PRE-ENGINEERING CURRICULUM & TECHNOLOGY ADVISORY COUNCIL

MINUTES

Meeting Date: March 18, 2003
Location: NHTI, Farnum Hall, Room 107

I. Meeting Purpose:

Scheduled meeting for the Pre-Engineering Curriculum & Technology Advisory Council

II. Members Present

X Richard Ayers
X Daniel Caron
X Charles Clough
X Robert Henry
X Judy Houston
X William Johnson, Chair
X F. Donald Jones
X Paul Leather
X William Leber
X Ralph Minichiello
Jane O’Hearn
X Brenda Quinn
X William Simonton
X Val Zanchuk, Vice-Chair

Also in Attendance: Jim Leon, Irene Wright, Jim Gorman, Marshall Derry, Bob Butson, Leo Corriveau

III. Agenda

1. Approval of the Minutes of the December 16 Meeting
2. PLTW/WOC Project
3. Counselor’s Conference
4. North Country Presentation
5. Summary Evaluation
6. PLTW/UNH Day
7. New Hampshire Forum on Higher Education/PLTW
8. Other

Topic 1: Approval of the Minutes of the December 16 Meeting

Decisions/Conclusions: The minutes of the December 16 meeting were approved as submitted.

Topic 2: PLTW/WOC Project

Decisions/Conclusions: Dr. Leon noted that the Workforce Opportunity Council (WOC) has recaptured funds for displaced IT workers. This money is being used for the shortage of math and science instructors by retraining. Ms. Wright is teaching Plymouth State College’s Foundation of Teaching course to 15 displaced IT employees. Ten of those are also taking the PLTW Digital Electronics course. This is PLTW’s first approach at pre-service training. Ms. Wright gave an overview of the class. Dr. Leon anticipates that this will be a yearly offering. Paul Leather noted that one of the stipulations of receiving the funding was that we would try to place the participants, therefore, if there are teaching openings, please contact Mr. Leather. Dr. Simonton suggested that we obtain bios for these individuals and send them to the PLTW schools. Ms. Wright will work on this.

Topic 3: Counselor’s Conference

Decisions/Conclusions: Dr. Leon distributed copies of the agenda for the March 20 PLTW-NH Conference for Middle & High School Counselors and gave an overview of the conference. The only major change from the agenda is that there will not be a panel of students due to Spring Break. Everyone from this group is invited to attend. Currently 35 people have registered. The conference will take place at NHTI in the back half of the cafeteria.

Topic 4: North Country Presentation

Decisions/Conclusions: Dick Blais asked Dr. Leon to prepare a presentation to promote PLTW in the North Country. Dick Blais gave an overview of what PLTW is and students from Lisbon made presentations. As a result of the presentation, Gorham has applied and Stratford will be applying. Groveton students will be able to “tuition-in” to Stratford.

Topic 5: Summary Evaluation

Decisions/Conclusions: Dr. Leon distributed copies of the PLTW-NH Evaluation Summary – September 2002. He noted that obtaining the information was very difficult. Evaluation forms were distributed to PLTW high schools in January 2002. Lisbon was the only school that replied. The forms were distributed again in May 2002 and finally phone calls were made. Irene Wright wound up visiting the schools in order to retrieve the information. Dr. Leon noted that this is not a complaint, but an ask for help as to what would be the best way to obtain the needed information. Ms. Wright gave an overview of the process to get the information. She noted that each school has a different format of collecting information. A simple and universal format to store and retrieve this information is needed at each school for future evaluations. Ideas of how to collect this information should be sent to Dr. Leon. Paul Leather noted that we need to report numbers of PLTW students going onto college and/or employed in PLTW fields. The suggestion was made to include these questions on the senior exit survey. Dick Ayers suggested creating a web based collection tool. Mr. Johnson indicated that Leadership New Hampshire has done web based surveys which were created by the Hamel Center. Bob Henry noted that UNH has software on their campus to be able to create web based surveys. Another suggestion was to place a few questions on the bottom of the PLTW year end exams or distribute pre-addressed postcards at the exam. Mr. Henry noted that there needs to be a way to identify PLTW students that are applying to UNH for PLTW scholarship purposes (UNH is awarding five $1,000 scholarships to PLTW students). Dr. Simonton suggested that PLTW instructors be e-mailed information about the scholarships and have them contact Mr. Henry. It was decided that a subcommittee of this group to include Mr. Johnson, Ms. Houston, Mr. Henry and Dr. Leon will work on this.
**Topic 6: PLTW/UNH Day**

**Decisions/Conclusions:** Mr. Henry noted that the PLTW/UNH day will be April 11, 2003. He distributed copies of a letter which was sent to PLTW instructors summarizing the day’s events. He noted that the students need to be actively engaged and explained the Spaghetti Bridge competition. If the students do not have enough time between now and April 11 to complete a spaghetti bridge, they could bring projects in that they are currently working on to be judged. He hopes that this competition becomes an annual event. Dr. Simonton suggested that the NHTI students demonstrate their robots as one of the demonstrations. Mr. Henry also distributed information regarding the 2003 Engineering Summer Camp to be held at UNH August 10-16. The fee to attend has gone up to $500 this year. He hopes to solicit donations from area businesses and an NSF grant to help fund the camp in the future. Mr. Johnson will solicit Plan New Hampshire; he is the president of this organization. Ms. Houston will contact Nobis and the Association of New Hampshire Professional Engineers.

**Topic 7: New Hampshire Forum on Higher Education/PLTW**

**Decisions/Conclusions:** Dr. Simonton noted that NHFHE is holding a meeting at NHTI March 18. Participants include politicians and individuals in higher education. Governor Benson has been invited. There will be a PLTW presentation during the meeting. Dr. Simonton and Dr. Leon will speak as well as Mr. Blais, Mr. Johnson and Mr. Ford. Students will present demonstrations. This is a chance to let NHFHE what they can do to help PLTW. Suggestions include becoming involved in local advisory teams, moving PLTW forward in non-PLTW schools, matching grants, and internships.

**Topic 8: Other**

- Dr. Leon distributed the Roster of PLTW-NH Schools. New schools for 2003-04 include Berlin, Kingswood, Laconia, Littleton, Pinkerton, Plymouth, Somersworth, Gorham and Stratford. Dr. Simonton noted that when new schools come on board, the superintendent is invited to join this group. Due to the number of PLTW schools and the size of the group, the question was raised as to whether it is time to separate PECTAC from PLTW. After much discussion the consensus was to regionalize PLTW groups and appoint a member from the PECTAC group to attend regional PLTW meetings. Mr. Jones noted how important it is for superintendents to be informed. Mr. Gorman stated that PLTW became so successful early on due to the fact that the original PLTW team was so small. Mr. Minichiello stated that superintendents meet on a monthly basis, perhaps a PLTW meeting could be conducted prior to or after the superintendent meetings. Dr. Simonton suggested that if regionalization does take place, there could be an annual PECTAC/PLTW meeting. This item will be discussed at the next meeting. Any suggestions should be sent to Dr. Leon prior to the April meeting.

- Dr. Leon stated that he needs a secure contact at each PLTW school.

- Mr. Johnson noted that he recently met with the head of Merchant Bank and they would like to team up with PLTW. Mr. Johnson and Dr. Simonton will meet with him on April 2.

- Mr. Henry suggested that students be exposed to the college format prior to entering college. He feels that this would help with retention. Perhaps this could be done through distance education. This item will be discussed further at a future meeting.

The next meeting will be held on Monday, April 21, at 8:00 a.m. at New Hampshire Technical Institute in Farnum Hall, Room 107.
II. Members Present

Richard Ayers
Daniel Caron
Charles Clough
Robert Henry
Judy Houston
William Johnson, Chair
F. Donald Jones
Paul Leather
William Leber
Ralph Minichiello
Jane O'Hearn
Brenda Quinn
William Simonton
Val Zanchuk, Vice-Chair

Also in Attendance: Jim Leon, Irene Wright, Jim Gorman

III. Agenda

1. Approval of the Minutes of the May 12 Meeting
2. September Start-ups
3. Merchant Banc Initiative
4. Election of Vice Chair
5. Summer Training Institute
6. Governor's Report

Topic 1: Approval of the Minutes of the May 12 Meeting

Decisions/Conclusions: The minutes of the May 12 meeting were approved as submitted.

Topic 2: September Start-ups

Decisions/Conclusions: Dr. Leon reported that Plymouth High School and Gorham High School will not be able to participate in PLTW in the Fall of 2003. Plymouth is facing space issues and Gorham is facing personnel issues. Gorham students can attend PLTW classes in Berlin. The suggestion was made to ask John Crosier, President of the Business & Industry Association, speak with the Plymouth business community and in turn have the business community contact Plymouth High School representatives to push PLTW. Judy Houston noted that she knows Representative John Alger from Plymouth and she will speak with him. Perhaps Plymouth High School should be approached and asked to revisit the space issue. Don Jones and Ralph Minichiello will speak with John True, Superintendent for Plymouth High School, at the next Superintendents meeting. Ms. Houston will wait to speak with Representative Alger until after Mr. Jones and Mr. Minichiello speak with Mr. True. Schools that will be starting in Fall 2003 are: Berlin, Kingswood, Laconia, Littleton, Pinkerton, Somersworth and Stratford.

Topic 3: Merchant Banc Initiative

Decisions/Conclusions: The Merchant Banc Foundation, The Digital Divide, will be partnering with PLTW. There have been meetings with both Pittsfield and Franklin high schools. Merchant Bank works with banks in the North Country. They will be working with PLTW schools in the North Country providing grants to offset training costs. All of the North Country PLTW schools will receive at least $1,000 to $2,000. Bill Johnson noted that a formal "Thank You" should be sent to Jeffrey Pollock and Merchant Banc.

Topic 4: Election

Decisions/Conclusions: Dr. Simonton nominated Ms. Houston as Vice Chair, second by Mr. Zanchuk, the vote was unanimous. Ms. Houston will be the new Vice Chair. Mr. Houston had been the Clerk, therefore, a new Clerk needed to be nominated. Mr. Minichiello nominated Jim Gorman as Clerk, seconded by Dr. Simonton, the vote was unanimous. Mr. Gorman will be the new Clerk.

Topic 5: Summer Training Institute

Decisions/Conclusions: Dr. Leon reported that the summer training at NHTI will be held August 3 through August 15. There is a capacity of 20 per class. Currently, 19 people have signed up for Introduction to Engineering Design, four have signed up for Digital Electronics and three have signed up for Pre-Engineering.

Topic 6: Governor’s Report

Decisions/Conclusions: Dr. Leon noted that at the first PECTAC meeting in October of 2003, Mr. Leber noted that the purpose of the annual meeting is for the election of officers as well as the Governor’s Report. Dr. Leon will draft the report and get it to Bill Johnson for approval and signature.

Topic 7: Other

- Dr. Leon distributed copies of a letter he received from Carolyn Woodman, Project Director for Content Enhancement Instructional Leadership (CEIL). CEIL has committed $3,000 to go towards PLTW staff training for New Hampshire schools who are not recipients of the Merchant Banc grant. The funding is coming from No Child Left Behind project.

- Mr. Johnson noted that the Evaluation Survey Committee recently met. Ms. Houston distributed copies of the Evaluation Survey Committee – Update and gave a summary
of the meeting. A draft evaluation proposal which will be sent to Project Lead The Way-National will be available at the next PECTAC/PLTW meeting.

- The suggestion was made to add a guidance counselor to the PECTAC/PLTW membership.

- Dr. Leon noted that his office has been flat funded for the next fiscal year. They lost approximately $10,000 in discretionary funds which brings their total operating budget for the next fiscal year to $2,300. They need to find ways of raising extra funding. Mr. Johnson will call the Department of Education to try to solicit funds from Prep Tech.

- Dr. Leon thanked Mr. Zanchuk for giving PLTW a plug at the recent BIA meeting. John Crosier, President of the BIA, also made note of PLTW.

- Mr. Minichello is retiring as Superintendent of the Bow School District. Dr. Leon presented Mr. Minichiello with a PLTW golf shirt.

The next meeting will be held on Monday, August 11, at 8:00 a.m. at New Hampshire Technical Institute in Farnum Hall, Room 107.

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Meeting Date: August 11, 2003  
Location: NHTI, Farnum Hall, Room 107

I. Meeting Purpose:
Scheduled meeting for the Pre-Engineering Curriculum & Technology Advisory Council

II. Members Present

Richard Ayers  
Daniel Caron  
Charles Clough  
Robert Henry  
Judy Houston, Vice Chair  
William Johnson  
F. Donald Jones  
Paul Leather  
William Leber  
Ralph Minichiello  
Jane O'Hearn  
Brenda Quinn  
William Simonton  
Val Zanchuk, Chair

Also in Attendance: Jim Leon, Irene Wright, Jeff Pollock, Virginia Irwin

III. Agenda

1. Approval of the Minutes of the June 18 Meeting  
2. Summer Training Institute  
3. UNH Graduate Credit Through STI  
4. SERESC Partnership  
5. Merchant Banc Partnership  
6. Status of Tech Prep Grant  
7. Evaluation Initiative  
8. New England Counselor conference  
9. Tour of STI Classes

   Topic 1: Approval of the Minutes of the June 18 Meeting

Decisions/Conclusions: The minutes of the June 18 meeting were approved as submitted.

Topic 2: Summer Training Institute

Decisions/Conclusions: Dr. Leon noted that there are a total of 36 individuals participating in the PLTW Summer Training Institute. Eighteen are from New Hampshire and 18 are from California, Texas, Montana, Missouri and Florida. Five of the participants are female. Twenty-one participants are taking Introduction to Engineering Design, 11 are taking Principles of Engineering and four are taking Digital Electronics. This is the first time that the Summer Training Institute has been a "break even" venture. Daniel Caron is one of the participants and gave an overview of his first week of classes.

Topic 3: UNH Graduate Credit Through STI

Decisions/Conclusions: Dr. Leon noted that Robert Henry and Todd McDaniels from UNH visited the Summer Training Institute during the first week of classes. Dr. Leon approached UNH about offering graduate training for teachers participating in the Summer Institute. They seem to be very excited about the project. They are working out the arrangements for the Masters program and this may be an option as early as next summer.

Topic 4: SERESC Partnership

Decisions/Conclusions: Dr. Leon distributed copies of the final version of the SERESC Project letter which was sent to Superintendents in the Project Lead The Way school districts. He noted that each PLTW school district sending instructors to the Summer Institute will be allotted a maximum of $300 towards the cost of the training, unless they are receiving a grant from the Merchant Banc Digital Divide.

Topic 5: Merchant Banc Partnership

Decisions/Conclusions: Bill Johnson introduced Jeff Pollock of Merchant Banc. Mr. Pollock explained that Merchant Banc is a venture capital firm. Their interest is a little different than the interest of venture capital firms in the Boston area. Merchant Banc is dedicated to serving the lesser served markets (one hour or more out of Boston). They are a partner with New Hampshire Charitable Foundation (NHCF). Merchant Banc does not administer the funds, that is done through NHCF. Project Lead The Way is one of six programs utilizing the Merchant Banc Digital Divide Fund. They are interested in schools in limited resource areas where funding would make the difference between starting up PLTW or not. Five north country schools are involved (Stratford, Lisbon, Berlin, Littleton and Gorham [9/2004]).

Topic 6: Status of Tech Prep Grant

Decisions/Conclusions: In Paul Leather’s absence, Dr. Leon reported that the Tech Prep Grant monies have not been released by Governor Benson’s office. EPONH has been operating since the end of June without funding. The Hillsboro-Deering SAU has been funding the salary for Dr. Leon. To date they have no discretionary funds.

Topic 7: Evaluation Initiative

Decisions/Conclusions: Prior to the meeting a copy of the Evaluation Survey Committee – Update was distributed. Judy Houston noted that the committee is still preparing the draft proposal. Hopefully, the committee will meet with True Outcomes on September 11 or 12.
Topic 8: New England Counselor Conference

Decisions/Conclusions: Dr. Leon noted that at this point in time he is unsure whether or not the New England Counselor Conference will take place this year. He noted that $2,500 is forthcoming from Project Lead The Way for marketing purposes (each training affiliate is entitled to $2,500). He noted that if there is not a New England conference, there will definitely be a New Hampshire conference. The date of November 12 has been set aside for either the NE or NH conference.

The next meeting will be held on Monday, October 6, at 8:00 a.m. at New Hampshire Technical Institute in Farnum Hall, Room 107.

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Meeting Date: October 6, 2003
Location: NHTI, Little Hall, Cafeteria Function Room

I. Meeting Purpose:
Scheduled meeting for the Pre-Engineering Curriculum & Technology Advisory Council

II. Members Present
- Richard Ayers
- Daniel Caron
- Charles Clough
- Robert Henry
- Judy Houston, Vice Chair
- William Johnson
- Paul Leather
- William Leber
- Jane O'Hearn
- Brenda Quinn
- William Simonton
- Val Zanchuk, Chair

Also in Attendance: Jim Leon, Irene Wright, Jim Gorman, Bob Butson, Steve Ryan

III. Agenda
1. Approval of the Minutes of the August 11 Meeting
2. Summer Training Institute
3. Evaluation
4. Tri City Expo
5. Counselor Conference

Topic 1: Approval of the Minutes of the August 11 Meeting

Decisions/Conclusions: The minutes of the August 11 meeting were approved as submitted.

Topic 2: Summer Training Institute

Decisions/Conclusions: Dr. Leon noted that 36 individuals participated in the Summer Training Institute. Eighteen participants were from New Hampshire and 18 were from out of state. Three courses were run: Introduction to Engineering Design, Digital Electronics and Principles of Engineering. He noted that this is the first time that the Summer Training Institute has paid for itself. Dr. Leon hopes to add a fourth and/or fifth course to next summer's schedule. Initial feedback from the participants has been positive.

Topic 3: Evaluation

Decisions/Conclusions: Judy Houston noted that the Evaluation sub-committee has been working of the evaluation program for Project Lead The Way. The committee met with a representative from True Outcomes at the beginning of September. True Outcomes gave a comprehensive overview of what their website-based software can provide. Instructors can access software as well as students, counselors and PECTAC/PLTW members to retrieve database information. Survey results will also be available on the website. If this group agrees to look into purchasing True Outcomes software, they will be willing to make a formal proposal. A preliminary proposal was distributed prior to the meeting. If this group decides to pursue True Outcomes, we will approach PLTW national. True Outcomes has assured the committee that they will provide as much support as is needed. Judy Houston then gave an overview of the proposal. Due to the proposed costs (approximately $30,000 for five schools which includes a coordinator at $18,000, a technologist at $16,000 and True Outcomes software at $6,000-$13,500) the committee decided to start with only five schools. After discussion it was decided to go back to True Outcomes to see if they would be willing to decrease the cost. Let them know that we will be bringing this information to PLTW national and they may get the national bid. Dr. Leon seems to think True Outcomes is anxious to reduce the cost. Judy Houston noted that True Outcomes is willing to do a presentation utilizing PLTW statistics. She stated that the sub-committee is looking for approval to move forward to develop a final proposal at a lower cost. Jim Leon noted that PLTW national is interested in looking further at True Outcomes. The question was raised as to how this will be paid for. Hopefully PLTW national will buy in using New Hampshire's experience as a pilot study, thereby picking up the cost. Then, in the future, individual school districts could pick up the additional cost of $2.00 per student per year. It was also noted that no Request For Proposals have been submitted to companies other than True Outcomes. Bill Johnson suggested that PLTW national submit a letter to True Outcomes indicating the interest. The letter could then be used as a negotiating tool to bring down the cost. Jim Gorman noted that UNH is using True Outcomes and they are very pleased with the program. True Outcomes would have a direct benefit to PLTW national, PLTW at the state level, school districts as well as students. Jay Lewis inquired as whether or not alumni could be tracked with this software. Judy Houston explained that this software is very flexible and True Outcomes can tailor it to suit PLTW needs. It was suggested that the students complete the initial survey during their first PLTW class. Brenda Quinn inquired as to why PLTW national isn't researching evaluation programs. It was noted that PLTW national is researching evaluation programs. Dr. Simonton had a concern that if the evaluation is initially limited to only five schools, key information may not be collected (i.e. data from large schools compared to small schools). Judy Houston explained that there are pros and cons either way. Paul Leather inquired as to why the group is strictly looking at True Outcomes when there are other competing companies. He noted that if PLTW national will be paying for the software there will not be a problem, however, if state funds are involved, three bids will be needed. Dick Ayers asked if the software would be compatible with software packages schools are currently utilizing. Val Zanchuk asked if UNH researched companies other than True Outcomes. Dr. Leon will check with Bob Henry. Judy Houston noted that the next step is to see if True Outcomes would be willing to lower the cost and then go to PLTW national and give a presentation. If PLTW national buys in, then the schools who will be utilizing the software need to be contacted and workshops need to be held on the use of True Outcomes. Brenda Quinn suggested that the State of New Hampshire provide a letter to PLTW national. Bill Leber noted that he could help with that but will need much more data to bring to the capital budget and finance committee.
He noted the more information the better. After discussion it was the consensus of the group to continue with the process to pursue True Outcomes. Dick Ayers suggested that if the school districts are aware of the benefits to them, they may be willing to pay some of the expense.

**Topic 4: Tri City Expo**

**Decisions/Conclusions:** Dr. Leon noted that the Tech Prep Directors had a booth at the Manchester/Nashua Chamber of Commerce Tri City Expo. The booth represented five regional Tech Prep programs and that PLTW information was available. Irene Wright created a looping PLTW PowerPoint presentation which ran throughout the Expo. She noted that quite a few connections were made with area businesses.

**Topic 5: Counselor Conference**

**Decisions/Conclusions:** Dr. Leon noted that NHTI and the University of New Haven have each received $2,500 from PLTW national for marketing purposes. It was suggested to them that they utilize this money to have a New England counselor conference. He noted that the conference will take place on November 12 and 13 in Warwick, Rhode Island. The format will be the same as the Spring 2003 conference and attendance will be capped at 100.

**Topic 6: Other**

- Dr. Leon distributed copies of the PLTW Student Count for September 2003. He noted that in September of 2002 there were 762 students enrolled in PLTW courses. That number increased to 1148 in September of 2003. Val Zanchuk asked if Concord and Manchester would be participating in PLTW. Dr. Leon noted that Concord has indicated on a number or occasions that they are not ready. Dr. Simonton and Irene Wright spoke with Manchester and now need to make a follow-up visit.

- Dr. Leon distributed a draft of a report he put together for the Governor and Executive Councilors and gave an overview of same. Dr. Simonton suggested that he include the growth of PLTW as well as add the names of the members of the PECTAC/PLTW. It was also suggested that he include information of the corporate and private partners and expand on the Merchant Bank information.

The next meeting will be held on Monday, December 8, at 8:00 a.m. at New Hampshire Technical Institute in the Cafeteria Function Room, which is located in Little Hall.

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PRE-ENGINEERING TECHNOLOGY & CURRICULUM ADVISORY COUNCIL

MINUTES

Meeting Date: December 11, 2003
Location: NHTI, Little Hall, Cafeteria Function Room

I. Meeting Purpose:
Scheduled meeting for the Pre-Engineering Technology & Curriculum Advisory Council

II. Members Present

- Richard Ayers
- Daniel Caron
- Charles Clough
- Robert Henry
- Judy Houston, Vice Chair
- William Johnson
- Paul Leather
- William Leber
- Jane O’Hearn
- Brenda Quinn
- Lynn Kilchenstein
- Val Zanchuk, Chair

Also in Attendance: Jim Leon, Irene Wright

III. Agenda

1. Approval of the Minutes of the October 6 Meeting
2. True Outcomes/Evaluation
3. New England PLTW Guidance Counselors’ Conference Summary
4. Schools for 2004-2005
5. Young Women in Engineering Conference
6. PLTW Growth Issues

Topic 1: Approval of the Minutes of the October 6 Meeting

Decisions/Conclusions: The minutes of the October 6 meeting were approved as submitted.

Topic 2: True Outcomes/Evaluation

Decisions/Conclusions: Dr. Leon distributed copies of an updated Preliminary Proposal for Comprehensive Program Assessment with True Outcomes Software. He noted that in the original proposal the price was $30,000 and in the new proposal the price dropped to $16,000. He spoke with Niel Tebbano of PLTW national and found out that the contract with Heazel and Associates, which they were using for evaluations, is coming to an end. True Outcomes will be one of the bidders for the new contract. The RFP will stipulate that PLTW-New Hampshire will be the state model for individual states. New Hampshire will always be able to extract the information they wish to utilize from the national database.

Topic 3: New England PLTW Guidance Counselors’ Conference Summary

Decisions/Conclusions: Ms. Wright noted that the conference was highly successful. The conference took place in Rhode Island. All but one of the evaluation forms rated the conference in the four to five range (five being the highest). The highlight of the conference was the students and their projects. At future conferences the student projects will be split and put first and last on the agenda to keep participants interest at a high level. Approximately 55 people attended from all six New England States. There were 15 participants from New Hampshire. John Ford, who was one of the speakers, did a great job.

Topic 4: Schools for 2004-2005

Decisions/Conclusions: Dr. Leon noted that Timberlane High School has registered with PLTW for 2004-05. The following high schools are at various stages in their own internal approval process: Oyster River, Gorham, Londonderry, Timberlane and Manchester. Alvirne has put out an RFP which we need to submit. Middle schools are beginning to ask about PLTW. Lisbon is currently the only school offering the middle school curriculum. Mr. Paul Leather, Dr. Simonton and Dr. Leon visited Manchester school district and made a PLTW presentation. Mr. Leather noted that Keene needs to be contacted (Wayne Cotton). Dr. Leon will follow-up with Keene. Belmont has requested a visit. There are now 21 out of 78 New Hampshire high schools participating in PLTW. Dr. Leon noted that Mark O’Bryan, a distributor of Intelitek, has been approaching people in the state (only two schools — Alvirne and Nashua) regarding Intelitek’s pre-engineering program. This is a modular approach to programming, with the modules organized as the five courses included in HB 1231. It was noted that Mr. O’Bryan needs to bring the program to this Board in order to get the program approved if they wish to utilize HB 1231 funding. After much discussion it was decided that if a proposal is to be sent to Alvirne, it should come from Dick Blais. PLTW national knew nothing of the Intelitek program. The president of Intelitek happened to call Mr. Blais and he inquired about the program. The president of Intelitek also knew nothing about this program. It seems as though Mr. O’Bryan has been acting on his own as a distributor. Mr. O’Bryan spoke with Representative Leber and Mr. Leber informed him that any pre-engineering programs looking for HB 1231 funding need to be approved by the Department of Education as well as the Pre-Engineering Curriculum & Technology Advisory Council to make sure the program meets the standards. Mr. Ayers suggested that a letter be sent to Mr. O’Bryan explaining the role of PETCAC, the approval process, and let him know that PETCAC would be happy to help in any way. Mr. Leather stated that this issue needs to be addressed in a formal manner. The issue is that Dr. Leon is representing PLTW and this could come back at Dr. Leon as well as the PETCAC board. This board needs to let the public know that there are other pre-engineering programs but PLTW is what was written into the legislation. Mr. Johnson suggested sending a letter to Alvirne High School indicating that PLTW is the only pre-engineering program that has come to this board and the only program that can receive funding. Mr. Henry suggested that this board research what other pre-engineering programs are in existence. Other programs may address things that PLTW does not. This board needs this information. Mr. Zanchuk suggested sending letters to all New Hampshire school districts informing them that PLTW is the only approved program and other programs need to come before this board for approval. Mr. Henry suggested we ask about other programs via a public RFP on an annual basis and give respondents the steps they need to follow to become approved. Mr. Johnson suggested that the state put out a RFP. Mr. Leather suggested that the Department of Education put something out over the internet to software companies with a statement of what PETCAC is and if other programs have an interest.
in becoming an approved pre-engineering curriculum. Mr. Henry suggested that this information go out via the Department of Education website as well as the Educational Partnership for Central New Hampshire website. Mr. Zanchuk will send a letter to Mr. O’Bryan and Dr. Leon will work on the RFI. Dr. Leon and Mr. Leather will meet in the near future to discuss this issue further.

**Topic 5: Young Women in Engineering Conference**

**Decisions/Conclusions:** Dr. Leon noted that the Young Women in Engineering Conference will be held on January 16. Ms. Quinn is co-chairing this event with Dr. Leon. He noted that there is no problem enrolling in PLTW classes, however, there is a high attrition rate. Currently there are 159 female students participating in PLTW in New Hampshire. Lynn Kilchenstein, Interim President at New Hampshire Technical Institute, will welcome the group of young women. Bob Henry noted that there is an active chapter of the Society for Women in Engineering at UNH. Perhaps some of these students should participate in the conference.

**Topic 6: PLTW Growth Issues**

**Decisions/Conclusions:** Mr. Zanchuk noted that there will be growth issues with PLTW as more schools are added. He noted that he has heard the guidance personnel at Wolfeboro are using PLTW as a dumping ground for behavioral problem students, which is driving the good students out of the program. It is the job of this board to assure the success of PLTW. When PLTW first started in New Hampshire, the Leadership Board included the superintendent from each participating PLTW school district. That is no longer the case, therefore, the newer schools need more information about PLTW. This board needs to continue the connection with superintendents and principles at PLTW schools. Dr. Leon noted that only two schools (Hopkinton and Bow) have gone through the PLTW certification process. He suggested that PLTW school-based meetings be held on non-PETCAC/PLTW meeting months. Mr. Henry suggested having an accreditation process through the PETCAC board every five years on a rotating basis. Mr. Ayers suggested creating a document of criteria for PLTW schools listing common problems, PLTW requirements, etc. Another suggestion was to create a “Support Team” made up of administrators, teachers, guidance counselors, etc. This “Support Team” would be available to help PLTW schools, if needed. Mr. Ayers noted that he would be willing to help with the project. It was also noted that there is going to be a Superintendent Conference during the last week in June in North Conway. Perhaps PETCAC can do a presentation at this conference. This item will be discussed further at the next meeting.

The next meeting will be held on Monday, February 9, at 8:00 a.m. at New Hampshire Technical Institute in the Cafeteria Function Room, which is located in Little Hall.

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