Modified DACUM Research Chart Automotive Technology Program CIP 47.0604

DACUM Panel

Representing 200 years of experience in the automotive field

Ed Bogert, Owner, Town & Country Automotive Corry, PA

Shane Crotty, Manager Crotty Chevrolet, Corry, PA

Domenic P. DiMucci, Automotive Technology Instructor Crawford County Career & Technical Center, Meadville, PA

Tanner Golembeski, Shop Foreman David Corry Chrysler, Corry, PA

Jason Halfast, President, H.H. NAPA Auto Parts, Inc. Corry, PA

Aaron Marshall, Admissions Representative University of Northwestern Ohio, Lima, OH

Eric McCray, Automotive Technology Instructor Corry Area School District's CTE Center, Corry, PA

Sam Steever, Automotive Technology Instructor Erie County Technical School, Erie, PA



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Corry Area School District's Career & Technical Education Center



Produced by



Jan Kennerknecht, DACUM Facilitator Kennerknecht Consulting

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Observers

Susan Bogert, Supervisor of Vocational Education, Corry Area School District's CTE Center

Mike Daniels, Co-op Coordinator, Corry Area School District's CTE Center

Neil Donovan, Career and Technical Distinguished School Leader, PDE Bureau of CTE

Worker Behaviors

Reliable

Mentally aware and present Driven/dedicated to the craft Understands personal value

Productive Organized Good attitude

Willing to work hard

Team player Proactive

Takes pride in work

Drug-free

Willing to learn every day

Adaptable Positive Proficient

Uses cell phone appropriately

Skills Needed

Interviewing skills Computer skills

Tablet/smart phone skills

Communication skills

Paperwork/documentation skills

Time management skills

Trends

Currently there is a high demand for good technicians.

There is more emphasis on electronics.

There are supply chain issues (i.e., brake rotors, filters, foreign parts).

It is harder to recruit good workers.

Increase in vehicle prices

The pace of technological change is increasing.

Worker behaviors are more important than having entry-level skills.

Customer surveys are big.

There is a need for constant training.

Warranties are more important to consumers.

Media and online communication are used more for buying and selling.

Scan tool registration

Knowledge Needed

Auto "101"

Electrical

Career pathways

Tools and equipment

Math Reading Science

Customer relations

How to find online information

Automotive terms

Parts names

Knows what is expected of the employee

Wages are increasing.

There is competition for higher wages offered by other industries

Future Directions

Everything except for medium or heavy-duty trucks will be hybrid or EV.

Volkswagen is partnering with Ford, Volvo.

EVs will charge to full capacity in 5 minutes.

There will be a shift in vision, fossil-fuel vs. electric vehicles.

Schools should consider pulling students from robotics courses into the automotive courses (incorporating those higher-level technical skills).

Highly skilled automotive technicians will make the same amount of money as those with college degrees.

The industry will "condense". Fewer "Mom and Pop" garages will be providing repairs and service.

Car purchasing will occur across state lines, with customers researching available options online.

Customer loyalty will be "out the door".

Concerns

Safety is always a concern- electric vehicles will dramatically increase need for safety training.

Rising costs to become educated, rising cost of tools

Increasing depth of technology, knowledge needed

Increased knowledge needed for new parts

Cost of training materials for new technology has risen exponentially.

Cost of electric vehicle for training activities in the shop

Concern for independent shops having increased cost for training, increased technology

Where will cars be in 20 years? What technology will be involved?

If electric vehicles are coming, what will happen to fossil fuel-powered cars?

What will happen to smaller independent shops?

What will the electricity cost to charge your cars?

Technology is growing in leaps and bounds.

How will we dispose of lithium batteries?

Bridging the gap between today's technician to more computer-based technician

We will need to look for a different type of technician or re-train older technicians.

The amount of computer coding needed for vehicles

The stigma change- there is a more positive reality for future workers.

How do we get the student with a correct mind-set into our programs? More computer skills are needed.

The pay structure for automotive technicians must change in order for the industry to survive.

Flat rate needs to go.

We need to build the pool of A-level technicians.

General Observations and Recommendations

Could use a vehicle brake lathe

The shop has improved in appearance and usability over the past years.

Certifications Recommended

For Students:

PA Safety Inspection

EPA 609 (MAC version)

Emission Inspection

S/P2- includes Motor Oil Certification (Valvoline), WD40, Soft Skills, a variety of certificates

Lifting it Right (ALI)

For Technicians Later in Career:

ASE (a series of certifications)

Manufacturing certifications (i.e., GM, Ford, etc.)

Parts manufacturing certifications (i.e., tools, batteries, diagnostics)

Recertifications of previous certificates

Acronyms

ALI Automotive Lift Institute

AYES Automotive Youth Educational Systems

ASE Automotive Service Excellence EPA Environmental Protection Agency

EV Electric Vehicle

MAC Mobile Air Conditioning

OSHA Occupational Safety and Health

Administration

S/P2 Safety and Pollution Prevention

Advice for Automotive Technology Students

Ed Bogert: "School doesn't end when you graduate. You will use magazines, articles, and TV shows to keep learning."

Shane Crotty: "The industry is constantly advancing. There will be rapid advances in technology. You will need to keep up or you will get lost."

Mike Daniels: "Don't chase money over knowledge."

Domenic DiMucci: "There will be rapid changes in the next few years. Embrace change!"

Tanner Golembeski: "Set goals and a plan to get there."

Jason Halfast: "Take pride in what you do. No job is too small."

Aaron Marshall: "If you work hard, you will make money. Embrace the technology. The sky is the limit!"

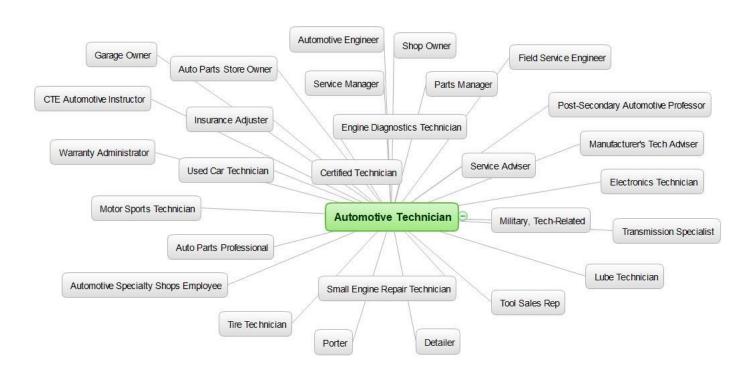
Eric McCray: "Never quit learning."

Sam Steever: "You need skills to survive in this workforce. You need to make someone else money before you can expect to make money."

Automotive Job Titles and Opportunities Identified by DACUM Panel







*See attached Pennsylvania Program of Study Analysis Report for additional local tasks added by this DACUM panel.

The Corry Area School District's Career & Technical Education Center would like to thank this dedicated panel of automotive technology professionals for providing their expertise. All input will be analyzed for program improvement.