



Student Learning Outcomes for AUTO 93C

Automatic Transmissions

Team Members:

Team Leader:

[Rick Maynard](#) (8704) in AUTO

Other members:

1. [John Walton](#) (x8508) AUTO
2. [Pete Vernazza](#) (x8216) AUTO
3. [Dave Capitolo](#) (x8312) AUTO
4. [Phil Green](#) (x8376) AUTO
5. [Randy Bryant](#) (x8840) AUTO
6. [Rick Maynard](#) (x8704) AUTO

Additional team members/notes about team:

Rick Maynard, Dave Capitolo, Pete Vernazza, John Walton, Randy Bryant, Phil Green, Mike Brandt,

Additional Notes:

Outcomes:

Outcome 1 Phase I: Statement

The student will be able to describe in an essay form, the function of an automatic transmission torque converter. They must show a knowledge of the components and their function as well as an understanding of the relationship between them. A description of what each component does during acceleration, cruise, and converter lock up must be included.

Outcome 1 Phase II: Assessment Strategy Used:

Assessment Quarter: Spring 2009

Assessors: Rick Maynard

Assessment Tools:

Outcome 1 Phase III: Reflect & Enhance

Number of people involved in Phase III: 1

Changes:

Methods:

Written essay

Findings and Conclusions:

Outcome used: The understanding of the components and their operation inside of a torque converter. Assessment used: I chose a written essay. The students were informed 3 weeks prior to the assignment being handed out. They were given 6 days to complete the essay after being given the actual assignment. Only 1 student did not turn in a paper.

Results: As with most forms of grading, there were no big surprises. The students who did well all year did well again. The students who struggled all year did not do as well. The result is very little change in the grades. The overall quality of the papers was very poor. Many did not even put their names on them. I did feel the knowledge of topic was covered well and they knew how a converter worked, but most had no idea how to write an essay paper. Rick Maynard Auto Tech 29 June 09

Enhancement (Planned Actions)**Part I:**

I am satisfied with the students understanding of the operation of a torque converter. Enhancements will focus on the ability to write a college level paper.

Part II:

No additional resources are needed.

Outcome 2 Phase I: Statement

The student will completely disassemble an automatic transmission and then reassemble the same unit replacing any needed parts. The transmission will then have to function as designed on the transmission dynamometer in the shop.

Outcome 2 Phase II: Assessment Strategy Used:

Assessment Quarter: Spring 2010

Assessors: Rick Maynard

Assessment Tools:

Outcome 2 Phase III: Reflect & Enhance

Number of people involved in Phase III: 1

Changes:

Methods:

The students were to work in teams of 3-4 to mount the transmissions that they had rebuilt on the dyno mometer for testing. The transmission should shift through all of the available gears with the proper hydraulic pressures.

Findings and Conclusions:

The results were very poor. The machine used to test the transmission is very old and unsafe. There are no directions to operate the machine for transmissions built after 1984. This is a very important part of the learning process and the students all look forward to the challenge. The machine broke after 2/3 of the students were done and there is no money left for repairs.

Enhancement (Planned Actions)**Part I:**

This SLO shows that the student can actually perform the job that I am training them for. I would like to continue this but may not be able to due to budget shortfalls.

Part II:

A new transmission dynamometer is needed that will accept newer transmissions and can be operated safely and effectively. The will cost and \$100,000.00 dollars to purchase install and train faculty in its operation.

SLO Created: 01/25/2010 Last Modified: 07/05/2011