last NEASC visit is available. An executive summary will be given. Mr. Hurley said that he would like to see the 40-page report.

Dr. Britton said that the District is required to submit a five-year report. Much work has been done. Areas of concentration included more time for faculty and promoting the least restrictive environment for students. Consistent formatting of paper documents was another area that the administration addressed. Adjustments have been made in the area of leveling. There are no more level four classes at the High School. Levels two and three are being combined.

Dr. Brady noted that all core courses at the middle schools haven't been eliminated.

Mr. Blake asked if the report could be put on the website. Dr. Brady said that it can.

Mr. Stirling questioned whether the trend in education is to eliminate levels. Dr. Britton said that it is.

Dr. Brady said that high academic standards are needed for students, whatever level they're in. The Common Core is going to help with that.

15. Announcements from the Board and Administration

The Board acknowledged the recent passing of Jill Ferraiolo. Ms. Ferraiolo helped the District get the building project together and passed. Her help was invaluable and made a tremendous impact.

16. Correspondence

a. Letters from QVHD Regarding 2012-2013 Annual Inspection of Amity Regional High School and Amity Middle School, Bethany Campus

Dr. Brady mentioned some of the positive comments about Amity outlined in a letter from the Quinnipiac Valley Health District. Dr. Brady said that the facilities in the District will continue to be maintained to keep them in pristine condition.

Ms. Cohen questioned whether Orange was also inspected. Dr. Brady said that it was, but not by the Quinnipiac Valley Health District.

Mr. Hurley said that he was pleased to see the letter from the health district.

Other recent correspondence was also noted, including a letter that Mr. Hurley received about reading.

Mr. Stirling said that Amity was recognized by the Governor for the efficiencies taken on by the District in order to save money.

17. Superintendent's Report

a. **Personnel Report**

Dr. Brady noted one retirement that did not appear on the report.

18. Chairman's Report

a. Committee Reports

1. ACES – Dr. Brady noted that discussions are taking place to determine which rubric to use to rate teachers. There is a movement underway to extend the period of time during which teachers can be evaluated. Some districts are opposed to the new model. Classroom observations can be done by exemplary teachers.

2. CAFE – Mr. Stirling had no new information to report.
3. Curriculum – Ms. Altman noted that a meeting took place last month. Amity has two darkrooms and will keep one to be used for a unit on film developing. The other darkroom will be used for other purposes.
4. Facilities – Ms. Cardozo noted that a meeting took place last month. The artificial turf field was discussed, as was the Capital Budget. Dr. Brady added that the topic of setting aside money for large capital projects was addressed. Mr. Hurley asked if anything special is being done to prevent flu. There has been a lot of talk in the media about the large number of cases of flu this season. Dr. Brady said that all systems are in place. There has been no additional disinfecting being done beyond what is already performed routinely.
5. Finance
 - a. Discussion and Possible Action on Audited Financial Statements
 1. Review of Audited Financial Statements by Auditors
The review was discussed under Item #5.
 2. Discussion and Possible Action to Accept Annual Financial Report
Motion to accept the Annual Financial Report (Mr. Hurley, 2d Mr. DeMaio).
Vote in favor unanimous. Motion passed.
 3. Discussion and Possible Action to Return Funds to Member Towns
Move to authorize the Superintendent of Schools to return the balance of \$329,571 from the fiscal year ended June 30, 2012, to the Member Towns, as follows: Town of Bethany - \$67,513; Town of Orange - \$159,542; Town of Woodbridge - \$102,516 (Mr. Hurley, 2d Mr. Browe).
Vote in favor unanimous. Motion passed.
 - b. Discussion and Possible Action on Award of Contract of \$35,000 or More
 4. Mr. Levine said that the contract with Xerox would save \$15,000 a year for product and service. A two-year contract was signed and he would like the Board to consider a five-year deal. He noted that he believes it would be worthwhile to lock in the price. If the price changes Amity can get out of the contract. The Finance Committee supported this request.
Move to authorize the Director of Finance and Administration to extend the Xerox contract for toner, maintenance kits and fusers, as well as service, for the District's printers, up to five years, at the contracted price (Mr. Browe, 2d Mr. Horwitz).
Discussion: Mr. Hurley noted that the cost of color would likely go down. Mr. Levine said that there is an out clause.
Vote in favor unanimous. Motion passed.
 - c. Update on Preliminary Superintendent's Proposed 2013-2014 Budget Development

Dr. Brady said that the preliminary budget calendar will be going out tomorrow. A number of factors are driving the budget increase, particularly state mandates. There are also requests for technology items that are needed. There are no significant cost savings initiatives that can be pursued at this point.

A 3.87 percent increase is projected. Dr. Brady noted that the District will be facing a difficult year. It is hard to consider asking the public to support a turf field, but only time will tell whether that plan can become a reality.

Mr. Stirling said that the Finance Committee has asked Dr. Brady to once again look at staffing levels as a means for achieving savings.

Mr. Blake agreed with Mr. Stirling. Now that the High School is in its second year with the 8 Period Schedule, it would make sense to ensure that the staffing levels are optimal.

Dr. Brady said that the administration always carefully considers staffing.

Mr. Hurley said that with such a significant increase, the public will ask about staffing, so it is necessary to look at staffing once again.

Dr. Brady noted that members of the Board have expressed interest in two items that were removed from the budget as cost savings measures. One item was a graduate study that would cost \$15,000. The other item that was cut from the budget was a virtualization server, which cost \$120,000.

Mr. Hurley said that he supports the purchase of the virtualization server. He noted that the new server is where technology is today. A new piece of physical hardware isn't needed with this new technology. There would be energy savings as well. There is less to track and fewer security issues. He has brought this topic up for three years now.

Ms. Altman said that she would like to put this item aside.

Mr. Hurley said that delaying this purchase is like kicking a can down the road.

Ms. Cardozo said that the \$15,000 for the graduate study seems like a nominal cost for information that would be useful for future planning.

Mr. DeMaio said that questioning recent graduates about their experience at Amity makes sense to him. It would help the administration and Board determine if everything is being done to prepare students to be successful upon graduation.

Dr. Brady said that perhaps there might be money leftover at the end of the year that could be used for this purpose.

d. Discussion of Monthly Financial Statements

There were no questions.

e. Director of Finance and Administration Approved Transfers Under \$3,000

There was no discussion.

f. Discussion and Possible Action on New Funding Requests

This new funding request is summarized in a memo from Mr. Levine to Dr. Brady, dated December 20, 2012.

Move to make the following budget transfer of \$64,561 to pay Pearson School Systems of Rancho Cordova, CA, for PowerSchool software and related support services (Mr. DeMaio, 2d Mr. Hurley):

| <u>Account Number</u> | <u>Account Name</u> | <u>From</u> | <u>To</u> |
|-----------------------|---------------------|-------------|-----------|
| 05-15-0000-5850 | Contingency Account | \$64,561 | |
| 05-14-2350-5690 | Other Supplies | | \$64,561 |

Vote in favor unanimous.

Motion passed.

Move to make the following budget transfer of \$15,000 to pay West Haven Public Schools as a donation toward a Zamboni for Bennett Rink. In return, Amity's ice rental fee would remain at \$374 per hour for the fiscal year 2013-2014. Also, the \$15,000 donation will be credited towards ice rental time in 2013-2014 (Mr. Hurley, 2d Mr. Browe):

| <u>Account Number</u> | <u>Account Name</u> | <u>From</u> | <u>To</u> |
|-----------------------|----------------------------|-------------|-----------|
| 05-15-0000-5850 | Contingency Account | \$15,000 | |
| 03-11-3202-5440 | Rentals-Land, Bldg, Equip. | | \$15,000 |

Vote in favor unanimous.

Motion passed.

g. Update on Financial Operations

1. Information on 2013-2014 Budget Calendar

Some modifications to the budget calendar were made.

6. Policy – This was discussed under Item #12.

7. Personnel – There was no discussion.

19. Executive Session – Security Issues

Motion to enter into Executive Session at 9:41 p.m. (Ms. Gedansky, 2d Ms. Cohen).

Vote in favor unanimous.

Motion passed.

The Board came out of Executive Session at 10:10 p.m.

20. Items for the Next Agenda

No new items were added.

21. Adjournment

Motion to adjourn the meeting at 10:10 p.m. (Ms. Cohen, 2d Mr. Hurley).

Vote in favor unanimous.

Motion passed; meeting adjourned.

Respectfully submitted,

Marianne Lippard, recording clerk
Rita Gedansky, secretary

References/Attachments:

Minutes:

Regular BOE Meeting, December 10, 2012
Special BOE Meeting, December 18, 2012

Reports:

Amity Regional School District No. 5 FY June 30, 2012 Audit Results, Federal and
Single Audit Reports
Amity Regional School District No. 5 Year-to-Date Budget Report, 12/31/12
Amity Regional School District No. 5 Revenues and Expenditures for FY 2012-2013

Memos:

John J. Brady to Amity Board of Education (12/14/12) re: Award of Contract of \$35,000
or More
Jacqueline Jacoby to William Blake (December 2012) re: CAFE Proposal for a Regional
Search for the Superintendent of Schools
Jack B. Levine to John J. Brady (12/28/12) re: 2013-2014 Budget Calendar
Jack B. Levine to John J. Brady (12/20/12) re: New Funding Requests for FY 2012-2013
Jack B. Levine to John J. Brady (12/28/12) re: Return Funds to Member Towns
John J. Brady to Amity Finance Committee and Amity Board of Education (1/8/13)
re: Update on Preliminary Superintendent's Proposed 2013-2014 Budget

MINUTES

AMITY BOARD MEMBERS PRESENT: Julie Altman, William Blake, Christopher Browe, Patricia Cardozo, Sue Cohen, Diane Crocco, Steven DeMaio, Rita Gedansky, John Grasso, Jr., James Horwitz, Thomas Hurley, Tracey Lane Russo, James Stirling

AMITY BOARD MEMBERS ABSENT: none.

Staff Members Present: John Brady, Charles Britton, Kathleen Fuller Cutler, Thomas Falcigno, Kevin Keller, Jack Levine, Marianne Lippard, Terry Lumas, Marie McPadden, Rocco Palmieri, Mary Raiola, Jim Saisa

A special meeting of the Amity Regional Board of Education was held on Monday, February 4, 2013 at 6:30 p.m. in the cafeteria of Amity Regional High School.

1. **Call to Order:** William Blake called the meeting to order at 6:30 p.m.
2. **Pledge of Allegiance** was recited by those present.
3. **Presentation of the Superintendent's Proposed 2013-2014 Budget**
Dr. Brady began his presentation by pointing to a picture representing a school spirit campaign undertaken at Amity that showcased the diverse student body that the District serves. He noted that it is important when considering the budget that everyone remains fully aware of the population served at Amity. In order to continue to meet the needs of the students, it is important to continually strive to enhance the educational experience offered in the District.

Dr. Brady noted that the administration has pursued numerous savings and efficiencies that have saved the District a significant amount of money. Unfortunately, he noted that the District has exhausted most of the non-educational savings that are available. He noted that he will be meeting with the Orange Board of Finance at 1:45 p.m. on Friday, February 8th to discuss the budget again.

The Superintendent announced that Amity High School was rated #4 of 191 high schools in the state and the Amity district was recently rated #5 out of 165 districts in the State, and yet, this year the District is facing state mandates that it hasn't faced. Tonight he will offer details of a preliminary budget with modest enhancements. The administration feels that this is a reasonable budget.

He noted that the return on an investment in education is considerable. Realtors are often asked if properties are in the Amity district. Most recently, Amity sophomores outperformed all others in the DRG (District Reference Group) at the

advanced level of the CAPT (Connecticut Academic Performance Test). AP results had Amity ranked #5 in the State for 2012 and #2 in the DRG despite a 22 percent increase in test participation. He noted that this achievement is worth noting because there were concerns that with more students taking these tests, the scores would go down, but instead Amity saw scores increase.

A look at CMT results shows strong patterns of growth. Dr. Brady noted that in middle schools it is not uncommon to see a dip in the performance on the CMT, but this isn't the case at Amity.

Dr. Brady noted that the District continues to focus on the success of all students. Amity students scored well on the Comprehensive Technical Education Assessment, including #1 in the State in Computer Information Systems and in Video Production.

Over 95 percent of the Class of 2012 took the SAT exam, scoring well above the State average. Twelve students were accepted to Ivy League institutions; 226 were accepted to the Most Selective institutions; and 360 were accepted to Highly Competitive institutions ranked by Barron's College Guide. There is an expectation that Amity graduates will go on to four-year colleges, mostly private, out-of-state colleges.

Dr. Brady added that Amity students also have an impressive list of accomplishments in the arts, including a variety of awards in painting, ceramics, photography, music, and theater. An Amity senior received recognition as Best Female Lead in the State for her performance in Legally Blonde. Unified Theater has also been started at Amity.

In athletics, strong performances were seen in many sports. The Girls' Softball team from 2012 managed to become C.I.A.C. State Champions. Boys' Cross Country, Girls' Swimming & Diving, Boys' Track & Field, Baseball, Boys' Tennis, Boys' Indoor Track and Field, Golf, and others achieved recognition.

Amity was recognized by Connecticut Magazine as one of the most highly efficient school districts in the State. The District has managed to save a substantial amount of money by pursuing energy savings and other avenues to direct money toward educating students. Dr. Brady noted that each year, the administration has been successful in finding areas to cut spending. Dr. Brady noted that Amity's efforts to achieve efficiencies got the attention of Governor Malloy, who recognized the District for converting the High School from fuel oil to natural gas. Air quality is a high priority in the District and United Illuminating even nominated the District for an award.

Dr. Brady said that there are a number of factors are driving the budget. Surpluses have helped in past years, but this year, a significant surplus isn't predicted. A school construction grant is running out. There is a reduction

related to a special education grant. This year, teachers got no salary increase, but next year they are due to get a step increase. Medical and dental insurance is budgeted to increase by approximately \$403,000. Underfunded and unfunded State and Federal mandates will impact the budget by over \$250,000.

The budget includes a request to fund a Varsity Girls' Ice Hockey team at a cost of \$55,543. Amity has been on a cooperative team, but there are now 21 girls who would like to play the sport. According to the by-laws of the Southern Connecticut Conference, any member of a cooperative team (Amity-Cheshire-North Haven Girls' Hockey) that has an individual school representative of 15 or more student athletes must leave the cooperative program and play as a single member school. This would also align the District with Title IX legislation. The District could choose to eliminate Boys' Ice Hockey, but Dr. Brady said that he recommends adding Girls' Ice Hockey.

Other factors affecting the budget include alignment with the Common Core, technology improvements, and adding a digital lab at the High School. Dr. Brady noted that the Facilities Committee supported a number of requests by Facilities Director Jim Saisa. STEM program materials, World Language offerings, increased security guard hours, new courses and Plan testing account for \$97,000 in program enhancements.

Twelve teachers will be trained over the summer on how to weave the Common Core Standards into their teaching approach. Students must be ready for performance-based tests coming in 2015 that are very different than what they are accustomed to. There are special education requirements that must be funded.

New text books are needed that are aligned with the Common Core Standards. The Superintendent noted that the preliminary budget includes replacement computers for aging technology, repairs to dozens of lockers that don't close, and a digital media area for the High School. Program enhancements are planned in robotics and language. New courses in Physics and Engineering and Oceanography are planned. The budget also includes funds that would be used to administer the Plan test. A full-time security guard is also included in the budget.

The preliminary budget calls for an increase of 2.64 percent. Staff reductions of 3.2 faculty positions were included to come to that figure. He noted that the District runs an efficient operation, with per pupil expenditures for education costs only being less than the three towns as well as the State average.

Enrollment is shown on page 28 of the presentation. Dr. Brady noted that, statewide, Boards of Education tend to add to superintendents' requested budgets. A budget summary appears on page 31 of the presentation.

Dr. Brady said that Amity also has eight tuition students and is a relative bargain compared to private schools. The administrator to pupil ratio is the second lowest in the State.

Dr. Brady pointed out that this preliminary budget presentation can be accessed on-line.

Questions:

Mr. Hurley said that many Board members have seen much of this information already and some committees have met previously to discuss some of these budget requests.

Ms. Cohen said that she has concerns about staff reductions as they would affect class sizes.

Mr. Browe questioned what the average class size is.

Dr. Brady said that most classes are currently in the low 20s, but the District can put up to 28 students in a class. Classes can have as few as 11 students. Certain classes have limitations that restrict the number of students, such as culinary studies.

Mr. Stirling asked for more detail on the technology requests. He asked if some of this could be delayed.

Dr. Brady noted that replacement equipment would cost approximately \$185,000. Server virtualization is being put off at this point.

Mr. Stirling questioned whether the administration has a sense of where the ECS grants are going.

Dr. Brady said that the administration does not.

Mr. Stirling said that if the ECS grant decreases, there will be greater financial pressure.

Mr. DeMaio questioned whether this budget will work well for a new superintendent coming into the District.

Dr. Brady said that all administrative staff helped with this process. A new superintendent might look at this differently, but should not encounter any problems with this budget. There is flexibility. As far as the long-range planning study goes, he recommended the Board hold off until the new superintendent is hired. Ms. Raiola works very closely with the elementary schools in planning ahead.

Mr. Blake said that this budget doesn't anticipate an artificial field being approved. He noted that there are funds included for maintenance of the grass field.

Dr. Brady said that even if approved, the field won't be ready for the next fall season.

Mr. Stirling questioned the impact of hiring certified staff to fill retirement vacancies.

Dr. Brady said that there would be negative effects, such as increases in class size.

Mr. Horwitz said that he has concerns about faculty reductions. The quality of the faculty at Amity has allowed the District to excel. Last year's budget was very low compared with inflation. We need to be investing in our faculty and programs.

Mr. Hurley said that he would commend the administration for looking at staffing numbers. This appears to be a very appropriate number. He believes not replacing six retirements might be overdoing it. He feels that the reductions in this budget will not significantly impact education.

Ms. Russo said that she could not determine whether faculty cuts would be appropriate as it isn't clear where the cuts will be made. Once you eliminate a teaching position, it is hard to get back.

Ms. Altman said that she would also like some data on student/faculty ratios. Some AP classes are large.

Dr. Brady said that he will bring more information to the next meeting to examine the impact of these reductions.

Dr. Brady said that there is some evidence that disadvantaged learners benefit when class sizes are smaller. Students can do quite well in classes of 26, 27 and 28 students.

Ms. Altman questioned why the STEM Coordinator position was removed.

Dr. Brady said that there was no guarantee that the person would have the science background that is required. The committee supports complementary evaluators, which will broaden the number of instructional leaders.

A memo dated February 4, 2013 from Dr. Brady to the Amity Finance Committee and Amity Board of Education details revisions made to arrive at the current

budget proposal. Reading Content Leaders were also removed. Dr. Brady said that implementing the Common Core State Standards can be accomplished without these expenditures. A Software Implementation Specialist was also removed. Dr. Brady said that he would support putting the IT position back in the budget.

Ms. Cardozo said that the Software Implementation Specialist position would be very useful.

Dr. Brady said that when developing this budget, it was very concerned with coming up with a budget that would pass. The Orange taxpayers didn't pass a budget with a .47 percent increase.

Mr. Browe questioned why the baseball netting for foul balls was removed.

Dr. Brady said that it was simply a matter of priorities.

Mr. Browe said that there is a facilities improvement needed in the area of Girls' Softball that should be looked at.

Mr. Saisa said that he is aware of the problem that Mr. Browe is referring to and has an idea on how to address this need.

4. Public Comment

No members of the public addressed the Board.

5. Adjourn

Motion to adjourn the meeting at 8:55 p.m. (Mr. Hurley, 2d Mr. DeMaio).

Vote in favor unanimous.

Motion passed; meeting adjourned.

Respectfully submitted,

Marianne Lippard, recording clerk
Rita Gedansky, secretary

Amity Regional School District No. 5

2013-2014 School Calendar - VERSION 2

DRAFT - 12-14-2012

| AUGUST/SEPTEMBER 19 Days | | | | |
|--------------------------|-----|-----|-----|-----|
| Mon | Tue | Wed | Thu | Fri |
| 26 | 27 | 28 | X | Y |
| A | 3 | 4 | B | 6 |
| 9 | 10 | 11 | 12 | 13 |
| 16 | 17 | 18 | 19 | 20 |
| 23 | 24 | 25 | 26 | 27 |
| 30 | | | | |

| OCTOBER 22 Days | | | | |
|-----------------|-----|-----|-----|-----|
| Mon | Tue | Wed | Thu | Fri |
| | 1 | 2 | 3 | 4 |
| 7 | 8 | 9 | 10 | 11 |
| C | 15 | 16 | 17 | 18 |
| 21 | 22 | 23 | 24 | 25 |
| 28 | 29 | 30 | 31 | |

| NOVEMBER 19 Days | | | | |
|------------------|-----|-----|-----|-----|
| Mon | Tue | Wed | Thu | Fri |
| | | | | 1 |
| 4 | 5 | -6- | 7 | 8 |
| 11 | 12 | 13 | 14 | 15 |
| 18 | 19 | 20 | 21 | 22 |
| 25 | 26 | 27/ | D | D |

| DECEMBER 15 Days | | | | |
|------------------|-----|-----|-----|-----|
| Mon | Tue | Wed | Thu | Fri |
| 2 | 3 | 4 | 5 | 6 |
| 9 | 10 | 11 | 12 | 13 |
| 16 | 17 | 18 | 19 | 20/ |
| E | E | E | E | E |
| E | E | | | |

| JANUARY 21 Days | | | | |
|-----------------|-----|-----|------|-----|
| Mon | Tue | Wed | Thu | Fri |
| | | F | 2 | 3 |
| 6 | 7 | 8 | 9 | 10 |
| 13 | 14 | 15 | 16 | 17 |
| G | 21 | 22 | -23- | 24 |
| 27 | 28 | 29 | 30 | 31 |

| FEBRUARY 18 Days | | | | |
|------------------|-----|-----|-----|-----|
| Mon | Tue | Wed | Thu | Fri |
| 3 | 4 | 5 | 6 | 7 |
| 10 | 11 | 12 | 13 | 14 |
| H | I | 19 | 20 | 21 |
| 24 | 25 | 26 | 27 | 28 |
| | | | | |

| MARCH 20 Days | | | | |
|---------------|-----|-----|-----|-----|
| Mon | Tue | Wed | Thu | Fri |
| 3 | 4 | 5 | 6 | 7 |
| 10 | 11 | 12 | 13 | 14 |
| 17 | 18 | 19 | 20 | X |
| 24 | 25 | 26 | 27 | 28 |
| 31 | | | | |

| APRIL 17 Days | | | | |
|---------------|-----|-----|-----|-----|
| Mon | Tue | Wed | Thu | Fri |
| | 1 | 2 | 3 | -4- |
| 7 | 8 | 9 | 10 | 11 |
| J | J | J | J | K |
| 21 | 22 | 23 | 24 | 25 |
| 28 | 29 | 30 | | |

| MAY 21 Days | | | | |
|-------------|-----|-----|-----|-----|
| Mon | Tue | Wed | Thu | Fri |
| | | | 1 | 2 |
| 5 | 6 | 7 | 8 | 9 |
| 12 | 13 | 14 | 15 | 16 |
| 19 | 20 | 21 | 22 | 23 |
| L | 27 | 28 | 29 | 30 |

| JUNE 10 Days | | | | |
|--------------|-----|-----|-----|-----|
| Mon | Tue | Wed | Thu | Fri |
| 2 | 3 | 4 | 5 | 6 |
| 9 | 10 | 11 | 12 | 13 |
| SD | SD | SD | SD | SD |
| 23 | 24 | 25 | 26 | 27 |
| 30 | | | | |

| | | |
|------------------|--|--------------------------|
| X August 28 | Teacher Only | No School |
| Y August 30 | Full Day Staff Development | No School/Teachers Only |
| A September 2 | Labor Day | No School/Offices Closed |
| September 3 | Orientation 7 th & 9 th Grades | 7:34 a.m. – 9:30 a.m. |
| | Opening Day-All Students | 9:30 a.m. – 2:18 p.m. |
| B September 5 | Rosh Hashanah | No School/Offices Closed |
| September 11 | Back to School Night 9 & 12 | High School |
| September 12 | Back to School Night | Middle Schools |
| September 18 | Back to School Night 10 & 11 | High School |
| October 4 | Mid Marking Period | Middle & High Schools |
| C October 14 | Columbus Day | No School/Offices Closed |
| November -6- | End of Marking Period | |
| November 15 | Report Cards Issued | Middle & High Schools |
| November 19 | Parent Conferences | Middle Schools |
| November 20 | Parent Conferences | High School |
| November 26 | Parent Conferences | Middle Schools |
| / November 27 | Minimum Day | Dismissal 12:14 p.m. |
| D November 28-29 | Thanksgiving Recess | No School/Offices Closed |
| December 3 | Parent Confs. – Min. Day- MS Only | Middle Schools |
| December 4 | Parent Conferences | High School |
| December 11 | Mid Marking Period | |
| / December 20 | Minimum Day | Dismissal 12:14 p.m. |
| E December 23-31 | Holiday Recess | No School |
| F January 1 | New Year's Day | No School/Offices Closed |
| January 2 | School Resumes | |
| G January 20 | Martin Luther King, Jr. Day | No School/Offices Closed |
| January -23- | End of Marking Period | |
| January 29 | Report Cards Issued | Middle & High Schools |
| February 4 | Parent Conferences | Middle Schools |
| February 5 | Parent Conferences | High Schools |
| February 12 | Parent Conferences | Middle Schools |
| H February 17 | Presidents' Day | No School/Offices Closed |
| I February 18 | Winter Recess | No School |
| March 3 | Mid Marking Period | |
| X March 21 | Full Day Staff Development | No School/Teachers Only |
| April -4- | End of Marking Period | High School |
| April 11 | Report Cards Issued | Middle & High Schools |
| J April 14-17 | Spring Recess | No School |
| K April 18 | Good Friday | No School/Offices Closed |
| May 13 | Mid Marking Period | |
| L May 26 | Memorial Day | No School/Offices Closed |
| June 13 | Last Day of School (formal) | Student Days 182 |
| June 16-20 | Snow Days (SD) | Teacher Days 185 |

Amity Regional School District No. 5
District Offices (203) 397-4811
Amity Regional High School (203) 397-4830

Amity Regional Middle School
Bethany Campus (203) 393-3102
Orange Campus (203) 392-3200

CMT/CAPT Testing Window -

BOE Approved _____

**If emergency closings exceed 5, then any additional days will be taken from April vacation.*



AMITY REGIONAL SCHOOL DISTRICT NO. 5

BETHANY * ORANGE * WOODBRIDGE

John J. Brady, Ed.D.
Superintendent of Schools

25 Newton Road
Woodbridge, CT 06525
john.brady@reg5.k12.ct.us
Phone: (203) 392-2106
Fax: (203) 397-4864

To: Amity Finance Committee and Amity Board of Education Members

From: Dr. John J. Brady, Superintendent of Schools

Re: Artificial Turf Field

Date: February 1, 2013

Last month, Dr. Britton, Paul Mengold and Jack Levine presented an overview of the advantages and cost impact for an artificial turf field at Amity High School. In summary, the key advantages are 1) a synthetic turf field can be used constantly rain or shine; 2) conservative estimates indicate that usage will triple; and 3) the main game and practice fields are worn from overuse. You were also informed about a five-year study of eight high school teams playing on in-filled synthetic surfaces and natural grass surfaces. The conclusion was the types of injuries suffered on artificial turf were less severe with a quicker recovery time than injuries suffered on natural grass.

The preliminary estimated cost is \$900,000 including the cost of issuance. Our investment advisor recommends a twenty-year bond. The annual maintenance cost for a synthetic turf field is \$32,650 (including setting aside \$30,000 each year for the replacement of the surface in 10 to 12 years) compared to the annual cost of \$13,850 for the natural grass field.

At our February meeting, Board Members can decide whether or not you want to proceed to the next step. This would be securing a reasonably accurate estimate for engineering and construction services for the installation of an artificial turf field. If the Board wants me to go forward with this project, I would ask Facilities Director Jim Saisa and Athletic Director Paul Mengold to contact Barakos-Landino Design Group of Meriden, Connecticut. This firm prepared the geotechnical engineering report in 1997 for the athletic complex that is present now. Barakos-Landino Design Group is familiar with the soil conditions, drainage and wetlands, because they have already provided data for that location. They would be able to provide the most accurate estimate on the design of the conversion to a turf field and the associated construction costs. Once we have a solid estimate, we can work with our investment advisor and bond counsel to prepare the necessary documents for a referendum.

If you support this, I would recommend the following motions:

Amity Finance Committee:

Move to recommend to the Amity Board of Education that the Superintendent of Schools be authorized to move forward with the artificial turf field project by seeking an updated estimate for such a project and engaging the Board's Investment Advisor and Bond Counsel to prepare the necessary Board resolutions. Such resolutions shall be brought to the Amity Finance Committee for their recommendation and the Amity Board of Education for their approval.

Amity Board of Education:

Move to direct the Superintendent of Schools be authorized to move forward with the artificial turf field project by seeking an updated estimate for such a project and engaging the Board's Investment Advisor and Bond Counsel to prepare the necessary Board resolutions. Such resolutions shall be brought to the Amity Finance Committee for their recommendation and the Amity Board of Education for their approval.

AMITY REGIONAL SCHOOL DISTRICT NO. 5
Bethany Orange Woodbridge
25 Newton Road, Woodbridge, Connecticut 06525



John J. Brady, Ed.D.
Superintendent of Schools

john.brady@reg5.k12.ct.us
Phone: (203) 392-2106

February 6, 2013

To: Members of the Board of Education

From: John J. Brady, Superintendent

RE: Staff Reductions and Class Sizes

As you know, I have recommended the elimination of 3.2 certified staff positions at Amity High School in my 2013-2014 Superintendent's Proposed Budget. I did so after review of current class sizes and assurance from high school administration that next year students would be offered the same number of course sections and that class size would not increase due to decline in enrollment. In response to concern raised at your meeting on Monday, February 4, 2013, I went further into the numbers with the high school administration and was able to assemble DRG comparative data.

Background

The data I examined include core subjects since specialty electives such as culinary, automotive, etc. have class sizes that are capped below contractual maximums. For example, for safety reasons, we do not schedule more than fifteen students in automotive classes.

It is important to understand that high school scheduling is complex. In order to meet the course requests of the maximum number of students we occasionally have an imbalance in class sizes. For example, currently we have one English I honors section with 10 students and at the opposite end of the spectrum, we have an English I honors section with twenty-six students. This type of disparity is a rarity and occurs only in instances where enough seats in existing sections of a particular course are not available to meet student requests. Students must take four years of English at Amity High School.

Scheduling is an art as much as it is a science. Schedulers must have flexibility as they build a schedule in order to accommodate, for instance, students who have enrolled in a level that ultimately does not work for them. In such cases, there must be room in a lower or higher level section to accommodate student need.

Schedulers use historical trends and averages when they build a schedule and create sections. This is one reason why average class sizes are not all at maximum. Another reason, for instance, is that level III classes are capped at 20, with many running below this number because sections need to be created that allow students to meet all their credit and class load requirements. Additionally reading classes and special education classes average less than 15.

All of these situations are common across high schools. They are not unique to Amity.

While the complexity of scheduling is not unique to Amity, many of our program offerings are unique and highly valued. Our extensive reading program is not found commonly in either DRG A or B districts yet we have found it vital to our students' success. In most school districts, special education teachers teach reading to students with special needs even though they may not have expertise in reading. Fortunately, years ago, Amity took a different path and the benefit to our students is obvious.

Most comprehensive high schools have significantly scaled back or eliminated their hands-on experiences for students in the areas of woodworking, manufacturing, automotive, business courses, manufacturing, etc. These experiences allow Amity to offer a meaningful high school experience for the broad range of students who attend our high school. I urge the Board to maintain this breadth of offerings into the future.

The Data

There currently are four hundred and sixty-seven (467) courses running in math, science, social studies, English and world languages at Amity High School. Of these courses, fifty-seven (57) have enrollments above twenty-five (25). Twenty-one (21) are at the contractual maximum of twenty-eight (28). The average class size in these core subjects for the current year is 20.

We are unable to get class size data for a DRG comparison of core courses only. Therefore the following comparison is for the average of all classes including the smaller classes, some of which I provided examples of above. The overall class size average in the DRG using the latest data available (2009-2010) is 15.7 students per class. In 2009-2010 the Amity High School average class size was 14.0.

Because the enrollment at the high school will be 1,578 next year, down from the 1,627 of 2009-2010, the 3.2 staff reduction will mean an overall class size average of 14.47. With the staff reductions we have been making beginning with the five positions that were not replaced when we had the retirement incentive program three years ago, along with the slight decline in enrollment, we have been able to maintain the programs and services that serve our students best and help make Amity the jewel that it is and, with your support, will continue to be.


I want to reaffirm my recommendation for the elimination of 3.2 certified teaching positions and restate that this reduction will not have an appreciable impact on average class size or on section offerings.

Recommendation:

Move that the Board of Education approve the 2013-2014 budget with total operating expenditures of \$44,763,387 and total member town allocations of \$43,544,985.

Grade 10 ELA.10.PT.3.03.149 C3 T1, T3, T4 and C4 T2, T3, T4
C3T3 Performance Task, draft

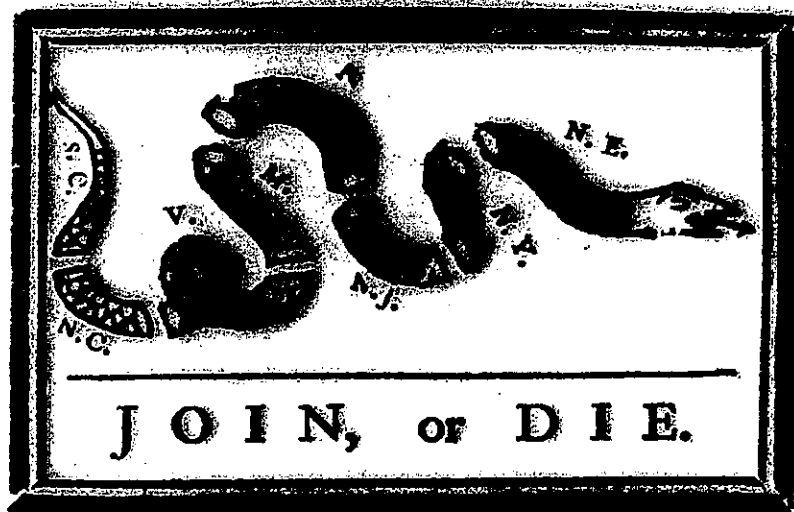
| | |
|----------------------|--|
| Sample Item Id: | ELA.10.PT.3.03.149 |
| Title: | Political Cartoons |
| Grade/Model: | 10/1 |
| Claim(s): | <p>Primary Claims</p> <p>3: Students can employ effective speaking and listening skills for a range of purposes and audiences.</p> <p>4: Students can engage in research/inquiry to investigate topics and to analyze, integrate, and present information.</p> |
| Primary Target(s): | <p><i>These claims and targets will be measured by scorable evidence collected.</i></p> <p>Claim 3</p> <p>1. LANGUAGE & VOCABULARY USE: Strategically use precise language (including academic and domain-specific vocabulary), figurative language, syntax, grammar, and discourse appropriate to the intent, purpose, and audience when speaking.</p> <p>3. PLAN/SPEAK/PRESENT: Gather and organize information, compose, and orally deliver short (e.g., summaries) and longer (presentations) for different purposes and audiences, drawing from a range of digital media to enhance the message or intent</p> <p>4. LISTEN/INTERPRET: Analyze, interpret, and use information delivered orally or visually</p> <p>Claim 4</p> <p>2. ANALYZE/INTEGRATE INFORMATION: Gather, analyze, and integrate multiple sources of information/evidence to support a presentation on a topic</p> <p>3. EVALUATE INFORMATION/SOURCES: Evaluate relevancy, accuracy, and completeness of information from multiple sources</p> <p>4. USE EVIDENCE: Generate a claim or a main idea and cite evidence to support arguments or conjectures</p> |
| Secondary Target(s): | n/a |
| Standard(s): | L-1, L-3a, L-6, SL-1, SL-2, SL-3, SL-4, SL-5, SL-6, W-1a, W-1b, W-8, W-9, RI-1 |
| DOK: | 4 |
| Difficulty: | Medium |
| Score Points: | TBD |
| Task Source: | Testing Contractor |

| | |
|--|---|
| How this task contributes to the sufficient evidence for the claims: | <p>In order to complete the performance task, students</p> <ol style="list-style-type: none"> 1. Gather information from a series of sources and analyze the relationship between these sources and a series of graphics 2. Analyze information sources and evaluate evidence in order to generate a thesis or controlling idea 3. Plan and deliver an oral presentation effectively demonstrating <ul style="list-style-type: none"> • a clearly-established position about the various sources • presentation of relevant supporting evidence, details, and elaboration consistent with the position, sources, purpose, and audience • effective organization of ideas • control of language for purpose and audience |
| Item Type | PT |
| Target-Specific Attributes (e.g., Accessibility Issues): | Students with visual impairments will need to be provided with descriptions of visual material. |
| Stimuli: | <p>Sources (3 articles, a set of cartoons; presented in the order in which they are used)</p> <p>Article 1: American Political Cartoons: an Introduction by Dr. Paul Parker http://www2.truman.edu/parker/research/cartoons.html Include the following sections: Introduction (cut the last paragraph), The Rise to Fame, The Ethics of Cartooning (cut the last paragraph), Elements of Effectiveness and the following cartoons</p>  |



Article 2: "Join, or Die" – America's First Political Cartoon

"Join, or Die," by Benjamin Franklin in 1754 is widely acknowledged as the first political cartoon created in America. This article gives a brief history of the politics and symbolism surrounding this image. 50-100 words.



<http://www.loc.gov/pictures/resource/cph.3a12149/>

Article 3: Why We Love Political Cartoons

This article gives a history of political cartoons from colonial America, through their rise in the late 1800s, with an increase in newspapers and magazines, to continued popularity today. The article explains the necessity of cartoons during a time when few people could read, and discusses why they are still widely used and immensely popular over 200 years later.

Research Packet (Cartoons with descriptions and historical context)

Tammany political boss William Marcy Tweed is portrayed as a bullying schoolteacher giving New York City comptroller Richard B. Connolly a lesson in arithmetic. A teary-eyed Connolly stands on a stool writing wildly inaccurate equations on a blackboard. For instance, "\$147 x 2 equals \$1380948"). Connolly protests to his teacher, "These figures wont suit my Father the public," but Tweed responds, "Never mind the public. Mind me. I will make a rich man of you. 12 years ago I was poor, now I am rich by this new arithmetic." Behind the board are two padlocked ledgers—"City Debt 1871 \$125,000,000" and "City Debt 1869 \$30,000,000." Exaggerated bills for the building of the county courthouse are posted on the wall. The building's final cost was \$12 million, of which two-thirds was fraudulent. In less than three years, Tweed's "ring" of corrupt officials managed to rob the city's treasury of \$30 million. 1871



THE RING ARITHMETIC - AS TAUGHT BY THE MODERN CEASERS

<http://www.loc.gov/pictures/resource/cph.3a11413/>

The arrest of "Boss" Tweed—another good joke. 1871



<http://www.loc.gov/pictures/resource/cph.3a34646/>

This print shows a representative of the British crown in America for peace negotiations (identified in the text as Edmund Burke, though possibly Lord North); he is wearing a crown with an olive branch on his head and carries a "Conciatory Bill" in a pocket. He is riding a donkey and is being driven from the American shores by several men, one wearing a feathered headdress. 1778



THE OLIVE BRANCH, OR THE YANKEES' REVENGE.
Lord North, the British Minister, is driven from the American shores by the Yankees, who are determined to drive him out of the country.

<http://www.loc.gov/pictures/resource/cph.3a45589/>

This cartoon shows Lord North standing on a platform holding a

letter announcing the successful campaign by British troops in America. A distraught woman, "America," holding a liberty cap, sits at the base of the platform; others present react to the news. 1776



<http://www.loc.gov/pictures/resource/cph.3a01878/>

Print shows a horse, "America," throwing its rider, George III. 1779



<http://www.loc.gov/pictures/resource/cph.3g05286/>

A rare anti-North satire, probably dealing with either the Crittenden

Compromise or the Douglas Compromise. Proposed in December 1860 in the form of several constitutional amendments, the former called for restoration of the Missouri Compromise line and prohibition of slavery north of it. Stephen Douglas's compromise, an alternative proposed immediately thereafter, offered two similar amendments but also advocated settlement of the slavery issue by popular sovereignty. "Congressional Surgery" reflects the viewpoint of the lower South, which rejected both compromises. "Doctor North" (Pennsylvania congressman Thaddeus Stevens) sits with hands folded in a chair at left, a young black crouching beside him. On the doctor's desk rests a wooden leg labeled "Constitutional Amendment." The Doctor says, "Help you! Of Course! We will first, with your assistance, take you off your legs, & then fix you up nicely on these Constitutional Amendments." His patient "South," a tall bearded man with his left arm in a sling, replies, "Can't see it."



<http://www.loc.gov/pictures/resource/cph.3b35942/>

A tribute to commander of Union forces, Gen. Winfield Scott, shown as the mythical Hercules slaying the many-headed dragon or hydra, here symbolizing the secession of the Confederate states. At left stands Scott, wielding a great club "Liberty and Union," about to strike the beast. The hydra has seven heads, each representing a prominent Southern leader. The neck of each Southerner depicted is labeled with a vice or crime associated with him. They are (from top to bottom): Hatred and Blasphemy (Confederate secretary of state Robert Toombs), Lying (vice president Alexander Stephens), Piracy (president Jefferson Davis), Perjury (army commander P. G. T. Beauregard), Treason (United States general David E. Twiggs who in February 1861 turned over nineteen federal army posts under his command in Texas to the South), Extortion (South Carolina governor Francis W. Pickens), and Robbery (James Buchanan's

secretary of war John B. Floyd, accused of supplying federal arms and supplies to the South).



<http://www.loc.gov/pictures/resource/cph.3b50445/>

Photograph reproduces a political cartoon depicting Uncle Sam arguing with a woman while a slave on the right tiptoes by the couple. Uncle Sam holds a newspaper marked "united"; the woman has a newspaper behind her back marked "states." 1861



<http://www.loc.gov/pictures/resource/ppmsca.10974/>

The 1912 presidential candidates Woodrow Wilson and Theodore Roosevelt battled over the question of which candidate was the true "trustbuster." The first cartoon depicts Roosevelt as a hunter; the various trusts are depicted as game. The second cartoon depicts Roosevelt wielding a baton labeled "legalized monopoly" while conducting a chorus representing the different trusts. The cartoon also notes that Wilson states that Roosevelt is pro-monopoly. Since trusts (large corporations with tremendous power over their industries) were a source of potent political anger, each candidate attempted to bolster his anti-monopoly credentials.



<http://www.loc.gov/pictures/resource/cph.3a34852/>



<http://www.loc.gov/pictures/resource/cph.3a11248/>

| | |
|--------------------------|---|
| Stimuli/Text Complexity: | |
| Acknowledgments: | <p>Stimuli have been taken from the following sources:</p> <p>American Political Cartoons: an Introduction by Dr. Paul Parker http://www2.truman.edu/parker/research/cartoons.html</p> <p>Political Cartoons from the Library of Congress http://www.loc.gov/pictures/resource/cph.3a11248/ http://www.loc.gov/pictures/resource/cph.3a34852/ http://www.loc.gov/pictures/resource/ppmsca.10974/ http://www.loc.gov/pictures/resource/cph.3b50445/ http://www.loc.gov/pictures/resource/cph.3b35942/ http://www.loc.gov/pictures/resource/cph.3g05286/ http://www.loc.gov/pictures/resource/cph.3a01878/ http://www.loc.gov/pictures/resource/cph.3a45589/ http://www.loc.gov/pictures/resource/cph.3a34646/ http://www.loc.gov/pictures/resource/cph.3a11413/</p> <p>Additional sources still to come from freelancer:</p> <p>Article 2: "Join, or Die" – America's First Political Cartoon</p> |

| | |
|-------------|---|
| | Article 3: Why We Love Political Cartoons |
| Task Notes: | |

Task Overview (120 total minutes):

Title: Political Cartoons

Part 1 (35 minutes): Ultimately tasked with delivering an oral presentation on political cartoons, students will read three articles, taking notes on these sources. They will then respond to three constructed-response questions addressing the research skills of analyzing and evaluating information.

Part 2 (85 minutes): Finally, students will work individually to compose and deliver an oral presentation on political cartoons, referring to their notes and the sources as needed.

Scorable Products: Student responses to the constructed-response questions and the presentation will be scored.

Teacher Directions:

Students are given the texts, research, and any additional information about the speech.

Session 1 (35 minutes)

- Initiate the online testing session.
- Alert the students when 15 minutes have elapsed.
- Alert the students when there are 5 minutes remaining in part 1.

Stretch Break

Session 2 (85 minutes)

- Initiate the testing part 2.
- Allow students to access the sources and their answers to the constructed-response questions presented in part 1. They will not be allowed to change their answers.
- Present the research packet of cartoons.
- Alert the students when 30 minutes have elapsed.
- After students have been working for 65 minutes, alert them that there are 10 minutes left.

Close the testing session.

Direct students to deliver their presentations.

Teacher preparation / Resource requirements

The teacher should assure that sufficient blank paper and writing utensils are available for student note taking. Teacher should conduct standard preparation, registration, etc., for computer-based testing. The testing software will include access to spell-check.

Time Requirements:

The Performance Task will take 120 minutes in one session

Pre-Task Activity:

There are no specific pre-task activities to be conducted.

Student Directions:

Part 1 (35 minutes)

Your assignment:

You will read several articles about political cartoons, review a packet of some cartoons, and prepare and deliver an oral presentation about political cartoons.

Steps you will be following:

In order to plan your presentation, you will do the following:

1. Read and take notes on three articles.
2. Answer three questions about the articles.
3. Plan and deliver your presentation.

Directions for beginning:

You will now read the sources. Take notes because you may want to refer back to your notes while writing your speech. You can refer back to any of the sources as often as you like.

(article 1)

(article 2)

(article 3)

Questions

Use your remaining time to answer the questions below. Your answers to these questions will be scored. Also, they will help you think about the sources you've read and viewed, which should help you write your presentation. You may click on the appropriate buttons to refer back to the sources when you think it would be helpful. You may also refer to your notes. Answer the questions in the spaces provided below them.

1. Explain why the cartoons presented were an effective political statement. Use details from the sources to support your answer.
2. Analyze the techniques political cartoonists use to express their message. Use details from the texts to support your

answer.

3. Explain how the information presented in political cartoons differs from the information presented in written text. Use details from the texts to support your answer.

Part 2 (85 minutes)

You now have 85 minutes to prepare an oral presentation. You may refer back to the sources you read in part 1. You will also receive a packet of additional cartoons, which you may choose to use in your presentation. Now read your assignment and the information about how your presentation will be scored; then begin your work.

Your Assignment

Plan and deliver a presentation on the power of political cartoons as a tool for defining issues and influencing public opinion. Support your analysis with details from what you have read and viewed.

How your speech will be scored: The people scoring your speech will be assigning scores for

- 1. Focus**—how well your speech clearly introduces and communicates your ideas
- 2. Organization**—how well your ideas flow from the opening to the conclusion and how well you stay on topic throughout the speech
- 3. Elaboration of Evidence**—how well you use sources, facts, and details as evidence
- 4. Language and Vocabulary**—how well you effectively express ideas using precise language that is appropriate for your audience and purpose
- 5. Presentation**—how well your speech is presented, including eye contact, pronunciation, and awareness of audience and the use of visual/graphics/audio enhancements appropriate

to your message

Now begin work on your presentation. Manage your time carefully so that you can:

- plan your presentation
- prepare your presentation

Word-processing and presentation tools are available to you.

Key and scoring information for questions:

CR#1: C4 T4

| Use Evidence Rubric (Claim 4, Target 4) | |
|--|---|
| 2 | The response gives sufficient evidence of the ability to cite evidence to support arguments and/or ideas. |
| 1 | The response gives limited evidence of the ability to cite evidence to support arguments and/or ideas. |
| 0 | A response gets no credit if it provides no evidence of the ability to cite evidence to support arguments and/or ideas. |

CR#2: C4 T2

| Analyze/Integrate Information Rubric (Claim 4, Target 2) | |
|---|---|
| 2 | The response gives sufficient evidence of the ability to gather, analyze, and integrate information within and among multiple sources of information. |
| 1 | The response gives limited evidence of the ability to gather, analyze, and integrate information within and among multiple sources of information. |
| 0 | A response gets no credit if it provides no evidence of the ability to gather, analyze, and integrate information within and among multiple sources of information. |

CR#3: C4 T3

| Evaluate Information/Sources Rubric (Claim 4, Target 3) | |
|--|---|
| 2 | The response gives sufficient evidence of the ability to evaluate the credibility, completeness, relevancy, and/or accuracy of the information and sources. |
| 1 | The response gives limited evidence of the ability to evaluate the credibility, completeness, relevancy, and/or accuracy of the information and sources. |
| 0 | A response gets no credit if it provides no evidence of the ability to evaluate the credibility, completeness, relevancy, and/or accuracy of the information and sources. |

4-point Speech Rubric (Grades 3–11)

| Score | Establishment of Focus and Organization | | Development: Language and Elaboration of Evidence | | Presentation |
|-------|--|--|---|--|--|
| | Focus | Organization | Elaboration of Evidence | Language and Vocabulary | Presentation |
| 4 | <p>The speech is consistently and purposefully focused:</p> <ul style="list-style-type: none"> controlling idea, opinion, or claim is clearly stated and strongly maintained controlling idea, opinion, or claim is introduced and communicated clearly within the context | <p>The speech has a clear and effective organizational structure, helping create unity and completeness:</p> <ul style="list-style-type: none"> employs a strong opening and logical progression of ideas effective introduction and conclusion for audience and purpose | <p>The speech provides thorough and convincing support/evidence for the writer's controlling idea, opinion, or claim that includes the effective use of sources, facts, and details:</p> <ul style="list-style-type: none"> use of evidence from sources is smoothly integrated and relevant | <p>The speech clearly and effectively expresses ideas:</p> <ul style="list-style-type: none"> use of precise language (including academic and domain-specific language) consistent use of syntax and discourse appropriate to the audience and purpose | <p>The speech is clearly and smoothly presented:</p> <ul style="list-style-type: none"> use of effective eye contact and volume, with clear pronunciation understandable pace adapted to the audience consistently aware of audience's engagement use of strong visual/graphics/audio enhancements, when appropriate, to effectively clarify message |

| | | | | | |
|---|---|--|---|---|---|
| 3 | <p>The speech is adequately and generally focused:</p> <ul style="list-style-type: none"> controlling idea, opinion, or claim is clear and for the most part maintained, though some loosely related material may be present some context for the controlling idea, opinion, or claim | <p>The speech has an evident organizational structure and a sense of completeness, though some ideas may be loosely connected:</p> <ul style="list-style-type: none"> adequate use of transitional strategies with some variety ideas progress from beginning to end introduction and conclusion are adequate adequate, if slightly inconsistent, connection among ideas | <p>The speech provides adequate support/evidence for the writer's controlling idea, opinion, or claim that includes the use of sources, facts, and details:</p> <ul style="list-style-type: none"> some evidence from sources is smoothly integrated, though may be general or imprecise | <p>The speech adequately expresses ideas employing a mix of precise with more general language:</p> <ul style="list-style-type: none"> use of academic and domain-specific language is adequate use of syntax and discourse generally appropriate to the audience and purpose | <p>The speech is adequately presented with minor flaws:</p> <ul style="list-style-type: none"> appropriate use of eye contact, volume, and pronunciation generally understandable pace adapted to the audience sufficiently aware of audience's engagement sufficient use of visual/graphics/audio enhancements, when appropriate, to clarify message |
|---|---|--|---|---|---|

| | | | | | |
|---|--|---|--|--|--|
| 2 | <p>The speech is somewhat unclear and unfocused:</p> <ul style="list-style-type: none"> controlling idea, opinion, or claim is for the most part maintained, though there may be a minor drift controlling idea, opinion, or claim may be lacking an appropriate context | <p>The speech has an inconsistent organizational structure:</p> <ul style="list-style-type: none"> inconsistent use of transitional strategies with little variety ideas progress unevenly from beginning to end introduction and conclusion, if present, may be weak weak connection among ideas | <p>The speech provides uneven, cursory support/evidence for the writer's controlling idea, opinion, or claim that includes partial or superficial use of sources, facts, and details:</p> <ul style="list-style-type: none"> evidence from sources is weakly integrated | <p>The speech inconsistently expresses ideas employing simplistic language:</p> <ul style="list-style-type: none"> insufficient use of academic and domain-specific language use of syntax and discourse may, at times, be inappropriate to the audience and purpose | <p>The speech is unevenly presented with evident flaws:</p> <ul style="list-style-type: none"> inconsistent use of eye contact, volume, and pronunciation pace partially adapted to the audience partially aware of audience's engagement sufficient use of visual/graphics/audio enhancements, when appropriate, to clarify message |
|---|--|---|--|--|--|

| | | | | | |
|---|---|---|--|--|---|
| 1 | <p>The speech is unclear and unfocused:</p> <ul style="list-style-type: none"> controlling idea, opinion, or claim may have a major drift controlling idea, opinion, or claim may be confusing or ambiguous | <p>The speech has little or no discernible organizational structure:</p> <ul style="list-style-type: none"> few or no transitional strategies are evident frequent extraneous ideas may intrude | <p>The speech provides minimal support/evidence for the writer's controlling idea, opinion, or claim that includes little or no use of sources, facts, or details:</p> <ul style="list-style-type: none"> evidence from sources is minimal, absent, in error, or irrelevant | <p>The speech expresses vague ideas, lacks clarity, or is confusing:</p> <ul style="list-style-type: none"> uses limited language or domain-specific vocabulary rudimentary use of syntax and discourse inappropriate for the audience and purpose | <p>The speech is presented with serious flaws that obscure meaning:</p> <ul style="list-style-type: none"> infrequent eye contact, and inappropriate volume and pronunciation pace not adapted to the audience little or no sense of audience's engagement little or no visual/graphics/audio enhancements to clarify message |
| 0 | A speech gets no credit if it provides no evidence of the ability to gather and organize information, compose, and orally deliver short speech. | | | | |

MAT.HS.PT.4.0CORN.A.412

| | |
|------------------------------|---|
| Sample Item ID: | MAT.HS.PT.4.0CORN.A.412 |
| Title: | Corn |
| Grade: | HS |
| Primary Claim: | Claim 4: Modeling and Data Analysis Students can analyze complex, real-world scenarios and can construct and use mathematical models to interpret and solve problems. |
| Secondary Claim(s): | <p>Claim 1: Concepts and Procedures Students can explain and apply mathematical concepts and interpret and carry out mathematical procedures with precision and fluency.</p> <p>Claim 2: Problem Solving Students can solve a range of well-posed problems in pure and applied mathematics, making productive use of knowledge and problem-solving strategies.</p> <p>Claim 3: Communicating Reasoning Students can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others.</p> |
| Primary Content Domain: | Number and Quantity |
| Secondary Content Domain(s): | Geometry, Statistics, Algebra |
| Assessment Target(s): | <p>4 A: Apply mathematics to solve problems arising in everyday life, society, and the workplace.</p> <p>4 D: Interpret results in the context of a situation.</p> <p>4F: Identify important quantities in a practical situation and map their relationships (e.g. using diagrams, two-way tables, graphs, flowcharts, or formulas).</p> <p>1 C: Reason quantitatively and use units to solve problems.</p> <p>1 N: Build a function that models a relationship between two quantities.</p> <p>1 P: Summarize, represent, and interpret data on a single count or measurement variable.</p> <p>2 A: Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace.</p> <p>2 B: Select and use appropriate tools strategically.</p> <p>2 C: Interpret results in the context of a situation.</p> |
| Standard(s): | N-Q.1,N-Q.2, S-ID.6, G-MG.3, G-SRT.8, 7.RP.2, 7.EE.3, A-CED.1, 7.RP.1 |

HS Mathematics Sample PT Form Claim 4



| | |
|---|---|
| Mathematical Practice(s): | 1, 2, 3, 4, 5, 6 |
| DOK: | 4 |
| Item Type: | PT |
| Score Points: | 20 |
| Difficulty: | H |
| How this task addresses the "sufficient evidence" for this claim: | The student uses concept of number and quantity, geometry, and statistics to provide rationale for the recommendation made regarding on- or off-site storage of harvested corn. The work is supported by the calculations. |
| Target-specific attributes (e.g., accessibility issues): | Accommodations may be necessary for students who have challenges with language processing, vision, or fine motor skills. |
| Stimulus/Source: | http://www.extension.iastate.edu/agdm/crops/html/a2-35.html http://www.extension.iastate.edu/agdm/wholefarm/pdf/c2-24.pdf http://www.ksre.ksu.edu/library/agec2/mf2474.pdf http://www.michigan.gov/documents/Vol1-27GrainBinsandTanks_120836_7.pdf http://www.ces.purdue.edu/extmedia/gg/gg-3.html |
| Notes: | |
| Task Overview: | Students will research the price of corn and the costs associated with rental storage and grain bin storage, as well as the costs associated with drying corn to remove moisture so that it can be stored. A recommendation will then be made based on this analysis as to what type of corn storage method a farmer should use. |
| Teacher preparation / Resource requirements: | Resource requirements: Video access. Up to two days prior to the administration of this task, the teacher will provide class time to watch pretask videos. They may be watched as a class or individually. The teacher will also require students to perform a "prework" task in which they will research current prices of corn and liquid propane gas. |
| Teacher Responsibilities During Administration: | After the prework, the teacher will find the average of the prices for corn and gas that have been submitted by the students. These averages will be the numbers used in Session 1. The teacher should check for feasibility. During Session 1, the students will record values of certain quantities on a note sheet that will be needed for work during Session 2. After Session 1, the teacher will collect the note sheets from the students and return them to the students the following day. The students will need these responses to continue work on the second day. Monitor individual student work as necessary. |
| Time Requirements: | Excluding the prework, the task will be completed in two 60-minutes sessions. Parts A through C will be completed during Session 1 and Parts D and E will be completed during Session 2. |

Prework:

Students will watch two short videos describing the harvesting and storing of corn for market. These videos will assist students, especially those unfamiliar with the work on a farm, by giving them a snapshot of this process. They may also supplement the reading load of these tasks for ELLs.

Here are some examples of ones that might be used:

- <http://www.youtube.com/watch?v=1jhuNDuLaps>
- <http://www.youtube.com/watch?v=iddFy6A9uHg>

Students will also be asked to research the current cost of corn and of LPG (liquid propane gas).



Your Assignment:

In this task you will assume the role of consultant for a farmer. You will analyze the options available to the farmer for handling the storage of shelled field corn (shown in the pictures above). In the past, the farmer has sold the corn as it was harvested, and did not store the corn to be sold in the future. The farmer has increased the number of acres used to grow corn, and now is exploring the cost of storing the corn until after the harvest is complete and then selling it. You will analyze two storage options available to the farmer for storing the grain that is harvested.

- The corn can be stored in grain bins constructed on the farm.
- The corn can be stored in rental storage close to the farm.

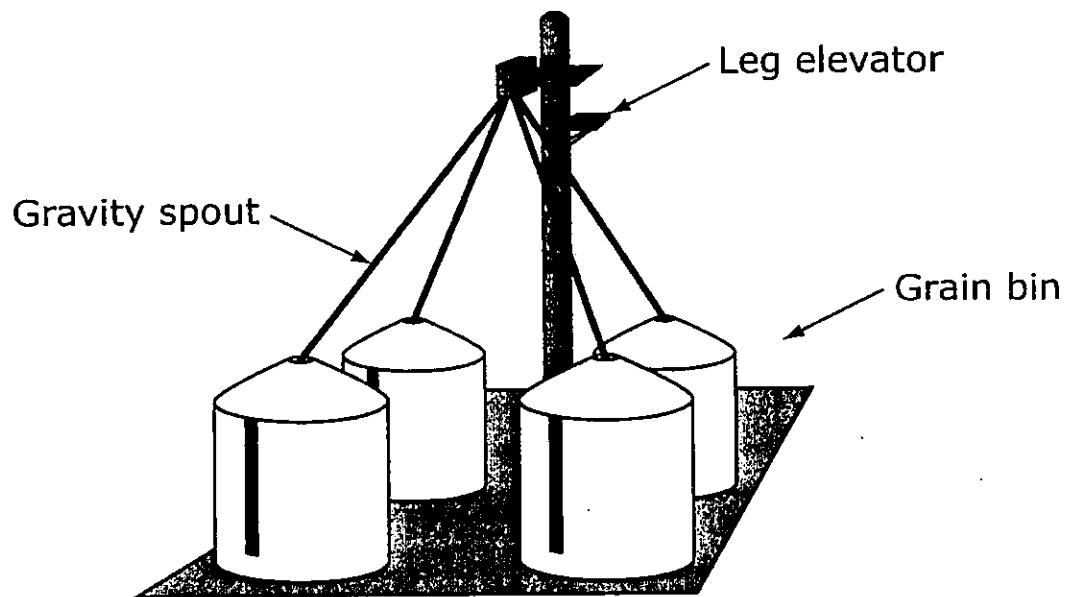
Following the tasks, you will recommend which type of storage the farmer should use.

Corn Storage

Session 1

Part A

Your first job is to determine the most efficient cost for constructing 4 grain bins which can be used to store the harvested corn. A leg elevator, which moves the corn from ground level into the bins, must also be built. The bins must be able to hold the 132,000 bushels of corn from the harvest. Each bin should include a ventilated floor, fan and heat. A cost table for building various size bins is shown below.



Cost of Grain Bins

| Diameter (feet) | Height (feet) | Capacity (bushels) | Cost Without Floor (\$) | Add for | | | |
|--------------------|------------------|-----------------------|-------------------------------|---------------------------|------------------------|-----------------------------|-------------------------|
| | | | | Concrete Floor (\$) | Steel Floor (\$) | Ventilated Floor (\$) | Fan and Heat (\$) |
| 30 | 19 | 10,775 | 11,525 | 1,650 | 1,130 | 4,250 | 2,950 |
| | 24 | 13,625 | 16,000 | 1,775 | 1,130 | 4,250 | 2,950 |
| | 32 | 18,175 | 20,100 | 1,975 | 1,130 | 4,250 | 2,950 |
| 33 | 24 | 16,475 | 17,725 | 2,050 | 1,320 | 5,100 | 3,025 |
| | 27 | 18,550 | 20,050 | 2,100 | 1,320 | 5,100 | 3,025 |
| | 32 | 21,975 | 24,950 | 2,550 | 1,320 | 5,100 | 3,025 |
| 36 | 24 | 19,625 | 21,575 | 2,575 | 1,540 | 6,000 | 3,075 |
| | 27 | 22,075 | 23,475 | 2,675 | 1,540 | 6,000 | 3,075 |
| | 32 | 26,150 | 26,100 | 2,775 | 1,540 | 6,000 | 3,075 |
| | 40 | 32,700 | 28,925 | 2,950 | 1,540 | 6,000 | 3,075 |
| 42 | 27 | 30,050 | 28,450 | 3,650 | 2,065 | 8,100 | 3,225 |
| | 32 | 35,600 | 32,525 | 3,875 | 2,065 | 8,100 | 3,225 |
| | 40 | 44,500 | 39,650 | 4,075 | 2,065 | 8,100 | 3,225 |
| | 48 | 53,425 | 47,200 | 4,400 | 2,065 | 8,100 | 3,225 |
| 48 | 27 | 39,250 | 41,150 | 4,775 | 2,640 | 10,450 | 3,350 |
| | 32 | 46,500 | 48,900 | 5,050 | 2,640 | 10,450 | 3,350 |
| | 40 | 58,150 | 55,000 | 5,300 | 2,640 | 10,450 | 3,350 |
| | 48 | 69,775 | 61,650 | 5,750 | 2,640 | 10,450 | 3,350 |

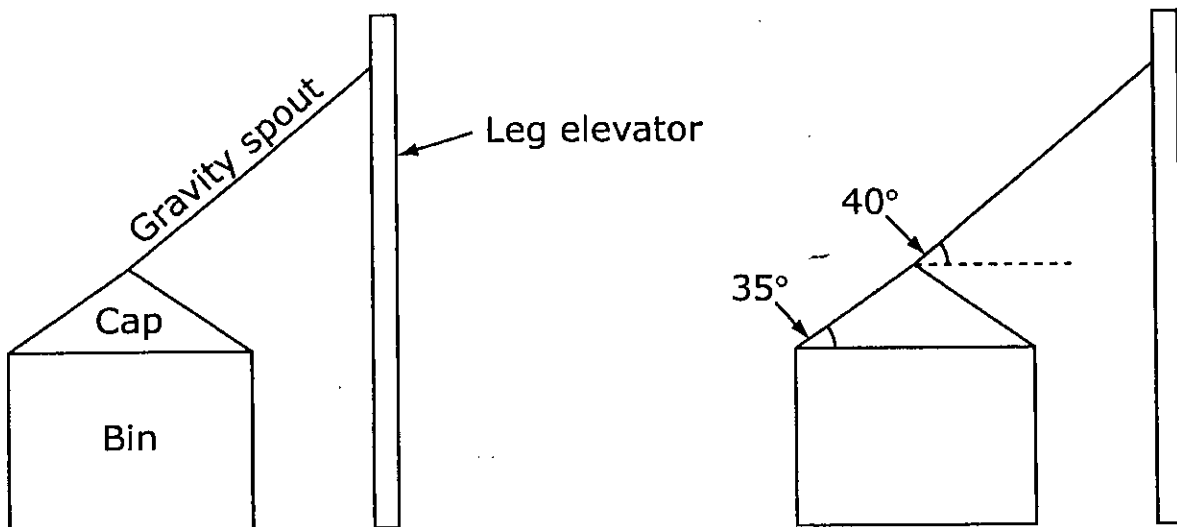
All 4 bins must have the same capacity.

The bins must be built to the following specifications.

- The height listed in the table does not include the height of the conical cap on top of the bin. The cap forms a 35° angle with the base.
- The distance from the outer edge of the bins to the leg elevator will be 15 feet.
- A gravity spout is placed so that it runs from the top of the cap to a point that is 2 feet below the top of the elevator leg. To account for certain moisture content the gravity

spouts will slope 40 degrees to the horizontal.

- The average cost involved in the construction of the leg elevator is \$15,000 plus \$125 for every foot in height.
- The gravity spouts cost \$20 per foot.



Find the most efficient cost of the construction. Be sure to include the bins (caps are included in the price), gravity spouts, and leg elevator.

Part B

When corn is harvested, the moisture content varies, but is typically above the level desired for selling or storing corn, so the corn must be dried. The moisture content is given as a percent that represents the proportion of the weight of the corn that is from water. For example, if you had 40 lbs of corn at 25% moisture content, it would consist of 10 lbs of water and 30 lbs of dry material. As corn dries, the amount of water decreases, but the amount of dry material stays the same, so the percent of weight from water will decrease.

The final moisture contents for various purposes are as follows:

- 15.5% to sell at market
- 14.0% to store at a rental storage facility
- 13.5% to store in grain bins constructed on the farm

There is a cost for drying corn to 15.5% moisture to be able to sell it at market, but there is extra cost to dry it below 15.5%. This extra cost is a cost of storage since it must be paid only if the grain is to be stored and not sold at market.

Assuming corn is harvested at an initial moisture content of 20% and you use LP gas as fuel for your dryer, use the information in tables 1 and 2 below to calculate the extra cost per bushel of drying corn to a final moisture content of 14% and 13.5%. Justify your answer mathematically and show all the steps in your calculation. You can use the regression tool in the spreadsheet provided if necessary. The BTUs required to dry corn to a final moisture content of 15.5% and 13.5% are not in the table but can be found using the provided regression tool.

Energy (BTU's) Required to Dry a Bushel of Wet Corn

| Final Moisture Content | Initial Moisture Content | | | | | |
|------------------------|--------------------------|--------|--------|--------|--------|--------|
| | 20% | 22% | 24% | 26% | 28% | 30% |
| 17% | 5,625 | 8,744 | 11,714 | 14,487 | 17,086 | 19,545 |
| 16% | 7,522 | 10,596 | 13,506 | 16,241 | 18,784 | 21,188 |
| 15% | 9,579 | 12,589 | 15,447 | 18,118 | 20,624 | 22,978 |
| 14% | 11,635 | 14,582 | 17,388 | 19,994 | 22,463 | 24,768 |
| 13% | 13,878 | 16,774 | 19,528 | 22,088 | 24,486 | 26,744 |

Energy Content (BTU's) per Unit of Fuel

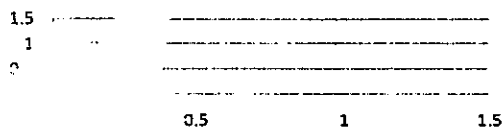
| Fuel Type | Unit | BTU's per Unit of Fuel |
|-------------|------------|------------------------|
| Oil | Gallon | 140,000 |
| LP gas | Gallon | 92,000 |
| Electricity | kWh | 3,414 |
| Natural gas | Cubic foot | 1,000 |

To use the regression tool below, enter labels for the axes and pairs of independent and dependent variable values in the spreadsheet.

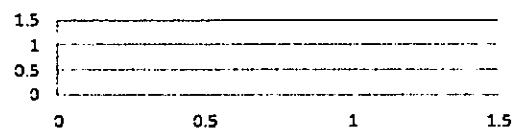
Regression Tool:

| | Independent Variable | Dependent Variable |
|-------------------|----------------------|--------------------|
| Enter axis labels | | |
| | | |
| | | |
| Enter Quantities | | |
| | | |
| | | |
| | | |

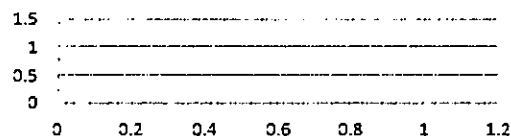
Linear Regression



Exponential Regression



Quadratic Regression



Enter your final answers:

Extra cost to dry 1 bushel of corn to 14% = _____

Extra cost to dry 1 bushel of corn to 13.5% = _____

(Record these values on your note sheet; you will need them in a later part.)

Part C

Corn is composed of dry material and water (moisture). For example, corn at 16% moisture would be composed of 84% dry material. At 15.5% moisture, one bushel of corn weighs 56 pounds. Complete the table below to show the amounts of dry material for 56 pounds of corn at each of the moisture levels. Show all work to get the values.

| Moisture Level | Amount of Dry Material (pounds) |
|----------------|---------------------------------|
| 15.5% | |
| 14% | |
| 13.5% | |

Enter the average price per bushel of corn that you found during the prework in the blank below.

Corn at 15.5% moisture sells for \$_____ per bushel.

What is the price per pound for the dry material in 56 pounds of corn at 15.5% moisture? Show all work, and round your answer to the thousandths place.

At this rate of dollars per pound of dry material, what is the value, in dollars, of the dry material in 56 pounds of 14% corn

and in 56 pounds of 13.5% moisture corn? Show all work.

When 56 pounds of corn is sold at market, the buyer receives more dry material if the corn has lower moisture content. This means that there is a cost to the farmer of drying corn for storage, since each bushel sold will contain more dry material than it would have at higher moisture content. This cost is called the shrinkage cost.

For 56 pounds of corn sold:

Shrinkage Cost = value of dry material – selling price

Find the shrinkage costs when corn is sold at 14% moisture and at 13.5% moisture. Show all work.

Enter your final answers.

Shrinkage cost, per bushel, for selling corn at 14% = _____

Shrinkage cost, per bushel, for selling corn at 13.5% = _____

(Record these values on your note sheet; you will need them in a later part.)

Session 2

Part D

In this part, you will calculate the total rental cost of storing 132,000 bushels of corn at a grain elevator close to the farm, which is called rental storage. The farmer provides you with the following information.

- In January, February, and August, 2 truckloads of corn can be transported to market each day to be sold.
- In March, April, May, June, and July, 1 truckload of corn can be transported to market each day to be sold.
- Each truck the farm uses for transporting corn holds 600 bushels of corn.
- On average, corn is transported to market 20 days each

month.

- The farmer only transports and sells grain beginning in January.
- The cost for storing grain is \$0.09 per bushel for 3 months and then \$0.02 per bushel for each additional month past 3 months.
- The monthly storage cost for corn stored past 3 months is calculated based on the amount of corn in rental storage at the beginning of the month.
- From past experience, the farmer estimates the following percentages of corn harvested each month.

| Month | Percent of Crop Harvested and Put in Storage |
|-----------|--|
| September | 20% |
| October | 40% |
| November | 30% |
| December | 10% |

Enter the necessary amounts in the provided spreadsheet to calculate the total rental cost of storing the corn at a grain elevator close to the farm. Amounts can only be entered in cells that are shaded yellow.

Cost to store 1 bushel for 3 months =

Cost to store 1 bushel for each month past the initial 3 months =

Number of bushels =

| Month | Percent of Crop Put in Storage | Number of Bushels That It Is Possible to Transport | Percent of Crop Removed From Storage | Number of Bushels Removed From Storage During Month | Number of Bushels Remaining in Storage at End of Month | Cost of Rental Storage |
|-----------|--------------------------------|--|--------------------------------------|---|--|------------------------|
| September | | | | | | \$0.00 |
| October | | | | | | \$0.00 |
| November | | | | | | \$0.00 |
| December | | | | | | \$0.00 |
| January | | | #DIV/0! | #DIV/0! | #DIV/0! | \$0.00 |
| February | | | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| March | | | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| April | | | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| May | | | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| June | | | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| July | | | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| August | | | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |

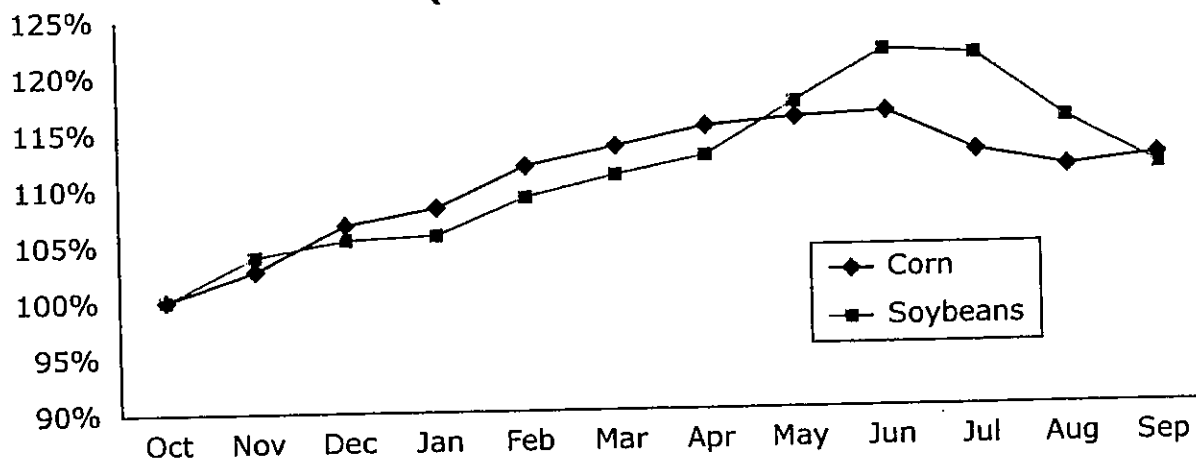
Total Cost of Rental Storage = #DIV/0!

Part E

In this part, you will analyze the cost of building grain bins to store corn on the farm. Based on the time series plot below, the farmer thinks that it might be more cost effective to build grain bins rather than paying for rental storage. Storing corn in grain

bins on the farm will enable the farmer to sell corn to many possible buyers at times during the year when the price of corn will be higher than it is at harvest time.

**Monthly Cash Prices as % of September–October Price
(NASS-USDA, 1999–2008)**



Calculate the average increase in selling price (\$ per bushel) that the farmer receives by selling corn during the months of January through August rather than selling all of the corn at harvest. The average increase in selling price (\$ per bushel) is \$0.20 more for grain stored in the farmer's bins than for grain stored in rental storage because rental storage charges a fee to remove grain to sell elsewhere.

Use the results of your calculations and any other necessary information to enter values in the spreadsheet below to calculate the cost for storing corn in grain bins and in rental storage. You will be provided with the note sheet on which you recorded the **current** cost per bushel of corn that you found in your prework, and the results of your calculations from previous parts.

Grain Storage Investment Comparison
Ag Decision Maker -- Iowa State University Extension

Place the cursor over cells with red triangles to read comments.

Enter your input values in yellow shaded cells.

Storage Type

Number of bushels stored
 Total cost of bin construction (\$) bin (including floor, fan, heat), spouts, leg elevator additional augers, fans, conveyers, etc.
 Useful life for bin (years)
 Useful life for augers, fans, conveyers (years)
 Interest rate for financing initial investment (%)
 Average moisture at harvest (%)
 Moisture level for storage (%)
 Extra handling cost (\$ per bu.)
 Extra transportation cost (\$ per bu.)
 Quality loss for on-farm storage (%)
 Fans, total horsepower
 Hours fans will run, total
 Electricity rate (\$ per KWH)
 Add'l hours per month spent managing & handling grain
 Labor value (\$ per hour)
 Commercial storage charges
 Minimum charge or base rate (\$ per bu.)
 Base period (months)
 Rate per month after base period (\$ per bu. per month)
 Expected September-October cash selling price of corn (\$ per bu.)
 Average increase in selling price (\$ per bu.)
 Short-term interest rate (%)
 Average length of storage (months)

| Corn | |
|--------------------|----------------|
| On-farm Investment | Rental Storage |
| 1,000 bu. | 1,000 bu. |
| \$ 1,000 | |
| \$ 5,000 | |
| 25 years | |
| 10 years | |
| 4.6% | |
| 20.0% | 20.0% |
| 13.5% | 14.0% |
| \$ 0.015 | |
| \$ 0.050 | |
| 1.0% | |
| 10 hp | |
| 1440 hrs | |
| \$ 0.1000 | |
| 5.00 | |
| \$ 10.00 | |
| | \$0.2100 |
| | 3 months |
| | \$0.0280 |
| \$ 6.00 | \$ 6.00 |
| \$ 0.20 | |
| 7.00% | 7.00% |
| 7 months | 7 months |

Total initial costs (\$ per year)
 Total cost (\$ per bu.)
 \$ per bu.)
 or service fee
 entory
 ing or corn
 shrinkage cost for corn
 handling and transportation cost
 Quantity deterioration
 Electricity cost
 Extra labor cost
Total cost of storage
 Less selling price advantage
Net cost of storage (\$ per bu.)

| On-farm Investment | Rental Storage |
|--------------------|----------------|
| \$ 703 | |
| \$ 90 | |
| \$ 60 | |
| \$ 853 | |
| \$ 0.85 | |
| | \$ 0.322 |
| \$ 0.253 | \$ 0.245 |
| | |
| \$ 0.065 | |
| \$ 0.060 | |
| \$ 1.152 | |
| \$ 0.350 | |
| \$ 2.73 | \$ 0.57 |
| \$ 0.200 | |
| \$ 2.53 | \$ 0.57 |

Based on your analysis of the information in the spreadsheet, explain what recommendation you would make to the farm manager about what type of storage is best. Explain how you arrived at your recommendation.

Sample Top-Score Response:

Session 1

Part A (use $n = 132,000$ for number of bushels of corn)

1. First, I need to decide which bins to buy. If the company needs 4 bins that will hold 132,000 bushels, then $\frac{132,000}{4} = 33,000$. The smallest bins that hold this capacity are those that hold 35,600 bushels. The dimensions for those bins are 42' by 32' (diameter by height) and will each cost \$32,525. If we include the floor (\$8100) and fan/heat (\$3225), then each bin will cost \$43,850.
2. Next, I need to find the height of the leg elevator. Its height is the sum of the bin height (32'), the cap height (x), the vertical distance from the top of the cap to the entry point for the gravity spout (y), and the remaining distance to the top of the leg elevator (2').

$$\begin{array}{ll} \text{To solve for } x: \tan 35 = \frac{x}{21} & \text{and to solve for } y: \tan 40 = \frac{y}{36} \\ x \approx 14.70 & y \approx 30.21 \end{array}$$

Total height of the leg elevator is $32 + 14.70 + 30.21 + 2 = 78.91$ ft.

3. Next is the length of each gravity spout (z). Using the Pythagorean Theorem (student may choose to use right triangle trigonometry), $36^2 + 30.21^2 = z^2$, and solved for z . I found the length of one gravity spout to be approximately 47 ft. Since there are four of them, we will need 188 feet.
4. Finally, I now have enough information to find the total cost of the project:

Bins are $4(\$43,850) = \$175,400$.

Leg elevator is $\$15,000 + \$125(78.91)$, which is $\$24,863.75$.

The **gravity spouts** are $\$20(188)$ or $\$3,760.00$.

Grand total cost of the project is **\$204,023.75**.

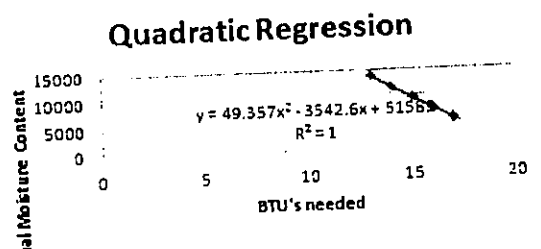
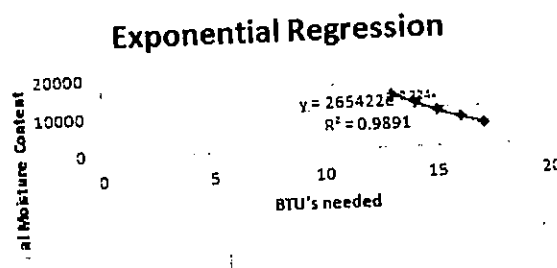
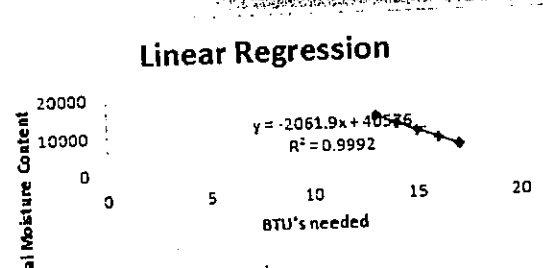
Part B

Cost of drying corn (Assuming LP Gas costs \$2.18 per gallon)

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Finding BTU's needed to dry corn -

| Enter axis labels | Independent Variable | Dependent Variable |
|-------------------|------------------------|--------------------|
| | Final Moisture Content | BTU's needed |
| Enter Quantities | 17 | 5625 |
| | 16 | 7522 |
| | 15 | 9579 |
| | 14 | 11635 |
| | 13 | 13878 |



Since the quadratic regression has the highest r-squared value, I will use that equation to calculate the number of BTU's needed to dry one bushel of corn from 20% to 15.5% and to 13.5%.

Quadratic regression equation: $y = 49.357x^2 - 3542.6x + 51583$

BTU's needed for 15.5%: $y = 49.357(15.5)^2 - 3542.6(15.5) + 51583 = 8,531$ BTU's

BTU's needed for 14% (From table): 11,635 BTU's

BTU's needed for 13.5%: $y = 49.357(13.5)^2 - 3542.6(13.5) + 51583 = 12,753$ BTU's

Finding per bushel cost -

For 15.5%: 8,531 BTU's $\cdot \frac{1 \text{ gallon}}{92,000 \text{ BTU's}} \cdot \frac{\$2.18}{1 \text{ gallon}} = \0.202 per bushel

For 14%: 11,635 BTU's $\cdot \frac{1 \text{ gallon}}{92,000 \text{ BTU's}} \cdot \frac{\$2.18}{1 \text{ gallon}} = \0.276 per bushel

For 13.5%: 12,753 BTU's $\cdot \frac{1 \text{ gallon}}{92,000 \text{ BTU's}} \cdot \frac{\$2.18}{1 \text{ gallon}} = \0.302 per bushel

Extra cost to dry 1 bushel of corn to 14% = cost to dry to 14% - cost to dry to 15.5%
= $\$0.276 - \0.202
= $\$0.074$

Extra cost to dry 1 bushel of corn to 13.5% = cost to dry to 13.5% - cost to dry to 15.5%
= $\$0.302 - \0.202
= $\$0.100$

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Part C

Shrinkage cost (Assuming market price of \$6.40 per bushel)

Finding the weight of the dry material in 56 lbs of corn –

For 15.5% moisture content (84.5% dry material):

Weight of dry material = $56(.845) = 47.32$ pounds

For 14% moisture content (86% dry material):

Weight of dry material = $56(.86) = 48.16$ pounds

For 13.5% moisture content (86.5% dry material):

Weight of dry material = $56(.865) = 48.44$ pounds

Finding price per pound of dry material for corn at 15.5% moisture content –

$$\frac{\$6.40}{47.32 \text{ lbs of dry material}} = \$0.135 \text{ per lb of dry material}$$

Finding the value of the dry material in 56 lbs of corn at 14% and 13.5% moisture content –

$$\text{For 14\%: } 48.16 \text{ lb of dry material} \cdot \frac{\$0.135}{1 \text{ lb of dry material}} = \$6.514$$

$$\text{For 13.5\%: } 48.44 \text{ lb of dry material} \cdot \frac{\$0.135}{1 \text{ lb of dry material}} = \$6.551$$

Finding shrinkage cost –

Shrinkage cost, per bushel, for selling corn at 14%: Value of dry material – selling price
 $\$6.514 - \$6.40 = \$0.114$

Shrinkage cost, per bushel, for selling corn at 13.5%: Value of dry material – selling price
 $\$6.551 - \$6.40 = \$0.151$

Session

Part D

Part D gives the following values that can be directly entered

Cost to store corn for 3 months in rental storage: \$0.09
 Cost to store corn for each month past the initial 3 months: \$0.02
 Percent of corn lost: September (20%), October (40%), November (30%),

The number of bushels that can be found on the student's note sheet from the previous day's

corn harvested: 132,000

The number of bushels that can possibly be transported must be calculated.

$$\text{August: } \frac{2 \text{ truckloads}}{1 \text{ day}} \times \frac{20 \text{ days}}{1 \text{ month}} \times \frac{600 \text{ bu.}}{1 \text{ truckload}} = \frac{24,000 \text{ bu.}}{\text{month}}$$

$$\text{For March, April, May, June, July: } \frac{1 \text{ truckload}}{1 \text{ day}} \times \frac{20 \text{ days}}{1 \text{ month}} \times \frac{600 \text{ bu.}}{1 \text{ truckload}} = \frac{12,000 \text{ bu.}}{\text{month}}$$

Entering all of these values into the spreadsheet results in a total cost of \$23,160 for rental

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storage to store the season's 132,000 bushels of harvested corn.

Cost to store 1 bushel for 3 months = 0.09

Cost to store 1 bushel for each month past the initial 3 months = 0.02

Number of bushels of corn harvested = 132,000

| Month | Percent of Crop Put in Storage | Number of Bushels That Is Possible to Transport | Percent of Crop Removed From Storage | Number of Bushels Removed From Storage During Month | Number of Bushels Remaining in Storage at End of Month | Cost of Rental Storage |
|-----------|--------------------------------|---|--------------------------------------|---|--|------------------------|
| September | 20 | | | | | \$2,376.00 |
| October | 40 | | | | | \$4,752.00 |
| November | 30 | | | | | \$3,564.00 |
| December | 10 | | | | | \$1,188.00 |
| January | | 24,000 | 0.18182 | 24,000 | 108,000 | \$2,640.00 |
| February | | 24,000 | 0.18182 | 24,000 | 84,000 | \$2,160.00 |
| March | | 12,000 | 0.09091 | 12,000 | 72,000 | \$1,680.00 |
| April | | 12,000 | 0.09091 | 12,000 | 60,000 | \$1,440.00 |
| May | | 12,000 | 0.09091 | 12,000 | 48,000 | \$1,200.00 |
| June | | 12,000 | 0.09091 | 12,000 | 36,000 | \$960.00 |
| July | | 12,000 | 0.09091 | 12,000 | 24,000 | \$720.00 |
| August | | 24,000 | 0.18182 | 24,000 | 0 | \$480.00 |

Total Cost of Rental Storage = \$23,160.00

Part E

The students will use the current selling price for 1 bushel of shelled corn, which they will find in the pre-work session. Suppose this price was \$6.40, and the price was found when the test is taken in the month of March. Using the provided graph for the "Monthly cash prices as % of September-October price," it is possible to determine a likely value for the selling price at harvest time in September-October as follows.

The March price of corn, on average, is about 114% of the October price. This means that $\$6.40 = 1.14(\text{October price})$, or $\text{October price} = \frac{\$6.40}{1.14} \approx \$5.61$. So based on the monthly cash prices in the graph, on average, we would expect that the price at harvest would be about \$5.61. This value can be placed into the spreadsheet for the "Expected September-October selling price" on line 35.

The "Average increase in selling price" must also be calculated and put into the spreadsheet. To do this, we must use the information in the provided time series plot, and

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also the values for the percent of crop removed in each month from January to August from the spreadsheet in part D.

| Month | Percent of Crop Removed, r , (from spreadsheet in part D) | Monthly Cash Price, p , as % of Sept.-Oct. Price (estimated from graph) | $r \times p$ (as a decimal) |
|----------|--|---|--------------------------------|
| January | 18.18% | 108% | 0.1963 |
| February | 18.18% | 112% | 0.2036 |
| March | 9.09% | 114% | 0.1036 |
| April | 9.09% | 115% | 0.1045 |
| May | 9.09% | 116% | 0.1054 |
| June | 9.09% | 116% | 0.1054 |
| July | 9.09% | 113% | 0.1027 |
| August | 18.18% | 111% | 0.2018 |
| Total = | | | 1.1233 |

So when different percentages of corn are sold at different percentages of the Sept.-Oct. selling price, the weighted average for the corn sold is approximately 1.1233 times the Sept.-Oct. selling price, or in other words the average increase in selling price is about 12.33% higher than the harvest price. The average increase in selling price is thus approximately $\$5.61(0.1233) = \0.6917 . This value can be entered for the "Average increase in selling price" on line 36 of the spreadsheet below.

Five other values must be obtained from the student's note sheet from the previous day's work. These values are the following.

Total cost of constructing the grain bins: \$203,991.25 (from part A on day 1)

Extra cost to dry 1 bu. to 13.5% moisture (for grain bin): \$0.10 (from part C on day 1)

Extra cost to dry 1 bu. to 14% moisture (for rental storage): \$0.074 (from part C on day 1)

Shrinkage Cost for selling corn at 14% moisture (for rental storage): \$0.114 (from part C on day 1)

Shrinkage Cost for selling corn at 13.5% moisture (for grain bins): \$0.151 (from part C on day 1)

These five values must be entered into the spreadsheet on the appropriate lines.



Grain Storage Investment Comparison

Ag Decision Maker - Iowa State University Extension

Place the cursor over cells with red triangles to read comments.

Enter your input values in yellow shaded cells.

Storage Type

Number of bushels stored
Total cost of bin construction (\$) bin (including floor, fan, heat), spouts, leg elevator additional augers, fans, conveyers, etc.
Useful life for bin (years)
Useful life for augers, fans, conveyers (years)
Interest rate for financing initial investment (%)

Average moisture at harvest (%)
Moisture level for storage (%)
Extra handling cost (\$ per bu.)
Extra transportation cost (\$ per bu.)
Quality loss for on-farm storage (%)
Fans, total horsepower
Hours fans will run, total
Electricity rate (\$ per KWH)
Add'l hours per month spent managing & handling grain
Labor value (\$ per hour)

Commercial storage charges
Minimum charge or base rate (\$ per bu.)
Base period (months)
Rate per month after base period (\$ per bu. per month)

Expected September-October cash selling price of corn (\$ per bu.)
Average selling price advantage (\$ per bu.)
Short-term interest rate (%)
Average length of storage (months)

Fixed costs

Interest and depreciation on investment
Repairs (estimated at 1.5% of initial investment)
Insurance and taxes (estimated at 1% of investment)
Total fixed costs (\$ per year)
Fixed costs (\$ per bu.)

Variable costs (\$ per bu.)

Storage rental charge or service fee
Interest on grain inventory
Extra drying cost for corn
Extra shrinkage cost for corn
Extra handling and transportation cost
Quality deterioration
Electricity cost
Extra labor cost
Total cost of storage

Less selling price advantage
Net cost of storage (\$ per bu.)

| Corn | |
|--------------------|----------------|
| On-farm Investment | Rental Storage |
| 132,000 bu. | 132,000 bu. |
| \$ 204,024 | |
| \$ 5,000 | |
| 25 years | |
| 10 years | |
| 4.6% | |
| 20.0% | 20.0% |
| 13.5% | 14.0% |
| \$ 0.015 | |
| \$ 0.050 | |
| 1.0% | |
| 10 hp | |
| 1440 hrs | |
| \$ 0.1000 | |
| 5.00 | |
| \$ 10.00 | |
| | \$0.0900 |
| | 3 months |
| | \$0.0200 |
| \$ 5.61 | \$ 5.61 |
| \$ 0.69 | \$ 0.49 |
| 7.00% | 7.00% |
| 7 months | 7 months |

| On-farm Investment | Rental Storage |
|--------------------|----------------|
| \$ 14,534 | |
| \$ 3,135 | |
| \$ 2,090 | |
| \$ 19,759 | |
| \$ 0.15 | |
| | \$ 0.170 |
| \$ 0.257 | \$ 0.249 |
| \$ 0.100 | \$ 0.074 |
| \$ 0.151 | \$ 0.114 |
| \$ 0.065 | |
| \$ 0.056 | |
| \$ 0.009 | |
| \$ 0.003 | |
| \$ 0.79 | \$ 0.61 |
| \$ 0.692 | \$ 0.492 |
| \$ 0.10 | \$ 0.12 |

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Recommendation: Based strictly on cost, the best recommendation to make to the farmer would be to build the grain bins and use them for storage, since the net cost for rental storage is \$0.12 per bushel and the net cost for grain bin storage is \$0.10 per bushel, which is lower. However, other considerations might convince the farmer to accept the higher cost.

Scoring Notes:

Scoring Rubric:

Responses to Part A will receive 0-4 points based on the following:

4 points: The student demonstrates a thorough understanding of the 3 major concepts assessed in this part: complete investigation of choice in size of the bins; use of right triangle trigonometry (or Pythagorean Theorem) to calculate missing heights; and a combination of strategies used in earlier grades (linear functions and proportional relationships) to analyze costs.

3 points: The student demonstrates a thorough understanding of 2 of the 3 major concepts assessed in this part and a limited understanding of the 3rd. This limited understanding could be an inappropriate choice for the size of the bins by picking one that doesn't hold enough, OR the student will demonstrate a thorough understanding of all 3 of the major concepts assessed in this part with minor arithmetic errors.

2 points: The student demonstrates a thorough understanding of 1 of the 3 major concepts assessed in this part and a limited understanding of the other two. A student receiving 2 points for this part may thoroughly determine the correct size of the bins but makes significant errors in the other two parts.

1 point: The student demonstrates a limited understanding of all of the 3 major concepts assessed in this part OR a thorough understanding of 1 of the 3 concepts and little to no understanding of the other 2. A student receiving 1 point for this part may thoroughly determine the correct size of the bins but only be able to guess at a cost for the rest of the project based on conjecture.

0 points: The student demonstrates little to no understanding of any of the 3 major concepts assessed in this part.

Responses to Part B will receive 0-4 points based on the following:

4 points: The student has a thorough understanding of how to analyze a real-world scenario to identify important quantities and use units to solve problems. The student has a thorough understanding of how to select and use a regression model in the context of the data. The student enters the values for final moisture content as the independent variable and the values for the number of BTU's needed to dry from 20% moisture content as the dependent variable. The student identifies that the quadratic regression is the best fit or explains that another type of regression is close enough to a perfect fit that the level of error would be negligible. The student uses the chosen regression function to find the number of BTU's needed to dry the corn to 15.5% and to 13.5% moisture content. The student shows how the units of the quantities lead to the calculation for the total cost per

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bushel of drying corn and then subtracts to find the extra cost for drying corn to 14% and to 13.5%.

3 points: The student has an adequate understanding of how to analyze a real-world scenario to identify important quantities and use units to solve problems. The student has a thorough understanding of how to select and use a regression model in the context of the data. The student enters the values for final moisture content as the independent variable and the values for the number of BTU's needed to dry from 20% moisture content as the dependent variable. The student identifies that the quadratic regression is the best fit or explains that another type of regression is close enough to a perfect fit that the level of error would be negligible. The student uses the chosen regression function to find the number of BTU's needed to dry the corn to 15.5% and to 13.5% moisture content. The student shows how the units of the quantities lead to the calculation for the total cost per bushel of drying corn but forgets to subtract to find the extra cost for drying corn to 14% and to 13.5%.

2 points: The student has a solid understanding of how to analyze a real-world scenario to identify important quantities and use units to solve problems. The student has a limited understanding of how to select and use a regression model in the context of the data. The student either does not correctly use the regression spreadsheet to identify the best model for the data, or uses a model other than the quadratic one without explaining why it is acceptable in the context. The student uses the values they identified (which may be incorrect) for the number of BTU's needed to dry the corn to each level and shows how the units of the quantities lead to the calculation for the total cost per bushel of drying corn and then subtracts to find the extra cost for drying corn to 14% and to 13.5%.

1 point: The student has some understanding of how to analyze a real-world scenario to identify important quantities and use units to solve problems. The student has a limited understanding of how to select and use a regression model in the context of the data. The student either does not correctly use the regression spreadsheet to identify the best model for the data, or uses a model other than the quadratic one without explaining why it is acceptable in the context. The student uses the values they identified (which may be incorrect) for the number of BTU's needed to dry the corn to each level and shows how the units of the quantities lead to the calculation for the total cost per bushel of drying corn but forgets to subtract to find the extra cost for drying corn to 14% and to 13.5%. **OR** The student has limited understanding of how to analyze a real-world scenario to identify important quantities and use units to solve problems. The student has a solid understanding of how to select and use a regression model in the context of the data. The student enters the values for final moisture content as the independent variable and the values for the number of BTU's needed to dry from 20% moisture content as the dependent variable. The student identifies that the quadratic regression is the best fit or explains that another type of regression is close enough to a perfect fit that the level of error would be negligible. The student does not use the values they identified (which are correct) for the number of BTU's needed to dry the corn to each level to show how the units of the quantities lead to the calculation for the total cost per bushel of drying.

0 points: The student has limited understanding of how to analyze a real-world scenario to identify important quantities and use units to solve problems. The student has a limited understanding of how to select and use a regression model in the context of the data. The student either does not correctly use the regression spreadsheet to identify the best model for the data, or uses a model other than the quadratic one without explaining why it is acceptable in the context. The student either does not identify the number of BTU's needed

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to dry the corn to each level or does not use the values they identified (which are incorrect) to show how the units of the quantities lead to the calculation for the total cost.

Responses to Part C will receive 0-4 points based on the following:

4 points: The student has a thorough understanding of how to analyze a real-world scenario to calculate rates and use units to solve problems. The student uses the percent of moisture content to calculate the weight of the dry material in 56 lbs of corn at each moisture level. The student uses the current price of corn to calculate the value of the dry material in the corn at the market standard moisture level of 15.5%. The student uses the calculated rate to find the value of the dry material in 56 lbs of each of the dryer corns. The student compares the value of the dry material in each of the dryer corns to the selling price to find the cost of shrinkage.

3 points: The student has some understanding of how to analyze a real-world scenario to calculate rates and use units to solve problems. The student uses the percent of moisture content to calculate the weight of the dry material in 56 lbs of corn at each moisture level. The student uses the current price of corn to calculate the value of the dry material in the corn at the market standard moisture level of 15.5%. The student uses the calculated rate to find the value of the dry material in 56 lbs of each of the dryer corns. The student does not compare the value of the dry material in each of the dryer corns to the selling price to find the cost of shrinkage.

2 points: The student has incomplete understanding of how to analyze a real-world scenario to calculate rates and use units to solve problems. The student uses the percent of moisture content to calculate the weight of the dry material in 56 lbs of corn at each moisture level. The student uses the current price of corn to calculate the value of the dry material in the corn at the market standard moisture level of 15.5%. The student does not use the calculated rate to find the value of the dry material in 56 lbs of each of the dryer corns, and so cannot compare the value of the dry material in each of the dryer corns to the selling price to find the cost of shrinkage.

1 point: The student has limited understanding of how to analyze a real-world scenario to calculate rates and use units to solve problems. The student uses the percent of moisture content to calculate the weight of the dry material in 56 lbs of corn at each moisture level. The student does not use the current price of corn to calculate the value of the dry material in the corn at the market standard moisture level of 15.5%. The student cannot find the value of the dry material in 56 lbs of each of the dryer corns, and so cannot compare the value of the dry material in each of the dryer corns to the selling price to find the cost of shrinkage.

0 points: The student has no understanding of how to analyze a real-world scenario to calculate rates and use units to solve problems. The student does not use the percent of moisture content to calculate the weight of the dry material in 56 lbs of corn at each moisture level. The student therefore cannot find the value of the dry material and the cost of shrinkage.

Responses to Part D will receive 0-4 points based on the following:

4 points: The student has a thorough understanding of how to analyze a real-world scenario to calculate rates and use units to solve problems. The student correctly calculates

the number of bushels of corn that can be transported to market for the block of months January, February, August, and separately for the block of months March, April, May, June, July. The student identifies the appropriate information to enter into the provided spreadsheet, enters this information into the spreadsheet, and records the value of \$23,160 for the total cost of transportation.

3 points: The student has some understanding of how to analyze a real-world scenario to calculate rates and use units to solve problems. The student fails to correctly calculate the amount of corn transported for one of the block of months, but correctly calculates it for the other block of months. The student identifies the appropriate information to enter into the provided spreadsheet, enters this information into the spreadsheet, and records a value for the total cost of transportation that is correct except for the use of the one incorrect number.

2 points: The student has incomplete understanding of how to analyze a real-world scenario to calculate rates and use units to solve problems. The student fails to correctly calculate the amount of corn transported for both of the blocks of months. The student identifies the appropriate information to enter into the provided spreadsheet, enters this information into the spreadsheet, and records a value for the total cost of transportation that is correct except for the use of the two incorrect numbers.

1 points: The student has limited understanding of how to analyze a real-world scenario to calculate rates and use units to solve problems. The student fails to correctly calculate the amount of corn transported for both of the blocks of months. The student enters some information correctly into the spreadsheet, but not all correct information, and thus records an incorrect number for the total cost of transportation.

0 points: The student has no understanding of how to analyze a real-world scenario to calculate rates and use units to solve problems. The student fails to perform any calculation correctly, and fails to enter any correct information into the spreadsheet.

Responses to Part E will receive 0-4 points based on the following:

4 points: The student has a thorough understanding of how to analyze a real-world scenario to read information on a graph, set up a simple linear equation and solve for an unknown value, and reason quantitatively using percents. The student uses the current selling price of corn and the provided time series plot to correctly calculate the estimated selling price of corn at harvest time in October. The student also correctly calculates the "Average selling price advantage" by using the percent of crop removed and sold each month and the monthly cash price during that month to multiply percents and then calculate an average percent above the October price. These values and values from the previous day are all entered correctly into the spreadsheet, and then the student makes a recommendation about what type of storage to use and gives valid reasons for the recommendation.

3 points: The student has some understanding of how to analyze a real-world scenario to read information on a graph, set up a simple linear equation and solve for an unknown value, and reason quantitatively using percents. The student correctly calculates the "Average selling price advantage" by using the percent of crop removed and sold each month and the monthly cash price during that month to multiply percents and then calculate an average percent above the October price. However, the student fails to use the current selling price of corn and the provided time series plot to correctly calculate the

HS Mathematics Sample PT Form Claim 4

estimated selling price of corn at harvest time in October. These values and values from the previous day are all entered correctly into the spreadsheet, and then the student makes a recommendation about what type of storage to use and gives valid reasons for the recommendation.

2 points: The student has some understanding of how to analyze a real-world scenario to read information on a graph, set up a simple linear equation and solve for an unknown value, and reason quantitatively using percents. The student uses the current selling price of corn and the provided time series plot to correctly calculate the estimated selling price of corn at harvest time in October. However, the student fails to correctly calculate the "Average selling price advantage" by using the percent of crop removed and sold each month and the monthly cash price during that month to multiply percents and then calculate an average percent above the October price. These values and values from the previous day are all entered correctly into the spreadsheet, and then the student makes a recommendation about what type of storage to use and gives valid reasons for the recommendation.

1 points: The student has limited understanding of how to analyze a real-world scenario to read information on a graph, set up a simple linear equation and solve for an unknown value, and reason quantitatively using percents. The student fails to use the current selling price of corn and the provided time series plot to correctly calculate the estimated selling price of corn at harvest time in October. The student also fails to correctly calculate the "Average selling price advantage" by using the percent of crop removed and sold each month and the monthly cash price during that month to multiply percents and then calculate an average percent above the October price. The student makes a recommendation about what storage to use, but the recommendation is made based on incorrectly calculated numbers from the spreadsheet.

0 points: The student has no understanding of how to analyze a real-world scenario to read information on a graph, set up a simple linear equation and solve for an unknown value, and reason quantitatively using percents. Any calculations made are incorrect, and no recommendation is made or a recommendation is made but no reasoning is given to justify

Brady, John

From: James Stirling [JStirling@stirlingbenefits.com]
Sent: Thursday, February 07, 2013 10:17 AM
To: Brian Fournier
Cc: Derrylyn Gorski; Brady, John; William Blake; Mary Sofair
Subject: RE: Bethany 6th graders

Thank you, Brian.
Jamie

From: Brian Fournier [mailto:bfournier@fournierlawfirm.com]
Sent: Wednesday, February 06, 2013 6:49 PM
To: James Stirling
Cc: Derrylyn Gorski; Brady, John; William Blake; Mary Sofair
Subject: RE: Bethany 6th graders

While I disagree with your historical account and your recitation of the facts, I am happy to make another request to Dr. Brady.

John Brady:

We are interested in knowing how many classrooms you could make available to house sixth grade students at the Bethany Middle School and how many students in total you could support. Given the limited educational value to a "rent a classroom" concept, we would also need you to come up with a plan for integration of the sixth grade into the middle school. Along that line, we would also like to know whether you have enough classrooms available for Woodbridge Sixth graders and could support integration of Woodbridge students as well.

Obviously, the question of space has to be answered first. If there is enough room to house both the Bethany and Woodbridge sixth graders, then the issue of integration and feasibility should be explored further. If not, then there is little utility to pursuing the discussion further.

If there is sufficient room at the middle school that is not currently being utilized and you can come up with a plan for integration, we would like to know the cost of sending the Bethany sixth graders to the middle school. Certainly, any plan would require a long term commitment, so we would need to know your willingness to make such a commitment.

If you have any questions or would like to discuss the matter further, please feel free to contact me directly.

Thank you for your consideration and I look forward to your response.

Brian C. Fournier, Esq.
THE FOURNIER LAW FIRM, LLC
1948 Chapel Street
New Haven, CT 06515
p (203) 389-9500
f (203) 389-8344
57 Holmes Avenue
Waterbury, CT
e brian@fournierlawfirm.com

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From: James Stirling [mailto:JStirling@stirlingbenefits.com]
Sent: Wednesday, February 06, 2013 4:14 PM
To: Brian Fournier
Cc: Derrylyn Gorski; Brady, John; William Blake; Mary Sofair
Subject: Bethany 6th graders

Hello Brian,

We spoke this morning on the phone and from that conversation I understood that you believed that Amity had been asked if we could take the six graders at the Bethany Middle School, and Amity had responded that the space was already being used.

I spoke to John Brady after our call and he confirmed a conversation with John Barile about the space, where he told John that the space is currently being used for other purposes. John Brady shared with me that in 2004 the school housed approximately 750 students and we have 375 kids there now. Of course the space is being used, but that does not preclude it from being re-purposed for 80 Bethany 6th graders.

You will recall that about a month ago, on January 7th, I emailed you to ask if you and/or Derry would please make a formal request of Amity to evaluate the possibility of moving the sixth graders to the middle school. I copied Bill Blake, John Brady and Derry Gorsky on that e-mail. I believe that from Amity's perspective, no formal request has been made.

A formal "ask" might look something like this:

Would the Amity administration please evaluate the ability and cost of the Bethany Board of Education to contracting for the placement of the Bethany 6th graders at the Amity Middle School, Bethany Campus? Could we please provide a menu of options that include:

- Classroom space only
- Food services
- Nursing services
- Support services for special education
- Other services that in your opinion would need to be included in a possible contract

Please quote the placement of the 6th grade with Bethany BOE teaching staff. We'd also be interested in a contract for an all inclusive option that includes teaching staff as part of the Amity system. We envision a mutually renewal one year contract.

Brian, you asked why I am driving this option when the Board has already voted for a school expansion. Here's why, I see an underutilized middle school building located in Bethany, a shrinking school enrollment, and a marvelously enriched educational opportunity for 6th graders at the middle school. In short, I think that option may be better for the kids. Maybe the Amity option will not work out, but it was not fully explored before the Board voted for a building expansion.

Maybe the Bethany Board is not interested in finding out if it is financially and educationally desirable to contract with Amity for space and/or services for the Bethany 6th graders, but I think the school building project risks losing some support if the middle school option is not thoroughly evaluated.

Sincerely,

James Stirling
Bethany BOE member 2008-2010
Amity BOE member 2010 to current
20 Miller Road, Bethany

AMITY REGIONAL SCHOOL DISTRICT NO. 5
Bethany Orange Woodbridge
25 Newton Road, Woodbridge, Connecticut 06525



John J. Brady, Ed.D.
Superintendent of Schools

john.brady@reg5.k12.ct.us
phone: (203) 392-2106
Fax: (203) 397-4864

February 11, 2013

To: Members of the Board of Education
From: John J. Brady, Superintendent of Schools
Re: Personnel Report

New Hire(s):

Amity Reg. District Offices – Woodbridge – None

Amity Reg. High School – Woodbridge – None

Amity Reg. Middle Schools – Orange – None

Amity Reg. Middle School – Bethany – None

Coaches:

Amity Reg. High School – Woodbridge:

Loren Vorrace – Varsity Softball
Sierra Kader – Asst. Varsity Girls' Soccer
Brandon Pepe – Varsity Boys' Lacrosse
Michael Faroni – Asst. Varsity Boys' Lacrosse
Brett Dowty – Asst. Varsity Boys' Lacrosse

Amity Reg. Middle Schools – Bethany / Orange – None

Resignation(s):

Meredith Kohlbrenner – English – Amity Reg. Middle School – Bethany Campus

Retirement(s):

Elizabeth Raucci – Secretary – Amity Reg. Technology Office - Woodbridge

JJB/pfc

AMITY REGIONAL SCHOOL DISTRICT NO. 5
REVENUES AND EXPENDITURES
FOR FY 2012-2013

| LINE | CATEGORY | COLUMN 1 2011-2012 ACTUAL | COLUMN 2 2012-2013 BUDGET | COLUMN 3 DEC '12 FORECAST | COLUMN 4 CHANGE INCR./ (DECR.) | COLUMN 5 JAN '13 FORECAST | COLUMN 6 VARIANCE OVER/(UNDER) | COL 7 FAV UNF |
|------|---|---------------------------------|---------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------|
| 1 | MEMBER TOWN ALLOCATIONS | 41,199,830 | 41,664,551 | 41,664,551 | 0 | 41,664,551 | 0 | FAV |
| 2 | OTHER REVENUE | 202,397 | 209,505 | 230,291 | 0 | 230,291 | 20,786 | FAV |
| 3 | OTHER STATE GRANTS | 610,679 | 1,043,577 | 801,301 | 0 | 801,301 | (242,276) | UNF |
| 4 | MISCELLANEOUS INCOME | 1,031,364 | 409,182 | 410,004 | 3,722 | 413,726 | 4,544 | FAV |
| 5 | BUILDING RENOVATION GRANTS | 478,125 | 286,347 | 286,347 | 0 | 286,347 | 0 | FAV |
| 6 | TOTAL REVENUES | 43,522,395 | 43,613,162 | 43,392,494 | 3,722 | 43,396,216 | (216,946) | UNF |
| 7 | SALARIES | 22,713,423 | 22,926,055 | 23,068,633 | 16,620 | 23,085,253 | 159,198 | UNF |
| 8 | BENEFITS | 5,498,457 | 5,035,918 | 5,053,580 | (3,746) | 5,049,834 | 13,916 | UNF |
| 9 | PURCHASED SERVICES | 5,491,309 | 6,923,720 | 6,577,318 | 88,647 | 6,665,965 | (257,755) | FAV |
| 10 | DEBT SERVICE | 5,633,460 | 5,384,858 | 5,342,896 | 0 | 5,342,896 | (21,962) | FAV |
| 11 | SUPPLIES (INCLUDING UTILITIES) | 2,946,315 | 3,040,193 | 3,052,428 | (54,019) | 2,998,409 | (41,784) | FAV |
| 12 | EQUIPMENT | 320,059 | 56,887 | 56,887 | 4,916 | 61,803 | 4,916 | UNF |
| 13 | IMPROVEMENTS / CONTINGENCY | 33,637 | 150,000 | 70,439 | 0 | 70,439 | (79,561) | FAV |
| 14 | DUES AND FEES | 106,191 | 115,531 | 119,789 | 0 | 119,789 | 4,258 | UNF |
| 15 | TRANSFER ACCOUNT | 150,050 | 0 | 0 | 0 | 0 | 0 | FAV |
| 16 | ESTIMATED UNSPENT BUDGETS | 0 | 0 | 0 | (50,000) | (50,000) | (50,000) | FAV |
| 17 | TOTAL EXPENDITURES | 42,892,901 | 43,613,162 | 43,341,970 | 2,418 | 43,344,388 | (268,774) | FAV |
| 18 | SUBTOTAL | 629,494 | 0 | 50,524 | 1,304 | 51,828 | 51,828 | FAV |
| 19 | PLUS: CANCELLATION OF PRIOR YEAR'S ENCUMBRANCES | 77 | 0 | 0 | 0 | 0 | 0 | FAV |
| 20 | DESIGNATED FOR SUBSEQUENT YEAR'S BUDGET: | | | | | | | |
| 21 | LESS: ASSIGNED TO NEXT YEAR'S BUDGET | (300,000) | | 0 | 0 | 0 | 0 | FAV |
| 22 | LESS: COMMITTED TO ERRP | 0 | 0 | 0 | 0 | 0 | 0 | FAV |
| 23 | NET BALANCE / (DEFICIT) | 329,571 | 0 | 50,524 | 1,304 | 51,828 | 51,828 | FAV |

Column 7: FAV=Favorable Variance
Revenues: At or OVER budget
Expenditures: At or UNDER budget

AMITY REGIONAL SCHOOL DISTRICT NO. 5
REVENUES AND EXPENDITURES
FOR FY 2012-2013

| LINE | CATEGORY | COLUMN 1 | COLUMN 2 | COLUMN 3 | COLUMN 4 | COLUMN 5 | COLUMN 6 | COLUMN 7 |
|------|-----------------------------------|---------------------|---------------------|---------------------|--------------------------|---------------------|--------------------------|------------|
| | | 2011-2012 ACTUAL | 2012-2013 BUDGET | DEC '12 FORECAST | CHANGE INCR./ (DECR.) | JAN '13 FORECAST | VARIANCE OVER/(UNDER) | FAV UNF |
| 1 | BETHANY ALLOCATION | 8,439,785 | 8,591,647 | 8,591,647 | 0 | 8,591,647 | 0 | FAV |
| 2 | ORANGE ALLOCATION | 19,944,426 | 20,687,700 | 20,687,700 | 0 | 20,687,700 | 0 | FAV |
| 3 | WOODBRIIDGE ALLOCATION | 12,815,619 | 12,385,204 | 12,385,204 | 0 | 12,385,204 | 0 | FAV |
| 4 | MEMBER TOWN ALLOCATIONS | 41,199,830 | 41,664,551 | 41,664,551 | 0 | 41,664,551 | 0 | FAV |
| 5 | ADULT EDUCATION | 3,244 | 3,307 | 2,936 | 0 | 2,936 | (371) | UNF |
| 6 | PARKING INCOME | 30,054 | 30,000 | 30,000 | 0 | 30,000 | 0 | FAV |
| 7 | INVESTMENT INCOME | 977 | 2,500 | 1,500 | 0 | 1,500 | (1,000) | UNF |
| 8 | ATHLETICS | 25,948 | 22,000 | 23,500 | 0 | 23,500 | 1,500 | FAV |
| 9 | TUITION REVENUE | 69,232 | 76,028 | 110,859 | 0 | 110,859 | 34,831 | FAV |
| 10 | TRANSPORTATION INCOME | 72,942 | 75,670 | 61,496 | 0 | 61,496 | (14,174) | UNF |
| 11 | TRANSPORTATION BOWA AGREEMENT | 0 | 0 | 0 | 0 | 0 | 0 | FAV |
| 12 | OTHER REVENUE | 202,397 | 209,505 | 230,291 | 0 | 230,291 | 20,786 | FAV |
| 13 | BESB GRANT | 0 | 0 | 0 | 0 | 0 | 0 | FAV |
| 14 | SPECIAL EDUCATION GRANTS | 610,679 | 1,043,577 | 801,301 | 0 | 801,301 | (242,276) | UNF |
| 15 | OTHER STATE GRANTS | 610,679 | 1,043,577 | 801,301 | 0 | 801,301 | (242,276) | UNF |
| 16 | RENTAL INCOME | 29,701 | 29,000 | 29,000 | 0 | 29,000 | 0 | FAV |
| 17 | CAPITAL RESERVE | 0 | 0 | 0 | 0 | 0 | 0 | FAV |
| 18 | CONSTRUCTION SINKING DEBT FUND | 262,000 | 0 | 0 | 0 | 0 | 0 | FAV |
| 19 | DESIGNATED FROM PRIOR YEAR | 675,000 | 300,000 | 300,000 | 0 | 300,000 | 0 | FAV |
| 20 | EARLY RETIREE REINSURANCE PROGRAM | 0 | 64,034 | 63,956 | 0 | 63,956 | (78) | UNF |
| 21 | OTHER REVENUE | 64,663 | 16,148 | 17,048 | 3,722 | 20,770 | 4,622 | FAV |
| 22 | TRANSFER IN | 0 | 0 | 0 | 0 | 0 | 0 | FAV |
| 23 | MISCELLANEOUS INCOME | 1,031,364 | 409,182 | 410,004 | 3,722 | 413,726 | 4,544 | FAV |
| 24 | BUILDING RENOVATION GRANTS | 478,125 | 286,347 | 286,347 | 0 | 286,347 | 0 | FAV |
| 25 | TOTAL REVENUES | 43,522,395 | 43,613,162 | 43,392,494 | 3,722 | 43,396,216 | (216,946) | UNF |

Column 7: FAV=Favorable Variance
Revenues: At or OVER budget
Expenditures: At or UNDER budget

AMITY REGIONAL SCHOOL DISTRICT NO. 5
REVENUES AND EXPENDITURES
FOR FY 2012-2013

| | | COLUMN 1 | COLUMN 2 | COLUMN 3 | COLUMN 4 | COLUMN 5 | COLUMN 6 | COLUMN 7 |
|------|--|---------------------|---------------------|---------------------|------------------------|---------------------|--------------------------|---------------------|
| LINE | CATEGORY | 2011-2012 ACTUAL | 2012-2013 BUDGET | DEC '12 FORECAST | CHANGE INCR./DECR.) | JAN '13 FORECAST | VARIANCE OVER/(UNDER) | COL 7 FAV UNF |
| 1 | 5111-CERTIFIED SALARIES | 19,210,777 | 19,326,825 | 19,445,106 | 7,450 | 19,452,556 | 125,731 | UNF |
| 2 | 5112-CLASSIFIED SALARIES | 3,502,646 | 3,599,230 | 3,623,527 | 9,170 | 3,632,697 | 33,467 | UNF |
| 3 | SALARIES | 22,713,423 | 22,926,055 | 23,068,633 | 16,620 | 23,085,253 | 159,198 | UNF |
| 4 | 5200-MEDICARE - ER | 294,034 | 298,468 | 298,632 | 215 | 298,847 | 379 | UNF |
| 5 | 5210-FICA - ER | 221,612 | 229,591 | 225,078 | 162 | 225,240 | (4,351) | FAV |
| 6 | 5220-WORKERS' COMPENSATION | 119,070 | 134,184 | 154,010 | (4,123) | 149,887 | 15,703 | UNF |
| 7 | 5231-BLUE CROSS DENTAL | 259,310 | 247,121 | 247,121 | 0 | 247,121 | 0 | FAV |
| 8 | 5251-MEDICAL INSURANCE | 3,272,420 | 2,799,458 | 2,799,458 | 0 | 2,799,458 | 0 | FAV |
| 9 | 5860-OPEB TRUST | 376,753 | 394,346 | 394,346 | 0 | 394,346 | 0 | FAV |
| 10 | 5260-LIFE INSURANCE | 45,356 | 44,438 | 45,824 | 0 | 45,824 | 1,386 | UNF |
| 11 | 5275-DISABILITY INSURANCE | 9,345 | 9,582 | 10,381 | 0 | 10,381 | 799 | UNF |
| 12 | 5280-PENSION PLAN - CLASSIFIED | 599,032 | 663,791 | 663,791 | 0 | 663,791 | 0 | FAV |
| 13 | 5282-RETIREMENT SICK LEAVE - CERT | 113,827 | 87,264 | 87,264 | 0 | 87,264 | 0 | FAV |
| 14 | 5283-RETIREMENT SICK LEAVE - CLASS | 24,093 | 8,118 | 8,118 | 0 | 8,118 | 0 | FAV |
| 15 | 5284-SEVERANCE PAY - CERTIFIED | 131,225 | 107,557 | 107,557 | 0 | 107,557 | 0 | FAV |
| 16 | 5290-UNEMPLOYMENT COMPENSATION | 32,380 | 12,000 | 12,000 | 0 | 12,000 | 0 | FAV |
| 17 | BENEFITS | 5,498,457 | 5,035,918 | 5,053,580 | (3,746) | 5,049,834 | 13,916 | UNF |
| 18 | 5322-INSTRUCTIONAL PROG IMPROVEMENT | 9,076 | 11,564 | 11,564 | 0 | 11,564 | 0 | FAV |
| 19 | 5327-DATA PROCESSING | 63,014 | 69,140 | 69,140 | 0 | 69,140 | 0 | FAV |
| 20 | 5330-OTHER PROFESSIONAL & TECHNICAL SRVC | 976,948 | 930,829 | 917,755 | 24,000 | 941,755 | 10,926 | UNF |
| 21 | 5440-RENTALS - LAND, BLDG, EQUIPMENT | 58,791 | 71,487 | 86,487 | 0 | 86,487 | 15,000 | UNF |
| 22 | 5510-PUPIL TRANSPORTATION | 2,108,674 | 2,524,305 | 2,426,766 | 2,638 | 2,429,404 | (94,901) | FAV |
| 23 | 5521-GENERAL LIABILITY INSURANCE | 158,330 | 166,770 | 162,761 | 0 | 162,761 | (4,009) | FAV |
| 24 | 5550-COMMUNICATIONS: TEL, POST, ETC. | 68,605 | 73,748 | 73,748 | 1,200 | 74,948 | 1,200 | UNF |
| 25 | 5560-TUITION EXPENSE | 1,971,800 | 2,984,225 | 2,737,445 | 60,809 | 2,798,254 | (185,971) | FAV |
| 26 | 5590-OTHER PURCHASED SERVICES | 76,071 | 91,652 | 91,652 | 0 | 91,652 | 0 | FAV |
| 27 | PURCHASED SERVICES | 5,491,309 | 6,923,720 | 6,577,318 | 88,647 | 6,665,965 | (257,755) | FAV |

Column 7: FAV=Favorable Variance
Revenues: At or OVER budget
Expenditures: At or UNDER budget

AMITY REGIONAL SCHOOL DISTRICT NO. 5
REVENUES AND EXPENDITURES
FOR FY 2012-2013

| LINE | CATEGORY | COLUMN 1 | COLUMN 2 | COLUMN 3 | COLUMN 4 | COLUMN 5 | COLUMN 6 | COLUMN 7 |
|------|--|---------------------|---------------------|---------------------|------------------------|---------------------|--------------------------|------------|
| | | 2011-2012 ACTUAL | 2012-2013 BUDGET | DEC '12 FORECAST | CHANGE INCR./DECR.) | JAN '13 FORECAST | VARIANCE OVER/(UNDER) | FAV UNF |
| 28 | 5830-INTEREST | 1,832,444 | 1,679,858 | 1,657,896 | 0 | 1,657,896 | (21,962) | FAV |
| 29 | 5910-REDEMPTION OF PRINCIPAL | 3,801,016 | 3,685,000 | 3,685,000 | 0 | 3,685,000 | 0 | FAV |
| 30 | DEBT SERVICE | 5,633,460 | 5,364,858 | 5,342,896 | 0 | 5,342,896 | (21,962) | FAV |
| 31 | 5410-UTILITIES, EXCLUDING HEAT | 749,270 | 812,299 | 790,660 | 0 | 790,660 | (21,639) | FAV |
| 32 | 5420-REPAIRS, MAINTENANCE & CLEANING | 675,754 | 672,721 | 672,721 | 6,190 | 678,911 | 6,190 | UNF |
| 33 | 5611-INSTRUCTIONAL SUPPLIES | 321,269 | 359,292 | 354,492 | 0 | 354,492 | (4,800) | FAV |
| 34 | 5613-MAINTENANCE/CUSTODIAL SUPPLIES | 185,312 | 179,208 | 179,208 | 0 | 179,208 | 0 | FAV |
| 35 | 5620-OIL USED FOR HEATING | 331,360 | 217,839 | 37,657 | (15,714) | 21,943 | (195,896) | FAV |
| 36 | 5621-NATURAL GAS | 0 | 0 | 149,495 | (44,495) | 105,000 | 105,000 | UNF |
| 37 | 5627-TRANSPORTATION SUPPLIES | 153,298 | 204,967 | 204,967 | 0 | 204,967 | 0 | FAV |
| 38 | 5641-TEXTS & DIGITAL RESOURCES | 71,131 | 106,331 | 111,131 | 0 | 111,131 | 4,800 | UNF |
| 39 | 5642-LIBRARY BOOKS & PERIODICALS | 22,439 | 21,607 | 21,607 | 0 | 21,607 | 0 | FAV |
| 40 | 5690-OTHER SUPPLIES | 436,482 | 465,929 | 530,490 | 0 | 530,490 | 64,561 | UNF |
| 41 | SUPPLIES (INCLUDING UTILITIES) | 2,946,315 | 3,040,193 | 3,052,428 | (54,019) | 2,998,409 | (41,784) | FAV |
| 42 | 5730-EQUIPMENT - NEW | 124,486 | 28,671 | 28,671 | 0 | 28,671 | 0 | FAV |
| 43 | 5731-EQUIPMENT - REPLACEMENT | 195,573 | 28,216 | 28,216 | 4,916 | 33,132 | 4,916 | UNF |
| 44 | EQUIPMENT | 320,059 | 56,887 | 56,887 | 4,916 | 61,803 | 4,916 | UNF |
| 45 | 5715-IMPROVEMENTS TO BUILDING | 4,785 | 0 | 0 | 0 | 0 | 0 | FAV |
| 46 | 5720-IMPROVEMENTS TO SITES | 28,852 | 0 | 17,550 | 0 | 17,550 | 17,550 | UNF |
| 47 | 5850-CONTINGENCY | 150,000 | 150,000 | 150,000 | 0 | 150,000 | 0 | FAV |
| 48 | TRSF. FROM CONTINGENCY TO OTHER ACCTS. | (150,000) | 0 | (97,111) | 0 | (97,111) | (97,111) | FAV |
| 49 | 5855-CAPITAL RESERVE | 0 | 0 | 0 | 0 | 0 | 0 | FAV |
| 50 | IMPROVEMENTS / CONTINGENCY | 33,637 | 150,000 | 70,439 | 0 | 70,439 | (79,561) | FAV |
| 51 | 5580-STAFF TRAVEL | 20,111 | 19,476 | 19,476 | 0 | 19,476 | 0 | FAV |
| 52 | 5581-TRAVEL - CONFERENCES | 17,402 | 15,339 | 15,339 | 0 | 15,339 | 0 | FAV |
| 53 | 5810-DUES & FEES | 68,678 | 80,716 | 84,974 | 0 | 84,974 | 4,258 | UNF |
| 54 | DUES AND FEES | 106,191 | 115,531 | 119,789 | 0 | 119,789 | 4,258 | UNF |
| 55 | 5856-TRANSFER ACCOUNT | 150,050 | 0 | 0 | 0 | 0 | 0 | FAV |
| 56 | ESTIMATED UNSPENT BUDGETS | 0 | 0 | 0 | (50,000) | (50,000) | (50,000) | FAV |
| 57 | TOTAL EXPENDITURES | 42,892,901 | 43,613,162 | 43,341,970 | 2,418 | 43,344,388 | (268,774) | FAV |

Column 7: FAV=Favorable Variance
Revenues: At or OVER budget
Expenditures: At or UNDER budget

**AMITY REGIONAL SCHOOL DISTRICT NO. 5
REVENUES & EXPENDITURES BY CATEGORY
FINANCIAL ANALYSIS
FOR THE FISCAL YEAR 2012-2013**

JANUARY 2013

SUMMARY OF COST SAVINGS AND EFFICIENCIES

Below is a list of the cost savings and efficiencies implemented for the current fiscal year:

- We have implemented the self funded insurance program for medical and dental benefits. The target savings is \$525,000, which is included in the 2012-2013 budget.
- Amity High School heating equipment and cafeteria kitchen, culinary kitchen, garage and field house will use natural gas rather than fuel oil and propane. The target savings is \$120,000, which is included in the 2012-2013 budget.
- The District is working with our insurance provider (CIRMA) to institute a 'budget stabilization program' for Liability-Automobile-Property (LAP) coverages, which includes enhanced risk control services, and a multiple-year coverage period with stabilized rates applicable to annual contributions. Thus, we will be identifying and implementing risk control initiatives. This will cap premium increases to 5 percent over the prior year for the next two fiscal years.
- The Cable Advisory Council Area 2 (CAC) awarded \$18,325 on the government grant application for the October 1, 2011 to September 2012. This grant had been submitted by the high school administration.
- The District has switched its third-party agent for reviewing State unemployment compensation. This should reduce costs.
- We negotiated a 'storage fee' for the unused heating oil from last fiscal year down to 10 cents per gallon per month from the initial proposal of 15 cents per gallon per month, which saved \$10,607.
- The District refinanced 2008 bonds. Moody's Investor Service reviewed and assigned a rating of Aa1 to the District. Due to the District and Member Towns' high bond ratings and timing in the market, we obtained total savings of \$357,271.67. These savings will offset the interest cost of \$201,964.17 on the bonds for the high school roof restoration, air handling unit replacement in the high school boys' and girls' locker rooms including the piping of the new cooling coils, and repaving at Orange Middle School.

SUMMARY OF COST SAVINGS AND EFFICIENCIES
(Continued)

- The Finance Office implemented several efficiencies, including:
 - ✓ Most of the collection of fees (over \$200,000) for Student Activity Accounts and Special Revenue Accounts are being done on-line by using MyPaymentsPlus. This has greatly reduced processing time in the schools and improved audit controls.
 - ✓ Staff reimbursements for mileage and other business expenses are being made by direct deposit. In addition, many of the high used vendors are being switched to direct deposit.
 - ✓ Remote deposit of checks into various bank accounts is saving time in preparing bank bags for each deposit and limiting the number of courier transactions required.
- The Technology Department has instituted a number of cost savings, including:
 - ✓ We are purchasing the iPad 2 in quantities of 10 and saving \$20 per iPad.
 - ✓ The department has used its staff rather than an outside contractor to install smart boards and projectors. To-date, we have saved \$2,400.
 - ✓ Apps are being purchased through the volume purchasing program at half price.
 - ✓ We are now participating in Microsoft's new Open Licensing Program, which is based on current full-time equivalent employees rather than the number of computers and servers. This saved approximately \$11,000, which is included in the 2012-2013 budget.
- Two students who had been placed out of district were returned to the District. Estimated savings are \$94,000. Other savings of about \$34,000 have been realized due to two fewer students in the vo-ag schools.
- Facilities Director negotiated reduced pricing for Bethany and Orange Middle School fire alarm inspections for a savings of \$4,140.
- Facilities implemented chiller optimization at both middle schools. This was accomplished by installing circuit boards and programming the Building Management System to look at humidity, dry bulb, and outside air temperatures and reset the chilled water temperature accordingly. The chilled water temperature was previously set at 44 degrees but now resets up to 52 degrees. This saves large amounts of energy.
- All lights in all schools are on motion sensors and/or light sensors to optimize energy savings. The lights are also programmed through the Building Management System to optimize savings.

SUMMARY OF COST SAVINGS AND EFFICIENCIES

(Continued)

- The Field House air handler is now monitored and programmed so it is on only during occupied times. It had been on 24/7 with a thermostat at a set temperature.
- Trash and recycling services were bid for a three-year contract, which resulted in a savings of \$2,693.
- A terminal reheat strategy was implemented for the boiler plants at both middle schools. By using the Building Management System, we can monitor the system more efficiently and realize energy savings.
- To support the new wireless infrastructure, the Technology Department added 30 Ethernet drops for the new wireless access points. In the past, we had contractors install the network wiring at a cost of about \$100 per drop.
- The Technology Department consolidated the Student and Staff File Servers in each Middle School so we now only use one server at each Middle School. This eliminated the need to replace 2 servers at a savings of about \$16,000.
- The Technology Department replaced the 40 CRT monitors with flat screen LCD monitors at the Middle Schools. The LCD monitors are more energy efficient. The estimated savings on electricity is about \$20 per year per monitor, or about \$800 per year.
- We have encouraged printing off of the copiers rather than printers, which has saved thousands of dollars in toner and repairs and replacements of printers.
- All bids require both written proposals and CD file. We now can review the paper submission but retain only the CD file copy. This saves a considerable amount of file space.
- Bethany Middle School stopped ordering 3-part, carbonless, printed field trip permission forms this year. The printed forms cost approximately \$0.15 each. The school uses approximately 2,000 forms a year. The school copies the forms on the copier machine at less than the cost to print the forms.
- Electronic permission slips are used with the MyPaymentsPlus program, which reduces paper costs and staff time.

SUMMARY OF COST SAVINGS AND EFFICIENCIES

(Continued)

- We negotiated a two-year contract with Xerox to supply toner, maintenance kits and fusers, as well as service, for the District's printers at a substantial savings. For example, the price per copy of black and white printed pages will be lowered from \$0.08 (which we now pay Hewlett-Packard Company) to \$0.02, or a 75 percent reduction in cost. The estimated annual savings is \$15,000.
- We ordered a cell phone signal enhancer for \$400 to see if we can improve cell phone communications in case of an emergency.
- Bethany Middle School will be publishing their student newspaper, The Spartan Forum, digitally instead of making copies. There are usually 3 to 4 editions each year. Each edition is 8 to 12 pages, and we usually make 400 copies. So, minimally we will be saving 9,600 pieces of paper and related copying costs. Orange Middle School is pursuing an electronic English newspaper project.

2012-2013 FORECAST

The projected net balance of revenues and expenditures for this fiscal year is **\$51,828 FAV** (previously \$50,524 FAV), which appears on page 1, column 6, line 18.

REVENUES BY CATEGORY

The projected yearend balance of revenues is **\$216,946 UNF** (previously \$220,668 UNF), which appears on page 2, column 6, line 25.

LINE 5 on Page 2: ADULT EDUCATION:

The forecast is based on the current State award.

LINE 7 on Page 2: INVESTMENT INCOME:

The average interest rates by month for the State Treasurer's Investment Fund (STIF) are shown below:

Average Interest Rates by Month

| <u>Month</u> | <u>Rate</u> |
|---------------------|--------------------|
| June 2012 | 0.09% |
| July | 0.21% |
| August | 0.22% |
| September | 0.18% |
| October | 0.14% |
| November | 0.21% |
| December | 0.18% |
| <i>January 2013</i> | <i>0.21%</i> |

LINE 8 on Page 2: ATHLETICS:

The forecast is based on estimated fees to be collected.

LINE 9 on Page 2: TUITION REVENUE:

The forecast includes seven tuition students at full price, one of which is for part of the school year.

LINE 10 on Page 2: TRANSPORTATION INCOME:

The forecast is based on the most updated information from the State.

LINE 14 on Page 2: SPECIAL EDUCATION GRANTS:

Based on the estimated tuition expenses at this time, the special education grants are projected to be lower than budgeted. The forecast and budget use a reimbursement rate of 75 percent. The December SEDAC report reflected a decrease in special education expenditures for FY 13, resulting in a decrease in State funding.

LINE 20 on Page 2: EARLY RETIREE REINSURANCE PROGRAM:

The District was notified we must return \$78.32, which has been deemed 'an overpayment' of the Early Retiree Reinsurance Program grant.

LINE 21 on Page 2: OTHER REVENUE:

The forecast is based on revenues received to-date.

EXPENDITURES BY CATEGORY

The projected yearend balance of expenditures is *\$268,774 FAV (previously \$271,192 FAV)*, which appears on page 4, column 6, line 57.

LINE 1 on Page 3: 5111-CLASSIFIED SALARIES:

The estimated savings due to staff turnover (i.e., replacing teachers who retired or resigned at a lower salary) was \$66,580 compared to the budget of \$125,000. Thus, we had an unfavorable variance of **\$58,420 UNF**. Additional sections were added for World Language and Mathematics due to enrollment, and Reading for mandated IEP reading services. This resulted in an unfavorable variance of **\$53,706 UNF**. In addition, the High School will use substitutes/tutors rather than interns. A budget transfer of **\$27,000 UNF** from 5330-Other Professional and Technical Services to 5111-Certified Salaries was made to pay for the substitutes/tutors. Partially offsetting these, Bethany Middle School will use a second intern rather than a bench sub. A budget transfer of **\$13,926 FAV** from 5111-Certified Salaries to 5330-Other Professional and Technical Services was made. *The forecast is based on the current staff.*

LINE 2 on Page 3: 5112-CLASSIFIED SALARIES:

The part-time guard at the high school is working full-time at an additional expense of about \$9,100 UNF. Overtime is projected to exceed budget at this time. The forecast is based on the current staff.

LINE 4 on Page 3: 5200-MEDICARE – ER:

The forecast is based on projected salaries.

LINE 5 on Page 3: 5210-FICA – ER:

The forecast is based on projected salaries.

LINE 6 on Page 3: 5220-WORKERS' COMPENSATION:

Workers' compensation insurance budget was based on information from our insurance carrier in December 2011. The premium increase was budgeted at 10 percent. Unfortunately, the District's claims experience was significantly higher than expected in the second half of the fiscal year, which resulted in the premiums rising 26.9 percent over last fiscal year's actual premiums. Our insurance carrier (Trident Insurance) and several other carriers refused to provide a bid. Connecticut Interlocal Risk Management Agency (CIRMA) submitted the only bid of \$149,010, or **\$19,826 UNF** over budget. *The payroll audit resulted in a premium payment of \$877 compared to a budget of \$5,000, or a favorable variance of \$4,123 FAV.*

LINES 7, 8 and 9 on Page 3: 5231, 5251 and 5860: MEDICAL AND DENTAL SELF-INSURANCE AND OPEB TRUST EXPENDITURES:

The chart below depicts the actual claims, fixed costs, employer's share of High Deductible Health Plan (HDHP), formerly called Health Savings Accounts (HSA), voluntary early retirement plan payments, less employees' premium share, retiree payments, and payments from the OPEB Trust. The annual budget is spread evenly by month.

Medical and Dental

| <u>MONTH</u> | <u>ACTUAL</u> | <u>BUDGET</u> | <u>VARIANCE</u> |
|------------------------------|------------------------------|---------------------------|-----------------------------------|
| July 2012 | \$ 194,542.58 | \$ 253,882 | (\$ 59,339.42) |
| August 2012 | \$ 274,862.00 | \$ 253,882 | \$ 20,980.00 |
| September 2012 | \$ 97,660.57 | \$ 253,882 | (\$ 156,221.43) |
| October 2012 | \$ 146,751.36 | \$ 253,882 | (\$ 107,130.64) |
| November 2012 | \$ 208,398.68 | \$ 253,882 | (\$ 45,483.32) |
| <i>December 2012</i> | <u>\$ 202,906.11</u> | <u>\$ 253,882</u> | <u>(\$ 50,975.89)</u> |
| <i>Totals To-Date</i> | <u>\$1,125,121.30</u> | <u>\$1,523,292</u> | <u>(\$ 398,170.70) FAV</u> |

Self-Insurance Fund Reserve Balance

| | <u>ACTUAL</u> | <u>BUDGET</u> | <u>VARIANCE</u> |
|---|-----------------------------|--------------------------|-------------------------------|
| <i>ERRP</i> | <u>\$ 63,956.00</u> | <u>\$ 63,956</u> | <u>\$ 0</u> |
| <i>Actual to Budget Variance</i> | <u>\$ 398,170.70</u> | <u>\$ 390,000</u> | <u>\$ 8,170.70</u> |
| <i>Total Reserve Balance</i> | <u>\$ 462,126.70</u> | <u>\$ 453,956</u> | <u>\$ 8,170.70 FAV</u> |

Notes:

- (1) The Reserve Balance is subject to swings, plus or minus, primarily due to the amount of claims paid each month.
- (2) The Self-Insurance Fund Reserve Balance Budget of \$453,956 is the projected balance on June 30, 2013. The expectation is the actual reserve balance will steadily increase throughout the fiscal year PROVIDED actual claims remain at or below budget.

LINE 10 on Page 3: 5260-LIFE INSURANCE:

The forecast is based on the current staffing.

LINE 11 on Page 3: 5275-DISABILITY INSURANCE:

The forecast is based on the current staffing.

LINE 16 on Page 3: 5290-UNEMPLOYMENT COMPENSATION:

The District has switched its third-party agent for reviewing State unemployment compensation. We believe this will enhance the review of claims and payments.

LINE 20 on Page 3: 5330-OTHER PROFESSIONAL & TECHNICAL SRVC.:

Bethany Middle School hired a second intern rather than a bench sub. A budget transfer of \$13,926 UNF from 5111-Certified Salaries to 5330-Other Professional and Technical Services was made to cover this expenditure. Amity High School will use 2 substitutes/tutors rather than interns. A budget transfer of \$27,000 FAV from 5330-Other Professional and Technical Services to 5111-Certified Salaries was made to cover this expenditure.

Legal expenditures to-date is \$26,605.01. The budget for legal expenditures is \$50,000. We anticipate expending the entire budget at this time. However, without any negotiations, it is possible there may be some unspent funds.

The Board approved expenditures 'up to' \$9,000 UNF for CABE Search to assist in the search for a new Superintendent of Schools.

The Superintendent of Schools said he will try to find funds to pay \$15,000 UNF for a Graduate Study. An important source of information concerning the effectiveness of our high school curriculum is our recent alumni members. A study of this nature would obtain important and meaningful input from recent graduates. The specific emphasis is on how specific high school offerings helped or hindered graduates in succeeding in college or the work force. The forecast includes this possible expenditure.

LINE 21 on Page 3: 5440-RENTALS-LAND, BLDG., EQUIPMENT:

A budget transfer of \$15,000 UNF from Contingency Account was made to pay West Haven Public Schools as a donation towards a Zamboni for Bennett Field. In return, Amity's ice rental fee would remain at \$374 per hour for the fiscal year 2013-2014. Also, the \$15,000 donation will be credited towards ice rental time in 2013-2014. The estimated net savings is \$2,500 to \$3,000 in 2013-2014 as a result of rental ice hourly charge not increasing.

LINE 22 on Page 3: 5510-PUPIL TRANSPORTATION:

The forecast projects special education transportation to be \$94,901 FAV (previously \$97,539 FAV).

LINE 23 on Page 3: 5521-GENERAL LIABILITY INSURANCE:

The budget was based on an estimate provided by our insurance carrier for liability-automobile-property (LAP) insurance in December 2011. The LAP insurance was awarded to Connecticut Interlock Risk Management Agency (CIRMA) at the bid price of \$148,997, or \$2,773 FAV under budget. In addition, the Student Accident Insurance premium of \$13,764 is \$1,236 FAV under budget.

LINE 24 on Page 3: 5550-COMMUNICATIONS:TELEPHONE, POSTAGE, ETC.:

The District purchased three Verizon cell phone signal enhancers, one for Orange Middle School, one for Amity High School and one for the District Offices, at a cost of \$1,200 UNF. Bethany Middle School has a good Verizon signal and did not need a cell phone signal enhancer.

LINE 25 on Page 3: 5560-TUITION EXPENSE:

These figures are subject to change on a monthly basis.

Tuition for the vo-ag schools is projected at *\$31,711 FAV (previously \$29,580 FAV)* under budget.

| | <u>FY08-09</u> <u>ACTUAL</u> | <u>FY09-10</u> <u>ACTUAL</u> | <u>FY10-11</u> <u>ACTUAL</u> | <u>FY11-12</u> <u>ACTUAL</u> | <u>FY12-13</u> <u>BUDGET</u> | <u>FY12-13</u> <u>ACTUAL</u> |
|-------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Sound | 9 | 9 | 7 | 6 | 7 | 8(9) |
| Trumbull | 1 | 2 | 4 | 3 | 4 | 2 |
| Nonnewaug | 4 | 5 | 5 | 3 | 4 | 2 |
| ACES | | | | | | |
| Wintergreen | | | | | | |
| Magnet | 0 | 0 | 0 | 0 | 0 | 2 |
| Totals | 14 | 16 | 16 | 12 | 15 | 14(15) |

Public (ACES) and private out-of-district placements are projected at *\$151,533 FAV (previously \$214,473 FAV)* under budget.

| | <u>FY08-09</u> <u>ACTUAL</u> | <u>FY09-10</u> <u>ACTUAL</u> | <u>FY10-11</u> <u>ACTUAL</u> | <u>FY11-12</u> <u>ACTUAL</u> | <u>FY12-13</u> <u>BUDGET</u> | <u>FY12-13</u> <u>ACTUAL</u> |
|--------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Public SPED | 9 | 7 | 6 | 6 | 9 | 8(7) |
| Private SPED | 21 | 20.5 | 21 | 24 | 30 | 21(23) |
| Totals | 30 | 27.5 | 27 | 30 | 39 | 29(30) |

Note: 0.5 is a part-time student.

The District has 27 students attending ECA. The total expenditure is *\$2,727 FAV* over budget.

LINE 28 on Page 4: 5830-INTEREST:

The District refinanced 2008 bonds on July 26, 2012. Total savings are \$357,271.67. The savings for this fiscal year will be *\$21,961.67 FAV*.

LINE 31 on Page 4: 5410-UTILITIES, EXCLUDING HEAT:

If approved by the Amity Finance Committee and Amity Board of Education, the budget of *\$17,000 FAV* for propane to heat the field house and facilities garage and provide gas to the kitchen facilities will be moved to a new account, 5621-Natural Gas.

The District received the load shed credits for last fiscal year's participation. The total amount was *\$12,455.27 FAV*. Due to the uncertainty of whether or not we would earn credits, this had not been budgeted.

Sewer expenses are projected to exceed budget by \$7,816 UNF. The primary reason is a change in the billing method. In the past, charges were based on actual usage for the quarter. This has been modified. The billing is now based on the prior year's usage.

LINE 32 on Page 4: 5420-REPAIRS, MAINTENANCE & CLEANING:

We have spent \$22,625 on snow removing and sanding as of January 31, 2013. The budget is \$47,000. At this time, we anticipate the entire budget will be spent.

During November 2012, we conducted the required five-year test for radon at Amity High School. This was planned and in the budget. Room 535 tested higher than the EPA action level of 4.0 pCi/L on both the original test (November 13 – November 15, 2012) and the second test (November 27 – November 29, 2012). The second test was 4.1 pCi/L. Thus, remediation was necessary. Connecticut Basement Systems Radon, Inc. did the remediation over the holiday break at a cost of \$1,300 UNF.

The District incurred expenditures due to property damage caused by Hurricane Sandy. We have submitted costs of \$14,948.10 to our insurance carrier. We are waiting on several invoices for other storm-related repairs. These expenses have been, or will be, charged to this account. If any of the costs are not reimbursed by the insurance company, we plan to submit a claim to FEMA. Our insurance deductible is \$1,000.

An electronic lock system was installed at the District Offices for security reasons. The cost was \$1,800 UNF. Some additional cameras were installed at a cost of \$4,390 UNF.

LINE 33 on Page 4: 5611-INSTRUCTIONAL SUPPLIES:

A budget transfer of \$4,800 FAV was approved to move funds into the Textbooks account to purchase additional Chinese and Spanish textbooks due to higher than expected enrollment.

LINE 35 on Page 4: 5620-OIL USED FOR HEATING:

The budget of \$132,495 FAV for natural gas to heat the high school was moved to a new account, 5621-Natural Gas.

Due to the warm weather, there were 34,886 gallons of unused heating oil from 2011-2012. The 'storage fee' for these gallons of heating oil is \$21,943, or \$10,607 FAV under budget. The 'storage fee' was initially proposed at 15 cents per gallon per month, but we negotiated it down to 10 cents per gallon per month.

The budget assumed the purchase of 10,000 gallons of heating oil at \$3.50 per gallon for the middle schools. *With the large carryover of unused heating oil from last fiscal year, the forecast assumes no additional gallons will be needed. This will result in a savings of \$35,000 FAV. (Previously, the forecast assumed using 5,000 gallons at \$3.1429 per gallon, or an estimated savings of \$19,285 FAV.)*

LINE 36 on Page 4: 5621-NATURAL GAS:

The Finance Office set up a new account for natural gas expenditures.

The budget for natural gas at the high school is \$132,495 (12,045 MBTU at \$11 each MBTU). The number of MBTU (million British thermal units) is calculated by dividing the estimated heating oil usage of 86,000 gallons by 7.14. This is included in the adopted 2012-2013 budget under 5620-Oil Used for Heating. A budget transfer was approved to move \$132,495 into this new account.

The budget for propane to heat the field house and facilities garage and provide gas to the kitchen facilities is \$17,000. This is included in the adopted 2012-2013 budget under 5410-Utilities-Excluding Heat. A budget transfer was approved to move \$17,000 into this new account.

As previously mentioned, we have been anticipating expenditures for natural gas to be \$149,495. Based on a review of actual invoices over the past several months, Facilities Director Jim Saisa projects yearend expenditures to be \$105,000 UNF.

Heating degree days as of January 30, 2013 were 2,656 compared to a normal of 2,962, or about 10 percent under normal.

LINE 38 on Page 4: 5641-TEXTS & DIGITAL RESOURCES:

The title of this account has been changed from "Textbooks" to "Texts & Digital Resources".

A budget transfer of \$4,800 UNF was approved to purchase additional Chinese and Spanish textbooks due to higher than expected enrollment.

LINE 40 on Page 4: 5690-OTHER SUPPLIES:

A budget transfer of \$64,561 UNF from Contingency Account was made to pay Pearson School Systems for PowerSchool software and related support services. The student information system will support comprehensive data reporting in a timely manner for administrators, teachers, and parents. All three of our member town elementary school districts are or will be using this system. This will allow for direct data transfer for incoming grade 7 students. By paying for this system now, we negotiated a discount of \$18,114 from the original price.

LINE 43 on Page 4: 5731-EQUIPMENT – REPLACEMENT:

A projector was purchased in August to replace the one used in the High School Auditorium for \$2,916 UNF. A budget transfer of \$2,000 UNF was made to replace a fitness bike at Bethany Middle School. The bike was inoperable.

LINE 46 on Page 4: 5720-IMPROVEMENTS TO SITES:

The oil tank at Amity High School needed to be removed. The estimated cost is \$17,550 UNF. This was covered by a transfer from the Contingency Account.

LINE 47 and LINE 48 on Page 4: 5850-CONTINGENCY:

The forecast assumes the entire Contingency Account of \$150,000 will be spent by year end. The balance is \$52,889. The forecast assumes the entire Contingency account budget will be spent by yearend.

September: **\$17,550** – Natural gas is now being used at Amity High School. A budget transfer was made to remove the oil tank and pump the oil/sludge from the oil tank.

January: **\$64,561** – Purchase PowerSchool software and related support services at a significantly discounted price.

January: **\$15,000** – Pay West Haven Public Schools as a donation towards a Zamboni for Bennett Rink. In return, Amity's ice rental fee would remain at \$374 per hour for the fiscal year 2013-2014. Also, the \$15,000 donation will be credited towards ice rental time in 2013-2014.

The Superintendent of Schools would like to use all, or part, of the remaining balance in the Contingency Account to pay for a Long Range Planning Study. The initial bids ranged from \$21,696 to \$65,000. A recommendation will be made towards the end of the fiscal year.

LINE 53 on Page 4: 5810-DUES AND FEES:

A budget transfer of \$4,258 UNF was made to pay for the dues of the Connecticut Association of Schools and the Southern Connecticut Conference. These items were not included in the budget due to an oversight.

LINE 56 on Page 4: ESTIMATED UNSPENT BUDGETS:

The forecast assumes \$50,000 FAV of the budget will not be spent. From past history, small amounts from numerous accounts are unspent at yearend.

Amity Regional School District No. 5 - Budget Transfers 2012-2013

| <u>MONTH/YR</u> | <u>JNL#</u> | <u>ACCOUNT NUMBER & DESCRIPTION</u> | <u>AMOUNT</u> | <u>DESCRIPTION</u> |
|-----------------|-------------|---|---------------|------------------------------|
| 2012-JUL | 12 | 01-031110105330 - OTHER PROF SVCS | 1,400.00 | GUEST FIDDLER |
| 2012-JUL | 12 | 01-031110105611 - INSTRUCT SUPP | (1,400.00) | GUEST FIDDLER |
| 2012-JUL | 13 | 01-011322205642 - LIBRARY BOOKS | 170.00 | MEDIA DATABASE |
| 2012-JUL | 13 | 01-011322205330 - OTHER PROF SVCS | (170.00) | MEDIA DATABASE |
| 2012-JUL | 13 | 01-011110095690 - OTHER SUPPLIES | 160.00 | PENCIL SHARPENERS |
| 2012-JUL | 13 | 01-011110095611 - INSTRUCTIONAL SUP | (160.00) | PENCIL SHARPENERS |
| 2012-JUL | 13 | 01-011110105810 - DUES&FEES | 20.00 | CMEA PRICE INCREASE |
| 2012-JUL | 13 | 01-011110105641 - TEXTBOOKS | (20.00) | CMEA PRICE INCREASE |
| 2012-AUG | 12 | 01-051423505731 - EQUIPMENT-REPL | 2,916.00 | AUDITORIUM PROJECTOR |
| 2012-AUG | 12 | 01-031422195611 - INSTRUCTIONAL SUPP | (2,916.00) | AUDITORIUM PROJECTOR |
| 2012-AUG | 23 | 01-03111015-5810 DUES & FEES | 1,100.00 | MEMBERSHIPS |
| 2012-AUG | 23 | 01-05142510-5521 GENERAL LIABILITY | (1,100.00) | MEMBERSHIPS |
| 2012-AUG | 54 | 01-03142219-5611 INSTRUCTIONAL SUPP | (4,800.00) | ADDITIONAL ENROLLMENT |
| 2012-AUG | 54 | 01-03111006-5641 TEXTBOOKS | 4,800.00 | ADDITIONAL ENROLLMENT |
| 2012-AUG | 55 | 01-031426005620 OIL USED FOR HEAT | (132,495.00) | NEW GAS ACCOUNT |
| 2012-AUG | 55 | 01-031426005621 NATURAL GAS | 132,495.00 | NEW GAS ACCOUNT |
| 2012-AUG | 55 | 01-031426005410 UTILITIES, EXC HEAT | (17,000.00) | NEW GAS ACCOUNT |
| 2012-AUG | 55 | 01-031426005621 NATURAL GAS | 17,000.00 | NEW GAS ACCOUNT |
| 2012-AUG | 143 | 01-011322205690 OTHER SUPPLIES | 1,000.00 | RENEW ONLINE SUBSCRIPTION |
| 2012-AUG | 143 | 01-051423505690 OTHER SUPPLIES | (1,000.00) | RENEW ONLINE SUBSCRIPTION |
| 2012-AUG | 143 | 01-021322205690 OTHER SUPPLIES | 495.00 | RENEW ONLINE SUBSCRIPTION |
| 2012-AUG | 143 | 01-051423505690 OTHER SUPPLIES | (495.00) | RENEW ONLINE SUBSCRIPTION |
| 2012-AUG | 143 | 01-011322205690 OTHER SUPPLIES | 275.00 | EZ BIB |
| 2012-AUG | 143 | 01-051423505690 OTHER SUPPLIES | (275.00) | EZ BIB |
| 2012-AUG | 143 | 01-011322205690 OTHER SUPPLIES | 210.00 | RENEW ONLINE SUBSCRIPTION |
| 2012-AUG | 143 | 01-051423505690 OTHER SUPPLIES | (210.00) | RENEW ONLINE SUBSCRIPTION |
| 2012-SEP | 16 | 01-011322205690 OTHER SUPPLIES | (485.00) | BETHANY MEDIA CENTER |
| 2012-SEP | 16 | 01-021322205690 OTHER SUPPLIES | 485.00 | BETHANY MEDIA CENTER |
| 2012-SEP | 20 | 01-041321405611 INSTRUCTIONAL SUPP | (15.00) | NASP MEMBERSHIP DUES |
| 2012-SEP | 20 | 01-041321405810 DUES&FEES | 15.00 | NASP MEMBERSHIP DUES |
| 2012-SEP | 31 | 01-011110065641 TEXTBOOKS | (110.00) | COLT CONFERENCE |
| 2012-SEP | 31 | 01-011110065810 DUES&FEES | 110.00 | COLT CONFERENCE |
| 2012-SEP | 49 | 01-021110105810 DUES&FEES | (340.00) | MEMBERSHIP DUES |
| 2012-SEP | 49 | 01-021324005810 DUES&FEES | 340.00 | MEMBERSHIP DUES |
| 2012-SEP | 59 | 01-041261305510 PUPIL TRANSPORT | (11,300.00) | SPECIAL ED TRANSPORT |
| 2012-SEP | 59 | 01-041261105510 PUPIL TRANSPORT | 11,300.00 | SPECIAL ED TRANSPORT |
| 2012-SEP | 62 | 01-031324005810 DUES&FEES | 4,258.00 | CAS & SCC DUES |
| 2012-SEP | 62 | 01-031422195611 INSTRUCTIONAL SUPP | (4,258.00) | CAS & SCC DUES |
| 2012-SEP | 63 | 01-031426005720 IMPROVE TO SITES | 17,550.00 | OIL TANK REMOVAL |
| 2012-SEP | 63 | 01-051500005850 CONTINGENCY | (17,550.00) | OIL TANK REMOVAL |
| 2012-SEP | 100 | 01-031132025690 OTHER SUPPLIES | (399.00) | IPAD FOR ATHLETIC TRAINER |
| 2012-SEP | 100 | 01-051423505690 OTHER SUPPLIES | 399.00 | IPAD FOR ATHLETIC TRAINER |
| 2012-SEP | 122 | 01-031110015611 INSTRUCTIONAL SUPP | (400.00) | FUNDS FOR FIELD TRIP |
| 2012-SEP | 122 | 01-031427005510 PUPIL TRANSPORT | 400.00 | FUNDS FOR FIELD TRIP |
| 2012-SEP | 125 | 01-031110105810 DUES&FEES | (320.00) | PURCHASE CDS FOR MUSIC CLASS |
| 2012-SEP | 125 | 01-031110105611 INSTRUCTIONAL SUPP | 320.00 | PURCHASE CDS FOR MUSIC CLASS |
| 2012-SEP | 149 | 01-031110135641 TEXTBOOKS | (1,000.00) | SCIENCE PILOT PROGRAM |
| 2012-SEP | 149 | 01-051423505730 EQUIPMENT - NEW | 1,000.00 | SCIENCE PILOT PROGRAM |
| 2012-SEP | 176 | 01-041261135560 TUITION EXPENSE | (2,100.00) | SNAP LICENSE FOR NURSES |
| 2012-SEP | 176 | 01-051423505690 OTHER SUPPLIES | 1,600.00 | SNAP LICENSE FOR NURSES |
| 2012-SEP | 176 | 01-041321905810 DUES&FEES | 500.00 | FEE UNIFIED THEATER |
| 2012-OCT | 32 | 01-041261135560 TUITION EXPENSE | (185.00) | CONFERENCE FEES |
| 2012-OCT | 32 | 01-041321405581 TRAVEL-CONFERENCE | 125.00 | CONFERENCE FEES |
| 2012-OCT | 32 | 01-041321905810 DUES&FEES | 60.00 | CONFERENCE FEES |
| 2012-OCT | 131 | 01-031110095641 TEXTBOOKS | (400.00) | CAMERA DOCUMENT |
| 2012-OCT | 131 | 01-031110095690 OTHER SUPPLIES | 400.00 | CAMERA DOCUMENT |
| 2012-OCT | 142 | 01-011324005330 OTHER PROFESSIONA | 13,926.00 | INTERNS/SUBS |
| 2012-OCT | 142 | 01-051510265111 CERTIFIED SALARIES | (13,926.00) | INTERNS/SUBS |

| | | | | |
|----------|-----|------------------------------------|-------------|--------------------------|
| 2012-OCT | 142 | 01-051510265111 CERTIFIED SALARIES | 27,000.00 | INTERNS/SUBS |
| 2012-OCT | 142 | 01-031324005330 OTHER PROFESSIONA | (27,000.00) | INTERNS/SUBS |
| 2012-NOV | 86 | 01-051423505690 OTHER SUPPLIES | (1,600.00) | SNAP LICENSE |
| 2012-NOV | 86 | 01-041261135560 TUITION EXPENSE | 1,600.00 | SNAP LICENSE |
| 2012-NOV | 112 | 01-02111095690 OTHER SUPPLIES | (799.00) | CMT RESOURCES |
| 2012-NOV | 112 | 01-021110095611 INSTRUCTIONAL SUPP | 799.00 | CMT RESOURCES |
| 2012-DEC | 54 | 01-011110095611 INSTRUCTIONAL SUPP | 2,865.00 | SUBSCRIPTION |
| 2012-DEC | 54 | 01-011426005620 OIL USED FOR HEAT | (2,865.00) | SUBSCRIPTION |
| 2012-DEC | 139 | 01-031110105330 OTHER PROFESSIONAL | (350.00) | |
| 2012-DEC | 139 | 01-031110105420 REPAIRS,MAINTENANC | 350.00 | |
| 2012-DEC | 167 | 01-011110115731 EQUIPMENT-REPLACE | 2,000.00 | REPLACE ELLIPTICAL &LIFE |
| 2012-DEC | 167 | 01-011426005620 OIL USED FOR HEAT | (2,000.00) | REPLACE ELLIPTICAL &LIFE |
| 2013-JAN | 95 | 01-021322205690 OTHER SUPPLIES | (300.00) | AUTHOR VISIT FEE |
| 2013-JAN | 95 | 01-021322205642 LIBRARY BOOKS | 300.00 | AUTHOR VISIT FEE |
| 2013-JAN | 114 | 01-051322125690 OTHER SUPPLIES | (200.00) | STAFF TRAVEL |
| 2013-JAN | 114 | 01-051322125580 STAFF TRAVEL | 200.00 | STAFF TRAVEL |
| 2013-JAN | 149 | 01-011110165690 OTHER SUPPLIES | (1.00) | READING CLASS TEST |
| 2013-JAN | 149 | 01-011110165641 TEXTBOOKS | (101.00) | READING CLASS TEST |
| 2013-JAN | 149 | 01-011110165611 INSTRUCTIONAL SUPP | 102.00 | READING CLASS TEST |
| 2013-JAN | 154 | 01-051423505690 OTHER SUPPLIES | 64,561.00 | POWERSCHOOL |
| 2013-JAN | 154 | 01-051500005850 CONTINGENCY | (64,561.00) | POWERSCHOOL |
| 2013-JAN | 156 | 01-031132025440 RENTALS-LAND,BLDG | 15,000.00 | ZAMBONI-ICE TIME PAYMENT |
| 2013-JAN | 156 | 01-051500005850 CONTINGENCY | (15,000.00) | ZAMBONI-ICE TIME PAYMENT |

Attached are the minutes from the following Board of Education
Sub-Committee meetings:

| | |
|-------------------|---------|
| Finance Committee | 1/14/13 |
|-------------------|---------|

| | |
|-------------------|--------|
| Finance Committee | 2/4/13 |
|-------------------|--------|

MINUTES

COMMITTEE MEMBERS PRESENT: Janet Brunwin, Matthew Giglietti, James Horwitz, Joseph Nuzzo, James Stirling

COMMITTEE MEMBERS ABSENT: John A. Grasso, Jr.

Also Present: John Brady, Thomas Falcigno, Robert L. Howard, Jr., Thomas Hurley, Jack Levine, Marianne Lippard, Terry Lumas, Marie McPadden, Paul Mengold, Jim Saisa, Samantha Thomas, Jeffery Walsh

A meeting of the Finance Committee of the Amity Regional Board of Education was held on Monday, January 14, 2013 at 5:30 p.m. in the cafeteria at Amity Regional High School.

1. **Call to Order:** James Stirling called the meeting to order at 5:36 p.m.

2. **Pledge of Allegiance** was recited by those present.

3. **Discussion and Possible Action on Minutes**

Finance Committee Meeting – December 10, 2012

Motion to approve the minutes as presented (Mr. Giglietti, 2d Ms. Brunwin).

Vote in favor unanimous.

Motion passed.

4. **Public Comment**

Board of Education member Thomas Hurley said that with budget season upon us, he would like to see the server upgrade pursued rather than put off as it has been. There are 15 servers in the back office. We need a more efficient system. The proposal would get the District two virtual servers. This purchase won't ever make it to the top of list of wants. Without this as our backbone, we will be obsolete.

Thomas Falcigno said that he wanted to reiterate his support for the artificial turf field at the High School. He expressed the potential benefits of the artificial turf, particularly the use of less water and pesticides. He also said that there are possible increases in revenue with the new field. Thomas also offered some statistics from a research study showing fewer injuries on artificial turf as opposed to grass.

5. **Discussion and Possible Action on Audited Financial Statements**

A. Review of Audited Financial Statements by Auditors

Robert Howard explained the audit results for Fiscal Year June 30, 2012. He noted that it was a clean audit. Mr. Howard pointed out some details in the

report on pages 9, 10 and 11. Adjustments listed on page 12 were “very, very minor,” according to Mr. Howard.

- B. Discussion and Possible Action to Accept Annual Financial Report
Motion to accept the Annual Financial Report (Mr. Nuzzo, 2d Mr. Giglietti).
Vote in favor unanimous. Motion passed.

- C. Discussion and Possible Action to Return Funds to Member Towns
Motion to recommend to the Amity Board of Education that the Superintendent of Schools be authorized to return the balance of \$329,571 from the fiscal year ended June 30, 2012, to the Member Towns, as follows: Town of Bethany - \$67,513; Town of Orange - \$159,542; Town of Woodbridge - \$102,516 (Mr. Giglietti, 2d Mr. Nuzzo).
Vote in favor unanimous. Motion passed.

6. Discussion and Possible Action on Award of Contract of \$35,000 or More

Mr. Levine explained the rationale for the contract with Xerox Corp. which would run for five years. He said the price looks pretty good. He would have the ability to get out of the contract in the future should the need arise in order to save more money.

Move the recommend the Amity Board of Education authorize the Director of Finance and Administration to extend the Xerox contract for toner, maintenance kits and fusers, as well as service, for the District's printers, up to five years, at the contract price (Ms. Brunwin, 2d Mr. Horwitz).

Vote in favor unanimous. Motion passed.

7. Information and Discussion of Bonding for Artificial Turf Field

Dr. Brady said that the District has attempted to get a grant to help fund the cost of an artificial turf field, but regional districts aren't eligible for such grants. Fundraising hasn't produced sufficient income to help significantly with the cost. There appears to be no way to get the field into the operating budget. With interest rates at historic lows, now might be the time to explore the concept of bonding.

Mr. Mengold noted that the field currently can't be used for anything except football and even then, can't always be used for football due to muddy conditions. Dr. Britton said that there are a number of practical reasons why an artificial turf field would be a great addition at the High School. The football field currently doesn't get enough use as the grass field gets torn up when wet. With an artificial turf surface, the field could be used during the school day for physical education classes. Opportunities to use the field for soccer and field hockey are minimal at best. Nine new sports programs have been added since the field was resurfaced in 1999.

Dr. Britton noted that with the new field, no team would benefit exclusively. Mr. Levine said that he has factored the cost of bonding. According to Mr. Levine,

the tax impact for a 20-year bond would be on average \$4.48 per household per year in Bethany, \$3.93 in Orange and \$4.07 in Woodbridge.

Discussion:

Ms. Brunwin asked about why a 20-year bond was considered.

Mr. Levine said that he questioned whether a 20-year bond was possible. The artificial turf field can get more than 20 years of use with proper maintenance.

Ms. Brunwin asked if the field needs to be completely replaced after 20 years.

Dr. Brady said that just the carpet would need replacement at that time. He noted that this presentation is just informational in nature. Since the field has been discussed for some time and is costly, he thought it would be helpful to provide this information.

Mr. Giglietti questioned whether this would be part of the budget for the next fiscal year.

Dr. Brady said that the administration felt that this should be separate from the budget. It is unlikely that the field could be ready for next football season.

Mr. Giglietti asked how long it would take to install the artificial turf field. Dr. Britton discussed the project timeline, noting that actual installation would take 12 to 16 weeks.

Mr. Horwitz asked for a breakdown of the cost.

Mr. Levine discussed how the bonding would work. The cost is \$900,000, including the cost of issuance. Total interest would be \$236,250. The cost to maintain the current football field is \$13,000 per year. The administration worked with St. Joseph's in Trumbull on the numbers.

8. Update on Preliminary Superintendent's Proposed 2013-2014 Budget Development

Dr. Brady said that the proposed 2013-2014 budget is 3.87 percent higher than the current budget at this point. There are several reasons for the projected increase. Federal and state mandates are impacting the numbers. Also, Dr. Brady noted that past budgets have postponed expenses for items that inevitably must be addressed, such as technology. Another reason for the increase is that the District is nearing the end of the line in addressing efficiencies to reduce spending. There are few areas left to cut. Additionally, the surpluses that Amity benefited from in past years are not available in the current budget. There is about \$300,000 that

can be rolled forward to the next budget and this is less than what has been seen in the past.

Dr. Brady noted that two items were removed from the budget that at least a couple of Board members have asked to remain. One item is a graduate study that would help determine how well Amity is doing its job of preparing its graduates for the future. The cost of the study is \$15,000 and a similar study was last completed in 1998. The other item, server virtualization, would cost \$120,000. Discussion:

Mr. Stirling asked Dr. Brady if staffing changes have been considered. The projected increase will be a shock compared to past budgets. We would like to be able to say that everything has been explored.

Dr. Brady noted that there are six retirements expected at this point. He noted that staffing is always a consideration in this process.

9. Discussion of Monthly Financial Statements

There were no comments.

10. Director of Finance and Administration Approved Transfers Under \$3,000

There was no discussion.

11. Discussion and Possible Action on New Funding Requests

Mr. Levine noted that there are two new funding requests for the Committee's consideration. Both items would be paid for out of the Contingency Account. The items are PowerSchool and a donation to West Haven for use of the ice rink. The donation to West Haven would guarantee that there would be no price increase for use of the ice rink.

Move to recommend making the following budget transfer of \$64,561 to pay Pearson School Systems of Rancho Cordova, California, for PowerSchool software and related support services (Mr. Giglietti, 2d Ms. Brunwin):

| <u>Account Number</u> | <u>Account Name</u> | <u>From</u> | <u>To</u> |
|-----------------------|---------------------|-------------|-----------|
| 05-15-0000-5850 | Contingency Account | \$64,561 | |
| 05-14-2350-5690 | Other Supplies | | \$64,561 |

Vote in favor unanimous.

Motion passed.

Move to recommend making the following budget transfer of \$15,000 to pay West Haven Public Schools as a donation toward a Zamboni for Bennett Rink. In return, Amity's ice rental fee would remain at \$374 per hour for the fiscal year 2013-2014. Also, the \$15,000 donation will be credited towards ice rental time in 2013-2014 (Mr. Giglietti, 2d Mr. Nuzzo):

| <u>Account Number</u> | <u>Account Name</u> | <u>From</u> | <u>To</u> |
|-----------------------|----------------------------|-------------|-----------|
| 05-15-0000-5850 | Contingency Account | \$15,000 | |
| 03-11-3202-5440 | Rentals-Land, Bldg, Equip. | | \$15,000 |

Vote in favor unanimous.

Motion passed.

12. Update on Financial Operations

A. Information on 2013-2014 Budget Calendar

There was no discussion.

13. Adjourn

Motion to adjourn the meeting at 6:38 p.m. (Mr. Giglietti, 2d Ms. Brunwin).

Vote in favor unanimous.

Motion passed; meeting adjourned.

Respectfully submitted,
Marianne Lippard, recording clerk

MINUTES

COMMITTEE MEMBERS PRESENT: Janet Brunwin, Matthew Giglietti, John A. Grasso, Jr., James Horwitz, Joseph Nuzzo, James Stirling

Also Present: John Brady, Charles Britton, Christopher Browe, Sue Cohen, Diane Crocco, Kathleen Fuller Cutler, Thomas Falcigno, Kevin Houlihan, Thomas Hurley, James Leahy, Jack Levine, Marianne Lippard, Marie McPadden, Rocco Palmieri, Mary Raiola, Tracey Lane Russo, Jim Saisa

A meeting of the Finance Committee of the Amity Regional Board of Education was held on Monday, February 4, 2013 at 4:30 p.m. in the cafeteria at Amity Regional High School.

1. **Call to Order:** James Stirling called the meeting to order at 4:35 p.m.
2. **Pledge of Allegiance** was recited by those present.
3. **Presentation and Discussion of Superintendent's 2013-2014 Preliminary Budget**

Dr. Brady began by referencing a school spirit campaign, "I am Amity," which served to highlight an important element of the school experience that serves to strengthen education. The preliminary budget that he is presenting tonight seeks to further strengthen the educational opportunities for students in this District. Amity encourages students to think critically and to evaluate information as they work to acquire and create new knowledge with the goal of applying their knowledge and skills to solve real world problems. Amity students have made outstanding achievements in academics, arts and athletics. The High School has been rated #4 of 191 high schools in the state and the District has been rated as #5 of 165. He noted that 95 percent of Amity graduates go on to attend college, with 86 percent of graduates attending four year institutions.

Amity, along with other local school districts, must comply with unfunded or underfunded Federal and State governments mandates. Attempts have been made to reduce spending to offset these additional costs and much work has been done in the last few years to increase savings and efficiencies in all areas.

Unfortunately, most savings opportunities have been exhausted and there are few remaining efficiencies to explore. The preliminary budget calls for a reduction of 3.2 certified teaching positions.

One of the key goals of the budget is to provide a high quality experience for students. Dr. Brady described Amity as a precious jewel in the region, with many accomplishments. Most recently, Amity sophomores outperformed all others in the DRG (District Reference Group) at the advanced level of the CAPT

(Connecticut Academic Performance Test). AP results had Amity ranked #5 in the State for 2012 and #2 in the DRG despite a 22 percent increase in test participation. He noted that this achievement is worth noting because there were concerns that with more students taking these tests, the scores would go down, but instead Amity saw scores increase.

Dr. Brady noted that the District continues to focus on the success of all students. Amity students scored well on the Comprehensive Technical Education Assessment, including #1 in the State in Computer Information Systems and in Video Production. Over 95 percent of the Class of 2012 took the SAT exam, scoring well above the State average. Twelve students were accepted to Ivy League institutions; 226 were accepted to the Most Selective institutions; and 360 were accepted to Highly Competitive institutions ranked by Barron's College Guide.

Dr. Brady added that Amity students also have an impressive list of accomplishments in the arts, including a variety of awards in painting, ceramics, photography, music, and theater. An Amity senior received recognition as Best Female Lead in the State for her performance in Legally Blonde. Unified Theater has also been started at Amity.

In athletics, strong performances were seen in many sports. The Girls' Softball team from 2012 managed to become C.I.A.C. State Champions. Boys' Cross Country, Girls' Swimming & Diving, Boys' Track & Field, Baseball, Boys' Tennis, Boys' Indoor Track and Field, Golf, and others achieved recognition.

Amity students also gave back to the community in many ways, such as donating blood and making blankets for children with cancer. Dr. Brady noted that Amity's efforts to achieve efficiencies got the attention of Governor Malloy, who recognized the District for converting the High School from fuel oil to natural gas.

Dr. Brady said that there are a number of factors are driving the budget. Surpluses have helped in past years, but this year, a significant surplus isn't predicted. A school construction grant is running out. This year, teachers got no salary increase, but next year they are due to get a step increase. Medical and dental insurance is budgeted to increase by approximately \$403,000.

While there has been controversy about the initiatives involving teacher evaluation planned by the State, Dr. Brady said that he sees potential for real improvement. This will, however, impact the budget by over \$250,000.

The budget includes a request to fund a Varsity Girls' Ice Hockey team at a cost of \$55,543. Amity has been on a cooperative team, but there are now 21 girls who would like to play the sport. According to the by-laws of the Southern Connecticut Conference, any member of a cooperative team (Amity-Cheshire-North Haven Girls' Hockey) that has an individual school representative of 15 or

more student athletes must leave the cooperative program and play as a single member school. This would also align the District with Title IX legislation. The District could choose to eliminate Boys' Ice Hockey, but Dr. Brady said that he recommends adding Girls' Ice Hockey.

Other factors affecting the budget include alignment with the Common Core, technology improvements, and adding a digital lab at the High School. Dr. Brady noted that the Facilities Committee supported a number of requests by Facilities Director Jim Saisa. STEM program materials, World Language offerings, increased security guard hours, new courses and Plan testing account for \$97,000 in program enhancements.

Dr. Brady noted that the staff reductions could result in savings of nearly \$300,000, although it is not clear exactly how the reductions would be made. He noted that Woodbridge is expected to have the largest increase in enrollment. The Superintendent noted that Amity current has eight tuition students. Families who are willing to spend for private school view Amity as a good bargain.

The preliminary budget calls for an increase of 2.64 percent. He noted that the District runs an efficient operation, with per pupil expenditures for education costs only being less than the three towns as well as the State average.

Questions:

Mr. Stirling said that it looks like there will be six retirements. He questioned what effect there would be if none of those positions were filled.

Dr. Brady said that class sections would run with increases in class size. Classes can run with up to 28 students. The quality of teaching would be compromised, however, since the District strives to keep class size in the low 20s.

Ms. Brunwin asked what changes were made to achieve the additional savings outlined tonight. Previously, the preliminary budget was said to involve a 3.87 percent increase.

Dr. Brady briefly explained some of the revisions detailed in memo dated February 4, 2013.

Mr. Nuzzo questioned whether any adjustments have been made to respond to declining enrollment. He questioned whether anything more could be done to bring down the budget without too much impact on educational programming.

Dr. Brady said that there have been some adjustments and the administration will work until April 1 to attempt further reductions. He noted that further cuts would involve things that the District needs. For example, the digital media lab at the

High School would complement offerings already available at the middle school level.

Mr. Giglietti said that with the State budget situation, he wonders whether it will impact the Education Cost Sharing (ECS).

Dr. Brady said that special education cannot be cut.

Ms. Brunwin questioned whether Workers' Compensation is dealing with large claims.

Mr. Levine said that there have been slip and fall claims. It was noted that with three buildings and a large number of employees, injuries can't always be prevented.

Mr. Horwitz said that he would not support faculty cuts that don't further Amity's mission.

Dr. Brady said that he wouldn't recommend anything that would impede the District's mission. He remains confident that the new superintendent will be able to manage this. Declining enrollment is expected to impact Amity in 2015-2016. A long-range planning study will help guide future decisions.

Mr. Giglietti said that he sees enrollment rising in the town of Woodbridge. Real estate prices are good.

4. Public Comment

James Leahy, vice chairman of the Orange Board of Finance, asked for clarification in several areas of the budget, including enrollment and tuition.

It was noted that \$14,000 is charged for tuition students. Amity receives \$3,200 for Open Choice students. Dr. Brady pointed out that for Open Choice students, Amity only takes in children who started in the District's elementary schools.

Mr. Leahy asked for further clarification on the data on page 18, 21, 22, and 30 on the budget presentation.

Mr. Levine explained the data used for the report.

Ms. Brunwin said that comparing pages 22 and 42, insurance costs seem to be going up. She questioned whether more claims are projected.

Mr. Levine said that the costs are going up because the claims are going up.

Ms. Brunwin said that she is disappointed to see that there was initial savings, but now the cost is going up.

Board of Education member Tracey Lane Russo said that she has concerns about the staffing cuts, particularly with reading.

Dr. Brady said that he saw an overstaffing issue that could be addressed. This would not affect direct services to students.

Board of Education Member Christopher Browe questioned whether an alternative financial strategy could be used with the OPEB Trust.

Dr. Brady said that the strategy that Mr. Browe suggested can't be done. The administration is supportive of the OPEB Trust and came to the Board and recommended establishing it.

5. Adjournment

Motion to adjourn the meeting at 6:18 p.m. (Ms. Brunwin, 2d Mr. Horwitz).

Motion passed; meeting adjourned.

Respectfully submitted,
Marianne Lippard, recording clerk