**NHTM Board Meeting Agenda**

**September 16, 2015**

**2 Pillsbury Street, 5th Floor, PSU Graduate Offices in Concord, NH**

**4:30pm to 7:00pm**

Attendance: Gretchen, Donna, Jeanine, Rich, Annie, Cecile, Amanda, Andrea, Matt.

Call to order at 4:45pm.

1. **Welcome /Announcements**
2. **Secretary’s Report – (Andrea)**

Matt moved to accept the retreat minutes, seconded by Rich. Motion passed unanimously with 1 abstention.

1. **Treasurer’s Report (Jeanine)**

Jeanine met with the accountant today before the meeting and found out some slight changes he would like to be done. As for our account balances, the checking account balance is $13,530.90; the money market account balance is $23,527.64; and the savings bonds are at $18,489.60. All other reimbursements are completed, aside from the ATMNE balances.

Jeanine has paperwork back to around 1990, but the accountant said that we really only need to maintain 4 years worth of receipts and paperwork, but that it was really up to the board as to what we wanted to hang on to. She will check in with the accountant to see about how far back we should go, and possibly getting the receipts scanned to keep the records digitally, rather than in paper format.

The safety deposit box fee was $103.95, which Jeanine paid in August, and it is good until February. The treasurer, president and president-elect’s names were added to the safety deposit box to cover it in the event of an emergency.

Annie moved that Jeanine compile the budget and notify the board of the final budget via email. Gretchen seconded. Matt asked who would be notified of approval or disapproval, Cecile stated that we should reply to the entire board so we are aware of the open vote. The vote will be amended and attached to the current minutes.

1. **Membership Report (Gretchen)**

276 members, and more are coming in each week, so people are checking in on their status. Some increase could be attributed to the ATMNE conference registration, but Gretchen noted that a lot of it could be resulting from Dine & Discuss registrations.

Annie asked that her NHJEM membership article, which explained NHJEM membership details, from Mathesis also be added onto the website.

Gretchen will also work on getting the brochure completed for Dine & Discuss, so that attendees can bring them back to their schools.

1. **Website Update (Matt)**

Matt sent out the email versions of the NHTM email address, and made some tweaks to the titles.

The website is paid up for the next two years.

Rich asked whether our access to the website will be changed to correspond with the new email addresses. Right now, our access is still the email we provided NHTM. If we choose to change the email address, that can be done via logging into the website and changing the account.

1. **Media & Public Relations (Amanda)**

NHTM has over 1K likes on Facebook, but only 41 followers on Twitter. She will be tweeting at the upcoming conferences to try and drum up more followers.

As a new PR campaign, Amanda will touch base with colleges and professors to get preservice teachers involved. Gretchen noted we will have some students attending the Dine & Discuss. Amanda also noted the flyer that was included in the Mathesis would be helpful to email out to professors as she is starting up this campaign.

1. **Elementary Representative Report (Amy)**

Unfortunately Amy was unable to attend this meeting, so no report will be given, but Cecile advised that Amy will be checking to see that the information for the Prevost and Evans awards is accurate on our website.

1. **Middle Level Representative Report (Katrina)**

Katrina is resigning her position effective this board meeting, so we will need to appoint a representative to finish out her appointment. Her term is up May 2017. Stephanie may know of someone who could be interested, but will need to talk with them first. Cecile suggested Pat Marquette, or Lynne Tassi as possible appointees. Amanda suggested checking out who has run for that position in the past as well as possibilities.

1. **ATMNE Update (Rob)**

Reminder that the ATMNE conference is coming up Oct. 29-30th in Portland, ME.

ATMNE grant is coming up October 1st, and Rob is working on that with Annie and Cecile. The book study survey has been completed, and they are now working on sorting out the final book, and making sure the grant ties into our events throughout the year.

ATMNE is also looking to refine the constitution.

The summer conference in NY is going along, and ATMNE is looking for regional folks to participate in the planning piece, if you are interested in volunteering.

1. **NCTM Update (Terri via Google Hangout)**

Terri was unable to connect, but emailed that she would send us a copy of her report.

1. **State Math Contest (Stephen)**

No update from the summer retreat. Still waiting to hear back from Shawn Hackshaw to finalize the contest date.

Stephen received an email from a tutor to see about homeschool students coming to the State Meet to participate. He is aware that homeschool students are able to participate with their local school extra curriculars, but not sure if this tutor is looking for them to form their own team. After much discussion, it was decided that there needs to be a policy statement drafted by the board and publicized to the NH schools and homeschool groups that stipulates participation of homeschoolers at the State Meet. Donna is going to check in with the homeschool rep at the DoE to see what stipulations may or may not exist for homeschool participation, and whether or not every homeschool student is attached to a local school district.

Matt made a motion that we adopt a resolution to encourage homeschoolers that want to compete at the State Meet to participate through their local high school team. Rob seconded.

Discussion persisted and centered around the notion that a simple solution would be that homeschool students would need to become a participant on their local school district math team. Matt emphasized that however the policy is crafted, it needs to be encouraging, rather than exclusionary in language.

1. **Dine & Discuss (Rich) {The Difference in Teaching and Learning – The Mathematical Practices}**

Official keynote speaker is Rob Lukasiak. The title has been changed to “From Principles and Practices to Actions and Evidence: How do we get there and what does it look like?”

Jess and Steph are doing the Elem breakout groups, Annie doing Middle, and Michelle is covering the High School break out. Please let Rich know if you need any specific setup (projector, etc.) ahead of time.

Three Sponsors - $100 each and need to add to program. McGraw Hill, Carnegie, and Reasoning Mind.

1. **March 2016 Spring Mathematics Conference (Annie/Lauren)**

UNH Manchester is no longer an option as a location. River Valley CC is a possibility, but as Rich noted, the largest location for a keynote holds just over 100 people. Possible dates at River Valley CC would be the week of March 14th, hopefully the Thursday or Friday of that week so as to not conflict with the State Meet at PSU. The program chairs have also begun to check out Granite State College, but they may also have space restrictions. Rich noted that it could also be a time to break up the keynote into grade level sessions, rather than worrying about one whole keynote. Matt mentioned that in doing so it could be problematic for the awards ceremony. Rich raised the concern that there isn’t a great space available for the exhibitors that wouldn’t impact the ability to program sessions there as well. After much discussion, it was determined that the board ask the conference committee to research other possible locations, such as St. Paul’s and SNHU, and return a recommendation to the board.

1. **Fall 2016 ATMNE Conference Update (Cecile)**

No real change from the summer. The date is set for October 20-21, 2016. After the Portland conference is probably when speaker invitations will be sent out. Cecile has contacted ESANE to begin getting exhibitors for the conference. If anyone has time to work on any committee for either the Spring NHTM conference or the ATMNE conference, please get in touch with Cecile.

1. **Regional Coordinators Update (Cecile)**

Judy suggested that we have the mentor role for the regional coordinators be part of the duties for the

president-elect. This responsibility will be added to the president-elect duties.

Susan Kurtz is now the West Central regional coordinator, and Kellie Gabriel is now the South Central regional coordinator. South West is now the only region that doesn’t really have representation in the Monadnock region. Rob is heading down in that area this month, so he will reach out and see if he can drum up a regional coordinator.

1. **Summer – \*NCTM Leadership Conference (Annie/Jeanine)**

Jeanine & Annie talked about this at the summer retreat. One of the big items they worked on that is coming up was strengthening the regional structure. The other piece that they worked on were ways that NHTM can encourage the free 1-year membership participants to continue with a paid membership, and ways to get them to connect at the conferences.

1. **NCTM Secondary Institute (Nathan’s report)**

See Nathan’s report attached at the bottom of the minutes.

1. **Newsletter Update (Elisabeth via Google Hangout)**

The deadline to submit items for the next Mathesis is November 1st. Attached to this email you will find a list of articles that were included in last year's November issue. Please take a look at this list and let me know if there are any additional items that should be included in the upcoming issue. Also, I noticed that there was an article about the Dine and Discuss event. Is this something that the Newsletter Editor writes or is someone else responsible for writing about these activities? Does anyone have any questions for me?

1. **DoE Updates (Donna)**

Donna has a new role now as the assessment administrator at the DoE, but will still be maintaining her previous position until it has been filled. Donna is still connected with the Presidential Awards, and will be heading to Washington, D.C. with Eric Feldborg, recently appointed Director of STEM Education in NH.

1. **Other Business**
   1. **Nominations Committee (Annie)**

Need names for people interested in secretary and post-secondary representative. Please forward interested names to Annie for elections in the spring.

The following items were not able to be discussed due to time constraints:

1. Grant Application – ATMNE / Survey results
2. Proposal to have Teachers submit articles for publication in *Mathesis*
3. Updates on Evans, Prevost Award application process (Amy, Michelle)
4. STEM Update (Jeanine)
5. Reminder: Merchandising idea: **Name**: NHTM Apparel Store - **URL**: [http://nhtm4all.qbstores.com](http://nhtm4all.qbstores.com/)

Amanda made a motion to adjourn at 7:21pm, seconded by Rob. Motion passed unanimously.

Adjourned at 7:21pm

**Attachment for agenda #17:**

The 2015 NCTM High School Summer Institute in Anaheim, CA started off strong with keynote speaker Peg Smith. Her speech focused on the links between NCTM’s *Principals to Action,* the CCSS-M standards for mathematical practice, and good tasks, a theme that would be present throughout the institution in both keynote and breakout sessions.

The institute was broken into three distinct segments. Each day began and ended with a keynote address. The in between was filled with breakout sessions and individual strand breakout groups. The strand I participated in was Algebra 2/integrated 3.

On the first full day, the first breakout session I participated was led by Nicole Bannister and was titled, “Using Connected Representations to Promote Reasoning and Problem Solving.” Using a tile pattern problem, we focused on the use of multiple representations to foster student understanding of algebra. We needed to be able to create a diagram of the next step, color code the diagram, write an equation that was also color coded, and create a graphical representation of the problem. The requirement to do all parts of this task will help to ensure that students see the interconnection between each way of representing a function: no one method is better than another.

My next breakout session was “Thinking Vertically,” led by Ashli Black. In this session we examined the progression of “rate of change” from elementary through calculus. We performed multiple tasks requiring us to analyze the rate of change. We then linked these to the CCSS-M at the high school level.

Day two saw me again in Nicole Bannister’s breakout session. This time the topic at hand was “Fostering Meaningful Mathematical Discourse in Your Intermediate Algebra Classroom.” We focused on how to design group work to increase its effectiveness. First we watched and analyzed video of Nicole’s former classroom, where one group of students was struggling on a particular problem. Nicole used probing questions to discover what the students understood and where their stumbling block was. Once the students had a foothold to continue their problem, Nicole left them to continue working. This was enlightening, as it required the students to rely on themselves while still allowing a safety net when needed.

We also broke apart in individual strands, where we focused primarily on tasks related to our strand. On day one, we focused on a task devoted to taking three points and writing functions from it. I liked that it had the potential to be really open ended: there were so many different function families that the points could belong to. But the lack of structure could cause difficulty when implementing in classrooms with wide variation in ability. Of course we discussed using “least helpful questions” to get students moving in the right direction.

The second day of our task session focused on adapting current resources to ensure that they include the SMPs. I found this session to be intriguing because every teacher already has resources available to her. But not all of those resources push students to the level of mathematical understanding and practice that we should be requiring. We focused on three ways to improve current resources: reversibility, generalization, and flexibility. Reversibility is the act of taking a closed problem and opening it up, by reversing the order. For example, instead of asking for an asymptote of a rational function, have students write a rational function with a given asymptote. Generalization takes a very specific problem and broadens it. Instead of “solve this quadratic,” it is “write a quadratic equation whose solutions are integers.” Flexibility is requiring students to use multiple methods to complete problems. What I like most about these three strategies is that they can work for any teacher. It doesn’t matter what resources they currently have, and it doesn’t matter what grade level they teach. They can create more rigorous tasks using these three strategies.

In our final session, our task group focused on implementing statistics education in Algebra 2. We focused on a task involving displaying class-collected data graphically. This allowed us to introduce all sorts of statistical vocab, from histogram to distribution to spread to center.

I enjoyed all the keynotes and sessions that I attended at the NCTM Summer Institute. All were both educational and engaging. With that said, I feel that the third session of my Algebra 2 task strand offers the most potential advantage to all teachers. It doesn’t matter what they teach, the more than likely have resources that they currently aren’t in love with. But the creation of new tasks is intensive labor, that is hard to perfect and easy to mess up. Most teachers would probably be best served by using ready-made materials, but they are not always what we would like. The session on adapting current materials to be inline with the standards of mathematical practices seems like the obvious choice to share with other teachers. My session would include the link between the 8 standards of mathematical practices and NCTM’s mathematical teaching practices. From there, we would delve into the three methods of reworking tasks: reversibility, generalization, and flexibility. We would first work through the processes required for each. Finally, a task “in need of repair” would be given to each group. Using one or more of the three techniques, each group would improve the current task. A quick bulleted list of the session is below:

· Introduction

· 8 SMPs & NCTM Mathematic Teaching Principals

o Connections between

· Don’t create new tasks when you already have resources available

o 3 strategies

§ Reversibility

§ Generalization

§ Flexibility

· Fix this problem: taking a “textbook problem” and creating a task