# Automotive Technology Program

Advisory committee meeting minutes for December 13th 2018

1. Call to Order at 6:30 pm
   Members present: Members Present: Ken Rocha, Crisy Zeimetz, Will Mobley, Jose Castillo, Ryan Thomson, Katrina Simser. Members Absent: John Miller, John Neely.
   CR Personnel in attendance: Kerry Mayer, Mike Richards, and Anibal Florez joined in after his Auto Trans class wrapped up.

   Mike welcomed and thanked everyone for attending.

2. Action Items: Approval of Minutes: Motion to approve by Jose Castillo, seconded by Ken Rocha, approved by unanimous vote.

3. Discussion items:

   **ASE/NATEF Re-Accreditation**

   Mike explained that NATEF has been absorbed into ASE and is now called ASE Education Foundation. There have also been some changes to the accreditation standards. He also explained the process used to determine the ratings and shared the results of the Advisory Sub Committee's Automotive Compliance Review and invited any questions regarding the findings or ratings. The numerical 5 point rating system was questioned and Mike explained that 4 was considered average and 3 would require modifications to meet ASE Standards. Katrina asked about rating of 4 under employment potential. Mike explained that even though the Auto Tech Program has placed 100% of Program Completers seeking local jobs for 20 years we have had very poor returns on formal surveys of the type ASE recommends. Auto Tech typically receives considerably more phone and/or email requests for completers than we have students to fill. While the sub-committee felt the 100% placement rate was commendable it also noted our methods varied from standards thereby rating it a 4. Mike also informed the committee that the visiting team would only be evaluating Standards 6-10. No further questions were noted.

   Mike thanked John Miller, Jose Castillo, Ken Rocha, and Ryan Thomson for volunteering their time to conduct the ASE self-evaluation. There was a general showing of support for the work of the sub-committee.

   Equipment and Curriculum Updates

   Equipment

   Mike explained that due to the recent Measure Q and Strong Workforce Grants the Auto Tech Program was in pretty good shape with respect to equipment. Looking to the future however the program is planning to purchase refrigeration equipment necessary to service the new R1234YF refrigerant. He also noted this would be necessary for the hybrid-electric vehicle program under development. Mike informed the committee that he had accepted bids on those R1234YF machines from NAPA Auto, who sell Robinair and Snap-On Tools Polartek unit. Web research however turned up some negative reviews on the Robinair equipment being sold

through NAPA. Frank Camilla the Manager of NAPA however informed Mike that while there were some issues with the machines at first the problems have been resolved. Will stated that he had to purchase a new AC Delco YF Machine for Chevrolet and several months later he also had to purchase a very similar machine for the Hyundai line and he wished he could sell one of them to us as he felt he could certainly get by with only one. Kerry Mayer explored that possibility briefly but it would create many issues with our current purchasing procedure and Will wasn't sure what kind of issues it would create on his end either. It was decided that we should move forward with the purchase of the YF machine and R1234YF refrigerant to be used with it as well. Mike stated he and Anibal would do some more research and submit a PO Request.

Curriculum

Mike explained that the current one year Certificate of Completion is out of date with industry standards as it was developed to meet the need for EDD retraining of displaced logging and fishing industry workers in the early 2000's. Additionally, the CC is strictly an "in house" certificate and not recognized by the Chancellors Office so it doesn't serve us well based on the new funding formula.
Kerry Mayer explained that funding has shifted from FTES or "students in seats" to Completers of Chancellor's Office recognized Certificates of Achievement and Associate Degrees. Mike stated that this would be an excellent time to develop a one year Certificate of Achievement in Maintenance and Light Repair. The new MLR Certificate would further allow CR Auto to develop a much needed Basic Automotive Technology course. Mike explained that the majority of students entering the auto program today are unfamiliar with hand tool usage and require much basic instruction to develop manual dexterity skill levels commensurate with industry standards and norms. He explained that the current generation solves problems through Google and YouTube however they didn't grow up doing using hand tools like previous generations. We are not serving them well by enrolling them in an ASE Certification area course right out of the gate, he said.
He explained that there would need to be some modifications to some of the current curriculum to pair that down to 5 classes. Portions of each of those classes would be pulled to make up a basic auto class that covered inspections and lubrication as well as tools, techniques, and equipment usage.
Will Mobley stated that he felt the skill sets covered in the new MLR certificate would be in demand for entry level tech jobs and General Motors Training on the job would help in further skill development. Ryan Thomson stated he felt MLR training would be inadequate employment at the city or county. Ken Rocha expressed concerns about students completing training in all 8 ASE areas as is current practice.

Mike explained that the curriculum being proposed would not preclude students from completing the full complement of AT courses. He stated that the remaining coursework would be included in a second year Advanced Certificate for those who wish to continue their education. Mike said he felt it would allow CR Auto to increase the completer rates, better serve local employers by placing more students in jobs quicker and allow us to develop a much needed basic auto class that could serve as an exploratory course thereby having better prepared students in the ASE service area dedicated courses.

Ken Rocha asked what courses would the proposed MLR Certificate include. Mike stated he and Anibal had discussed this at length and wanted input from the committee on regarding skills and tasks that would appropriate for entry level techs.
It was generally agreed that AT 12 Brakes, AT 20, which includes tires, wheels, struts, shocks, power steering fluid exchanges, etc…, AT 16 Basic Electrical Principles should be integral to the new MLR CA.

The current AT 18 Engine Repair course covers cooling system inspection, maintenance, and repair, lubrication system maintenance and repair, timing belts, and major engine repair and rebuilding. I believe Will Mobley indicated major engine repair and rebuilding would not likely be assigned too entry level techs which was generally agreed on by the group.
There was some discussion regarding AT 24 Engine Performance being added to the MLR CA which would put it over the units that could be accomplished in the one year timeframe. A compromise was suggested to include some of the basic engine performance skills into the engine repair class after removing the major repair portion. Ken Rocha and Ryan Thomson expressed concern about the reduced training in important emissions diagnostics.
Mike explained that coursework, ASE tasks and skills not covered in the MLR would be included in our 2 year Advanced Automotive CA. We would have to modify the current Advanced Auto CA to include the MLR requirements as well as the existing coursework not included.

Crisy stated that the MLR should include automatic transmission fluid exchanges and she asked if we used coolant exchange/flush equipment in our cooling system service module. Mike said we currently do not. It was generally agreed that we should be providing this training. Mike agreed to do some research on the type and models of coolant exchangers currently in use at area shops. Anibal indicated he could work the auto trans service into the MLR CA.
Ken and Ryan both voiced concerns that the MLR CA would be inadequate training for what they required however, as long as we retained the 2 year Advanced Auto CA and AS Degree option they understood the need to develop the MLR CA.
Mike and Anibal stated they would get to work on the curriculum process and report out more at our May advisory meeting.

Strong Worforce HEV Grant

Mike informed the committee that after 3 years of inaction maintenance was beginning to make modifications to the old diesel lab in preparation for the new HEV lab. Safety railing was installed on the loading dock and lighting would be installed soon. Plans are in place for 5 lifts, 2 level II EV battery chargers, electrical outlets, workbenches and storage for high voltage batteries and components. He further stated that it was the persistence and perseverance of Dean Mayer that really got things moving.
Mike informed the committee he had recently attended CAT Conference at Rio Hondo College and connected with John Frala who heads up the Tesla and fuel cell program there. He informed the group of a world class trainer he encountered there produced by Lucas Nuelle that he thought would compliment the developing HEV program. He hoped to get more info on the trainer soon and possibly arrange a demo at CR.
Mike shared his vision of HEV coursework that would go well beyond the normal safety instruction and include the latest techniques being used for HEV service such as HV battery re-balancing, EV motor testing with milliohm meters as well as insulation testing.

Almost all committee members present indicated they would be interested in taking the class and/or sending existing techs from their shops.
Mike really wanted and needed more hands on time with the technology to develop curriculum. He reiterated the grant proposal included paid externships for him to work at dealers and/or shops to acquire the skills necessary for this type of class. However, due to teaching demands and the lack of associate faculty to backfill classes he has been unable to utilize that funding. Mike is hopeful the new lab will be completed soon enough to allow him time to get more hands on training.

Meeting adjourned at 8:00pm.