Knowing Your Assets: Navigating Best Practices Through an Exemplary Case Study Focused on an Automotive Technology Associate Degree Program

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Agenda

- Introduction and purpose
- Literature review
- Conceptual framework
- Methods
- Thematic findings
- Discussion
- Implications
Introduction and Purpose

• The purpose of this paper is to profile stories that emerged during site visits from four exemplary automotive technology associate degree programs at community colleges.

• What are the consequential best practices that contributed to the success of these students who participated in this automotive technical program across these four colleges?
Research on workforce training and development at community colleges is vital for addressing labor market demands (Dikhtyar et al., 2021; Myran & Ivery, 2013; O’Banion, 2019).

The demand for skilled automotive technicians has been on the rise due to advancements in vehicle technology (Chigbu & Nekhwevha, 2021) and an aging workforce (Toossi, 2015).

Community colleges, vocational schools, and automotive training programs play a critical role in preparing individuals for careers as automotive technicians (Haviland & Robbins, 2021).

Collaboration between educational institutions, government agencies, and private sector organizations can lead to targeted workforce development initiatives with local and regional significance (Weissman, 2022).
This scholarly discourse delves into three key factors related to student success at community colleges:

- Faculty-student interactions
- Academic curriculum and learning styles
- Financial barriers
Conceptual Framework

• Anti-Deficit Achievement Framework (Harper, 2010)
• Social constructivism (Creswell & Poth, 2018; Daiute, 2014; Moen, 2006; Schwandt, 2015)
Methods

• Stake’s case study methodology (1995, 2005)

• Single exemplary case study (Flyvbjerg, 2011)

Adapted from Yin (2018)
Sampling and Participants

122 people

105 students
- 95 men
- 6 women
- 4 no response
- 51 Latine
- 29 white
- 15 multi-racial

17 faculty & staff
- 13 men
- 4 women
Participants by Race/Ethnicity

- American Indian/Alaskan
- Asian
- Black/African American
- Latino/a/x or Hispanic
- White/Caucasian American
- Another Race
- More than one race
- Prefer not to answer or missing

Note: n = 105
Data Analysis


• Used iterative and recursive processes for ongoing analysis and interpretation of our data (Janesick, 1994)

• Sought additional data (specifically via interviews) until we reached the point of saturation (Creswell & Poth, 2018)

• Discussed our interpretations and perspectives during research team meetings

→ Best practices emerged from our collective meaning-making process, executed by understanding participants' experiences through triangulation and member checking, and subsequently, increasing our confidence in the robustness of our findings (Lincoln & Guba, 1986; Patton, 1999).
Thematic Findings

We identified three themes of best practices

- Strong faculty involvement
- Curricular alignment and relevance
- Reducing financial burdens for students through paid internships
Strong Faculty Involvement

[The instructor] has been very helpful...he has a really good attitude. He’s someone who cares about the program. He’s someone who’d been in the field and has experienced it and worked in it. He’s trying to give us a good foundation. He’s been a very integral part of this.

When we were doing electrical, some of us came in here on a Friday, and [the instructor] was here to help us. I came last Friday, because I wanted to learn about the parts of some other engines that we weren’t able to get to in this section.
We [faculty] encourage the cohorts to enroll in intro to psychology and think of it as a class to help them understand people’s behaviors...other employees or their customers’ [behaviors].
Reducing Financial Burdens for Student Through Paid Internships

The reason why I enrolled—why most of did—was because of the paid internship at the dealership. I mean, we get a decent hourly rate to work on cars and work with technicians who do the work we want to be doing....what do I use my salary for? To pay rent, to live, to take my girlfriend out, to come to school.
Discussion

Strong faculty involvement
Curricular alignment and relevance
Reducing financial burdens for students through paid internships
Implications

Research:

The Anti-Deficit Achievement Framework (Harper, 2010) utilized in this study provides a theoretical foundation that can be applied to other programs looking to better understand the factors contributing to student success from an asset-based approach.

Practice:

The exemplary practices identified in this study can be used as a blueprint for other community college automotive technology programs seeking to improve their retention, graduation, and workplace employment outcomes.
References


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