PETAC Meeting Minutes – January 15, 2010

Present: Bob Arredondo, Kevin Shyne, Karen White, Bob Henry, Val Zanchuk, Michele Munson, Kim Runion

Meeting called to order at 8:35

1. Welcome – Many people were not able to make the meeting due to conflicts, illness, etc.

2. Review of Minutes- No omissions or changes. Bob Henry-motion to approve, 2nd by Val Zanchuk– All approved.

3. Continuation of PETAC – discussion/documentation required- the group answered the questions on the “Statuatory Committee Chairman Survey”.

   Two Questions:

   1. What is the “saturation point” of implementing pre-engineering programs in all high schools and middle schools?

      - There was a discussion that there are still many schools that do not have these programs and there is still work to do.

      - There has been a change in administrations in schools; also, there have been many new STEM funding initiatives to help schools out.

      - The purpose of the board is also to look at and approve curricula. We also advise the legislature on programs around the state.

      - We still have not solved the problem of advising parents on pre-engineering and the value of the programs into advancing their children for future careers/college.

      - Can there be a restatement of the tasks of the committee through the legislature to continue it and will the funding disappear? If the law is reopened then there may be changes that we do not want. There also remains the question of fundraising. Was the 501(C)(3) ever approved? Being part of PETAC also gives our mission more credence.

      - There was a suggestion to do a survey monkey to find out how the courses are set up, weighted, classified (honors), etc. What are the school perceptions of the pre-engineering programs? This should give us the data we need to go forward. Michele and Val will create the questions and Kevin and Kim will create a list-serve to send out the survey.

   2. When saturation is achieved, should the council assist in sustainability of the implemented programs? In New England, only CT has more programs for pre-engineering. MA only puts these programs into the CTE centers. Fifty percent of FIRST robotics are mentored, or based out of PLTW programs.
4. Real World Challenge update- 8 Teams signed up for the challenge and their proposals are due in Concord today. The review criterion is still unclear and reviewers are still being sought.

5. Kevin’s Report-Kevin gave his report of his latest involvement in pre-engineering activities. The NHSPE meeting was successful and felt to be supportive. The PLTW held last week at WPI had over 90 attendees. There were also many visits and meetings with NH schools interested in implementing programs. No one has applied for any of the pre-engineering match funds. There are 5 towns interested in applying with 9 schools in total.

6. PLTW Guidance Counselor Conference Report – Bob – There were 44 counselors and 91 total including administrators in attendance. All the feedback was positive. There were 10-12 counselors from NH. The conference should come back to NH next January. NHTI will do the training for PLTW this summer. The courses were submitted last week. They are hopeful to make these full classes. Bob will be sending out a memo to the CIM schools for an opportunity to apply for a grant for equipment through the Society of Manufacturing Engineers. Bob will attend the Advanced Manufacturing meeting on January 28th. Our pre-engineering site needs to be updated as well. Jen has been doing it from Toronto. Kevin will email her the minutes for updating.

7. Other – Michele discussed the summer tech camps. That information should be coming out shortly. The feedback from students and parents has been extremely positive. Next meeting is scheduled for Tuesday, March 23rd, the purpose being able to discuss the results of the survey.
PETAC Meeting – March 3rd, 2010

Attending: Val Zanchuk, Robert Arredondo, Dan Caron, Thelma Brown, Rep Norman Major, Kim Runion, Dean Kascaden, Judy Houston, Michele Munson, Kevin Shyne

1. Review of Minutes from January: Motion to Approve: Val Zanchuk
   Second: Michelle Munson
   All approved
   Abstain: Judy Houston and Rep. Norman Major (absent in January)
   Changes- none

2. Survey – purpose- to see what schools around the state are doing and how extensive programs were, and if any schools abandoned programs. If we approve it, Kim Runion will send it out to the CTE centers. The high schools will have it sent out through NASSP and the NSSA (National School Supt Ascc).
   Question on whether an introduction letter will go with it to explain the questions, such as: what is pre-engineering? What courses consist of a pre-engineering program? Kim suggested an introduction letter stating what the results of the data will be used for. We could do so and provide a link to the survey monkey.
   There was a suggestion of putting who the survey is intended for and request to ask who is answering the questionnaire.
   The letter of introduction should come from PETAC. Kevin Shyne and Michelle will work on the intro letter. If an SAU is answering for different schools, then they need to fill the survey out separately. There was a request to add a question on training needs.
   Suggestion for change: #8 to add where the college credits will be coming from.
   #5 – if yes, put contact information in for their school.
   #3 – no program, would you be interested in more information? Direct them to Kevin Shyne. We can put a closing statement at the end with this info.
   Kim and Kevin will review the final approval and send it out.

   Motion to send out revised survey with revised questions: Judy
   Second: Rep. Norman Major         All Approved

3. Real World Challenge – There turned out to be only 2 teams and have been vetted through the initial process. Plymouth is the state winner and will be going to Washington, DC for the national challenge. No new team applicants will begin until the fall. It was a first start and is considered successful to begin with. There was also short notice. The purpose was to inspire aeronautical engineers…1/3 will be retiring. Federally initiated through the Dept. of Defense and manufacturers of software (PCT from Needham, MA is one) have sponsored this. Colleges were involved through mentoring teams. Teams get the software and a real world design problem.
4. Tech Camp registration is up and open:
   July 12-16 - all girls engineering camp for grade 6 and 7.
   July 19-30 is coed for grades 7, 8, 9, 10
   Aug 2-6th Middle school – 6-8 Day camp at White Mtn CC – for 1 week - $50 per day.

5. Dean reported on the certification process for teacher’s standards in the technical areas. The regulations are in the process of being revised. These teachers were being alternately certified. There will be hearings soon and we will be notified.

6. Dan Caron presented at the ITEA conference and suggested a short presentation on EbD for a future meeting. He can provide handouts and a PowerPoint presentation.

7. Kevin’s report - PLTW – phone call in meeting on March 16th, 2010. The discussions were more nuts and bolts. There were software problems. Due to high costs, they are going through the purchasing manual and do price reductions where possible. There should be a 20% reduction in the Autodesk software. There will be an assessment of data.
   International Technology and Engineering Education Assn is the new name for ITEA. Kevin attended the conference in Charlotte, NC. There was more on robotics and machine tool this year. PLTW was not present at the conference and there is a push to have them return. STEM Academy is a new engineering program provider and Kevin will be reporting more on this. Bob reported that some of the courses seem to be the same as the PLTW courses.
   Question on the PETAC board membership- Judy Houston gave us the membership rules and terms. There was a question from a person who would like to come from UNH. We do have 1 representative so far but this person represents a different arm of UNH. There are no current seats open right now. Bob will respond to him about this.

8. Judy discussed what was happening with NHSPE – NH Society of Prof Engineers – She has been trying to connect more engineers with students directly. She has heard from Milford High School regarding a panel of engineer’s discussion with students.

9. Kim suggested sending out notices several times a year as career days come in the spring and need a reminder.

10. Judy suggested that photos be submitted of students in activities for our website.

11. Portsmouth Naval Shipyards has begun a campaign to promote engineering since they must hire 30,000 engineering personnel in the country. They must hire US citizens. They have asked for contact info for the schools.

12. Rep Major has brought up the issue of considering expanding the duties of the committee to marketing. We could go to the PTA’s or other K-12 parent groups to state the importance of engineering and that the engineering programs remain adequate. Should he introduce legislation to add that as a duty? We have done our original charter of curriculum. It does state promote and funding already. Rep Major feels that we need to focus on parents and not just students. Not all
PTA’s belong to the state group. We had subcommittees in the past for the website and marketing. If he had to put some into a bill, it would have to be ready for the fall primaries.

13. Kim has printed out the list of the CTE centers, contact info and programs there.

14. Blueprint for Reform ESEA- something in there about STEM – we need to watch for it…money will be in there for a priority. Very early in the process of tackling education as a policy issue.

15. A number of schools looking to do outreach in Camp form. How could all of these schools become an entity to come together and foster grants? Could we be an outreach for additional support for our goals? This is now being done through EPSCOR. Does it need to be sponsored by an organization or school? We might need a non-profit so they would not take so much of the grant portion for managing it.

Judy proposed beginning the subcommittees that we had prior? Bob will send out an email for feedback since some members had to leave.

The status of the non-profit will be looked into by Kevin Shyne.

16. The governor stated that he wanted FIRST in all the high schools again…not an organized curriculum and there is cost. It is afterschool program and they like it that way so they can do their own thing.

17. Dan Caron sent out an email stating that judges are needed for TSA. Anyone available? It is Thursday.

18. Dan also asked Norm Major about STEM institutes that EbD runs. EbD piloted it in North Carolina. Are we looking into it? It was felt that Norm Major was acting through the legislature notices.

19. Where are the competencies that Dan worked on for the PLTW courses? Not on the website and the courses have been revised since. Kevin will request the information on this.

20. New board member Thelma Brown from PSNH introduced herself and gave some background info. She is an electrical engineer. From 2001-2008 she did recruiting for college graduates. She has also worked on the PLTW advisory board for Pinkerton Academy.

21. Info given on he $1500 3-D printer that has to be built but works well.

Next meeting: Tuesday, May 4th, 2010.
PETAC Meeting – May 4th, 2010

Attending: Bob Arrendondo, Kevin Shyne, Bob Henry, Michele Munson, Dean Kascaden. Thelma Brown, Karen White, Dan Caron, Kim Runion, Greg Donald

1. Welcome and Introductions of all attending

2. Review of Minutes from March 23rd, meeting. The date at the top of minutes lists March 3rd and not March 23rd, 2010. Motion to Accept Minutes with date change: Michele Munson 2nd: Dan Caron Abstain: Bob Henry
   All Approved

3. Nominations: Motion by Bob Arredondo to move that we approve the nomination of Dan Caron to Chair.
   Michele Munson – 2nd. All approved.
   Nominations for other positions: Thelma Brown for vice chair Bob Henry motioned to approve, Michele Munson: second. All approved
   Nomination for secretary – Bob Henry motioned to keep the same secretary, Karen White who sits for Tom Brennan. Michele Munson second. All approved.
   Nomination for all proposed officers voted for and approved. It will go to Governor and Council for final approval.

Next meeting for goal setting: August 24th, 2010 at UNH for 8:30 at Kingsbury Hall Room W290; the Dean’s Conference Room.

4. Engineering by Design Presentation – Dan Caron - Dan went through an overview of
   the curriculum and how it ties into STEM and standardized education. Dan feels that
   EbD is not in conflict with PLTW but compliment each other. The curriculum covers the
   20 standards of technological literacy and Advancing Excellence in Technological
   Literacy. It can be used as modules in other classes such as physics or it can be used in
   entirety. Matching funds requires that an engineering curriculum be implemented that
   meets the standards. Dan went through the coursework that is offered from K-12. There
   are 23 states involved in this curriculum.
   There will be summer training in Concord on July 7-9 at the Tech Ed Concepts Summer
   Camp at the Grappone Center for $175.00 registration fee.
   The pathway for Robotics lets your school participate in First Robotics and get a
   curriculum-based credit course.
   Funding - EbD works on a state site license. It has been reduced to $18,900 since we
   have been in the consortium for 3 years. We may be able to get the price reduced. We
   are going to see if the state legislature will pay for it. Every school in NH, K-college can
   access this curriculum for free since it was paid for by NHCTA. (NH Career and Tech
   Administrators) They do not have the funds to pay for the next 2 years. PSNH also gave
   us $5000 toward the curriculum. In the state of NH, 35 of 78 of the high schools have
   either PLTW or EbD and most all of the CTE centers have them as well.
5. Pre-engineering Survey – The introductory letter was not written but the changes were made as suggested from the last meeting. Michele went through the survey. Should we also have, “check all that apply”? That change will be made. A few other suggestions were made for changes that Michele noted. Kevin and Michele will complete the cover letter.

6. EPSCoR Update- Experimental Program to Stimulate Curriculum or Research- Michele Munson is the outreach person for this grant. Michele gave the group a report of how she is working on the promotion of STEM and pre-engineering activities, especially in the North Country. We became a member of the STEM equity pipeline. They are looking at a “train the trainer” model. The summer tech camps are part of this work.

7. Expansion of PETAC duties to include Marketing – There was a discussion as to whether the problem exists in marketing or other reasons, such as scheduling, competing courses like AP classes, and the courses not being allowed to be given math and science credits. Should we target the state school board for changes? There is also the superintendent’s meeting. That should be a goal for next year? It would be more effective to market once we resolve other issues. Sub-committees – we will talk about it in August as far as the marketing question.

8. Update Tech-Ed Standards for School Approval/Certification Standards- Dean reported that they have been approved by the professional standard board and are awaiting a meeting.

9. Kevin’s Report – Pipeline – no applications in yet but there is funding. Should we consider using funds redoing the labs? Our non-profit status was closed out due to the incomplete application and also the same for the Charitable Foundation. We can’t use the name (NHEEF) unless he is willing to sign it over to PETAC as it is registered to Dan McGuire’s home address.
There was a question about the software being used for the animation and gaming EbD program. Kevin will get that information.

Next meeting for goal setting: August 24th, 2010 at UNH for 8:30 at Kingsbury Hall Room W290: the Dean’s Conference Room.

Meeting adjourned at 10:30 AM
PETAC Meeting Minutes – August 24, 2010

Attending: Dan Caron, Bob Henry, Kevin Shyne, Rep Norman Major, Michele Munson, Thelma Brown, Karen White, Kim Runion, Val Zanchuk, Dean Cascadden

1. Welcome and Introductions- all members will have their picture taken so we can update our website. It is still being run by Jennifer Ng. (www.preengineering.nh.org)

2. Review of minutes from May 4th, 2010 meeting
   Motion to accept: Bob Henry 2nd: Dean Cascadden Approved: All – no corrections
   Abstain: none

3. a. Reports of accomplishments -
   White Paper: DanC began with a discussion of the “White Paper” that dated back to Nov, 2006. Nothing seemed to have come from that and it was suggested that it be reviewed by members. Should it be on the website? Is it still applicable? Val Zanchuk will review it and send it to Jennifer Ng for the website.

   Technology Education Program recommendations: Tech Ed is required for middle school and not high school. There was a discussion on the concern of how things are named. Lisa Danley, was looking at it through the DOE but was concerned as to how it would affect teacher certification requirements. Teacher certification recommendations are still in the process. They would be found in the minimum standards for school approval when finally approved. What are the minimum standards for a tech ed program? Kim will research this. People will need to come to the hearings at “rule making” to assure the process goes through well. DeanC feels it is included in the adequate education standards. This means having to have classes and employee teachers for these courses. Should we put our PETAC recommendation on our website? We agreed “yes”.

   Engineering Competencies: 3 Ebd and 3 PLTW – they were buried in the CACES website and we cannot access it. This work took 6 months to complete. They are samples created for the Perkins grant but they never made it on our website. Four of the 6 courses done were revised. Do we want to redo this project or revise it? Kevin Shyne will find out where they are from CACES or the council.

   Middle School engineering added to the legislation: went through and signed by the Governor last year. They are now applying for funds.

   Website – JenniferN constantly looks for information for the website. ValZ asked about a Facebook page. We will consider It if he might want to maintain it.

   Facilitated matching grants for pre-engineering

   Introduced EbD to NH

   Approved 1 home grown engineering program in Bedford
b. EPSCoR/Tech Camp - Michele Munson – They help you seed grants that will go to the federal govt. We were one of the last states to get EPSCoR. Research is supported at UNH and Dartmouth. The Outreach portion involves support for the Tech Camp and STEM Camp in the summer. Also, Equity and Diversity issues will be looked at and pilot sites will be considered this fall. Support for North Country initiatives is happening as well. STEM NH Consortium will begin soon and have grants available and will interact with the legislature. Funds travel for conferences for STEM initiatives. MicheleM will get further info on the newer grants.

MicheleM was looking to get information on NH members of a national consortium for STEM activity. A man by the name of Doug Heuser who works at the SEE Museum was listed but MicheleM cannot get any return calls from him. NAMSMC is the national consortium acronym. It is funded by very large corporations around the country. MicheleM will contact other members as will ValZ.

Third year of Tech Camps – 66 campers were enrolled. Rocketry, planes, oil spills were part of the projects. The girl’s camp had many industry partners who contributed their staff time and facilities. They focused on many fields of engineering. The Berlin camp had 33 students. DanC did rocketry for both camps and electric guitars were created. Geo-caching, water treatment and Lego Robotics were all covered. It cost $50,000 for 3 weeks of camp and cost nearly $1000 per camper.

On December 10th, 2010, Seacoast School of Technology will be demonstrating technology. It will be held at UNH. There was a discussion of the various camps that occurred in Bow, Manchester and future possibilities for next year. Funding of teachers and tuition for campers is a consideration. Can we put these events on the PETAC website? Does JenniferN have to do so or can we put our link on there? KevinS will inquire.

c. EbD/PLTW Progress - Kevin Shyne – KevinS reported out on various activities happening around the state. KevinS talked about the Academy of Arts and Sciences in Merrimack that is very stringent. EbD is continuing to gain strength as an engineering curriculum in schools. PLTW continues to change management. There are also training issues with minimum requirements for number to hold the training. Certain courses may require a teacher to fly a distance to train for a certain course. They have redesigned many of their courses that will require retraining.

4. Unfinished Business
a. PETAC membership – we discussed the fact that there are appointed people on the board that have chosen representatives to come in their place, but yet the appointee continues to be listed. We need to make sure that we have the official required positions filled as well. Rep Norman Major feels that the designee should be listed on the website as the person who actually attends. The designee is also authorized to vote and make decisions. DeanC will contact Mike (from Merrimack Valley) to see if a designee could be sent. Senator Kelly has not come but is very involved in the manufacturing committee. Rep. Major will talk to her about whether she wishes to continue.

b. Engineering Survey - This has not gone out yet but will very soon.
c. Tech Ed Teacher Certification – still in process and will be going to “rule making” soon.
d. Engineering Competencies will be reviewed

e. Technology competitions – there was a discussion about the Race to the Top grant and what can be done locally with First, Lego, Vex, etc. and what is cost effective and sustainable. There was a suggestion that we meet with the High Tech council and the Manufacturing Council. There was also a suggestion to look into the 4-H technology programs. Can we act as the facilitator to bring up a competitive league in the state? This sounds like a marketing idea to work on for this year.
Goals for the year:
1-Marketing – definitely what we want to focus on this year.
2-Charitable Foundation – Dan Maguire still has it and will not release it. Considered himself as being “thrown out” of the group. We will have to form a different group to do so. Do we have a copy of what DanM wrote to get approved? It is to fund scholarships and help to cut the red tape involved. Rep Major thinks we should call in someone from the NH Trust Assoc to ask questions to make sure it is what we want and to protect it. There was a concern that since DanM had set it up...if there were funds in there and he would not let them be released, what would happen? What if the board is disbanded....where do the funds go? Do we have to have prescribed goals for the funds and guidelines? VaZl will try to get someone from the NH Foundation and Rep Majors will from the NH Trust for our next meeting.
3-Sub committees –

a-charitable foundations-VaZl and Rep Major
b-competitions
c-information for the website
d-women in engineering-various people will research groups like 4-H, Girl Scouts, etc

4. Engineering Funding – KevinS gave out his report for discussion. EbD is proposed to be asked for 3 years at $19000 per year and use one of the schools as a fiscal agent. There was vote on approve use of state matching funding for EbD for 3 years.
Motion by MicheleM  2nd by: NormM  Vote approved by all

Meeting dates – 2nd Weds every other month.
1st Meeting will be Wednesday, Sept 22nd at 8:30 at the Walker building in Concord. The year meetings:
November 10th
January 12th
March 9th
May 11th.

Motion to Adjourn: DeanC
2nd by BobH
All Approved

Meeting Adjourned at 11:30
Below is a PETAC Meeting schedule for this year. Kim Runion has reserved the conference rooms for us.

PLEASE NOTE: The meetings are scheduled for 2 hrs, however, we have the room until 11:30 each day.

Purpose: PETAC Meetings

Place: State Dept of Education, Walker Building

Times: 8:30-11:30 am

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PETAC MEETING – September 22nd, 2010

Attending: Dan Caron, Karen White, Kevin Shyne, Lisa Danley, Bob Arredondo, Thelma Brown, Val Zanchuk, Shari Landry-NH Charitable Trust Foundation, Mike Martin – Supt Merrimack Valley, Michele Munson and Dean Cascadden.

1. Introductions of members and guests

2. Review of minutes – Lisa Danley would like to clarify that DOE would not consider the teacher certification requirements affected. Lisa will send me a clarification to be added to the minutes.

A Correction from Lisa Danley:

Hopefully this will better clarify the on-going history (saga) of the rules:
Approximately two years ago PETAC was charged with re-drafting/updating the Technology Education standards found in the Administrative Rules (306.47).? The original request came from Paul Leather, now Deputy Commissioner, in an effort to ensure the current teacher standards align with a progressive technology education program as opposed to the old “industrial arts” programs that may not be forward thinking especially in regards to technology. A copy of the current standards is attached for your convenience.

New standards were drafted by PETAC and submitted to my office in draft form. Since that time they have been used to better align teacher certification standards. This work was done last year via Dean Cascadden.

By Friday, September 24th a final copy of the revised standards for 306.47 will be submitted for consideration of rule changes. (Dan Caron and/or Michelle will forward these to Lisa Danley). The rule-making process takes approximately one year and will require at least one session of re-writes which will then be submitted to PETAC for review.

Question on $19,000 for EbD renewal from Bob Arredondo and how the funds from the legislation can be used. It will be put on a future agenda.

Motion to accept the minutes as revised: Motion: Thelma B. Second: Michele M.

3. NEW BUSINESS

NH Charitable Trust – Val Zanchuk and Shari Landry from NH Charitable Trust-we are looking to establish a fund that would exist for a lengthy time that can expend funds to schools or groups that meet our mission. The NH Charitable Trust would advise against a private foundation unless it is multi-million dollar trust. What the NH Charitable Foundation can do is accept living gifts or estate gifts like a private foundation where each gift or donation has its own mission that a representative group can determine or set criteria as to which organizations or groups get those funds. We need to decide which group does the advising or what group sets the guidelines. Do those end when the group ends? Rules may need to be set so that the funds can continue to be given out after the group meet. You need $25,000 to start a donor fund.
The NH Charitable Trust does not go out and recruit applications for that fund. They respond to requests but do not solicit unless it was huge, as in the 5 million dollar range. They would not be able to administer funds of technical expertise to determine what funds should be given out. PETAC needs to look for donors and establish the criteria. It should alleviate concerns for donors as to what is happening to their money. The committee can have no influence on who gets the funds or consider our opinion as to who should. A donor advised fund is where the donor can recommend who should get it. The funds cannot be any individual purpose or scholarship. A donor advised fund has to be for $25,000. A long term fund can only be what the board advises to be expended, which is 4.5%. Funds can be changed according to what the board is recommending. The donations are tax deductible. There are clear and rigid guidelines around fund-raising for this trust. The fees are 1% of invested and 1-2% of cash gifts. The commitment has to be to PETAC and not the NH Charitable Trust. We can show a document of our intent so that we can take donations until we meet the $25,000.

Charitable Division of NH should also be advising us on the same tip of not having a private foundation. We may not need to hear from them as the information seems clear.

Right now we do not have any donors lined up. We would be soliciting a variety of firms to gain donations. The purpose is to sustain middle school and high school pre-engineering programs.

A motion was proposed from Dean C. to move forward on the proposal. 2nd by Thelma B. ALL approved this motion.

We need to set up a working group. A charter needs to be established. We need a name, purpose statement, a list of potential donors and guidelines on the projects. Val Z. and Thelma B. will be doing so. We will have that for the November meeting.

REAL WORLD DESIGN CHALLENGE- Lisa Danley gave out brochures and information from last year as the website is still being developed. Last year's project turned out to be very different from what was promoted. Many schools dropped out. The competition wasn't clear and hopefully Bob Henry can help us with more information. Tom Duda from Plymouth brought a team to the national competition and could be helpful with feedback. The application and use of the software given, although valued at $50,000, was not practical for high schools. The virtual mentoring connection was also difficult to even obtain. It was marketed to the governors and then sent to the DOE without knowing what it entailed.

ENGINEERING SURVEY- Michele M. asked Lisa D. about using the DOE Survey Monkey account. She can and it will be figured out between Kim Runion and Lisa D.

PETAC Membership List is being finalized- Kevin Shyne feels that it is set and we just need to make sure all designees have been established and if the appointed persons still want to receive the information.

Tech Ed Teacher Certification – still in rule making. The hearings often have special interest groups that attend so we should have representation there. Dean C. will let us know when that will occur.
**Engineering Competencies** – Dan C. has them and will put them on our website and on the DOE website. There are 11 files on them. Each document has about 15 pages and an extensive amount of work.

Other Business

**Marketing Engineering**- Tech Fest – October 23rd at the new Windham H S. Like a fair that focuses on STEM activities. Should we set up a booth that we could give out information? We have a display that can be used. Michele M. will invite Joe Cunningham to our November meeting. Can we do something hands on? Karen W. and Michele M. will look for some small activities for the fair. We will report out how Tech Fest goes.

New person hired for PLTW – Carolyn Malmstrom to promote PLTW in New England. She might like to come to the November meeting. She wants to connect with what we are doing in this state.

NHTI affiliation with PLTW for training- not many new schools coming on so NHTI is considering whether they need to remain as an affiliate or not. There were only 4 people in each class and there was a big loss of funds. The Guidance Counselor conference may not be in NH this year. It most likely will be back in CT. The date and information has not been set yet. The funding may also be by how many people will be attending from each state. October 20 is the national summit for PLTW in Washington, DC.

Dean C. would like to consider putting the information for summer camps and activities on our website. We would like to be the state clearinghouse for information. We can also show a lot of activity on the local level and not just the state level. As soon as we get dates for next year we will send them to Jennifer Ng.

Jennifer N. continues to update our website from Toronto and hasn’t chosen to stop doing so. She also wants to put former minutes on the site. Members will look for them.

**EbD Funding**- The NH Charitable Trust can help with this.

**REPORTS** –

**EPScOR**-STEM NH program is moving ahead. An advisory committee will look at grants and who to support. Today the STEM Pipeline training is occurring for pilot site teams to go through the process of analyzing programs for equity. It supports non-traditional careers and projects. It is part of a 3year $10,000 grant. Michele M. found that the national group NAMSMC no longer exists.

**The Shyne Report**-Kevin S. gave out his report of his pre-engineering activities for September. He has been working with colleges on articulation agreements that offer EbD, and pre-engineering. Kevin S. is working with Claremont to establish PLTW, and other schools on establishing EbD pathways. Berlin is still trying to establish EbD in their middle school. There are still a few schools applying for matching funds. The $400,000 needs to be spent by the end of this year but Kevin S. will find out for sure. It is for new programs or to expand a newer part of the program. He is not sure if we lose the money if we
don’t use it. CTE centers can apply for $50,000, $25,000 for high schools and $15,000 for middle schools. The money is to be used for equipment to upgrade and add to the program.

Meeting adjourned at 10:00 Motion by Val Z. to adjourn 2nd by Michele M.. All approved.

Next Meeting: November 10th, 2010
PETAC Minutes – November 10, 2010

Attending: Michele Munson, Bob Arredondo, Kevin Shyne, Carolyn Malstrom(guest), Judy Houston, Kim Runion, Dan Caron, Thelma Brown, Bob Henry, Val Zanchuk(by phone)

Absent: Greg Donald, Dean Cascadden, Lisa Danley, Rep Norm Majors

Approval of Minutes: Motion to Accept: Michele Munson 2nd: Bob Arredondo Abstain: Judy Houston

1. Welcome and introductions- The group introduced themselves to our guest Carolyn Malstrom from PLTW. She explained new initiatives for PLTW and curriculum updates. There is also a new management team. The new CEO is John Locke. Dick Blais left last summer. Every course has been revised since 2006.

Gateway to Technology has a new unit called Energy and the Environment – There are now 6 (9) week units. The two all schools should do are Design and Modeling and Automation and Robotics. There have been significant changes to: Automation and Robotics, Energy and Environment, Magic of Electrons, Science and Technology, and Flight and Space.

The Biomedical Sciences courses (4) are science courses and not engineering courses. There is a career emphasis, but also can compliment biology courses.

A new course that will be offered this fall: Global Challenges for 7-9 graders. It combines the biomedical and engineering. Units will deal with global challenges, ex. Food...how we get enough, not compromise the nutrition or the environment. Structured like the Gateway to Technology units. It will eventually become 6 units. The goal is to engage more girls that are still only at 25% in engineering and to increase boys into the biomedical.

New is the Innovation Portal-this will provide experts for students to network with for projects and refinement. Only now in the mid-west but will roll out nationally next year. The collaborative portal is being developed for teachers to innovate with the curriculum and share with others. The teacher will be compensated for their ideas.

PLTW has negotiated with Autodesk to keep their current versions for 3 years instead of purchasing each year. PLTW is moving away from having a software lease because some schools prefer Solidworks or P-Engineer. They are moving to an annual subscription fee for an approximate cost of $3000. Materials for the curriculum have also been reduced by 10-40%. As the curriculum has been rewritten, the piece of equipment is used throughout the course or in multiple courses. There is also a new assessment process again and they will partner with NWEA for skills analysis. It also enables pre and post testing in math and science and will include reading in the future.

2. Proposed Endowment Fund – Val Zanchuk – Val and Thelma met and discussed how it could be managed. The intent and purpose were also discussed. Set it up as a donor advise fund with a review of applications and recommendations so we are still involved in what will go on. The charitable foundation will make the choices, and this will protect the funds should PETAC be disbanded. The applicants should
be school districts with DOE approved engineering programs. The purpose of the fund should be broad, but anything that the school district deem appropriate for their curriculum. It could be training, field trips or equipment. We should develop an application based on the charitable foundation template. It was suggested to be funneled through the DOE or possibly Kevin Shyne. It could go to a subcommittee for review and recommendation to the PETAC board for award. We would seek contributions from the major engineering/manufacturing companies in NH and also through the major engineering societies.

Next: If everyone agrees, the details of the agreement will be worked out with the NH Charitable Foundation and their board needs to approve it. The contract language will have to be worked out with PETAC. We need $25,000 to get it started.

3. Engineering Survey – Michele went through the survey with the board. The purpose is to find out what is happening around the state. We also want to determine what the curriculum is, credits, articulations and how do they publicize the courses. We also want to find out which school would want to do what. Michele will add a SAU identifier to complete it and get it out ASAP. She will have a preceding letter.

4. The dates for filing legislation are on our agenda and will take place before our next meeting; November 15-Dec 3rd and until Jan 3rd for any changes. These were brought forth by Rep Norm Majors. We have decided to not bring forth anything due to the economy.

5. The Shyne Report – Kevin distributed his report to the board and explained various activities that were happening. The last announcement to the superintendents around the state generated 4 serious calls about start up funds.

Think about for the next meeting: Richard Ayers at SERESC: Sponsoring another day like the one in the past. We can try to set it up later in the year. Could it coincide with the NH Engineering Expo on March 17th at NHTI at the Sweeney Gym? There is also a Woman in Engineering Conference sponsored by FIRST with a high school focus.

The PLTW Guidance Counselor/ Administrator Conference will be held at NHTI on Friday, Jan 7th. This is the New England Regional Conference. Teachers will be invited this year.

NEXT MEETING: Wednesday, January 12th, 2011