NH PRE-ENGINEERING TECHNOLOGY CURRICULUM AND ADVISORY COUNCIL
MINUTES OF JANUARY 25, 2006

Meeting Date: January 25, 2006 Location: Cafeteria Conference Room

I. Meeting Purpose: Regularly scheduled meeting of the Pre-Engineering Technology Curriculum Advisory Council.

II. Present:

Members

X Judy Houston, Chair
X Dick Ayers
Senator Peter Bragdon
Daniel Caron
Mark Carter
Bob Henry
Lynn Kilchenstein
Paul Leather
Michael Ludwell
Michelle Munson
Brenda Quinn
X Val Zanchuck

Charles Clough
X James Gorman
X Justina Hale
Kim Runion
Bill Simonton

Invited Guests

X Tony Puntin
X Jack Delaney

X Jim Leon
X Irene Wright
X Bob Arredondo
Lynn Darnell
X Nancy Fall

Staff:

X

X

X

X

X

Judy called the meeting to order at 8:36 a.m.

Panel Discussion:

The meeting opened with a panel discussion on “What Education and Business are Looking for in Students in the Workforce.”

Participants: Tony Puntin, P. E., Civil Engineer with The Louis Berger Group; Dr. Robert Henry, P. E. UNH Civil Engineering Asst. Dean; Jack Delaney, Director of Technical Operations, BAE Systems; Robert Arrendondo, NHTI Mechanical Engineering Technical Professor.

Tony Puntin, P. E., Civil Engineer with The Louis Berger Group: 35 employees in Manchester, NH office (international firm); highway, bridge, civil, and environmental services; also an ASCE Past President.

Goals: Trying to raise the bar for the field; looks for students:

- who have a sense of the real world,
- have a sense of propriety,
- have past experience in the industry,
- are willing “to deliver into every facet” of the work,
- are willing to participate and travel,
• will work at all levels,
• make themselves as valuable to the company as possible,
• have requisite skills – less structured than basic concepts ie. Hydrology,
• know how to use concepts, spreadsheets,
• can manage people,
• solve problems,
• can write a proposal,
• have language skills (critical).

Dr. Bob Henry, P. E., UNH Civil Engineering Asst. Dean: Noted that engineering asks students at 18 to decide their career (in law and medicine students first pursue a general program). Bob does not believe young people have access today to the kinds of activities and play that led into engineering in the past, ex. cannot work on a car, take things apart. Instead, young people play in a virtual world. Fewer apprentice programs are available; however industry expects new hires to be ready and 100% billable. Few companies in civil engineering have training programs. Engineering students take 36 – 38 courses in 4 ½ - 5 years. Bob also thinks students are “socially disfunctional.” Bob is not concerned about math beyond algebra, trigonometry, logarithms, (calculus not needed). Student motivation to study, focus, and take pride in work is essential. In response to Lynn Kilchenstein’s question about restructuring programs to allow student’s time to mature, Bob notes he has considered a 2 & 3 program, where the first 2 are basically a pre-engineering approach. Jim Gorman noted that we are in a period of transition. At the high school level, faculty work hard to help students learn and cultivate a learning attitude. High schools can no longer simply dictate the curriculum for all.

Jack Delaney, BAE Systems, (substituting for Paul Margolin), Department of Defense is the primary customer. Pleased with student preparation and motivation. Difference – young engineers have fantastic computer skills. Biggest issue: BAE requires U. S. citizenship. Looks for internships, well-rounded, employees who are active in community, including volunteer service. NHTI’s manufacturing 2 year degree is “perfect” graduating students who can then earn bachelor’s degree while working at BAE. He stressed the need for writing skills, “paperwork as important as the product.” Val Zanchuck noted that PLTW is a “tinkering” problem-solving program that encourages students. Tina Hale noted that the new Boston Museum of Science program presents a new science frameworks that will infuse engineering concepts into curriculum. Tony Puntin advised that ASCE-NH is very interested in becoming involved.

Bob Arrendondo, NHTI Mechanical Engineering Technical Professor. His challenges with students are motivation, attitude, pride in work - all are areas of concern. He also looks for math, computer literacy, language skills. The program is hands on. Bob asks students, in interviews, if they are interested in the application of concepts. Judy suggested that the list seems to center around workplace needs: language, graphic standards, plan development, knowing what the field demands, and preparing budgets. Bob noted we need to recognize academics in high school the way we recognize athletics. Jim Gorman added that 80% of kids in 3rd grade show no risk of academic failure and wonders what happens between elementary school and high school. We need to study what happens. Dick Ayers agreed that there is a cultural phenomenon but we can’t “address apathy with apathy.” We must take responsibility in schools to support learning. The Engineering field needs to make a statement about what are the needs regarding development of the “whole person.” Jim Leon noted BAE Systems and other companies have over 16 paid internships. Jack Delaney noted demographics don’t work in their favor; they have to pay more. BAE also has to deal with the following problems: U. S. citizenship, security clearance. Tony Puntin noted that theirs is an international company, so language skills are useful.

III. Agenda

The minutes of November 16, 2005 were approved as submitted
Reports:

1. White Paper – Lynn Kilchenstein
2. Counselors’ Conference – Jim Leon

Action Items:

1. Woman in Engineering
2. PETAC Appointments
3. BAE Internship Initiative

**Topic 1: White Paper**

Lynn Kilchenstein reported on the progress on the White Paper Committee. She distributed ‘PETAC White Paper’ definition to include Elements of the Paper: 1.) Characteristics and opportunities of engineering – related industry, 2.) Ways middle and high school students prepare for higher education in engineering and engineering technologies. Lynn also distributed the Science, Engineering, & Technology Business Survey Focus Group Questions which addressed: company profile, future workforce needs, challenges, favorable and unfavorable New Hampshire factors, and workforce education and training. Lynn noted the survey will be further refined. It can be placed in newsletters and distributed at the Annual Engineer Banquet 2/23; possibly also at the UNH Job Fair on March 1st. She also distributed the minutes of the December 13th, 2005 meeting with Bob Henry and Val Zanchuk.

**Topic 2: Northeast Regional Counselors Conference**

**Decisions/Conclusion:** Jim Leon distributed the information on the attendance of N. E. Regional Project Lead The Way Counselors’ Conference that was held at the Sheraton Hotel & Conference Center, in Nashua, N. H. on January 5th & 6th, 2006. Jim noted that it was successful. The next meeting will be in Hartford, CT, and will shift in focus with a broader approach and sessions for both experienced and new counselors and programs.

Action Items:

**Topic 1: Woman in Engineering**

**Decisions/Conclusions:** Judy Houston noted the goal is to encourage female High School students to enter engineering fields. After 2 years of good programs, she suggested that we shift into a more hands-on experience. Bob Henry has a variety of UNH female faculty involved in interesting projects who will be involved this year. The conference will be held in late spring this year at UNH. Judy Houston, Jim Leon, Bob Henry and Val Zanchuck will plan for the event. It is agreed that preparing the students for the conference will ensure a better experience. Date selected is in April from 9:30 a.m. – 12:00 p.m., then lunch. Tina Hale suggests we connect with Girls, Inc.

**Topic 2: PETAC Appointments**

**Decisions/Conclusions:** Jack Deplaney or another representative from BAE. The Committee still needs another business representative and general community member.

**Topic 3: BAE Internship Initiative**

**Decisions/Conclusions:** BAE Internship Initiative will be on the next Agenda.
**Other:** New website for PETAC, [www.epcnh.org](http://www.epcnh.org) : Kim Runion stated that High schools are setting up for job shadow (Groundhog Day Program, February 2\(^{nd}\), 2006). Junior Achievement will cover liability if students apply for unpaid experiences. Bob Henry suggests that professional organizations could post schools looking for shadow opportunities.

The next NH Pre-Engineering Technology Curriculum and Advisory Council will be held on 03/08/06 at 8:30 a.m. in the MacRury Conference Room. Directions will be included with the Agenda.

/nf
NH PRE-ENGINEERING TECHNOLOGY CURRICULUM ADVISORY COUNCIL

Meeting Date: March 8, 2006                      Location: Cafeteria Conference Room

I. Meeting Purpose: Regularly scheduled meeting of the Pre-Engineering Technology Curriculum Advisory Council.

II. Present:

Members

|   | Judy Houston, Chair                      |
|   | Dick Ayers                              |
|   | Senator Peter Bragdon                   |
|   | Daniel Caron                            |
|   | Mark Carter                             |
|   | Robert Henry                            |
|   | Lynn Kilchenstein                       |
|   | Paul Leather                            |
|   | Michael Ludwell                         |
|   | Michelle Munson                         |
|   | Brenda Quinn                            |
|   | Val Zanchuck                            |

Ex Officio Members

|   | Charles Clough                          |
|   | James Gorman                            |
|   | Justina Hale                            |
|   | Kim Runion                              |
|   | Bill Simonton                           |

Invited Guests

|   |                                             |

Staff:

|   | Jim Leon                                  |
|   | Irene Wright                              |
|   | Bob Arredondo                             |
|   | Lynn Darnell                              |
|   | Nancy Fall                                |

Judy called the meeting to order at 8:36 a.m.

III. Agenda

Old Business

1. White Paper (survey, distribution)
2. Financial Report
3. Projects Status Report (matching grants, articulation agreements)
4. Women in Engineering Conference
5. True Outcomes
6. New Council Members

New Business

1. PETAC as partnership board for all EPCNH initiatives (pre-engineering, building trades, architecture, manufacturing)
2. Department of Education Update

The minutes of January 25, 2006 were approved as submitted.
Old Business:

Topic 1: White Paper (survey, distribution)

Decisions/Conclusion: Jim Leon reported he has received 5 out of 100+ surveys distributed at the Annual New Hampshire National Engineers Week Banquet. Judy Houston will try to get the banquet attendance list and will remind the membership of the survey. The survey will be included in NHSPE Newsletter and it will be on line at the EPCNH website. Other members of the board will contact their respective associations and include the survey in their newsletters.


Decisions/Conclusion: A report on the disbursement of discretionary funds was presented to the Board. Discussion followed explaining the specifics of this year’s grant. Nineteen thousand of this amount has not yet been released by the Department of Education. Kim Runion pointed out that $19,000 of the $104,000 was earmarked for the development of articulation agreements between the Career Technical Education Centers and the post secondary institutions. (Manufacturing, architecture/building trades, and engineering technology) The implications of this codicil would limit the activities of the staff. Jim Leon noted that the project status report was included in the previous discussion.

Topic 4: Women in Engineering Conference

Decisions/Conclusion: Robert Henry gave two possible dates (April 4th and 11th) for the Women of Engineering Conference. Originally it was planned to be in the newly renovated Kingsbury Hall; however, due to the number of students involved, it will be held in the Memorial Union Building. The group agreed that April 11th would be the preferred date. Bob will inform the Board after he makes sure that the rooms are available. He also informed the Board that the UNH Chapter of the Society of Women Engineers (SWE) will be involved in this year’s program, and will assist in providing panelists and demonstrations in Kingsbury Hall. SWE would like to make this an annual participation for them, the Board agreed. The Board agreed that the focus audience should be 8 – 10th grades. Council members will recruit panelists to participate in the conference. Frances Benton was the unanimous choice for the keynote address. Val will contact her to confirm. There was discussion regarding the agenda for the program.

Topic 5: True Outcomes

Decisions/Conclusion: True Outcomes evaluation study is on hold until summer 2006.

Topic 6: New Board Members

Decisions/Conclusion: We are still in need of one council member from the business community. Several candidates were mentioned and will be contacted by council members.

New Business:

Topic 1: PETAC as partnership board for all EPCNH initiatives (pre-engineering, building trades, architecture, manufacturing)

Decisions/Conclusion: There was considerable discussion regarding the need for a partnership board to oversee the EPCNH initiatives. This could be a sub committee of PETAC or it could be a separate committee that would be responsible for the outcomes of the EPCNH initiatives that are funded by the
NHDOE grant (PETAC included). This group would be in keeping with the requirements of the Perkins/Tech Prep Legislation. The partnership board would need to be a signatory on the grant applications. Members to be 1 or 2 from the existing PETAC as well as others brought in with appropriate ‘construction trade’ experience. Kim Runion agreed that the sub committee was an excellent approach. The grant application is due by July 1, so the members of this sub committee need to be identified within 2 months. Jim et. al. to work up list of candidates for approval by the Board via e-mail. After discussion, Bob Henry moved and Val Zanchuk seconded the motion to create a sub committee which would serve as a partnership committee for this oversight.

**Topic 2: Department of Education Update**

**Decisions/Conclusion:** Kim Runion also noted that Tina Hale was unable to attend but would give a Department of Education update at the May meeting which will be held on May 3rd, 2006.

The meeting ended at 10:20 a.m. on a motion from Bob Henry, seconded by Michele Munson, to adjourn.

Respectfully submitted,

Nancy Fall
Meeting Date: May 3, 2006  Location: NHTI, Cafeteria Conference Room

I. Meeting Purpose: Regularly scheduled meeting of the Pre-Engineering Technology Curriculum Advisory Council.

II. Present:

Members

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<td>Judy Houston, Chair</td>
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Invited Guests

Staff:

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Judy called the meeting to order at 8:31 a.m.

III. Agenda

Old Business

1. Budget update – Irene Wright
2. White Paper – next steps – L. Kilchenstein
3. WIE final report – R. Henry
4. Project status report – J. Leon

New Business

1. Need for funds to support Professional Development for pre-engineering teachers – J. Leon
2. Partnership committee/sub-committee – Membership and review of candidates – J. Leon
3. DOE report – J. Hale
4. Election of Officers – J. Houston

The minutes of March 8, 2006 were approved as submitted.
Chairman Judith Houston welcomed new Board Member, Bruce Smith, P.E., retired from Digital Equipment Corp., under a special program to encourage Engineers to consider education as a second career. The Chairman also welcomed new Board Member, Dan McGuire, who was unable to attend.

Old Business:

Topic 1: Budget Update

Decisions/Conclusion: Irene Wright provided an update on the FY ’06 budget, and deferred to Jim Leon for program information. Kim Runion reported she can release the funds immediately as needed for programmatic development. Kim also noted addition funds could be encumbered as work proceeds.

Topic 2: White Paper – next steps

Decisions/Conclusion:

The PETAC survey (company profiles) will be sent out to the membership in next week’s NHSPE’s newsletter. The survey can also be found on the EPCNH website: www.epcnh.org. To date, only five surveys have been returned. Bruce Smith will provide research information of work he did at Digital that might provide information for the White Paper. Judy Houston will continue to work with the NHSPE to include the survey in their next newsletter. Lynn Kilchenstein will convene the work group to complete the draft of the white paper.

Topic 3: WIE final report

Decisions/Conclusion:

117 high school and 12 middle school students representing 16 schools attended the Women in Engineering Conference. Jim Leon reported the feedback was extremely good. High schools in 3 middle school sending districts should see an increase in the number of young women enrolling in Project Lead the Way courses in the fall. A copy of the feedback is included with these minutes. The high schools receiving students from the three middle schools attending the conference should experience an increase in female enrollments in the fall.

Topic 4: Project status report

Decisions/Conclusion:

Articulations agreements are in place for building trades, architectural engineering and pre-engineering. Those for heat, ventilation, air conditioning; welding; machinery are in progress. Stipends need to be considered for participants in the committees. Jim will continue to work increase the number of articulation agreements in place, and also, with the seven or eight schools that are working toward implementing PLTW.

Topic 5: Boston Museum of Science/DOE Conference

Decisions/Conclusion:

Kim Runion invited everyone to attend the educational conference on: “Engineering ‘Science Literacy’ for the 21st Century in NH”, to be held on Thursday, June 1, from 8:30 a.m. to 3:00
p.m., at the Radisson Hotel, Center of New Hampshire, 700 Elm Street, in Manchester, NH. Registration information was distributed.

New Business:

Topic 1: Need for funds to support Professional Development for pre-engineering teachers

Decisions/Conclusion:

Jim Leon reported that the schools need support for maintenance issues such as professional development and software costs. Several schools have indicated they will delay adding the next course in the sequence because their professional development funds have been cut. This does not mean that the program stops, but it doesn’t develop growth. After much discussion concerning the $400,000.00 proposed budget for the FY08-09 biennium, suggestions were made either to modify the legislation to include new funds for sustaining the program or recommend new legislation that would include sustaining funds. Kim Runion noted PETAC’s responsibility is to guide the Governor, Executive Councilors, and the Legislators.

Consensus of the Council was that finalizing the “white paper” will greatly assist in this endeavor, as it will outline what the Council sees as critical needs of the initiative, and suggest means for expansion and improvement.

Topic 2: Partnership committee/sub-committee—Membership and review of candidates

Decisions/Conclusion:

Proposed members of the Building Trades Sub-Committee are presented below. This group will serve as the Tech Prep consortium overseeing EPCNH, including staff activities and grant applications. Val Zanchuk will serve as Chair for Sub-Committee, providing linkage to PETAC.

Building Trades Sub-Committee was presented as follows:

Val Zanchuck
Graphicast, Inc.

Denis Adams
Business Manager
District Council 10

Dana Mosher
Program Coordinator
Building Construction
NHCTC – Manchester

Richard LaBonte
General Manager
Aggregrate Industries, Inc.

Additional recommendations should include representatives from CTE and MEP.

Topic 3: DOE report

Decisions/Conclusion:
Justina Hale was not in attendance to give report.

**Topic 4: Election of Officers**

**Decisions/Conclusion**

Judy Houston discussed the need to elect new PETAC officers for the next school year and nominated Dick Ayers as Secretary. The result of the vote was unanimous. Robert Henry as Vice Chair was nominated as the next chair. The vice-chair will be determined at the next meeting.

A motion was made to adjourn and the meeting ended at 10:21 a.m.

Respectfully submitted,

Nancy Fall
Meeting Date: July 14th, 2006 Location: NHTI, Dental Conference Room

I. Meeting Purpose: Informational meeting scheduled to update members of the Pre-Engineering Technology Curriculum Advisory Council regarding changes in assignments and responsibilities.

II. Present:

Members
- Judy Houston, Chair
- Dick Ayers
- Senator Peter Bragdon
- Daniel Caron
- Mark Carter
- Robert Henry
- Lynn Kilchenstein
- Paul Leather
- Michael Ludwell
- Michelle Munson
- Brenda Quinn
- Val Zanchuck
- Bruce Smith
- Dan McGuire

Ex Officio Members
- Charles Clough
- James Gorman
- Justina Hale
- Kim Runion
- Bill Simonton

Invited Guests
- Staff:
  - Kevin Shyne
  - Irene Wright
  - Bob Arredondo
  - Lynn Darnell
  - Nancy Fall

III. Agenda
1. Introductions ..................................................Judy Houston
2. Partnership Committee.................................Paul Leather, Kim Runion
3. Scope of Pre-engineering Programs..............Richard Ayers
4. Legislation.....................................................Paul Leather
5. White paper update........................................Lynn Kilchenstein, Val Zanchuck
6. PETAC Sub-committee....................................Val Zanchuck
7. Museum of Science........................................Kim Runion
8. August PETAC Workshop..............................Judy Houston
9. Next meeting...............................................Judy Houston

Chairwoman Judith Houston called the meeting to order at 9:00 a.m.

Topic 1:
Introductions were made around the table and Judy introduced Kevin Shyne who will be the director of pre-engineering programs for the year 06-07.

Topic 2: Partnership Committee.
Paul explained the history of the legislation and its implications, and the connection to Tech Prep. He introduced Kevin's responsibilities, past and present, and lauded his successes in other pathways. Kim explained the reasons for the changes in responsibilities. The changes affect the function of the sub-committee which will become separate from PETAC and work with Jim on Building Trades. Val will be the liaison for Jim until the Committee is established. Discussion regarding Federal, Tech Prep and Perkins monies took place.
Decisions/Conclusion
It was moved and seconded that Val chair the meetings of the sub committee until two changes in membership can be made and the group is organized. The motion passed unanimously. Judy expressed the Board’s appreciation of Jim’s work.

Topic 3: Scope of Pre-engineering Programs.
Irene read the report that Dick had sent to PETAC as he was unable to attend.

Decisions/Conclusion:
The written report has been forwarded to all members of PETAC. The next meeting of the study committee is scheduled for August 1, at the Walker Building.

Topic 4: Legislation
Paul outlined the source of revenue for the matching funds. He explained new legislation would be necessary if the Board chose to provide funds to maintain PLTW programs. Kim outlined the responsibilities of the PETAC Board. The main function of PETAC is curriculum oversight and fund raising. The DOE oversees staff and fiscal responsibilities. Kevin and Irene have reporting responsibilities to PETAC.

Topic 5: White paper update.
Lynn and Val presented their draft of the white paper which was recognized as one that could be addressed to various audiences with specific information added in last two pages. It provided research material that could be used as background for new legislation and/or the needs of individual schools. Costs of maintaining PLTW were discussed. Brenda pointed out that her company supplies PLTW with some of their software. Bob Henry's information will be added to the paper.

Decisions/Conclusion:
The members of the Board commended Lynn and Val on their work. Consensus of the Council was that finalizing the “white paper” will greatly assist in this endeavor, as it will outline what the PETAC sees as critical needs of the initiative, and suggest means for expansion and improvement.

Topic 6: The sub committee and its functions were discussed under the Partnership Committee item.

Topic 7: Museum of Science
Kim and Paul discussed the work that is being done in cooperation with the Museum of Science.

Topic 8 & 9 August PETAC Workshop/ Next Meeting

Decisions/Conclusion
Judy suggested that the August Workshop be cancelled. The Board agreed with her decision. The next meeting will be held on September 20th at either the Dental Conference room or the Walker Building. It is hoped that Dick Blais will be able to attend. Irene will contact him.

A motion was made to adjourn the meeting ended at 11:55 a.m. The vote was unanimous.

Respectfully submitted,
Irene Wright
Meeting Date: September 20th, 2006
Location: Conference Room in the Walker Building

I. Meeting Purpose: Regularly scheduled meeting.

II. Present:

Members
- Judy Houston, Chair
- Dick Ayers
- Senator Peter Bragdon
- Daniel Caron
- Mark Carter
- Robert Henry
- Lynn Kilchenstein
- Paul Leather
- Michael Ludwell
- Michelle Munson
- Brenda Quinn
- Val Zanchuck
- Bruce Smith
- Dan McGuire

Ex Officio Members
- Charles Clough
- James Gorman
- Justina Hale
- Kim Runion
- Bill Simonton
- Joan Fossum
- Robert Butson

Invited Guests
- Richard Blais, CEO, PLTW
- Dr. Lyonel Tracey, Commissioner of the Dept. of Education
- Mary Heath, Deputy Commissioner of the Dept. of Education
- Karen White, Principal of the Manchester School Of Technology

III. Agenda

1. Introductions ......................................................... Judy Houston
2. Richard Blais, PLTW
3. Business Meeting
   White Paper......................................................... Lynn Kilchenstein, Val Zanchuck and Bob Henry
   Revisiting legislation $'s........................................ Judy Houston
   Building Committee............................................... Val Zanchuk
   October 19th, Conference................................. Dick Ayers
   Summer Training Institute (STI)......................... Bob Arredondo
   Other

Chairwoman Judith Houston called the meeting to order at 8:35 a.m.

Topic 1: Introductions

Introductions were made around the table and Judy introduced Richard Blais, who is the Vice President and CEO of Project Lead The Way, National.

Topic 2: Richard Blais, PLTW

Mr. Blais, presented a Power Point bringing PETAC up to date on PLTW activities. He answered questions posed to him that Judy Houston had collected from members of the board and teachers in the field. The questions focused upon the availability of PLTW to schools who have restraints due to budget and qualified teachers. Mr. Blais encouraged PETAC to seek funding through foundations and private industries in the state. He also invited PETAC members to visit PLTW headquarters in Troy, New York.
Topic 3: Business Meeting

The Business Meeting began at 9:50 a.m.

White Paper: In the absence of Lynn Kilchenstein and Val Zanchuck, Bob Henry stated that he will be in touch with Lynn and will forward updated material for presentation at the next meeting.

Revisiting legislation $’s: Judy Houston outlined the following issues that had emerged from a meeting at the Department of Education held on Monday.

1. The responsibilities of PETAC are fundraising and curriculum development.
2. There are four possibilities in the application process for pre-engineering.
3. Core competences are in the process of being developed.
4. Funding may be used for renovation of equipment.
5. Administrative rules for clarification will be developed.

Decisions/Conclusion: There will be an Executive meeting to further discuss the Legislation. The results will be presented to the PETAC Board at a future meeting.

Building Committee: Kim Runion reported that the Building Committee will meet for the third time next week, in Raymond, at Aggregate Industries, Inc. The membership is growing and the purpose of the Committee is to articulate construction and pre-engineering.

October 19th, Conference: Dick Ayers presented an outline of the Engineering Conference to be held on October 19th, at the SERESC Conference Center, in Bedford. It is hoped all PETAC Board Members will attend.

Summer Training Institute (STI): Bob Arredondo reported that 39 PLTW teachers completed the summer training. The STI was highly successful.

Other: Dan McGuire inquired if PETAC can accept checks for fundraising. A discussion followed and Dick Ayers will report on the status of a 501:C3 request made some time ago. Also, Judy Houston noted PETAC should promote a business to adopt a school.

Judy Houston scheduled the next meeting for October 19th, in Bedford, from 3:30 p.m. – 5:30 p.m. Irene Wright will check with total membership regarding the date.

A motion was made and seconded to adjourn the meeting at 10:43 a.m. The vote was unanimous.

Respectfully submitted,
Nancy Fall
Meeting Date: November 14th, 2006  Location: SERESC Conference Room, Bedford

I. Meeting Purpose: Monthly meeting

II. Present:

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| Staff:                   |                             |
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| Kevin Shyne             |                             |
| Irene Wright            |                             |
| Nancy Fall              |                             |

III. Agenda

1. Introduction of new members – Judy Houston (JEH) and Irene Wright (ICW)
2. Approval of last meeting’s Minutes
3. POE Conference – Richard Ayers (RA)
5. White Paper – Robert Henry (RH), Val Zanchuck (VZ) or Lynn Kilchenstein (LK)
6. Funding Committee – Robert Henry (RH)
7. Standards/competencies – TH or Kim Runion (KR)
8. Meeting frequency – Judy Houston (JEH)
9. Visitor for next meeting
10. Engineering programs – Kevin Shyne (KS) and Irene Wright (ICW)
11. Other:
12. Next Meeting

Chairwoman Judith Houston called the meeting to order at 8:37 a.m.

Topic 1: Judy Houston introduced new member, Karen White, from the Manchester School of Technology. She will sit on the Board (ex-officio) as designee for Michael Ludwell.

Topic 2: The last meeting’s minutes were accepted with one change – vocational center should be Career and Technical Center.

Topic 3: Richard Ayers distributed the Evaluation Results for the Principles of Engineering in the NH High School Conference held on October 19th. Seventy-five to eighty per cent of the attendees strongly agreed with the value of the context of the conference/symposium. Some of the written comments were ‘a good mix of industry, higher education, NH DOE, school administrative/teachers’; ‘gave lots of different viewpoints’; ‘Dr. Henry’s PowerPoint presentation was packed with great highly organized information’. Dr. Ayers reported that the conference went extremely well and thanked everyone for their participation, and that the
Conference was a credit to the organization. He noted that it is time to think about the next step, and if the Conference should be an annual event. After much discussion, it was decided that the video of the conference would be put on the website, www.preengineeringnh.org and made available to schools. A subcommittee consisting of Judy Houston, Kim Runion, Kevin Shyne, Bruce Smith, Richard Ayers, Joan Fossum, Irene Wright, Bob Arredondo and Tony Panton, was established to determine the next steps.

Topic 4: Robert Henry reported that he has not received feedback from schools on the Women in Engineering Conference. He needs suggestions on possible formats and has asked the Committee members to send suggestions to him before the next PECTAC meeting.

Topic 5: Robert Henry reported he will e-mail the draft of the White Paper to Irene Wright who will send it out to the Committee. Comments can be sent to Robert Henry, Val Zanchuck or Lynn Kilchenstein.

Topic 6: Robert Henry reported that the Funding Committee has not met yet, but will try to get the Committee together before Christmas.

Topic 7: Joan Fossum explained the standards/competencies being established by the Department of Education, and their relationships to the frameworks. She also reported that they were near completion.

Topic 8: Judith Houston reported that the PECTAC meetings and the Sub Committee meetings will be held on alternate months. The next meeting (Sub Committees) will be held at 8:30 a.m. on December 19th at the Walker Building.

Topic 9: Charles Head was recommended. No decision was made at this time.

Topic 10: Kevin Shyne is working on alternative engineering programs at White Mountain Regional and Kennett High Schools. Irene Wright reported that a gap analysis had been done at Milford-Lyndeborough Middle/High School and the school may consider working with Milford Career Technical Center to establish courses. Irene has visited Keene, Laconia, Belmont, Salem, Nashua, and Manchester Schools. A meeting is scheduled with Pelham High School. She is working on a PETAC logo and has asked to view the first attempt on the PETAC page of the website and provide feedback. The final Logo will be used for PETAC Business cards and the letterhead.

Topic 11 – Other: Irene will put a link to the legislation pertaining to PETAC on the Web Site.

The next meeting of the PETAC Subcommittees will be held in the Walker Building on the 19th of December at 8:30 am.

A motion was made to adjourn at 10:25 a.m. The vote was unanimous.

Respectfully submitted,

Nancy Fall