HVAC Advisory Minutes March 27th, 2008, Room #106

Present: Vince Goldade (GF Heating), Bill Hastings, (Hasting Heating & Air), Phil Krammer, (Lunseth Plbg & Htg), Jim Kasprick, (Sunseth Plbg & Htg), Kevin Storstad, (City of Grand Forks, Inspection), Leroy Kurtyka, (Northern Plumbing Sply), Steve Kroke, (NCTC), Ed Krogfoss, (NCTC), Jay Klemetsrud, (Klemetsrud Plbg & Htg), Mitch Price, (McFarlane Sheet Metal), Chuck Narlock, (True Temp H & C), Karl Krogfoss, Master of Ceremony (NCTC)

Welcome, Introductions & Review of Agenda:

Questions were brought to the HVAC board members as to the past employment experiences that could be reflected upon regarding the hiring of NCTC HVAC students:

The majority of board members agreed and recommended, that in order to be hired that the employer is looking for students who are motivationally driven, dependable, and have good work ethics. Some of these characteristic have fallen by the way side with today's younger generation. Teachers, advisors, counselors can remind adult students of the qualities that employers are looking for, but some personal characteristics are home driven and individual, which can only be encouraged by the institute.

Lab Equipment: The HVAC department is requesting new, used, and even broken lab equipment; inviting the board members for a department walk through of the HVAC area, where board members could see first hand the equipment which is currently being utilized. An invitation was given to board members inviting their ideas and recommendations which would be beneficial to the HVAC program.

Donations: It was announced to the board that any donations of HVAC equipment and supplies are always appreciated, whether it be from a professional business or from a private party, the NCTC HVAC Program is always grateful to accept any used, unwanted or broken HVAC equipment for themselves, or other departments. If it would be easier for the lending party, a letter to acknowledge the equipment donation by the business and/or private party can be requested, not only as a justifiable donation (tax break), but also as a thank you from the program.

Curriculum: A serious look at curriculum and text books took place to see if any changes need to be implemented.

A lengthy discussion, overview and review followed, with comments of the other NCTC trade programs that overlap each other. There was a further explanation of course listings and terminology, including general ideas and new technology. Discussion of educating today's students by overlapping older technology with newer technology; this of course depends on the employer and whether their business maintains newer facilities verses smaller family owned operations with older equipment..

Steve opened discussion of course work that he currently teaches. An example of air flow, zone control and usage of equipment. An instructor needs to not only make the course work fun, but interesting. --Continued discussion of different types of student learners in today's world. There are students that want to excel, and others who won't put in the effort that it takes to successfully complete the course.

<u>Advanced Sheet Metal</u>: More lab space/more hands on w/equipment <u>Heating System Maint</u>: Assemble and re-assemble of equipment; students seem to enjoy working this way.

Discussion on the NCTC house project that interacts with the other programs while working at the house. Students seem to enjoy the interaction which keeps is diverse. The NCTC house project promotes learning how all trade programs work together. Students seem glad to out of the classroom and visit with the inspectors. Students actually take pride and ownership in as a "real project" and that a family will soon be living in.

<u>Boiler Operations:</u> Boiler assembly; natural gas, high efficiency modern, floor heat per 2007 Tech house not this year.

<u>Question w/more fuel oil:</u> A fuel oil education/usage question came forward with discussion and emphasis of the high interest of fuel oil within the farming region.

Heat System Design & Install:

<u>Refrig A/C & Heating</u>: All lecture and introduce student with equip that has been talked about; more into 2nd year class.

Programs are cross referenced with plumbing students.

Prepare students to go to the world of employment; general knowledge and touching on all HVAC topics. When hiring HVAC Tech employer is strictly into heating & air; not plumbing or other trade area. The main focus is to rounding the current students for general HVAC knowledge in as many areas of the trade as possible and prepare them for employability with quality workmanship.

Loosing Students to Wahpeton & Bemidji:

Discussion of Wahpeton's HVAC program, with the knowledge that the EGF HVAC Program is loosing student to go Wahpeton's program for installation types of jobs. Information came forward that Northwest Technical College, Bemidji, also has a shorter HVAC program which is drawing students away from NCTC. Consideration needs to be place on providing the student with a well rounded education in order for them to obtain employment. Consideration to the student's life style needs to be honored, whereby the program will encourage a continuation of training for a better salary. Day time employment with evening classes to obtain an AAS degree.

It was highly encouraged by the board, with a unanimous vote, that the EGF HVAC Program needs to seriously looking at providing both the HVAC diploma, as well as HVAC AAS degree. Otherwise EGF will be loosing students as installers in opposition to service technicians. (1st year & 2nd yr @ Wahpeton).

Requesting input if the HVAC program is teaching up to speed, and if the program meets the employer's need for their business. -Discussion-

Program Changes:

Discussion on:

- § Why we are teaching other courses? Students are struggling in Physics course work. (Administration was not available to attend this meeting)
- § AAS Degree: (green copy) Liberal Arts degree, which will allow student to continue on to 4 yr college.
- § Currently, instructor arranges schedule so that student can graduate within 2 years.
- § Discussion on placement test for college algebra regarding development.
- § Currently some required courses are hurting the students; Physics was continually given as an example. Whereby students are unable to meet the Physics requires and drop out of the program due to a specific course.
- § HVAC is requesting that consideration be given to the student for additional options of program completion; HVAC Diploma and HVAC AAS.
- § Diploma Program Option: (blue copy) Students currently looking for diploma option in order to obtain employment (Wahpeton/Bemidji draw) Loosing student to Wahpeton for that very reason.
- § Options need to be developed for students
- No problem with the way the program currently is, but would like to suggest another opportunities for students; such as Technical Math, Human Relations (interaction w/customer), Job seeking, CPR, Computer classes.
- § Requesting approval from Advisory members; unanimous vote of approval to look into diploma option.
- § 12-13 credit for diploma

- § Diploma option would also be driven by financial aid availability.
- § Input needed to back up program.
- § Technical Elective (steel pipe procedure) Computer classes
- § Welding allocated w/HVAC program.
- § Alternates? Why are some of these courses being taken?
 - o Some course work is required; physics is being changed for next year 07-08.
 - o Lib Arts chair is currently talking to Karl
 - o Still AAS program, but perhaps a different type of physic class which would aim more toward trade related course work.
- § Tech elective possible incorporate with what needs to be taught.
- § Automotive offer both AAS/Dip (2 individuals that go to AAS)
- § Offering evening course to complete general working toward AAS
- § Students to train and get out on the job to make an earning; Program needs to be developed which would encourage diploma students to return to EGF to complete AAS degree. Post education after diploma.
- § Employer knows that a student with an AAS has placed more effort to complete work for a degree.
- § Possible Union issues regard service and technician? Employer is always short of technicians.
- § Bemidji: started 2 year program: 1 yr plbg/1yr HVAC Bemidji program is booming and turning student away.
- § Wahpeton currently has a one yr HVAC program; minimum training and knowledge.
- § Approval request: unanimous. Advisory board feels that the diploma program will be an asset to the head count of the HVAC Program.
- § Maintain competitiveness w/Bemidji & Wahpeton

Class Caps: Our current cap is 23 for the program. Does the board support this? Can facilities and/or employers handle more? Student to instructor ratio maintains at least 20:1. Currently teaching staff doesn't believe it to be a problem, but for effective teaching and lab supervision, student capacity should not be over 23 student.

Currently loosing students to family issues; students that don't show up for class; financial aid issues. The HVAC Program generally graduates 13-15 students annually.

Promotion of NCTC HVAC Program through:

- § NCTC faculty support at Expos
- § NCTC faculty and advisors currently meet with high schools counselors, and are setting up appointments with highs school students that are interested in the trades programs.
- § Scholarship from businesses (future employers) discussion. Majority of scholarship seem to be geared toward female and health related fields.
- § Karl arranges his schedule to be here for the students with an open door policy.
- § Internship discussion: Internship opportunities being offer students, whereby allowing the student a chance to get in the employer's door through by internship experience. Perhaps as an internship 140 hours; suggestion.
- § Workman's Comp Issues: Discussion Clinical aspect, Non-paid school position, Union issues w/internship? Opposition w/internship
- § On-line HVAC Program: Discussion

An invitation was given to board members that included examples of the NCTC web site, whereby bringing their attention to the HVAC Program Learners Outcome web page, and also included information with the NCTC job placement availability thought Susie Dowers. The placement prospect is a wonderful opportunity for both the student and for employers looking for job openings. By utilizing this opportunity we can help each other succeed.

<u>Limited Low Voltage Lisc</u>. – Discussion; to have or not to have; MN requirements, certification requirements has to be a number of hours.

<u>Refrig Hand</u>; core types 1, 2, 3 test given to students prior to graduation Study guides are paid for out of HVAC program budget and students are required to take prior to their graduation. If a student is required to retake test, the student will then pay for themselves.

Discussion with the license requirements for both state of MN and ND. Mechanical license or take test in GF; Individual needs to read and study book/open book test

HVAC students need to be EPA certified, and it should be on resume for personnel file with employers

Refrigeration class info is covered and reviewed

DUI = be smart; be adults; failure to have a driver's license; insurance company can't afford.

Personnel retirement:

Steve Kroke announced his retirement @ the end of Spring Semester. If there are individuals interested in the possible replacement position they are invited to talk to Steve or to NCTC Human Relations. Currently we do not know where the college stands on this position.

Thanks and congratulations to Steve Kroke; he not only knows teaching, but also the ultimate goal for the success of the students.

In Closing: If additional items come forward or a thought develops please give Karl a call.

Advisory Board members were then invited for a classroom/lab walk though to see first handed what equipment was available to currently HVAC students.

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