PETAC Members,

We had a short, “unofficial” meeting yesterday at MST. Thanks to Karen White for hosting Val Zanchuck and I. The roads were terrible and I understand why everyone was unable to attend. If Bedford had cancelled school, I probably would have stayed home as well. The most important event was the presentation by the students concerning a logo for PETAC. I’ve attached the PPT they prepared so everyone can look over all the options. Check it out and come to the March meeting prepared to discuss the choices. I don’t know if the PPT will come through properly, but the gear in the last choices is animated and would add another dimension to the web site.

A couple of FYIs:

Mary Laturnau is organizing a training session for Engineering teachers for some time in May. The session will include hands-on with various CAD programs (Val suggests, “be sure to include SolidWorks,”), “Ask the Master Teacher” sessions, best practices, engineering competitions, etc.

Val asked about the results of the survey and asked if Michele could provide a summary for us at the next meeting.

Val will check with Bob Henry to see if there is an event at UNH where we could “kick off” the education fund pledge drive. Karen handed out the brochures Thelma Brown had printed at PSNH...very nice!

MST’s STEM/Tech Fest is on January 21st. 4K post cards were distributed at area middle schools. Everyone is welcome to drop in and view the displays.

Next Meeting: March 19, 2012 at DOE/Walker Building.
PETAC Meeting – March 19, 2012 – Minutes

Present: Dan Caron, Thelma Brown, Rep Norm Major, Val Zanchuk, Judy Houston, Bob Henry, Mary Laturnau, Karen White, Kevin Shyne, Michele Munson

Absent: Bob Arredondo, Greg Donald, Dean Cascadden

1. Minutes – November meeting- Bob Henry made a motion to accept the November minutes and Val Zanchuk-2nd the motion. – All approved.

   There was a meeting held at MST in January but only Dan Caron, Karen White and Val Zanchuk were able to attend due to weather conditions.

2. REPORTS
   a. Kevin Shyne – presented the status of the schools he is working with. We have not handed out any money in the past couple of months but Berlin and Hampton are interested. There are a few that still need to put in applications.
      The PETAC survey was helpful and Kevin was able to contact several schools that expressed interest from it.
      Kevin also spoke about the Pre-engineering Hearing. It went well until the last spokesperson. The majority are supporting this legislation.
      EPSCoR- Kevin is now on it as the DOE representative.
   b. Mary Laturnau reported on the May 23rd workshop at NHTI in Concord – there are many instructors from PLTW, EbD, will be holding workshops that teachers can attend. There will also be robotics workshops being held. Question on Team America Rocketry Challenge and their being able to be attend. Dan will look into that.
      Karen and Michele will give Mary some summer camp info.
   c. Michele Munson – EPSCoR – the website is now being populated. Any STEM activities should be on there. Michele gave us the team report for the STEM pipeline results. Four projects happened around the state to gather data. They will continue to look at equity in the fall. The NH DOE has been participating with the OPEN NH professional development.
   d. PLTW – Bob was not here. Kevin said that there is demand in the elementary level so PLTW is going back to developing items for the lower grades.

3. UNFINISHED BUSINESS
   a. K-12 Pre-engineering Legislation status – there was testimony on the bill proposed by Rep Majors to encourage the pre-engineering curriculum down to the kindergarten level. The result was to “ITL” it – The chairman of the education committee did not give a favorable response. The report felt that the costs were too great, it would take away from the basics needed to be taught in the elementary level, and that teachers would have to further be certified for it. Rep Majors responded to clarify what the bill was asking for so an amendment was proposed thereafter. The feeling
from the chairman was that even if passed, the NH DOE will not do anything with it. Kevin Shyne will check for sure but feels they will. There was a motion for PETAC to support Rep Majors to support HB1389 as proposed to us. Michele motioned it and Val seconded it. All voted and it was unanimous “yes”.

b. PETAC logo – MST students presented to us in January as to their ideas, and why they chose the logo they did. Bob Henry commented that his students did not like gears and the young figures looked like “aliens”. Bob thought we needed to make sure we are sending out the correct image and message. There was a discussion as to what the symbol should be. Could there be a merging of ideas? Today’s students seem to be focused on humanity as well. The gear concept with people in there was suggested. How does this support the world? The gear superimposed on the world instead of NH? Rep Majors thought about the wireless world. The character if it is animated? That might appeal to students more than adults?? Could we use #11 with the state photo but having 3 symbols such as electronics, defense, and manufacturing?? A math symbol might be ok as well, such as a Pi. Could the “P” in PETAC be a “Pi” symbol? Modify #11 and have members send Karen symbols within the week….Can we get environment or humanity in there?
c. Tech Ed standards and teacher certification – Dean was not present. Michele felt that it takes 2 years because committees are not focused on it right now. Michele will find out for us.
d. Plan to build the reserves in the Granite State K-12 Engineering Education Fund – NHSPE (NH Society of Prof Engineers) annual banquet – Thelma held a discussion but did not get any checks. They are individuals and do not represent companies. Thelma had 1000 pamphlets on the Engineering Education Fund and paid by PSNH. Thelma feels like we need to go back and start with companies again. We need to find organizations that represent companies. One is American Council of Engineering Companies. Each state has their board. IEEE is also another organization. Should we have a business afterhours meeting? We can have a group presentation? We would need to find a company wanting to host the event since PETAC is not a household name. PSNH can hold it. NH High Tech Council – Fred Kocher may be able to help. Dan said he sent an email to them a few weeks ago but never heard back from them. Judy will ask an acquaintance in Manchester who works in marketing. There is an event in October in Portsmouth for the joint society of engineering that is well attended. Judy will touch base with them. If we are going to do something, do we need to decide before our May meeting? Please bring your contacts for May. We need $25,000 for NH Charitable Trust to manage the funds.
There was a suggestion to send out our brochure to the Governor’s office and to licensed companies.
e. STEM/Tech Fest at Manchester School of Technology – January- very well attended for a snowy day. We did not get the vendors like we wanted but did get over 200 families that attended. Joe Cunningham approached Karen White at the VEX Robotics state championship to see if they could work together in the next year. They have funding issues and Karen could provide the site and some equipment. Karen will touch base with Joe Cunningham again and see if there can be a joint venture in January/February of 2013.

f. Education at the speed of thought! Val was at the MST 4 Year plan roll-out and made the best statement of the day. He was featured in the Union Leader article on it.

g. Recognition Teacher Program – Matt Lowe – has a few bio’s on some teachers. The award is $1000 to be split between the teacher and school. We tried to go through the professional organizations. We should send out a certificate to each school who teachers PLTW and EbD. The teachers can also be recognized as part of the teacher workshop.

h. Engineering Internships – no movement on that

Michele said from the survey did not identify their programs as STEM in the program of studies. It also said that only 5 had articulation agreements. Most programs had only 1 full-time staff member due to program costs, etc.

Announcements – Dan would like someone else to take the chair for next year. Thelma said she would be willing to step up. Greg Donald moved so his public position needs to be filled. The Merrimack Valley superintendent has not sent someone. We need to bring nominations for the May meeting. We need a vice-chair and secretary appt.

Motion to adjourn : Bob Henry 2nd by Val Zanchuk….meeting adjourned at 10:20AM.

Next Meeting is May 21st, on Monday instead of May 15th. There are several not showing on a regular basis.
Attending: Rep. Norm Majors, Val Zanchuk, Kevin Shyne, Michele Munson, Thelma Brown, Greg Donaldson, Mary Laturnau, Dan Caron, Karen White, Robert Arredondo

Guest in attendance: George Rogers from TEAM Charter School

Absent: Dean Cascadden, Lisa Danley, Judy Houston, Bob Henry.

George Rogers began with a short summary of the new charter school opening next school year in Penacook, on 26 Washington St. TEAMS Charter School will draw students from Franklin, Belmont, Pittsfield students. It will be an EdD school.

Minutes from March: Motion to accept as written: Val Zanchuk Seconded by: Kevin Shyne All approved

Kevin Shyne Report: Kevin was appointed to the EPSCoR board for K-12. Kevin is continuing to return calls on pre-engineering programs from the survey, so it was deemed successful. Kevin has met with George Rogers on the new charter school.

Three schools Berlin elementary school money and Hampton for middle school and the new TEAMS charter school. Berlin and Hampton envision a K-12 engineering program. The pre-engineering hearing went very well. Kevin also went to the meeting put on by EPSCoR on Excellence. They are partnering with businesses. It was presented by the “diversity” people. They are trying to attract underserved and minority students.

Michele Munson: EPSCoR will be doing teacher trainings this summer on sensors for information on the snow melt going into streams. This is between Plymouth and UNH. The pilot is with 20 teachers and next year for 50. They are looking for people in the North Country.
EPSCoR is hiring more staff to keep people up to speed on the research being done. Equity information will be given by presenting at the NHCTA meeting this summer. The information to be discussed will be perceptions and data on minorities on STEM and related access. Michele will also be presenting at the fall conference for EPSCoR as well. Tech camp has been full for a month and the girl’s camp is almost full.

Dan Caron announced the Aviation career camp during July 16-20th in Laconia. MST is having a summer camp the week of July 16th as well and has 80 students currently.

Mary is working with Karen to create a construction workshop for girls.

Mary Laturnau – Wednesday is the pre-engineering workshop at NHTI. It is a generic workshop and not related to PLTW or EbD specifically. This is for teachers around the state. Thanks to Bob and Dan for helping. There was a tremendous response to attend.

Bob Arredondo – restructured and renumbered the courses at NHTI so they line up and match to PLTW courses taken so they are transferable. The courses must be certified so they can be transferable. Many will be working on it this fall to be ready for next year. Those who do not may drop the Running Start credit. Schools have to do a self-study and complete everything in the agreement.

Kevin Shyne on EbD – more demand for engineering problems for lower level courses. They will look to see what the Museum of Science is doing in their workbooks. EbD is going into specialty areas, robotics, graphics, and they are becoming very popular. Also VEX Robotics and going to competitions.

UNFINISHED BUSINESS

a. Legislation update – it passed unanimously as amended. The Senate messages should be coming over tomorrow. Much of the legislation had to do with the regional advisory committees.

b. PETAC logo – go with the symbols from 2 board members and give feedback that we want an all encompassing logo for all engineering. This will be passed onto the marketing class at MST.
c. Tech Ed Standards Rulemaking – according to Dean Cascadden they have been approved.

d. Tech Ed Teacher Certification- Approved according to Dean Cascadden.

e. Granite State K-12 Engineering Education Fund – maybe something for the fall. It really hasn’t gotten out in public yet. We still have work to do. We still need to have $25,000 in pledges to start it going for applications. Rep Majors will talk to Val and Thelma so he can do some outreach. They went to a few events but there is more interest in using the fund and not pledging to it. Rep Majors would like a sheet of talking points. Mary suggested it be inserted into the flyer for the Governors Manufacturing Summit in October. We will be planning on approaching the various engineering societies.

f. Engineering internships – Greg and Thelma still have not met on that yet.

g. Recognition Program - Dan Caron put together 50 certificates to give out on Wednesday at the pre-engineering meeting. Dan has not been able to contact Mr. Lowe to see if anyone applied for the NH Society of Prof Engineers. They are committed to working with students at all levels, including internships.

h. Web-site – modifications are needed according to Jennifer Ng. We need to put Mary on it. Can everyone look at it to see what needs to be added or changed? Someone should be in charge of it next year.

7. Announcements –need nominations for vice-chair. Everyone seems to have already held it that is able to. Thelma will be Chair and Karen will be secretary. Bob Henry will not be able to be on the board next year but someone new should be coming in. Michele is nominating Val Zanchuk as vice-chair since he was the longest out.

Michele approved and it was seconded by Bob Arredondo.

Thelma thanked Dan for his service and asked the group to assist with information. Schedule of meetings for next year:

The August meeting will be at PSNH through lunch. The meeting is slated for August 14th, on a Tuesday at 9AM through lunch.

October 15th- Monday

December 10th-Monday
February 11th - Monday

April 15th - Monday

June 3rd - Monday

All meetings will be at 8:30 in the Walker Bldg in Concord.

ACE Academy – sponsored by the Federal Aviation Administration. There are 11 signed up…middle school through high school….each student got into the air for ½ hour in a Cessna….refueling mission and also tours of Pease, etc….inquiries from far away. FAA website has info. There is a limit of 20 students in each camp. The cost is $375….there is a girls camp running concurrently. The flight instructors are great.

Adjourned at 9:40AM: Motion by Val and seconded by Mary
PETAC MEETING – October 15, 2012 - Walker Building – Concord

Attendees: Thelma Brown, Karen White, Michele Munson, Irene Wright, Dan Caron, Kevin Shyne

Absent: Mary Laturnau, Val Zanchuk, Bob Arredondo, Lisa Danley, Rep Norm Majors

1. Welcome-Thelma Brown
2. Introductions
3. Minutes of the August Meeting – corrections: Michelle should be Michele. Page 1 question on EbD should not be confused with Real World Design Challenge and the training is at Plymouth State and was not modified slightly. Michele moved to accept at revised. Seconded by Dan Caron.
4. Reports:
   a. Shyne Report- Kevin Shyne- the PETAC survey still surfaces until now. Still working on grant requests coming in. Kevin has met with Merrimack Valley Math and Science Charter School, Litchfield, Lyndeborough Middle School, Marston Elementary School in Hampton, and Brown Elementary School in Berlin. SAU36 still cannot decide what they want to do for their implementation plan. Kevin will ask Lisa Danley about the Dean Cascadden email that “rule-making” is coming up soon. Do we need a presentation for this? The next ESPCor statewide meeting is in Concord on Weds, Oct. 17th. We are trying to figure out how to get Dartmouth College engaged in our schools in NH. The Governor’s Manufacturing Summit was held last week and was well-attended. A mix of schools and service agencies with a predominance of manufacturing companies and vendor reps. Kevin and Mary Laturnau had a table there. There is still $200,000 to spend of engineering grant money. Dartmouth College is trying to outreach for girls to come in and test games for engineering programs.
   b. Laturnau Report- Mary Laturnau- Mary was unable to attend the meeting today. Michele reported for Mary that there is a girl’s day for computer science and manufacturing set for March 14th, 2013, and they are looking for a dynamic speaker of engineering and manufacturing.
   c. EPSCor report-Michele Munson-the grant had a sight visit from NSF. They presented on what was happening on the project and had to respond to the feedback provided in a certain amount of time. There was training in Sept for the 7-9 schools gathering data for pollution. November 8th is training for all participants in the project meeting with NSF for grants.
   d. PLTW – Bob Arredondo- Bob was not here for the meeting. Kevin reported that there are regional meetings coming up.
   e. EdD- Kevin- because of their robotics program, VEX is now able to have a curriculum for it. Intellitek has had 2 of their major players leave from the company. Curriculum will be reviewed every few years.
5. Unfinished Business and updates-there was a discussion about the length of time it takes for rulemaking for the technology programs and teacher certification. Some superintendents are
trying to save money in certain parts of the state and are taking that on as their agenda. There is not a readily available supply of technology educators. Many of the colleges are not carrying these teacher programs anymore.

a. PETAC logo – Karen White-Karen will get their marketing program to give a report on any latest design changes they came up with at the end of last year. Changes will be brought to the next meeting.

b. Granite State K-12 Engineering Education Fund-Thelma-a presentation can be created for various organizations. Kevin was going to look at that for a “road show”. Thelma wanted to look at the Charter for the funds to see what we can fund. We will have that for the next meeting.

c. Engineering internships-Thelma—there is nothing to proceed on yet. Ideas are coming in.

d. Website Maintenance- Kevin-he will go in and clean it up and update contact info on it.

e. PETAC Membership-UNH representative will be invited. Thelma will do that. The new associate dean that took Bob Henry’s place. Kevin has asked a few “north country” supt’s. Greg Donald has been asked for a new rep from Autodesk. Dean Cascadden might be able to recommend someone from his district.

6. New Business-the UNH tech camp is now scheduled and Michele gave out flyers for us. Dan is probably going to end up doing his ACE camp. Karen will have summer camp again in July. The Manchester 8th grade camp was doubled last year and both Michele and Dan plan on adding sessions next summer as well. Karen will have an open house in January but cannot be sure if they can have the “tech fest” as last year due to personnel cuts.

a. Irene Wright – PLTW—had been instrumental in the beginning of PLTW in NH many years ago. She sat in on our meeting for an hour.

b. Ideas for future guests- CREO software are being used at a local company, and they would like to get into schools to show how it can be used with the robotics programs. Michele will contact them to see if they can come for the December meeting. Kevin would like to invite Justin Slattery from DRED so they can see what we do. Kevin will contact him for the December meeting as well. Dan said it will be good to get in touch with the McAuliffe Center as they plan on starting a charter school as well.

7. Announcements


8. Adjourn-Meeting was adjourned at 10:00AM
1. Meeting minutes – October meeting – Motion to approve – Dan Caron Second by Kevin Shyne
2. Bill Moran – Civil Air Patrol- Wing Commander for the state of NH. Bill was invited to give us an overview of the Civil Air Patrol history and how they are involved in the State of NH. They are no longer allowed to participate in combat operations anymore. CAP has a unique service as they have 2 charters by congress. They are a Federally Chartered Corporation as well as an auxiliary of the Air Force. They are also congressionally chartered to conduct aerospace education programs. They have over 60,000 members. Their biggest mission is aerial photography. Very cost efficient. They participate in disasters like Hurricane Sandy where they take aerial photography. They took pictures every 5 seconds and uploaded 120,000 photos to the FEMA website. There are 26,000 cadets involved ages 12-20. Leadership Schools lead students to 10% of the Air Force Academy. There are many schools, academies and encampments.
Aerospace Education – K-12 national standards-based education; STEM emphasized curriculum. This curriculum is for schools and it depends on how schools want to do it...could be in school or after-school or summer. The teacher needs to cover 6 lessons of the workbook to qualify them for the AEX certificate. www.capmembers.com/ae is the website to sign up. The cost is $35 but all the materials are free. www.gocivilairpatrol.com is another website for information for cadets to find local unit. The training is by age and gender. It is a highly structured curriculum.
3. Reports-
   a. Shyne report- A few phone calls are still coming in from Michele’s survey. “Are funds available for elementary” are the leading questions.....Rep. Norm Majors is still working on that. Berlin wants to be the first district in the state to do a K-12 engineering program. Granite State Engineering Fund....question as to what it is to be used for. There should be a specific statement in case it is challenged. Kevin has asked a few supts. about coming on the board. He will also ask Mark Joyce, supt on the NHASSA. Have we reached saturation with many of the school funding as the list of applicants is much smaller? Kevin feels we have or there has been a change in administration. There are also budget concerns. If we can get the legislation passed we can get more elementary schools.
   b. The Laturnau Report-On March 14th, we have a girl’s technology day at NHTI involving several colleges. There will be 10 workshops and it is full! The schools can only bring 30
The Jason Alexander group is giving away 2 Google pads. They are looking for other donations. NHTI is looking for a grant for flash-drives.

c. EPSCor-Michele by not available and Kevin did not have a lot to add.

d. PLTW-Bob Arredondo – regional meeting in November. There was supposed to be a big announcement but it has not been sent out yet. The fee structure has changed; the high schools are $3000 and middle schools are $750. The biomed is $2000. This includes Inventor2000. It includes all the smaller packages. There is now an online purchasing manual. Elementary schools are now in the works. The hope is that it will save and resurrect engineering programs in NH. The training cost is the same. The minimum allowed is $2100 for 2 weeks. It is sometimes difficult to fill the numbers for training.

VEX robotics is connected to PLTW and they are continuing again with the competitions. There were 57 robot teams and there are some schools that have many. There were 100 qualifying matches. It is open to anyone who wants to use the VEX materials. The Winter Classic will be on January 19th at Winnicunnet High School where there may be 100 teams.

It is cutting into the FIRST main program because it is less expensive although it was not created for this reason. The parts are reusable and for $1000, you can create a good program. They are always looking for judges and volunteers to help. Daniel Webster College has a $30,000 scholarship for students involved in VEX. Dates for the VEX competitions are on the website www.simplerobotics.org or the robotevents.com or the VEX website has the NH dates.

e. EbD-Kevin – also moving into the middle school arena. EPSCor agrees. They are paralleling with PLTW on reaching down to the elementary level.

4. Unfinished Business – updates –

a. PETAC logo-Karen handed out a crude drawing – corner of a letterhead...a lot of stuff for a symbol....maybe like a Nike swish....piece of machinery building the blocks? Too literal...more symbolic? Doesn’t mean anything in particular but will come to be recognized as our symbol.

b. Granite State – K-12 Engineering Education Fund – Thelma passed out the charter for the Engineering Education Endowment Fund. We need to clarify what we can support to grow, expand and sustain engineering education. There was discussion about what should be included. Members felt that field trips and guest speakers that were episodic should not be included. There were suggestions for other donors to seek funds from. P.T. will ask some that he is familiar with. There was a discussion on how to get the word out....possible 20 minute talks to potential donors like at the Rotary.

c. Engineering Internships-no progress

d. Web Site Maintenance – Dan will head up the changes needing to be made.

e. PETAC Membership- supt meetings and our guest Dave is interested!

Next Meeting – Monday, February 11, 2013- Next meeting in Room 100