



OAKLAND
COMMUNITY
COLLEGE

Auto Servicing Certification Survey Spring 2002

Preliminary Report

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June 2003

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Executive Summary

Background/Objective

The objective of the study was to determine if former and current Automobile Servicing students have sought and/or obtained certification in the field of Automobile Servicing, and to determine their current level of employment in the industry.

Students (or anyone who desires to) can seek certification from the State of Michigan or obtain certification through the National Institute for Automotive Service Excellence (ASE certification). To obtain certification, one must pass either the ASE exam or the State of Michigan exam. There are eight areas in which they can obtain certification, or they can obtain Master Certification (which means that they are skilled in all eight areas). Upon passing the exam in a particular area, the applicant is then qualified to apply for his/her license in that area. The eight areas are as follows:

- Engine Repair
- Automatic Transmission
- Manual Transmission, Front Axle and Rear Axle
- Front End Suspension and Steering Systems
- Brakes and Braking Systems
- Electrical Systems
- Heating and Air Conditioning
- Engine Tune-Up/Performance

OCC's program consists of 8 specialized courses that are designed in accordance with the Mandatory Auto Certification tests. One of the main purposes of this study is to determine the number of current and former OCC Automobile Servicing students who took the exam(s), passed the exam(s), and obtained certification.

Methodology

A telephone survey was conducted among former and current OCC students who had enrolled in at least one Automobile Servicing course at OCC within the past five years, based upon course information from One-Tenth Day data in the Student Information System. A total of 207 surveys were completed during May 2003.

Respondents were asked questions pertaining to their current employment, completion of mechanics certification exams, and whether they felt that OCC's Automobile Servicing courses prepared them for their jobs and the certification exams. A copy of the survey appears in Appendix Two of the report.

Key Findings

- Thirty-eight percent (38.3%) of respondents were currently employed in a position related to Automobile Servicing or Automotive Engineering Technology.
 - Thirty-nine percent (39.2%) of these respondents had been in the industry for five or more years, and another 22.8% had worked in the industry for three to four years.
 - Thirty percent (29.5%) of these former or current students worked for an automobile manufacturer, and 25.6% worked for an automotive dealership. Another 16.7% worked for automotive repair shops.
 - Ninety-one percent (91.0%) felt somewhat or very prepared for employment in the industry after taking OCC's Automobile Servicing courses. Only 9.0% felt that the course(s) did not prepare them for employment in the industry.
 - When asked how the course(s) were helpful in preparing them for their current positions, several responses pertained to increased knowledge, provision of basic vehicle repair skills, and hands-on experience.
 - Students were also asked how the course(s) could have better prepared them for their current or future positions. Several respondents were so pleased with the course(s) that they did not have any suggestions. However, several others cited potential improvements relating to increased/improved resources – more updated materials and equipment, and more instructors for the hands-on component of the course(s).
 - Of those current and former students employed in the industry, 55.7% held positions for which certification was not required. Nineteen percent (19.0%) indicated that State of Michigan certification was required for their positions, and another 8.9% held positions that required both ASE and State of Michigan certification.

- Of the 207 current and former students who responded to the survey, 33.8% took at least one ASE or State of Michigan Mechanic Certification exam. As expected, people who were employed in the industry were more likely to have taken an exam. Just over half (51.9%) of respondents employed in the industry took a certification exam, compared to 22.8% of people who were not employed in the industry.

- Of the 70 respondents who took at least one exam, 84.3% passed. When making comparisons of exam-takers by employment in the industry, 95.1% of respondents who were employed in the industry passed, compared to only 69.0% who did not work in the industry.

- For each topic area, students more often took the State of Michigan exam rather than the ASE exam.

The top exams most often taken by test-takers included Brakes and Braking Systems (64.3%), Engine Tune-Up/Performance (48.6%), Front End Suspension and Steering Systems (47.1%), and Engine Repair (42.9%).

ASE and/or State of Michigan Exams Taken	
	Percent of All Test-Takers
Base: N – Total Number of Test-Takers	70
Brakes and Braking Systems	64.3%
Engine Tune-Up/Performance	48.6%
Front End Suspension and Steering Systems	47.1%
Engine Repair	42.9%
Electrical Systems	35.7%
Heating and Air Conditioning	32.9%
Manual Transmission, Front Axle and Rear Axle	28.6%
Automatic Transmission	27.1%
Master Certification	15.7%

Note: Totals Exceed 100% as several respondents took multiple exams.

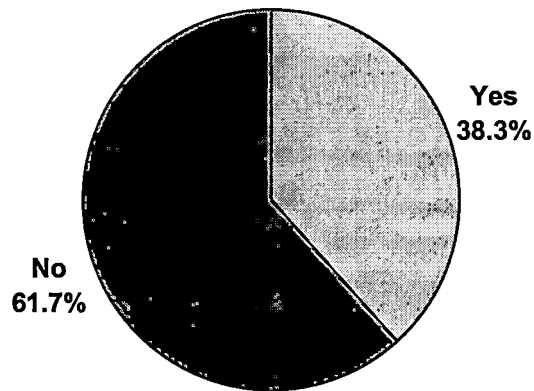
- The topic areas in which exam takers were most successful (i.e., passed the exam(s)) included Brakes and Braking Systems, and Front End Suspension and Steering Systems. The topic areas where the lowest percentage of test takers passed the exam(s) included Automatic Transmission Repair and Engine Repair.

Percent of Test-Takers Who Passed ASE and/or State of Michigan Exam			
	Number of Students Who Took Exam	Number Who Passed Exam	Pass Rate
Master Certification	11	10	90.9%
Brakes and Braking Systems	45	38	84.4%
Front End Suspension and Steering Systems	33	27	81.8%
Manual Transmission, Front Axle and Rear Axle	20	16	80.0%
Heating and Air Conditioning	23	18	78.3%
Electrical Systems	25	19	76.0%
Engine Tune-Up/Performance	34	25	73.5%
Engine Repair	30	21	70.0%
Automatic Transmission	19	12	63.2%

- Most people who passed the exam obtained certification. Of the 59 respondents who passed at least one ASE or Michigan exam, 94.9% obtained certification.
- Of the students who took a certification exam, most (92.7%) felt somewhat prepared or very prepared for the certification exam(s) after taking OCC's Automobile Servicing course(s).

Table 1: Current Employment in Automobile Servicing Industry

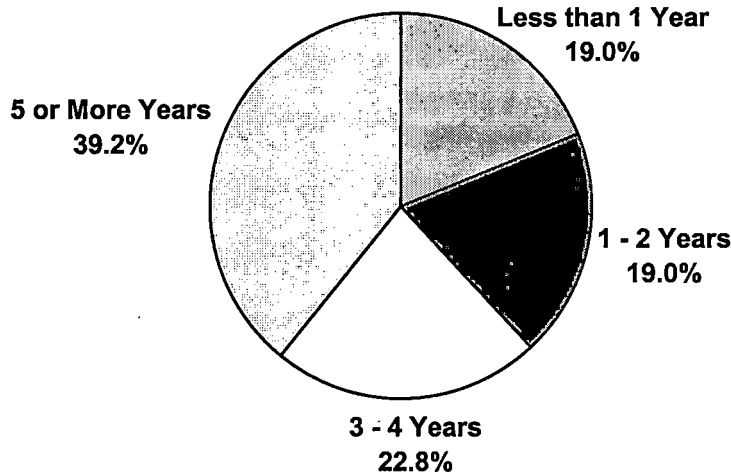
Question 1: Are you currently employed in a position related to Automobile Servicing or Automotive Engineering Technology? (N=206)



Summary: Thirty-eight percent (38.3%) of respondents indicated that they were currently employed in a position related to Automobile Servicing or Automotive Engineering.

Table 2: Length of Employment in Industry

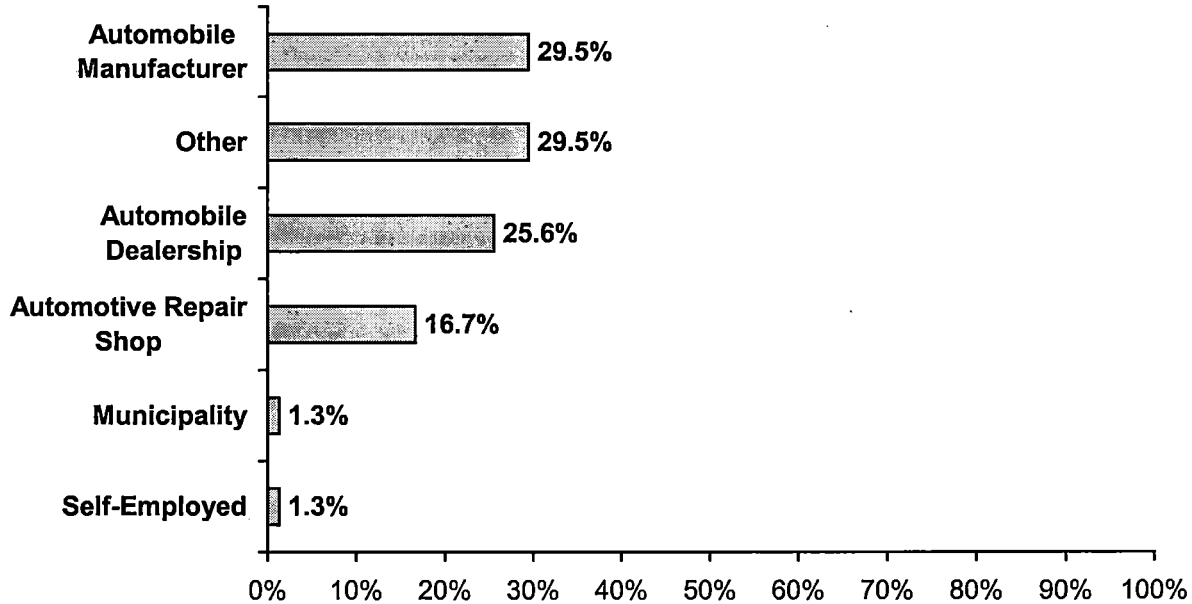
Question 2: How long have you been employed in this industry? (N=79)



Summary: Of the 79 respondents employed in the industry, 39.2% had worked in the industry for five or more years. Another 22.8% had worked in the industry for three to four years.

Table 3: Type of Organization Where Currently Employed

Question 3: For what type of organization do you currently work? (N=78)



Note: Some respondents were employed in more than one job; therefore, totals exceed 100%.

Summary: Thirty percent (29.5%) of respondents employed in the industry worked for an automobile manufacturer, and another 29.5% worked for "other" types of companies. One-fourth (25.6%) worked in an automobile dealership.

Table 3a: Type of Organization Where Currently Employed – “Other” Mentions

Type of Organization Mentioned	Number	Percent
Auto Parts Retailer/Auto Parts Store	3	3.8%
Auto Parts Manufacturer	1	1.3%
Automotive Supplier	1	1.3%
Automotive Testing	1	1.3%
Collision Shop	1	1.3%
Commercial Construction Co.	1	1.3%
Custom Machine Shop	1	1.3%
Electronic Repair Shop	1	1.3%
Engineering Firm	1	1.3%
GM Power Training Headquarters (In Pontiac), An Engineering Facility	1	1.3%
Grounds Maintenance Co.	1	1.3%
Work On My Own Equipment In Landscaping Company.	1	1.3%
Machine Shop	1	1.3%
Maintenance Repair (Pennzoil Lube)	1	1.3%
Manufacturer	1	1.3%
Parts Supplier	1	1.3%
Property Management Company	1	1.3%
Specialty Auto-Building Company	1	1.3%
Supplier	1	1.3%
Wal-Mart (Retailer)	1	1.3%
Work at OCC	1	1.3%
Total "Other" Mentions	23	29.8%

Summary: Some of the “other” types of organizations in which people in the industry were employed included auto parts retailers and manufacturers, machine shops, and engineering firms.

Table 4: Current Job Title

Question 4: What is your current job title?	Number	Percent
<i>Total Technician-Related Job Titles</i>	28	35.51%
Technician	5	6.33%
Auto Technician/Automobile Technician/Automotive Technician	4	5.06%
Service Technician	3	3.80%
Apprentice Technician	1	1.27%
Assistant Body Technician	1	1.27%
Auto Technician or Mechanic	1	1.27%
Automotive Engineer Technician	1	1.27%
Development Technician	1	1.27%
Dynamometer Technician	1	1.27%
Experimental Automotive Technician	1	1.27%
General Technician	1	1.27%
Heavy and Transmission Technician	1	1.27%
Light Repair Technician	1	1.27%
Lube (and Tire) Technician	1	1.27%
Lube Technician	1	1.27%
Mechanical Technician	1	1.27%
Oil Technician	1	1.27%
Prep. Technician	1	1.27%
Test Technician	1	1.27%
<i>Total Mechanic-Related Job Titles</i>	11	13.94%
Mechanic	8	10.13%
Apprentice Mechanic	1	1.27%
Master Mechanic	1	1.27%
Mechanic in Training	1	1.27%
<i>Total Engineer-Related Job Titles</i>	5	6.35%
Engineer	1	1.27%
Engineering Technical Support	1	1.27%
Product Engineer	1	1.27%
Research and Development Engineer	1	1.27%
Service Engineer	1	1.27%
<i>Total Management-Related Job Titles</i>	5	6.35%
Assistant Manager	1	1.27%
Field Manager	1	1.27%
President	1	1.27%
Senior Account Manager	1	1.27%
Technical Field Manager	1	1.27%

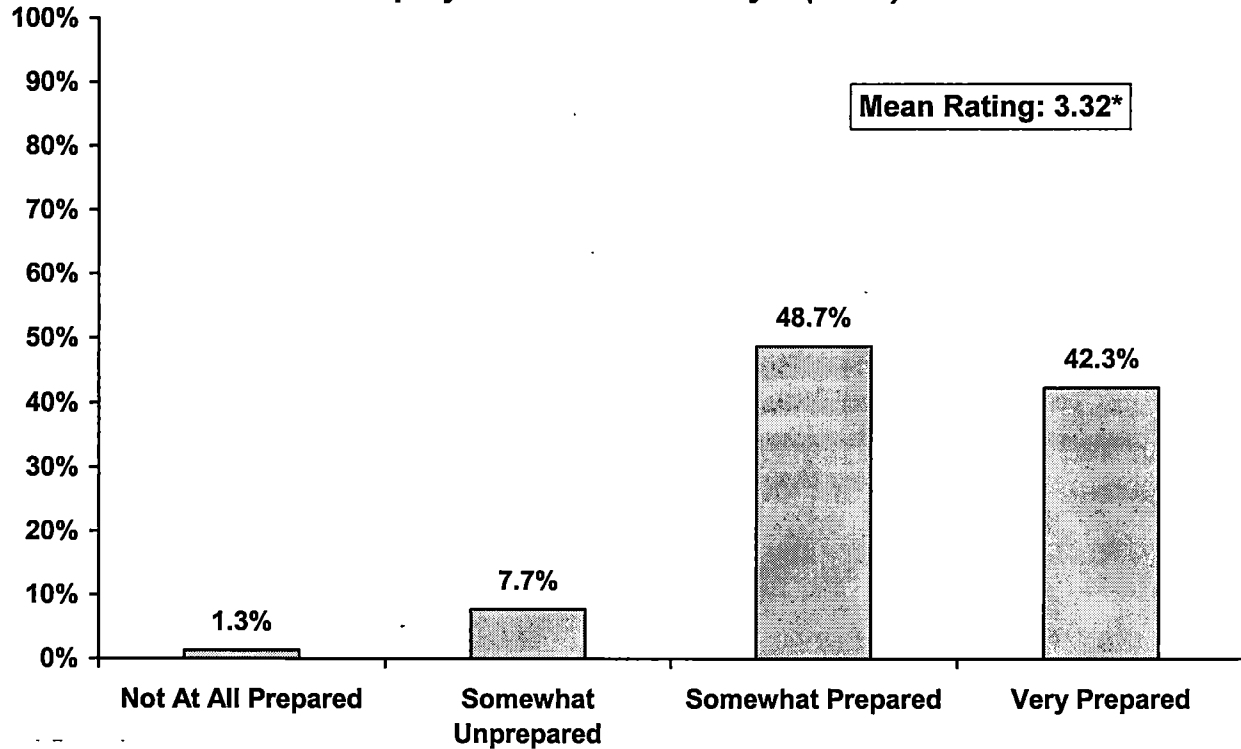
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Question 4: What is your current job title? (continued)	Number	Percent
Total Parts-Related Job Titles	3	3.80%
Auto Parts (Counter) Clerk	1	1.27%
Commercial Parts Specialist	1	1.27%
Parts Manager	1	1.27%
Total Assembly-Related Job Titles	3	3.80%
Assembler	1	1.27%
Assembly Worker	1	1.27%
Final Assembly	1	1.27%
Other Job Titles		
Porter	3	3.80%
(Electronics) Installer	1	1.27%
Auto Test-Driver	1	1.27%
CNC Machinist	1	1.27%
(Counter) Salesman	1	1.27%
Durability Test Driver	1	1.27%
Engine Builder	1	1.27%
Event Coordinator	1	1.27%
"Everything" Guy	1	1.27%
Groundskeeper (expected to try to fix vehicles when they break down.)	1	1.27%
Laboratory Superintendent	1	1.27%
Line Coordinator (in a plant)	1	1.27%
Machine Operator	1	1.27%
Metal Model Maker	1	1.27%
New Car Prep.	1	1.27%
Paid Intern	1	1.27%
Repair Man	1	1.27%
Skilled Trades	1	1.27%
Skilled Tradesman (for heavy equipment)	1	1.27%
Standard Examiner	1	1.27%
Supplier Quality Specialist	1	1.27%
Technical Assistance	1	1.27%
Total	79	100.00%

Summary: More than one-third (35.5%) of respondents employed in the industry possessed in technician-related jobs. An additional 13.94% held mechanic-related job titles.

Table 5: Ratings – Extent to Which OCC Prepared Students for Employment

Question 5: To what extent do you feel that the Automobile Servicing course(s) you took at OCC prepared you for employment in the industry? (N=78)



Summary: Most (91.0%) former and current students surveyed felt that the OCC Automobile Servicing course(s) at least somewhat prepared them for employment in the industry.

Table 6: Verbatim Responses – Helpfulness of Courses in Preparing For Employment

Question 6: How were the courses helpful in preparing you for your present employment?

Verbatim Responses Among Students Who Felt “Somewhat Prepared” Or “Very Prepared” For Their Current Position By OCC Courses

The verbatim responses below were grouped together, based upon the content of the statements. However, it should be noted that several statements may overlap into more than one category, but are only displayed in one category.

Increased Knowledge (25 responses)

- For example, before I took the automatic-transmission class, I knew nothing about it.
- Gave a good review of different disciplines.
- Gave me more background about automotive components.
- Gave me more knowledge about the automotive field and all that.
- I already knew the basics, but I learned the importance of the "technicals", e.g. accurate measurements of tolerances.
- I became more familiar with cars.
- I gained knowledge of the components, air conditioning and electrical systems.
- In giving me the knowledge I use every day.
- It provided knowledge of how things work and help with doing it right.
- It's a good understanding of vehicles from a physical standpoint.
- Just gave me a firmer understanding of how the different parts of a car work.
- Just general knowledge. (The class I took wasn't on the subject my job is concerned with.)
- Made me more familiar with cars.
- Teaching different areas that I didn't have experience in.
- The "Drivability" course helped me improve my knowledge a lot.
- The class helped me in becoming more familiar with diagnosing electrical problems.
- They gave me the general knowledge that I needed.
- They gave me the insight to show me how everything worked.
- They taught me a lot about the industry.
- They taught me all about the new drive-train and power-management components.
- They taught me quite a bit for the field I wanted- mechanics.
- They taught me the function of the parts of a vehicle and how they are repaired.
- Though it didn't prepare me for my specific job, it did help me understand the functionality of various components.
- Understanding what goes into the work, such as hours or how long it takes.
- Very helpful, I learned how to use different equipment, learning how to rebuild systems.

Provided Basic Vehicle Repair Skills (10 responses)

- They gave a general idea of basic mechanics; hands-on was the best!
- They taught me the basics in automotive, which prepared me for job placement.
- The experience with cars from an overall mechanical standpoint, knowing how system works on car.
- They explained about cars in general- basic things.
- They gave me a good perspective on what I would be doing. A lot of the basics you need.
- They gave me the basic idea of how to repair a car.
- They taught me the basics.

- They teach basic and advanced skills; give you all the experience you need to get started in servicing a car.
- They were helpful for the basic skills needed.
- They were helpful in the generic sense of getting the overall concepts of how all the different components work.

Used Information On the Job/Applied Information to an Existing Job (7 responses)

- A lot, everything I have learned in the classroom I use every day.
- I took them at the command of my employer. I had many years of prior experience in the industry.
- I was already employed in the industry, so I just took them for background information.
- It helped with advancement.
- The class made me familiar with the different pieces and functioning of an automobile. When I went to work, I knew where everything worked (on a car).
- They helped me in part to get a promotion.
- They were helpful with the identification of some (auto) parts and in talking to customers about what might be wrong with their cars.

Hands-On Experience (6 responses)

- In dealing with real-life problems, hands-on experience was most helpful. One teacher in particular (Mr. Hildebrandt) was very good and his tests were very similar to the certification exams.
- The information and knowledge I learned was terrific, and the instructors were great. The hands-on work was absolutely amazing.
- Good hands-on experience.
- Hands-on experience is a main focus, getting in and learning by actually doing it; and it is a helping environment.
- It gave me hands-on skills, more technical.
- They were very informative, showed things in great detail and there was a lot of hands-on work.

New Technology (5 responses)

- Helped me understand a lot of the new techno and how to use new technology.
- I could do things I couldn't in my garage, having more equipment to work with and using new technology.
- It helped me get familiarized with different computer and diagnostic tools used on cars.
- They got me current with the standard in the industry.
- They introduced me to technology that otherwise I would not be familiar with.

Helpful In Obtaining Current Position (3 responses)

- Looks good on paper. Got foot in door by saying going to school.
- In addition to classes I took at OU, it gave me hands-on experience and it helped me get the position I have now.
- They provided the basic core skills I needed, to get the job I got.

Personal Interest (3 responses)

- I took the courses more for my personal interest.
- They gave me a better understanding of how things are assembled and work; I took them mainly for self-improvement purposes.
- They weren't really appropriate for my current position, but were for my hobby.

Good Instructor (2 responses)

- Teachers were very good and made sure every student knew what was going on. The time spent in the shop was key to a great learning experience.
- The teacher knows his stuff.

The Classes Did Not Prepare Student for Present Employment (2 responses)

- I did not get any more out of it than I did in high school; I took 2 courses.
- They weren't really helpful in my present employment.

Miscellaneous (8 responses)

- They were a good refresher.
- I had been working in this area for quite some time but no degree, so I guess it prepared me very well.
- They fulfilled a requirement; an apprenticeship (since a qualification needed to be met).
- They tell you how to do the work.
- They were helpful, but I expected more.
- They were OK, but I had to learn the application once I got my job.
- They were somewhat helpful.
- I needed them for my degree.

Verbatim Responses Among Students Who Felt "Somewhat Unprepared" Or "Not At All Prepared" For Their Current Position By OCC Courses

- I learned different things and it made me more confident.
- No major colleges offer an Automotive Servicing program, so OCC should definitely keep such a program. We need it! (and MOTECH is closed now). High school auto classes are sometimes slack-off classes; they need the right instructor.
- The transmission classes were pretty good but not the others.
- Honestly, they didn't really help at all. Later on I had training at a dealership.
- I don't believe they were – I was unhappy with them.
- Really, they weren't.
- They weren't helpful at all. I took 2 courses, both with the same teacher. The teaching was very poor; he was all over the place.

Table 7: Verbatim Responses – How Courses Could Have Better Prepared Students for Employment

Question 7: In what ways could the program have better prepared you for your current or future position?

Verbatim Responses Among Students Who Felt “Somewhat Prepared” Or “Very Prepared” For Their Current Position By OCC Courses

The verbatim responses below were grouped together, based upon the contents of the statements. However, it should be noted that several statements may overlap into more than one category, but are only displayed in one category.

Could not think of any suggestions/Liked courses as they were (19 responses)

- Can't think of any!
- I can't say, because both instructors were quite talented and the courses were very good.
- I can't say. It pretty much covered everything I needed to know.
- I don't think they could have been more helpful. They were pretty good.
- I like the program, now I'm still attending.
- I think they are pretty good, I don't see any need for improvement.
- I thought it was so good that, right now, I can't think of how to improve it.
- I thought the instructors were well informed. The equipment was there. I didn't have any issues with it.
- I thought the program was fine, OK with me.
- I would not change anything because everything worked out well.
- I'm not sure. I was pleased!
- It did a pretty good job.
- It was very helpful for me; I felt very prepared.
- None that come to mind.
- Nothing really.
- There is no flaw.
- They did a pretty good job.
- They did well!
- This program was well put together.

More updated materials and equipment (11 responses)

- I guess they would have to update a lot of their tests. There were some outdated materials.
- If it had more up-to-date machinery and tools, and updated videos.
- If there were more vehicles supplied by the college, because a lot of our own vehicles weren't appropriate for the assigned tasks.
- It was pretty good, newer equipment, more budget.
- More field trips to the dealership or actual repair garage, and better equipment at the school. A lot of it was old, broken down, and could not be used because it took a long time to repair (due to a lack of funding).
- More up to date equipment because technology changes daily!
- The only real problem I had was with the tools. A lot of them were either missing or broken.
- The program needs more funding, more equipment, a dynamometer to measure horsepower, a bigger facility for more space (to avoid waiting on the list), more car performance-based courses and better-qualified teachers. (Mr. Hildebrandt is great but only one)
- To have better staff and servicing tools, the classes are overloaded.
- To provide more tools so you learn to use everything.
- Newer tools. Especially need to upgrade to the new technology, especially in electronics and computers.

More Instructors for Hands-On Portion of Course (8 responses)

- For the automatic-transmission class, I wish they had done more classroom instruction to better prepare us for the hands-on part.
- Having more teachers available to supervise us during the hands-on sessions.
- In having another teacher available to answer questions (when the one was busy in the garage) among 25 students.
- More assistance in classroom, need more variety of vehicles to repair instead of same cars and only certain repairs.
- Needed more interaction with a true "parapro"- an outside expert brought in to assist students hands-on.
- That's hard to say-it was pretty good. Maybe more teachers smaller class size (so there would be more hands-on opportunity).
- There could have been more structure and supervision in the lab, which may require more staff. The lab-time needs to be more specific-project-oriented.
- There should have been an assistant to help out the teacher during the hands-on periods. He was a great teacher, but many students needed one-on-one help.

Other suggested topics (8 responses)

- A diesel engine course, more classes.
- I work on imports (car), so there could have been more of a focus on imported automobiles.
- I'd like to see a more in-depth treatment of after market applications.
- If they had offered a broader range in the types of classes: more lab-tech oriented classes, engineering, research and development, "Dynotech", rather than a repair-focus only.
- In my Brakes class, there was no discussion on the anti-lock braking systems.
- There could have been classes in diesel technology (there weren't any), because I'm now fixing heavy trucks and earth-moving equipment.
- They could have broadened the program to involve diesel repair.
- They could have had more instruction in computer controls.

More work together as a class/Less individual work/More structure (7 responses)

- A little more involved as a class instead of individuals in the lab.
- A more strictly structured schedule: have all the students working on the same subject or project until they all "get it" before moving on to a new subject.
- More teaching, more class time.
- Some instructors were more organized than others. I think they should add more classroom time and have more structure in the class (as opposed to the instructor having the students go out into the garage and work on something).
- Sometimes we ran out of things to do, because we were just working on our own cars. Or too many of us were bunched up on one car.
- The classroom study was very good, but the lab part wasn't structured well (We were just set loose to do whatever we wanted.)
- It could have had more "theoretical" instruction (I took the manual-transmission and axle-repair class) besides the hands-on work.

Smaller Class Sizes (2 responses)

- Less students per class.
- The only problem: not enough garage space to work on the vehicles. As more students joined the program, it got quite congested.

Longer Classes (2 responses)

- Maybe longer classes; there is so much to learn. I took the automatic transmissions class twice, just because there are so many different kinds (of transmissions).
- Though I'm not in the servicing area, I'd say either the amount of course content should be decreased or the total course time should be lengthened.

Other Suggestions (7 responses)

- During "shop time", they should have a car purposely disabled by the teacher, and assign students to diagnose and fix it.
- They could start a program (like other schools) of helping students obtain appropriate tools at discount from manufacturer. They could start co-op program w/ area employers. As students finish 1 term, OCC could ask state to come & conduct exams on campus.
- To actually work on cars. (For the Brakes class, we had to work on only our own cars. I didn't like the teacher.)
- A little more hands-on experience at a cooperating employer in the field.
- It could have been more in depth; they could have gotten into it even more.
- Basically, learn more about cars.
- I would have preferred (especially in troubleshooting) to get more hands-on experience during the course.

Miscellaneous Comments (6 responses)

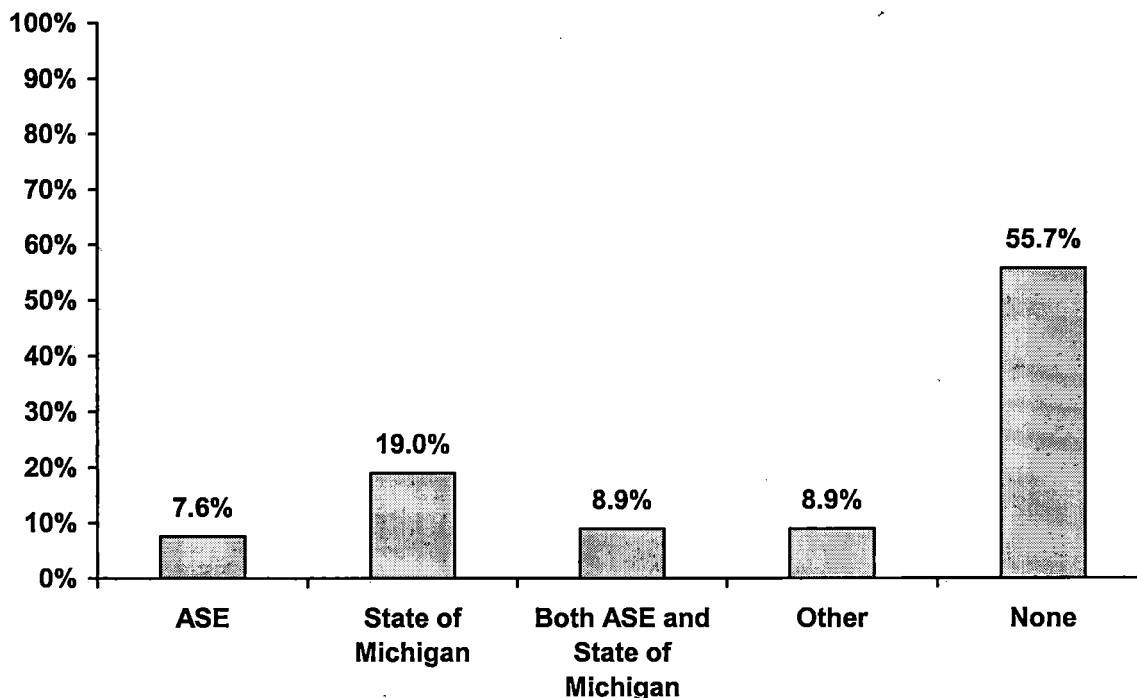
- I don't know how to answer that.
- I don't know.
- The instructors were very informational.
- There are so many ways; it's hard to explain.
- There was one instructor that I didn't feel was qualified, but he is no longer there.
- This is non-applicable because I am an engineer.

Verbatim Responses Among Students Who Felt "Somewhat Unprepared" Or "Not At All Prepared" For Their Current Position By OCC Courses

- More hands-on experience; meet people working in the industry; explain what the job really entails; explain the pay scale for people in the industry; explain personal investment (\$) mechanics must make – tools; shop safety – all courses; tell students to sign up for exam in advance; prepare students for independent (foreign auto) shops; expose students to auto alignment rack.
- More theory in the classroom. What we had led to very unorganized shop times.
- No suggestion (no answer, could not get any opinion).
- During the hands-on time, they just let us do whatever we wanted to do. There was just one instructor and there just wasn't enough help or direction. And there wasn't ANY lecture instruction.
- The whole program should be upgraded. It seemed like they were intending to shut it down: no money, no supplies. The painting class was more of a hobby thing. Sometimes the teacher didn't show up. I was really mad about it.
- Instead of just videos, the teachers should have done more hands-on, showing how a component works, what can go wrong and how to fix it.
- The classes should have been smaller, so the teacher could have worked more one-on-one with the students. I saw many students making mistakes, but the teacher wasn't around.

Table 8: Type of Certification/Licensing Required for Current Position

Question 8: What type of certification or licensing is required for your current position? (N=79)

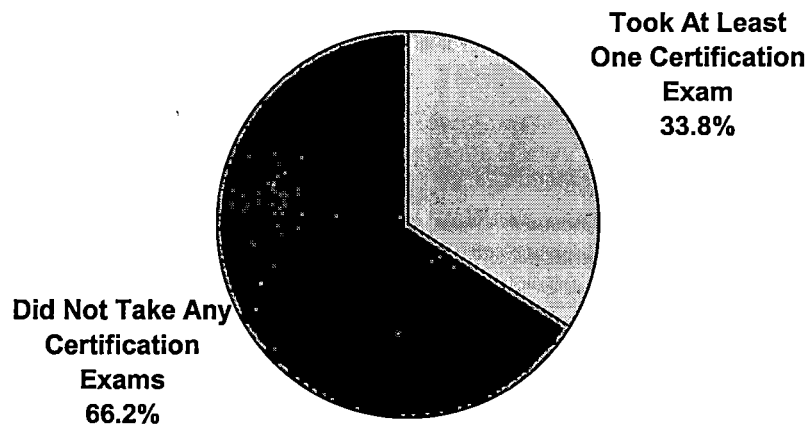


Summary: Among respondents employed in the industry, more than half (55.7%) were employed in positions for which certification was not required. Nineteen percent (19.0%) worked in positions that only required some type of mechanics certification from the State of Michigan, and an additional 8.9% worked in positions that required both ASE and State of Michigan certification.

- Responses in the "other" category included associate degrees, bachelor degrees, licensed driver, on-the-job training, and trainee permit.

Table 9: Percent of Current and Former OCC Students Who Took ASE and/or State of Michigan Exams

Percent of Former and Current Students Who Took Any ASE and/or State of Michigan Mechanics Certification Exams (N=207)



Summary: Seventy (70) students took at least one ASE or State of Michigan Mechanic Certification exam, accounting for 33.8% of all respondents in the study.

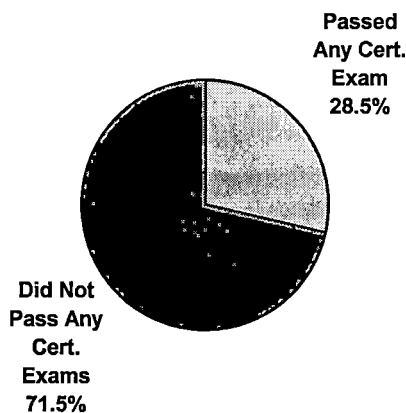
	Not Currently Employed in Industry	Currently Employed In Industry	Total
<i>Base – ALL Respondents (N):</i>	127	79	206
Did NOT Take ASE or Michigan Certification Exam	77.2%*	48.1%*	66.0%
Took Any ASE or Michigan Certification Exam	22.8%*	51.9%*	34.0%
Total	100.0%	100.0%	100.0%

* Statistically significant differences by employment in the industry at a 95% level of confidence.

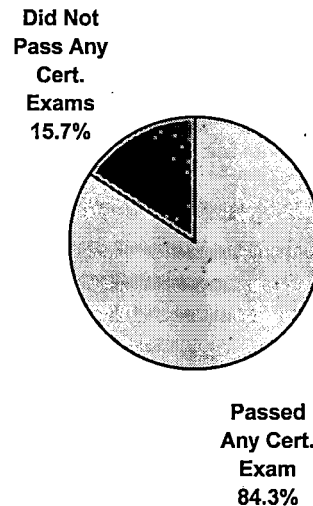
Summary: As expected, respondents who were employed in the industry were more likely to have taken an ASE or Michigan certification exam.

Table 10: Percent of Current and Former OCC Students Who Passed At Least One ASE and/or State of Michigan Exams

Percent of All Respondents Who Passed Any ASE and/or State of Michigan Mechanics Certification Exams (N=207)



Percent Who Passed Any ASE and/or State of Michigan Mechanics Certification Exams Among Those Who Took an Exam (N=70)



Summary: A total of 59 students passed at least one ASE or State of Michigan exam. These 59 former or current students accounted for 28.5% of *all* respondents in the study, and 84.3% of respondents who *took at least one exam*.

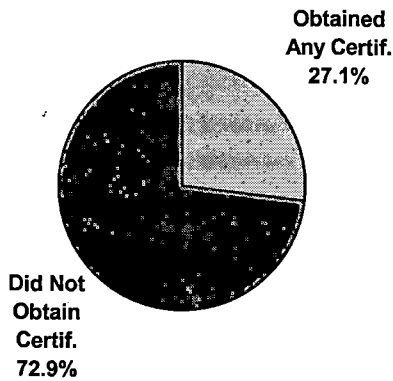
	Not Currently Employed in Industry	Currently Employed In Industry	Total
<i>Base – All Respondents Who Took At Least One Exam (N):</i>	29	41	70
Did NOT Pass ASE or Michigan Certification Exam	31.0%*	4.9%*	15.7%
Passed Any ASE or Michigan Certification Exam	69.0%*	95.1%*	84.3%
Total	100.0%	100.0%	100.0%

* Statistically significant differences by employment in the industry at a 95% level of confidence.

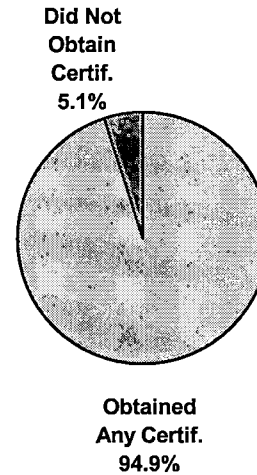
Summary: Among all respondents who took at least one exam, those who were currently employed in the industry were more likely than those not employed in the industry to have passed the exam.

Table 11: Percent of OCC Students Who Obtained Any ASE and/or State of Michigan Mechanics Certification

*Percent of **All** Respondents Who Obtained Any ASE and/or State of Michigan Mechanics Certification (N=207)*



Percent Who Obtained Any ASE and/or State of Michigan Mechanics Certification Among Those Who Passed an Exam (N=59)



Summary: Fifty-six (56) respondents obtained ASE and/or State of Michigan certification in at least one area. This group represented 27.1% of *all* respondents, and 94.9% of respondents who had passed a certification exam.

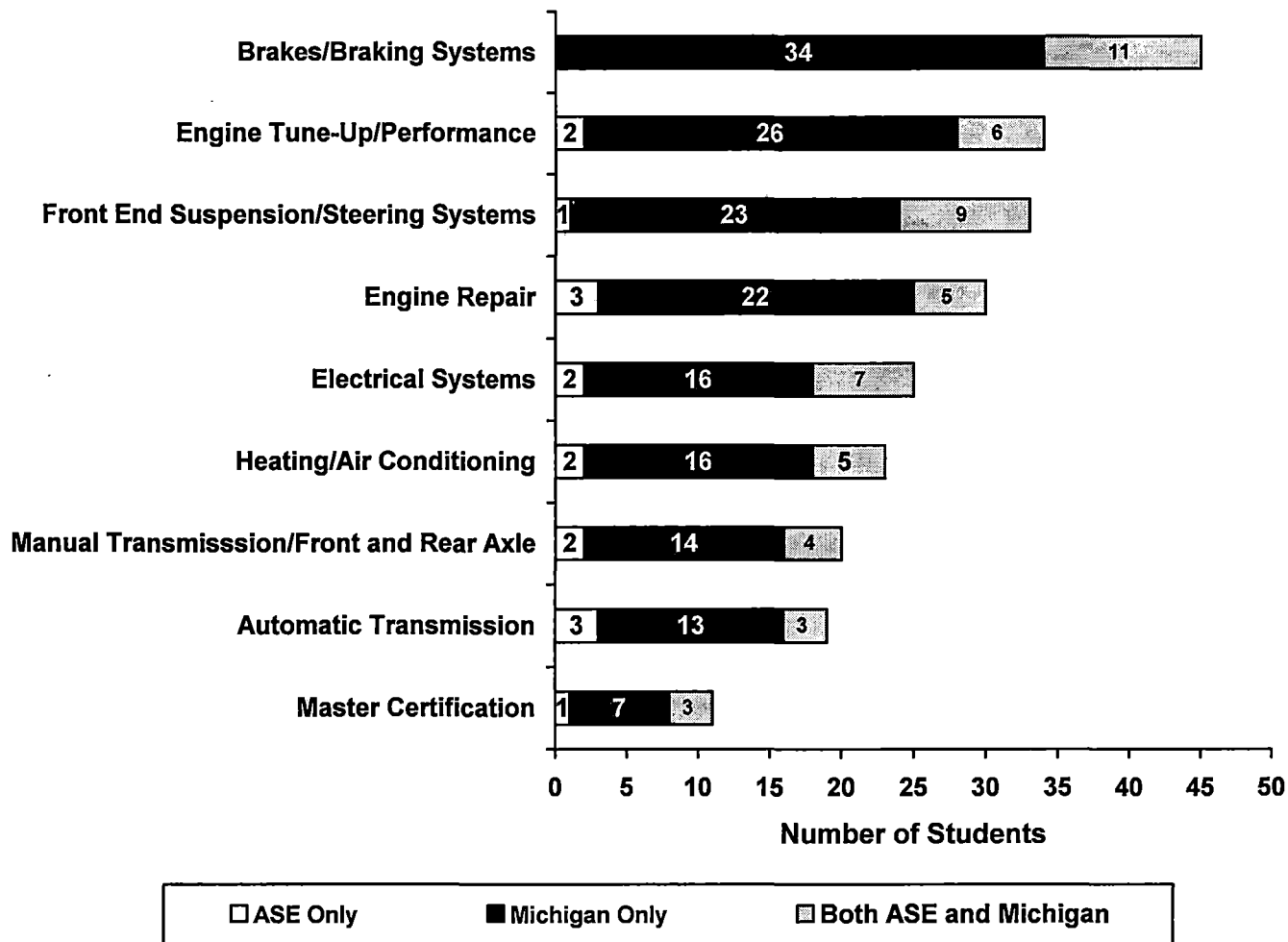
	Not Currently Employed in Industry	Currently Employed In Industry	Total
<i>Base – All Respondents Who Passed At Least One Exam (N):</i>	20	39	59
Did NOT Obtain ASE or Michigan Certification	10.0%	2.6%	5.1%
Obtained Any ASE or Michigan Certification	90.0%	97.4%	94.9%
Total	100.0%	100.0%	100.0%

Summary: Nearly all of the respondents who passed the exam obtained certification, regardless of employment in the industry.

Table 12: Exams Taken by Topic Area

Number of Students Who Took Automobile Certification Exams

Total Number of Test Takers = 70



Note: When added together for each topic area, the total exceeds the total number of respondents who took any test (70), as several respondents took multiple exams.

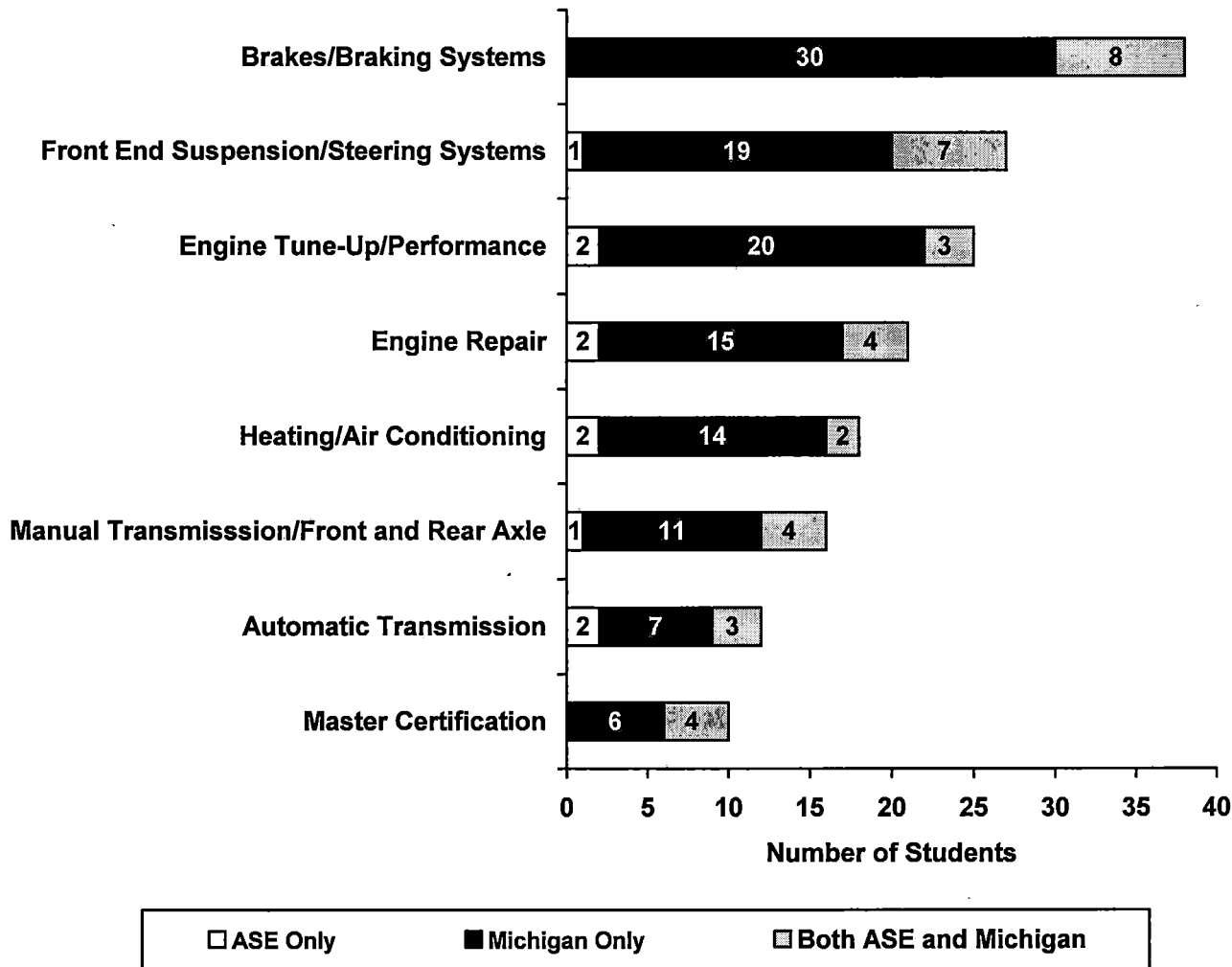
Summary: The exam for Brakes and Braking Systems was the exam most often taken by OCC former and current students, with 45 students taking the test. Thirty-four (34) students took the State of Michigan exam for Brakes and Braking Systems, and an additional 11 respondents took both the ASE and the Michigan exam.

Thirty-four (34) students took the Engine Tune-Up/Performance exam, with 26 taking only the State of Michigan exam, 2 taking only the ASE exam, and 6 taking both the Michigan and ASE exams.

Table 13: Exams Passed by Topic Area

Number of Students Who Passed Automobile Certification Exams

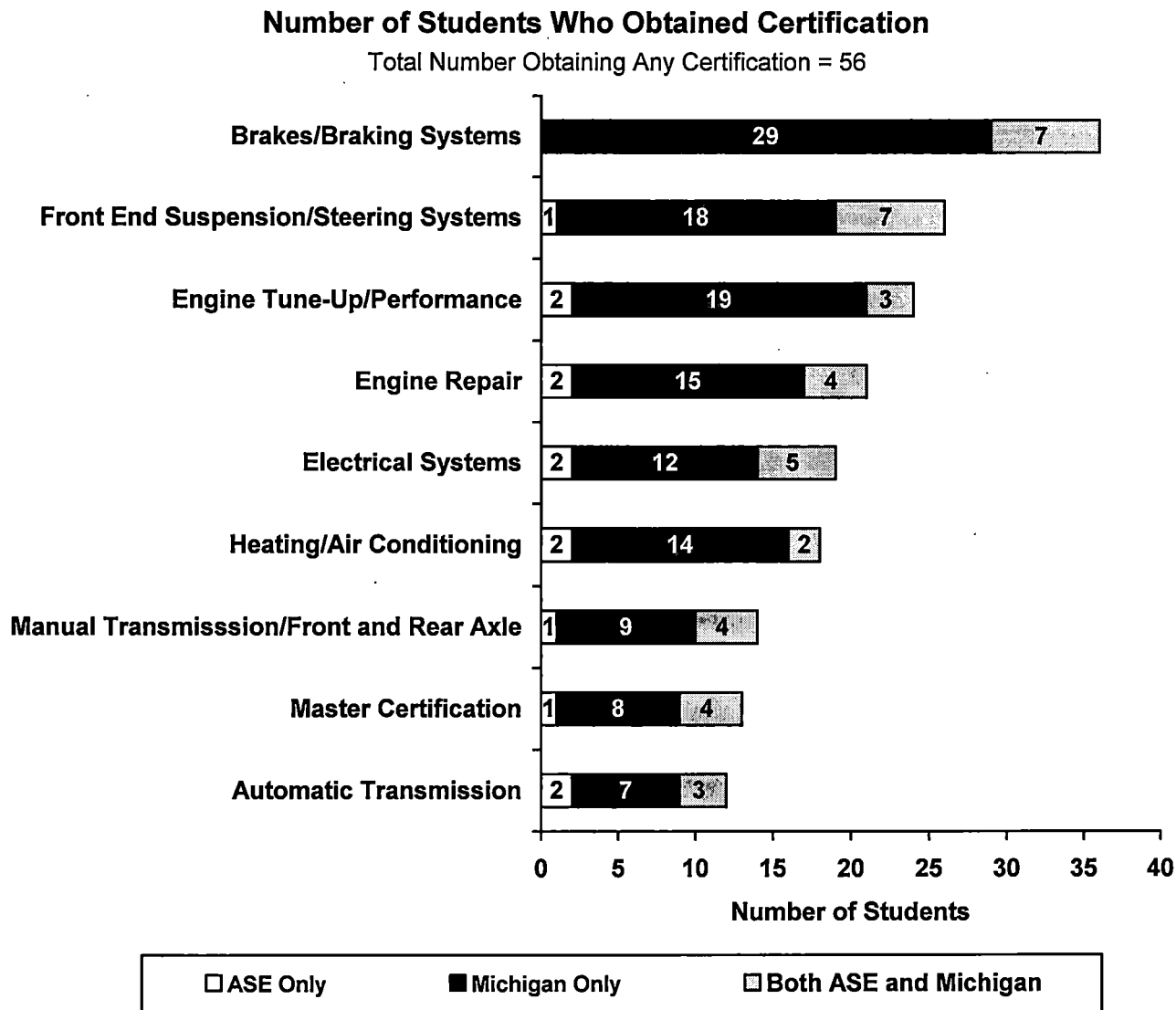
Total Number Passed Any Exam = 59



Note: When added together for each topic area, the total exceeds the total number of respondents who passed any test (59), as several respondents passed multiple exams.

Summary: Thirty (30) students passed only the State of Michigan exam for Brakes and Braking Systems, and an additional eight (8) students passed both the Michigan and ASE exams.

Table 14: Certifications Obtained by Topic Area



Note: When added together for each topic area, the total exceeds the total number of respondents who obtained any certification (56), as several respondents obtained certification in multiple areas.

Summary: Thirteen (13) respondents had obtained master certification; eight (8) were certified by the State of Michigan, one (1) was ASE-certified, and four (4) were certified by both Michigan and ASE.

Tables 15a – 15i: Exams and Certification by Topic Area

Table 15a

Master Mechanic Certification			
	Took Exams	Passed Exams	Obtained Certification*
<i>Base - Number Answering Question (N):</i>	70	13	14
ASE Certification Only	1.4%	0.0%	7.1%
State of Michigan Certification Only	10.0%	46.2%	57.1%
Both ASE and State of Michigan	4.3%	30.8%	28.6%
Neither	84.3%	15.4%	7.1%
Don't Know		7.7%	
Total	100.0%	100.1%	99.9%

* Note: The base for this question contains one respondent who did not indicate that he passed the exams when asked specifically about Masters Certification, but he listed all of the exams he passed individually, and indicated that he does indeed have Master Mechanic Certification. Therefore the base for the number who obtained Master certification exceeds the base for the number who passed the exams.

Table 15b

Engine Repair Certification			
	Took Exams	Passed Exams	Obtained Certification
<i>Base - Number Answering Question (N):</i>	63	30	21
ASE Certification Only	4.8%	6.7%	9.5%
State of Michigan Certification Only	34.9%	50.0%	71.4%
Both ASE and State of Michigan	7.9%	13.3%	19.0%
Neither	52.4%	13.3%	
Don't Know		16.7%	
Total	100.0%	100.0%	99.9%

Table 15c

Automatic Transmission Certification			
	Took Exams	Passed Exams	Obtained Certification
<i>Base - Number Answering Question (N):</i>	63	19	13
ASE Certification Only	4.8%	10.5%	15.4%
State of Michigan Certification Only	20.6%	36.8%	53.8%
Both ASE and State of Michigan	4.8%	15.8%	23.1%
Neither	69.8%	21.1%	7.7%
Don't Know		15.8%	
Total	100.0%	100.0%	100.0%

Table 15d

Manual Transmission, Front Axle, Rear Axle Certification			
	Took Exams	Passed Exams	Obtained Certification
<i>Base - Number Answering Question (N):</i>	63	20	16
ASE Certification Only	3.2%	5.0%	6.3%
State of Michigan Certification Only	22.2%	55.0%	56.3%
Both ASE and State of Michigan	6.3%	20.0%	25.0%
Neither	68.3%	10.0%	12.5%
Don't Know		10.0%	
Total	100.0%	100.0%	100.1%

Table 15e

Front End Suspension and Steering Systems Certification			
	Took Exams	Passed Exams	Obtained Certification
<i>Base - Number Answering Question (N):</i>	63	33	27
ASE Certification Only	1.6%	3.0%	3.7%
State of Michigan Certification Only	36.5%	57.6%	66.7%
Both ASE and State of Michigan	14.3%	21.2%	25.9%
Neither	47.6%	6.1%	3.7%
Don't Know		12.1%	
Total	100.0%	100.0%	100.0%

Table 15f

Brakes and Braking Systems Certification			
	Took Exams	Passed Exams	Obtained Certification
<i>Base - Number Answering Question (N):</i>	63	45	39
ASE Certification Only	0.0%	0.0%	0.0%
State of Michigan Certification Only	54.0%	66.7%	74.4%
Both ASE and State of Michigan	17.5%	17.8%	17.9%
Neither	28.6%	8.9%	7.7%
Don't Know		6.7%	
Total	100.1%	100.1%	100.0%

Table 15g

Electrical Systems Certification			
	Took Exams	Passed Exams	Obtained Certification
<i>Base - Number Answering Question (N):</i>	62	25	20
ASE Certification Only	3.2%	8.0%	10.0%
State of Michigan Certification Only	25.8%	48.0%	60.0%
Both ASE and State of Michigan	11.3%	20.0%	25.0%
Neither	59.7%	20.0%	5.0%
Don't Know		4.0%	
Total	100.0%	100.0%	100.0%

Table 15h

Heating and Air Conditioning Systems Certification			
	Took Exams	Passed Exams	Obtained Certification
<i>Base - Number Answering Question (N):</i>	63	23	20
ASE Certification Only	3.2%	8.7%	10.0%
State of Michigan Certification Only	25.4%	60.9%	70.0%
Both ASE and State of Michigan	7.9%	8.7%	10.0%
Neither	63.5%	13.0%	10.0%
Don't Know		8.7%	
Total	100.0%	100.0%	100.0%

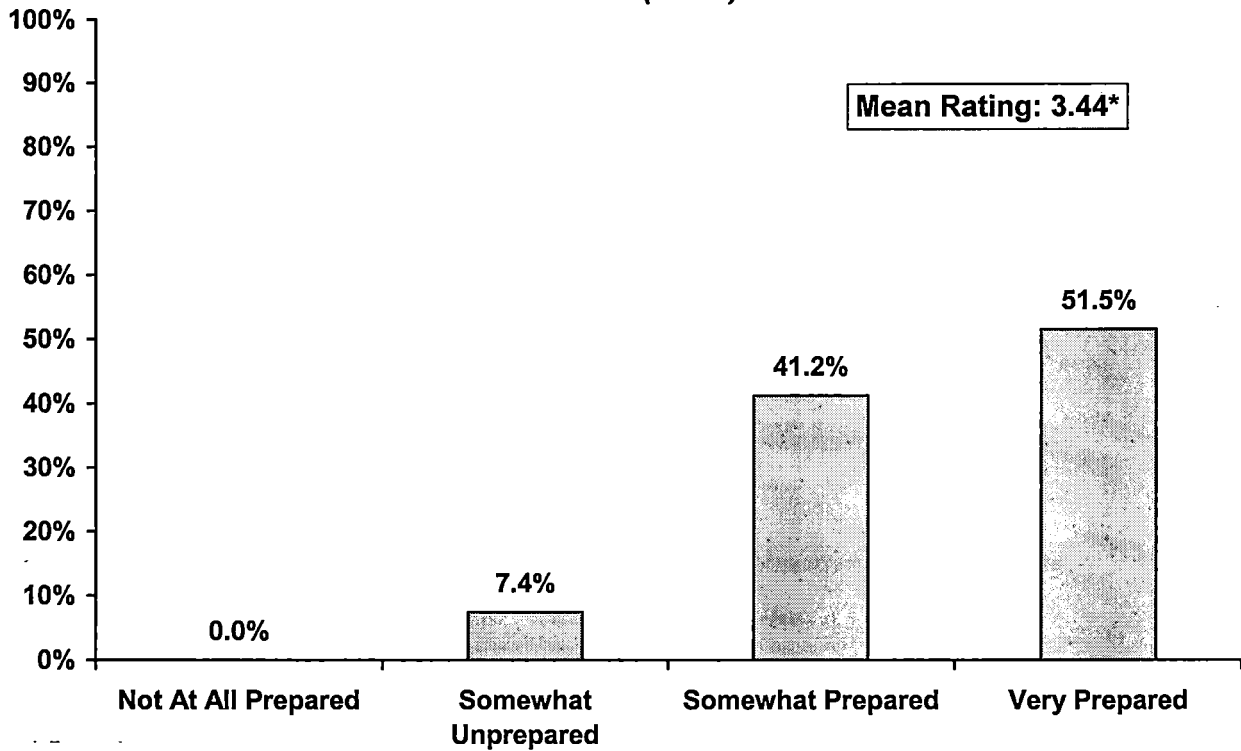
Table 15i

Engine Tune-Up/Performance Systems Certification			
	Took Exams	Passed Exams	Obtained Certification
<i>Base - Number Answering Question (N):</i>	62	34	26
ASE Certification Only	3.2%	5.9%	7.7%
State of Michigan Certification Only	41.9%	58.8%	73.1%
Both ASE and State of Michigan	9.7%	8.8%	11.5%
Neither	45.2%	17.6%	7.7%
Don't Know		8.8%	
Total	100.0%	99.9%	100.0%

Summary: The topic areas in which exam takers were most successful (i.e., passed the exam) included Brakes and Braking Systems, and Front End Suspension and Steering Systems. The topic areas where the lowest percentage of test takers passed included Automatic Transmission and Engine Repair.

Table 16: Ratings – Extent to Which OCC Prepared Students for Exam(s)

Question 13: To what extent do you feel that the Automobile Servicing and Technology program prepared you for the exams? (N=68)



Summary: Most (92.7%) respondents felt somewhat or very prepared for the certification exam(s) after taking OCC's Automobile Servicing courses.

APPENDIX ONE:

**Raw Counts of Respondents Who Took Exams, Passed Exams,
and Obtained Certification by Topic Area**

Number of Former and Current OCC Students Who TOOK Certification Exams by Topic Area						
	ASE Only	State of Michigan Only	Both ASE and Michigan	Total Taking Any Exam	Total ASE (ASE + Both)	Total Michigan (MI + Both)
Master Certification	1	7	3	11	4	10
Engine Repair	3	22	5	30	8	27
Automatic Transmission	3	13	3	19	6	16
Manual Transmission, Front Axle and Rear Axle	2	14	4	20	6	18
Front End Suspension and Steering Systems	1	23	9	33	10	32
Brakes and Braking Systems	0	34	11	34	11	45
Electrical Systems	2	16	7	25	9	23
Heating and Air Conditioning	2	16	5	23	7	21
Engine Tune-Up/Performance	2	26	6	34	8	32

Number of Former and Current OCC Students Who PASSED Certification Exams by Topic Area						
	ASE Only	State of Michigan Only	Both ASE and Michigan	Total Passing Any Exam	Total ASE (ASE + Both)	Total Michigan (MI + Both)
Master Certification	0	6	4	10	4	10
Engine Repair	2	15	4	21	6	19
Automatic Transmission	2	7	3	12	5	10
Manual Transmission, Front Axle and Rear Axle	1	11	4	16	5	15
Front End Suspension and Steering Systems	1	19	7	27	8	26
Brakes and Braking Systems	0	30	8	38	8	38
Electrical Systems	2	12	5	19	7	17
Heating and Air Conditioning	2	14	2	18	4	16
Engine Tune-Up/Performance	2	20	3	25	5	23

Number of Former and Current OCC Students Who OBTAINED Certification by Topic Area						
	ASE Only	State of Michigan Only	Both ASE and Michigan	Total Obtained Any Certification	Total ASE (ASE + Both)	Total Michigan (MI + Both)
Master Certification	1	8	4	13	5	12
Engine Repair	2	15	4	21	6	19
Automatic Transmission	2	7	3	12	5	10
Manual Transmission, Front Axle and Rear Axle	1	9	4	14	5	13
Front End Suspension and Steering Systems	1	18	7	26	8	25
Brakes and Braking Systems	0	29	7	36	7	36
Electrical Systems	2	12	5	19	7	17
Heating and Air Conditioning	2	14	2	18	4	16
Engine Tune-Up/Performance	2	19	3	24	5	22

Appendix Two:
Survey Instrument

Survey No. _____

Automobile Servicing & Technology Programs Survey

Place Label Here

Interviewer Name: _____

Date: _____

Hello, my name is _____, and I am calling from the Office of Institutional Research at Oakland Community College. This call may be monitored for quality and training purposes. Today, we are contacting current and former OCC students who have completed Automobile Servicing Courses at OCC.

We are conducting a brief survey regarding OCC's Automotive Servicing and Technology program. The information that we collect today is strictly confidential, and will be used to improve current OCC programs.

For verification purposes, have you taken any Automobile Servicing or Technology Courses at Oakland Community College in the past?

- 1 Yes ***(GO TO FIRST QUESTION)***
- 0 No ***(THANK AND END INTERVIEW)***

1. Are you currently employed in a position related to Automobile Servicing or Automotive Engineering Technology?

- 1 Yes **(CONTINUE)**
- 0 No **(SKIP TO QUESTION 9 ON PAGE 4)**
- 99 **(DON'T READ)** Refused **(THANK AND END INTERVIEW.)**

2. How long have you been employed in this industry? **(READ LIST)**

- 1 Less than one year
- 2 1 – 2 years
- 3 3 – 4 years
- 4 5 or more years
- 99 **(DON'T READ)** Refused

3. For what type of organization do you currently work? **(READ LIST. CHECK ALL THAT APPLY.)**

- 1 Automobile Dealership
- 2 Automobile Manufacturer
- 3 Automotive Repair Shop
- 4 Municipality
- 5 Self-Employed
- 6 Other _____
- 99 **(DON'T READ)** Refused

4. What is your current job title? _____

5. To what extent do you feel that the Automobile Servicing course(s) that you took at OCC prepared you for employment in the industry? Would you say that you felt ... **(READ LIST)**

- 1 Not at all prepared
- 2 Somewhat unprepared
- 3 Somewhat prepared
- 4 Very prepared
- 99 **(DON'T READ)** Refused

6. How were the courses helpful in preparing you for your present employment? _____

7. In what ways could the program have better prepared you for your current or future automotive position? _____

8. What type of certification or licensing is required for your current position? **(READ LIST. CIRCLE ALL THAT APPLY.)**

- 1 ASE
- 2 State of Michigan
- 3 None
- 4 Other _____
- 99 **(DON'T READ)** Refused

INTERVIEWER: IF RESPONDENT ANSWERED "ASE" AND/OR "STATE OF MICHIGAN" IN QUESTION 8, SKIP TO PAGE 5.

9. Have you taken any ASE or State of Michigan mechanic certification exams?

- 1 Yes **(CONTINUE)**
- 0 No **(IF RESPONDENT ANSWERED "NO," THANK AND END INTERVIEW)**
- 99 **(DON'T READ)** Refused **(THANK AND END INTERVIEW)**

Next, I am going to read a list of categories pertaining to Automobile and Light Truck Repair in which ASE and the State of Michigan offer exams. For each of the following categories, we would like to know if you have taken the ASE exam, the State of Michigan exam, both, or neither. **(PLEASE CIRCLE THE RESPONSES FOR WHICH EXAMS THE RESPONDENT TOOK. ONLY FOR THE EXAMS THAT THEY ACTUALLY TOOK, ASK IF THEY PASSED AND IF THEY OBTAINED CERTIFICATION.)**

	For...	10. Have you taken the ASE Exam, the Michigan Exam, Both, or Neither? (IF ANSWERED 1, 2, OR 3, ASK QUESTION 11 FOR THAT ITEM. IF NOT, SKIP TO NEXT AREA AND ASK IF HAVE TAKEN EXAM FOR THAT AREA.)					11. Did you pass? (PLEASE ENTER 1 FOR ASE, 2 FOR MICHIGAN, 3 FOR BOTH 4 FOR NONE 88 FOR DON'T KNOW 99 FOR REFUSED)	12. Have you obtained licensing or certification in this area? (PLEASE ENTER 1 FOR ASE, 2 FOR MICH, 3 FOR BOTH, 4 FOR NONE)
a.	Master Certification for Automobiles and Light Trucks	1 ASE	2 Michigan	3 Both	4 None	99 DK/Ref.		IF 1, 2, OR 3 FOR Q.11 OR Q.12, THEN ENTER RESPONSE HERE AND SKIP TO Q. 13 ON PAGE 6.
b.	Engine Repair	1 ASE	2 Michigan	3 Both	4 None	99 DK/Ref.		
c.	Automatic Transmission	1 ASE	2 Michigan	3 Both	4 None	99 DK/Ref.		
d.	Manual Transmission, Front and Rear Drive Axle	1 ASE	2 Michigan	3 Both	4 None	99 DK/Ref.		
e.	Front End, Suspension and Steering Systems	1 ASE	2 Michigan	3 Both	4 None	99 DK/Ref.		
f.	Brakes and Braking Systems	1 ASE	2 Michigan	3 Both	4 None	99 DK/Ref.		
g.	Electrical Systems	1 ASE	2 Michigan	3 Both	4 None	99 DK/Ref.		
h.	Heating and Air Conditioning	1 ASE	2 Michigan	3 Both	4 None	99 DK/Ref.		
i.	Engine Tune-Up/Performance	1 ASE	2 Michigan	3 Both	4 None	99 DK/Ref.		
j.	Other	1 ASE	2 Michigan	3 Both	4 None	99 DK/Ref.		
k.	Other	1 ASE	2 Michigan	3 Both	4 None	99 DK/Ref.		
l.	Other	1 ASE	2 Michigan	3 Both	4 None	99 DK/Ref.		

13. To what extent do you feel that OCC's Automobile Servicing and Technology program prepared you for the exam(s)? Would you say that you felt...**(READ LIST)**

- 1 Not at all prepared
- 2 Somewhat unprepared
- 3 Somewhat prepared
- 4 Very prepared
- 99 **(DON'T READ)** Refused

That's all the questions that I have for you today. I would like to thank you very much for your time.