

## Educational Relevance, Competencies, and Career Paths: A Tracer Study of Automotive Technology Graduates Towards Curriculum Design

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**Abstract: Educational Relevance, Competencies, and Career Paths: A Tracer Study of Automotive Technology Graduates Towards Curriculum Design. Objective:** this study explore the graduates of Automotive Technology from the year 2015 to 2020 which identifies the educational relevance, competencies, and career paths towards the designing of curriculum. **Methods:** The researchers employed descriptive research design and random sampling technique for collecting necessary information. A total of 113 respondents out of 164 graduates solicited responses through google form utilizing adapted survey questionnaire. **Findings:** The results revealed that most of the respondents agreed that their jobs related to their chosen courses. The graduates' also acquired competencies or skills extremely important to work performance. Additionally, for productive and professional interactions, communication and interpersonal skills are stood up among others. In terms of career paths, graduates impacted by the skills they learned in college and how relevant they believe their course work to be to their jobs. **Conclusion:** Graduates who believe their education and employment are closely related may be more inclined to choose jobs.

**Keywords:** tracer study, curriculum design, career paths, competencies, educational relevance.

**Abstrak: Relevansi Pendidikan, Kompetensi, dan Jalur Karir: Tracer Study Lulusan Teknologi Otomotif Terhadap Perancangan Kurikulum. Tujuan:** penelitian ini mengeksplorasi lulusan Teknologi Otomotif dari tahun 2015 hingga 2020 yang mengidentifikasi relevansi pendidikan, kompetensi, dan jalur karir terhadap perancangan kurikulum. **Metode:** Para peneliti menggunakan desain penelitian deskriptif dan teknik random sampling untuk mengumpulkan informasi yang diperlukan. Sebanyak 113 responden dari 164 lulusan meminta tanggapan melalui google form menggunakan kuesioner survei yang disesuaikan. **Temuan:** Hasil penelitian menunjukkan bahwa sebagian besar responden setuju bahwa pekerjaan mereka berhubungan dengan program studi yang mereka pilih. Lulusan juga memperoleh kompetensi atau keterampilan yang sangat penting untuk prestasi kerja. Selain itu, untuk interaksi yang produktif dan profesional, keterampilan komunikasi dan interpersonal diutamakan. Dalam hal jalur karier, para lulusan dipengaruhi oleh keterampilan yang mereka pelajari di perguruan tinggi dan seberapa relevan mereka yakin bahwa mata kuliah yang mereka ambil berkaitan dengan pekerjaan mereka. **Kesimpulan:** Lulusan yang percaya bahwa pendidikan dan pekerjaan mereka berkaitan erat mungkin lebih cenderung memilih pekerjaan.

**Kata kunci:** studi pelacakan, desain kurikulum, jalur karir, kompetensi, relevansi pendidikan.

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## ■ INTRODUCTION

There are substantial changes, expectations, and obstacles in the globe. In addition, graduates of higher education institutions play an essential role in society as conscientious persons and productive members of society. Tracer Study is categorized as a retrospectively data study that measures the condition of graduates using a standardized and validated survey. In particular, Gines (2014) argues that tracer study would be an impactful tool that identifies the attributes of employment, the changeover to employment, and also the degree of graduate fulfillment in a specified curriculum or program. It also serves as one of the desired characteristics for determining the efficacy and productivity of the institution based on the accomplishments of its students in the workplace. Additionally, the assessment of the group as academic products was considered. Consequently, Ramirez et al. (2014) acknowledged that tracer study enables educational institutions to ensure the quality of outputs that are consequential and to extend the tracer study principles to foster a long-term educational environment across all academe by assessing the condition of their graduates in order to monitor their ongoing professional development. It employs a standardized questionnaire to document the condition of graduates in order to verify and balance the information gathered on whether educational institutions are producing graduates with the necessary competencies (Aquino et. al., 2021b).

The graduates as responsible people and contributing members of society empowers the populace in various aspects of life. This will assist each individual's political, social, and technical development. In addition, a country's economy is dependent on the understanding and abilities of its population. In academic institutions, these will assist you in acquiring skills that will alter and improve the results of external investment, technological breakthroughs, and

internationalization (Cuadra et al., 2019; Grotkowska et al., 2015). To remain up with change, individuals must acquire the skills necessary to be effective, productive, and financially independent, all of which can be attained through education. It presumed to be the alternative to the developing and complex nature and issues of the 21st century, is undergoing reforms (Gines, 2014), with higher education institutions continuously producing graduates who are capable to practice all the skills and knowledge procured to the nature and requirements of their workplace environment (Laguador & Dotong, 2013).

Moreover, the newly crafted mission of the state university as a premier institution was driven in contributing to the growth and development of the nation in various disciplines like technology. Likewise, the state university has a fundamental obligation to train its graduates to access not only the domestic market but also the global market. Automotive Technology is one of the six majors offered by the college of Industrial Technology under the program of Bachelor of Science in Industrial Technology. This area of specialty is regarded as a profession that demands a set of specific abilities and awards certifications. Graduates of advanced technology were in high demand across the globe, and the majority of Automotive-related employment are filled by skilled individuals.

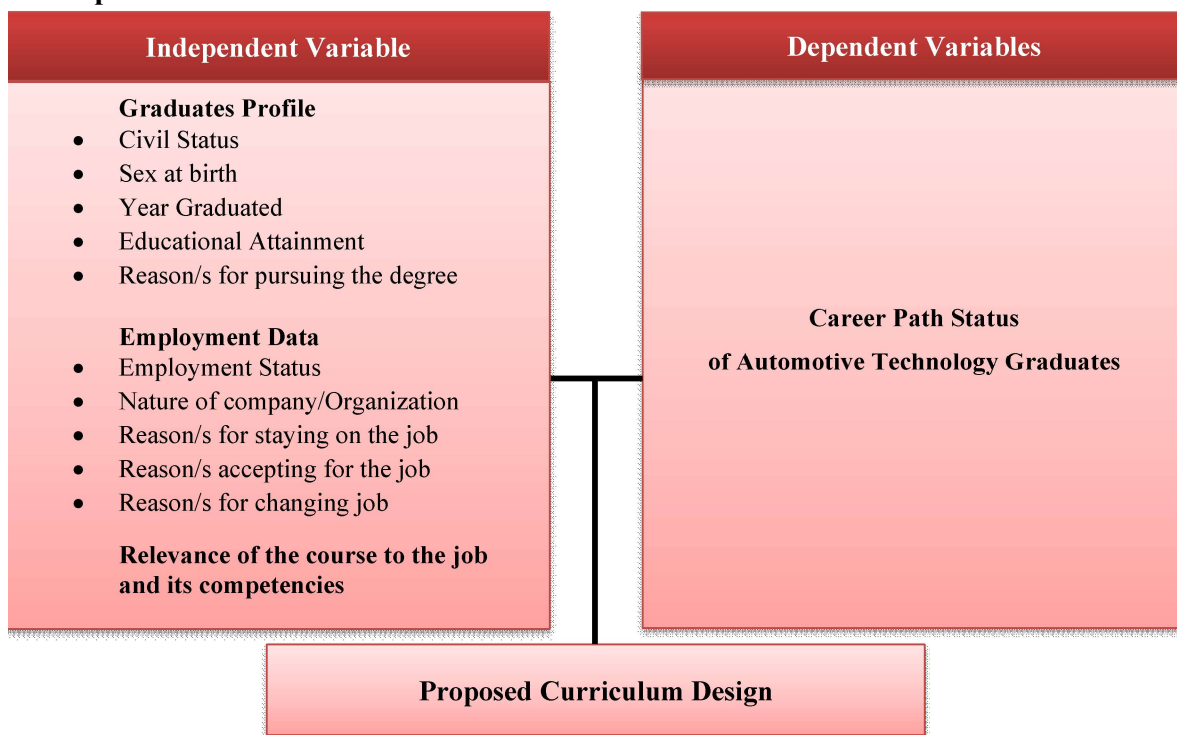
Educators are enthusiastic to shape and sculpt the abilities and aptitudes of their students. Students are also eager to cultivate their both personal and professional qualities (Aquino et al., 2021a). The students must be prepared to practice the function of increasing production and be able to find employment after completing their undergraduate degree to ensure not only their own but also society's continuing development. In addition, they must acquire National Certification as professional technicians in particular field of specialization, with a good working attitude,

values, or even ethical standards consistent with industry standards. In particular, the institution must create graduates with strong technical, managerial, research, and entrepreneurial skills in automotive technology. Furthermore, the BSIT Program outcomes specify that students must use their acquired knowledge to solve challenging technological challenges and acquire abilities in data interpretation and analysis in their respective fields. The graduates must be able to have a high

level of comprehension and articulate technology advancements to their employers and clients.

This study aims to elicit a significant response and reconnect alumni with their alma mater. In addition, the noteworthy contributions will serve as the basis of the proposed Curriculum Design of the BSIT Automotive for the benefit of the college and the achievement of its aims and objectives.

**Conceptual Framework**



**Figure1.** Research paradigm of the study

The figure shows the interrelationship of the variables used in the present study. The independent variables consist of the profile of the graduates determining the civil status, sex at birth, year graduated, educational attainment and reasons for pursuing the degree. In addition, the employment data that talks about the status, nature of the company or the organization, reasons of staying, accepting, and changing in their job. The researcher also identifies the relevance of the course to their job and its competencies learned

from the college. On the other hand, the dependent variable was the career path status of the automotive technology graduates. Moreover, the gathered and analyzed data was the basis of the proposed curriculum design of the researchers.

**Objectives of the Study**

The study aims to assess the graduates of Automotive Technology from the year 2015 to 2020 of one State University in the Philippines in

terms of employability status. Specifically, it identifies the profile of Automotive Technology Graduates in terms of civil status, sex at birth, year graduated, educational attainment, and reasons for pursuing the degree. Likewise, it also determine the career path of the graduates in relation to employment status, nature of company/ organization, reasons for staying on the job, accepting for the job and for changing job. The researchers also explore the relevance of the course to the previous and current job and its competencies acquired from college. With this, it find out the association between the career path of the graduates to the relevance of the course to their job and their competencies acquired from college towards the proposed curriculum design.

## ■ METHODS

### Research Design and Procedures

This study seeks explored the educational relevance, competencies, and career paths of automotive technology graduates. By using the descriptive method of research, it collected data from a sample of graduates to gain a better understanding of what they have done after completing their studies. Moreover, the descriptive method of research is an effective way to gain insight into the employment status of automotive technology graduates and to better understand the factors that contribute to their success. It provided valuable information that help the researchers to design the curriculum for automotive technology program (Montuerto & Muring, 2019). Conversely, this research utilized an online web service to deploy a survey to respondents following the approval of the letter of consent to proceed with the study.

### Participants

The survey conducted on graduates from an automotive school from the years 2015-2020. The list of graduates acquired from the university's registrar office and a random sampling technique used for selecting the participants. The

questionnaire was administered to 113 respondents from the total graduates of 164 through a Google Form. Random sampling is an effective technique for collecting survey responses from a large population. It ensures that each individual has an equal chance of being selected and that the sample is representative of the entire population (Etikan & Bala, 2017). This technique allows researchers to obtain reliable and valid data for their studies. Additionally, using Google Forms for administering the questionnaire is cost-effective and efficient, as it eliminates the need for manual data entry.

### Instrument

The researchers adopted a survey type questionnaire from the Commission on Higher Education (CHED Graduate Tracer Study, 2017) and participating State University Standard Questionnaire to collect information for their tracer study. They also obtained authorization from CHED and the alumni office to use the Standard Questionnaire for alumni, which helped to determine the career status of the graduates in the work field. To circulate the questionnaire, the researchers enlisted the help of enrolled students and their former instructors and professors. These adapted questionnaires were validated.

### Data Analysis

All data collected were evaluated and interpreted with discretion. The summary values were presented using graphs for a clearer understanding of the data. The researchers have committed to following ethical research protocols regarding the research procedure and data management, and have obtained approved letters of consent from the university. To ensure the safety and confidentiality of the respondents and researchers, all necessary precautions were taken when handling the data used in the study.

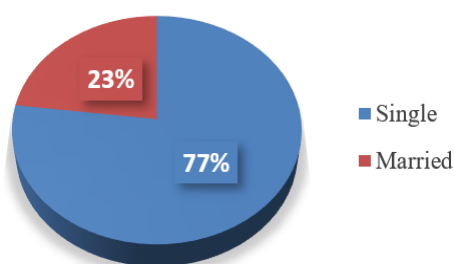
Moreover, frequency and percentage are all important tools for evaluating and interpreting data which used by the researchers. Frequency

utilized to measure the relative number of times an event occurs while percentage used to express a ratio or proportion as a fraction of 100 (Ali & Bhaskar, 2016). Likewise, by using these tools, it is possible to analyze data in a more comprehensive and reliable way. This helps the researchers to identify patterns and trends that can be used to make decisions and further research. In addition, it is important to remember that discretion was used when interpreting and evaluating data. All data will be properly

analyzed and interpreted before drawing conclusions.

## RESULTS AND DISCUSSION

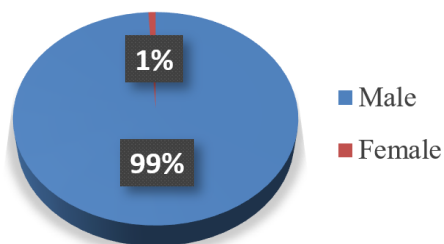
This section delves into a comprehensive analyzation of the respondents' profile, encompassing career path, the pertinence of previous and current job to the automotive technology course, and the competencies acquired by the graduate students during their tenure in college.



**Figure 2.** Civil status of CIT automotive graduates

The figure 2 shows the information of the CIT graduates that most of the respondents are single having 77% or a frequency of 87 while on the other hand, 23% of the respondents are married or consisting of 26 CIT graduates. The distribution of civil status among CIT graduates is seen the majority being single and a sizable minority being married. The information

emphasizes how crucial it is to take graduates' life stages and aspirations into account while providing career assistance and support inside the program. Understanding the range of experiences that graduates have can help create career development services that are more specialized and efficient (Markauskaite & Goodyear, 2017).



**Figure 3.** CIT automotive graduates sex at birth

This figure reiterates that the CIT automotive technology graduates are mostly male having 112 respondents or equivalent of 99 percent while female only consist of one out of

one hundred thirteen respondents from the school year 2015 to 2020. The data highlights that male graduates outpacing female graduates by a wide margin between 2015 and 2020 in the CIT

automotive technology program. However, students of all ages passionate about automotive technology may enroll and establish more inclusive and equal opportunities (Andersen et al., 2021; Lufkin et al., 2014).

The respondents of this study are from the school year 2015 to 2020 and it reveals that most automotive technology graduate's respondents are from 2020 consist of 33 graduates or having 29 percent. Consequently, the respondents from

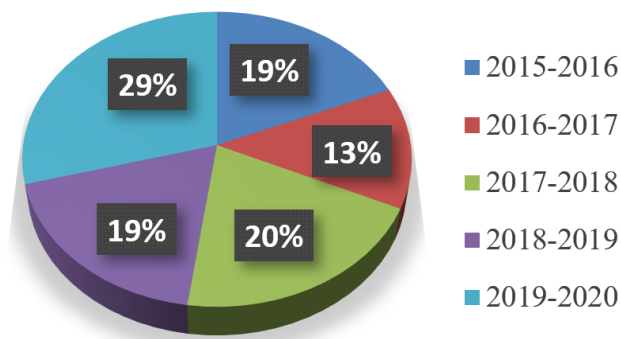


Figure 4. School year graduated

2018 consist of 23 respondents having 20 percent. Meanwhile, respondents from 2016 and 2019 are having the same frequency of 21 respondents or 19 percent. On the other hand, the least respondents are coming from 2017 automotive graduates which pegged at 15 respondents or 13 percent of the total. With this,

researchers may gain important insights on the development of the field and the influence of graduation year on job experiences as a result of the varied representation of different years, which gives them an expanded perceptions on the viewpoints and experiences of graduates (Torres et al., 2023).

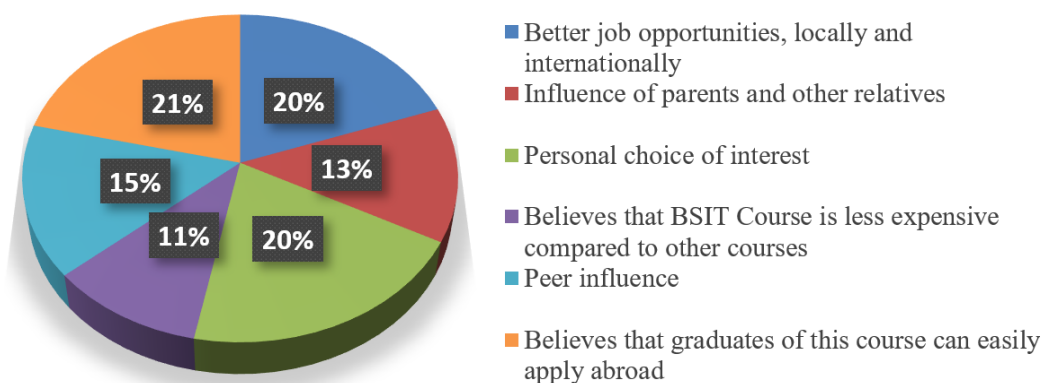


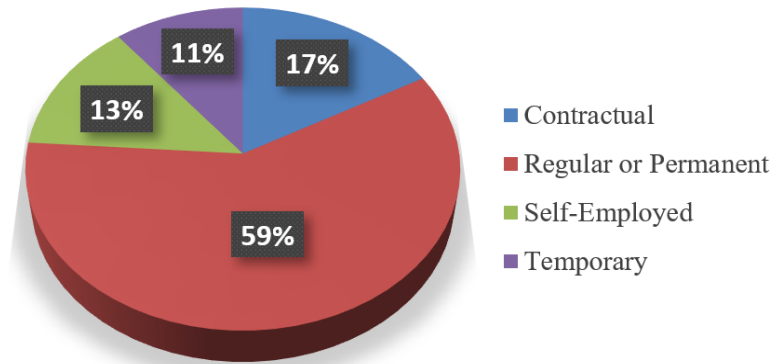
Figure 5. Reason/s of automotive technology graduates in pursuing the degree

The information in figure 6 illustrates the factors that led graduates in automotive technology to seek their degrees. The majority of graduates thought that students who had taken this course might readily seek for jobs abroad with a highest percentage of 21 or a frequency of

24 respondents. This shows that a sizeable percentage of students might be keeping an eye on an international future and view the automobile industry as a route to employment options outside of their own country (Deming, 2018). Likewise, equal percentage of automotive graduates

selected their degree out of personal interest and better job opportunities both locally and internationally. This indicates that a sizeable percentage of students had a sincere enthusiasm for automotive technology and desired to pursue a profession related to their interests and they view the course as one with opportunities for professional advancement and job possibilities (Savickas, 2013). Additionally, a significant percentage of graduates were persuaded to pursue this degree by their classmates with 17 respondents. It's probable that conversations with friends and classmates served a part in their

decision-making (Hollihan & Baaske, 2022). Peer influence may be a potent motivator. Meanwhile, 15 respondents chose this degree did so with the help of their parents and other family members. This shows that family influences employment choices greatly and that the automotive industry was seen as a safe and sensible choice (Appianing & Van Eck, 2015). Some graduates thought that, in comparison to other programs, completing an Automotive Technology was the most economical choice. This implies that cost was a deciding factor in their decision.



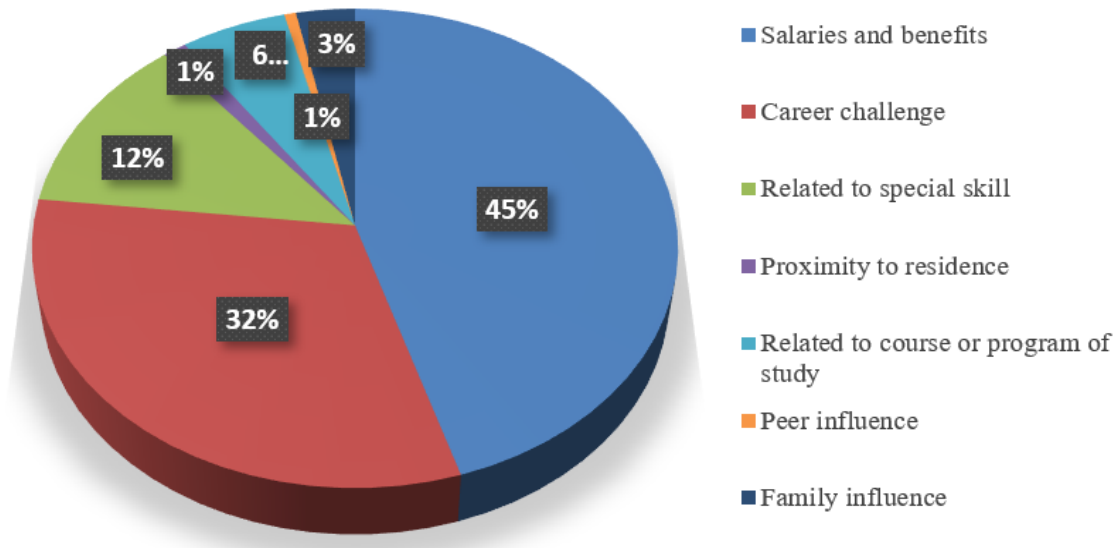
**Figure 7.** Automotive technology graduates employment status

The information supplied sheds light on the respondents' job status. The majority of respondents, or 59%, stated that they are currently employed in a regular or permanent capacity. This is a sizable percentage, indicating that many graduates in the field of automotive technology have found solid, long-term employment. These jobs frequently offer benefits, work security, and chances for professional advancement (Wicaksono & Priyadi, 2016). This data supports the program's claim that it can get students ready for secure professions in their fields. Likewise, roughly 17% of the survey participants said their work is only contractual which often has a set expiration date or length. These positions may have certain benefits, such project-based work or flexibility, but they

frequently don't have the same level of job security as permanent positions (Luthje, 2014). Contractual employment may indicate some labor flexibility in the automotive technology industry. Meanwhile, a significant 13% of respondents stated that they work for themselves. This group has decided to pursue entrepreneurship, which entails operating their own business or working as independent technicians among others (Kiboi, 2017). Self-employment may provide financial advantages and liberty; it may also come with increased degrees of risk and unpredictability (Queralt Lange, 2023). It draws attention to the business options open to recent graduates in the automotive technology industry. On the other hand, 11 percent of respondents have temporary jobs; this represents the temporary employment

rate. Temporary jobs are frequently project-specific, short-term, or seasonal in nature (Konrad et al., 2013). These temporary positions may give immediate employment prospects, they might not

offer the same level of long-term stability as permanent or contractual jobs (Spasova et al., 2017). This group of respondents can be in transition or just starting their careers.



**Figure 8.** Reason/s of automotive technology graduates in staying the job

The information given relates to the factors that respondents considered while deciding to remain in their jobs working in the automotive industry. Salaries and benefits are the most frequently mentioned justification for continuing their current position from a total of 70 respondents or 45% choose. This finding emphasizes how important monetary remuneration and benefits related to the job are in retaining employees (Wong et al., 2017). In order to retain personnel in the automotive industry, competitive salaries and complete benefits packages, comprising medical coverage, retirement savings plans, and other incentives, are essential (Osibanjo et al., 2014). This shows that many graduates give their financial security and professional stability top priority. Meanwhile, about 32% or 49 respondents of those surveyed claimed that the challenges they face in their careers are what keeps them working (Kossek, 2016). This shows that a significant

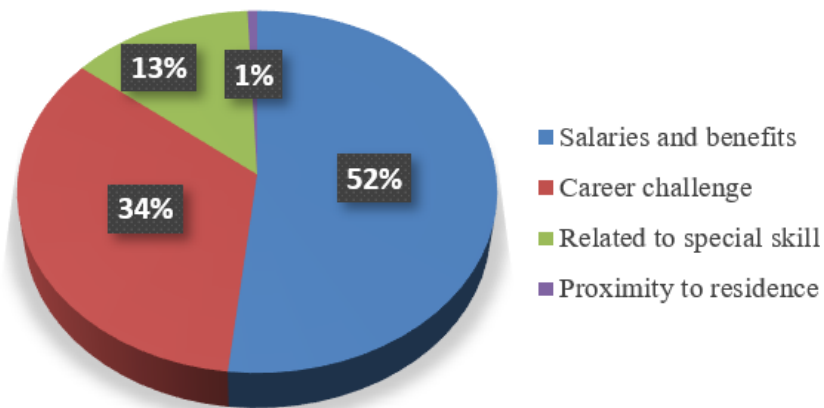
proportion of graduate's value chances for intellectual engagement, skill development, and professional progress. For these people, the workplace is challenging and satisfying because job challenges frequently result in progress on the personal and professional levels.

Additionally, a significant 12 percent or a total of 19 respondents claimed that using the special skills they learned during their studies is what keeps them in their current career fields (Kolb et al., 2014). This demonstrates how their education in automotive technology has given them skills and knowledge that are applicable to their day-to-day jobs. These recent grads find satisfaction in using their particular knowledge. Six percent or 9 of the respondents said that their decision to remain in their current positions was affected by the alignment of their job with their college course or program of study. This shows that their degree in automotive technology's educational value continues to influence their



employment decisions (Jackson, 2014). Meanwhile, 3 percent of respondents or a frequency of 5 said that family influence played a role in their choice to remain in their current positions. Some respondents' work decisions are influenced by family considerations (Lenzi et al., 2014), which might include a variety of elements like familial expectations or responsibilities. However, only one percent of respondents said

they continued working because of their jobs' proximity to their homes and peer influence. For these people, ease in terms of commute and closeness to home is important to keeping their jobs. This shows that for certain graduates, considerations like location and accessibility to the employment may be important and might be affected by the encouragement (Noon & Morrell, ) or influence of their peers (Rosaz, et al., 2016).



**Figure 9.** Reason/s of automotive technology graduates in accepting the job

The information given relates to the factors that respondents considered while deciding to accept their positions in the automotive technology industry. As reported of 73 respondents or 52% of the respondents, salaries and benefits are the most common justification for accepting a job among graduates in the automotive technology field. This emphasizes how important financial remuneration and benefits are in influencing hiring decisions (Robst & VanGilder, 2016). Graduates are drawn to opportunities in the automotive technology industry by competitive salary and extensive benefits packages. Likewise, about 34% or 48 of respondents said they chose their employment because of the career challenges they may encounter in the workplace. This data implies that a sizable majority of graduates appreciate chances for intellectual engagement, skill development, and professional progress (Tymon,

2013). For these people, the workplace is challenging and satisfying because job challenges frequently result in progress on the personal and professional levels.

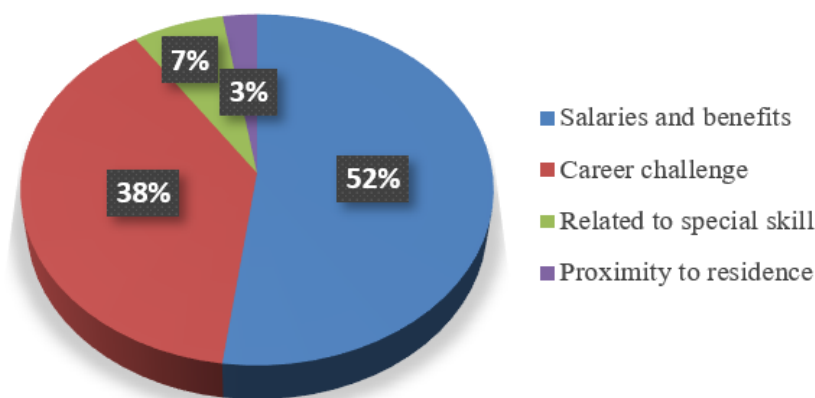
Additionally, A significant 13 percent of respondents said that their decision to take their current jobs was impacted by the application of the specialized skills they learned while pursuing their education in automotive technology. This emphasizes how crucial it is for their academic program's abilities, skills, and knowledge to match their career aspirations (Solem et al., 2013). Graduates discover satisfaction in using their particular knowledge in their employment. Meanwhile, only 1 respondent of those who accepted jobs cited convenience to their homes as a factor in their decision. For these people, ease of travel and closeness to home were important factors in deciding whether to accept

the job offer (Pelczarski, 2016). Only a small percentage of graduates consider location and accessibility to the employer.

Furthermore, the data reveals that salary and benefits, professional challenges, and the application of specialized skills are the most common justifications given by automotive technology graduates for accepting their positions. These results underline the significance of competitive pay, possibilities for professional growth, and the practical use of specialized

abilities in luring graduates to jobs in the automotive technology sector. The majority of graduates give considerations like financial stability and prospects for professional progress top priority when choosing their careers, whereas a relatively tiny fraction considers proximity to their place of residence when making a job acceptance decision.

The information provided in figure 10 relates to the factors that graduates in automotive technology considered while deciding to change



**Figure 10.** Reason/s of automotive technology graduates for changing the job

careers. A total of 52 percent or 61 of respondents stated that salaries and benefits were the primary factor in their decision to change careers after receiving an education in automotive technology. This emphasizes how important financial pay and work benefits are in encouraging job shifts (Raziq & Maulabakhsh, 2015). It implies that a large number of recent graduates are open to changing jobs in order to increase their financial security and compensation. In the field of automotive technology, competitive salaries and extensive benefit packages continue to play a significant role in employee satisfaction and retention. A little more than 38% or 45 of the respondents said they switched employment in search of more career challenges. Professionals in the automotive technology industry seem to be driven by a need for an exciting and challenging work environment

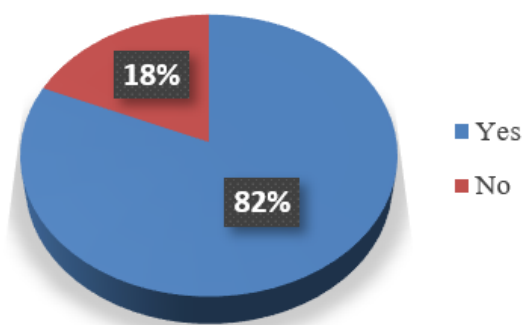
(Tymon, 2013). Job shifts are frequently viewed as a way to advance one's career and personal development.

Moreover, 7 percent or 8 of the respondents, a lesser but still significant percentage, stated that their employment moves were connected to the application of the special skill they developed while pursuing their studies in automotive technology. This demonstrates how crucial it is for students' academic program-acquired skills and information to influence the direction of their careers. Graduates find satisfaction in utilizing their specific knowledge and skills in many professional situations (Karaca-Atik et al., 2023). Meanwhile, only 3 percent of those who changed jobs did so because of the job's closeness to their home (Pelczarski, 2016). These people's decisions to shift jobs were

influenced by commute convenience and proximity to their homes.

Conversely, the data shows that salary and benefits and a desire for new challenges in the workplace are the main justifications given by automotive technology graduates for shifting employment. These results underline the continuing significance of competitive pay and

chances for career advancement in encouraging job changes in the automotive technology sector. The vast majority of graduates give consideration to aspects like financial security and prospects for career progress when making changes in their jobs, while a lesser percentage take consideration of their specific skills and proximity to home into account.



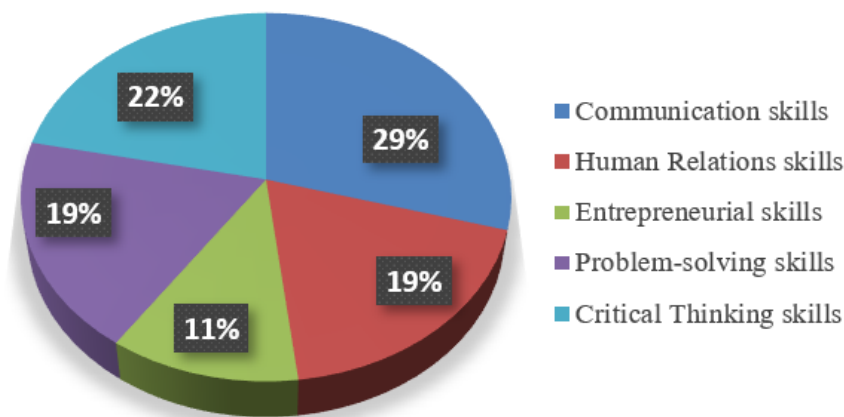
**Figure 11.** Relevance of the previous and current job to the automotive technology course

The information given in figure 11 relates to how closely the respondents' present and previous jobs are regarded to relate to their automotive technology course. A total of 82 percent or 84 of the respondents said that their present and prior jobs were related to their study in automotive technology. This considerable number implies that many graduates believe there is a solid correlation between the knowledge and abilities they have learned throughout their academic degree and the demands of their work roles. This correlation between education and employment is a testament to how well the curriculum prepares students for careers in the automotive industry. On the other hand, 18% of those surveyed or 19 of the respondents claimed that their jobs had nothing to do with their automotive classes. These people can have chosen careers that don't really fit with the specialized abilities and information they acquired during their studies. This separation may be caused by a variety of factors, such as individual career decisions or a dearth of jobs directly in the sector.

Furthermore, the information on job relevance is consistent with past talks on the factors influencing work acceptance and change. The motivation for accepting and changing professions was frequently reported as salary, career challenges, and the application of specialized skills (Frey & Osborne, 2017). Graduates who believe their jobs are relevant to their degree may have been driven by these elements. The value of educational programs in providing students with relevant skills and information that are immediately relevant in their chosen vocations is shown by the significant number of respondents who reported work relevance (Ornstein et al., 2016). There may be options for career growth and additional education to close the gap across their education and present employment positions for the 18% of respondents who believe that their jobs are unrelated to their course of study. According to the data, graduates in the field of automotive technology take a variety of employment paths (Van Noy et al., 2016). While some people may

hold jobs that are directly related to their academic interests, others may look into professions that

call for more extensive abilities or different specialties (Savickas, 2013).



**Figure 12.** Competencies acquired of automotive technology graduates from the college

Figure 12 relates to the skills that college graduates in automotive technology have obtained. A total of 29% or 69 of those surveyed said that their college experience helped them improve their communication abilities. Effective oral and written communication of concepts, information, and instructions is a requirement for this competency (Szucs et al., 2021). The ability to interact effectively with coworkers, clients, and stakeholders is crucial in the job. The development of communication skills indicates that the program values teaching graduates to express their ideas and work cooperatively with others. Likewise, about 22% or 51 of the respondents claimed that their college experience helped them develop their critical thinking skills. The ability to assess information, reach reasoned conclusions, and approach issues from a logical and analytical perspective are all components of critical thinking (Liu et al., 2014). For graduates to make wise decisions and consistently enhance procedures and systems at work, critical thinking is essential.

Conversely, human relation and problem-solving skills pegged at 19% or 44 of the respondents said that their college education helped them develop these skills. These abilities include the capacity to develop fruitful working

connections, manage interpersonal dynamics, and navigate social situations. Any career that needs teamwork, interactions with others, or leadership roles requires human relations skills (Boon & Biron, 2016). Graduates with good interpersonal skills are better able to create a productive workplace and control interactions. Meanwhile, the ability to assess difficult problems, find answers, and arrive at sound judgments are all necessary components of problem-solving (Hallo & Nguyen, 2021). These abilities are essential for dealing with problems and advancing automotive technology, which frequently calls for creative problem-solving and troubleshooting techniques. Additionally, a modest but significant 11 percent of respondents said they learned entrepreneurial skills while in college. Creativity, ingenuity, and the capacity to recognize and seize opportunities are all part of the entrepreneurial skill set (Thomas et al., 2014). Even though not all automotive technology graduates will go into company for themselves, these abilities might be useful for those who want to launch their own companies or look for creative solutions within well-established business organizations.

Furthermore, the data shows that college students who major in automotive technology develop a wide range of competencies. These

skills are essential to their professional success and job happiness in the automotive industry. The research emphasizes how crucial it is for educational programs to provide graduates with real-world skills that are directly applicable to their desired employment.

**The association across the career path of the graduates, to the relevance of the course to their job, and their competencies towards the Proposed Curriculum Design.**

**Educational Relevance to the Job**

According to the respondents' data, a sizable majority of respondents (82%) believe that their jobs are related to the automotive technology courses they have taken. This indicates that the majority of graduates think their educational background directly correlates with the careers they have chosen in the automotive technology industry. Additionally, the skills picked up in college are frequently linked to how relevant the course is to the profession. If graduates have the skills and information required for their work tasks, they are more likely to view their education as relevant.

**Competencies Acquired in College**

Graduates' acquired competencies or skills, including those in communication, human relation or interpersonal interactions, problem-solving, critical thinking, and entrepreneurial skills which are extremely important to work performance in the automotive technology industry. Additionally, for productive and professional interactions with coworkers, clients, and stakeholders, communication and interpersonal skills are crucial and vital. They are essential for establishing trust with clients and performing well in collaborative settings. Consequently, critical thinking and problem-solving abilities are essential for diagnosing complicated vehicle difficulties, resolving technical issues, and upgrading procedures continuously in the automotive

business. Even though they are less frequently mentioned, entrepreneurial skills can be useful for graduates looking to pursue novel solutions, launch their own enterprises, or assume leadership positions in their fields.

**Career Path**

Graduates' career paths may be impacted by the skills they learned in college and how relevant they believe their course work to be to their jobs. Graduates who believe their education and employment are closely related may be more inclined to choose jobs that call for the particular abilities and information they acquired in college. However, individuals who do not find a clear connection between their degree and their employment can explore other career options or pursue additional training and education to fill in any skill gaps.

**Proposed a Curriculum Design**

In designing the curriculum for an automotive technology course based on the facts and insights offered by the respondents which are the graduates of the program. It aims to improve graduates' career preparedness, job satisfaction, and success by matching education with industry expectations and encouraging the development of pertinent competencies. Conversely, a successful career in the automotive sector requires knowledge, abilities, and competences that the program aims to provide for students. To ensure that graduates are adequately ready for the needs of the global automotive workforce, the curriculum places a strong emphasis on gaining of technical expertise and crucial soft skills. Moreover, the researchers suggested curriculum for Automotive Technology program that seeks to close the knowledge gap between educational institutions and industry demands. Graduates will be better equipped to successfully navigate their career paths, find job satisfaction, and effectively contribute to the rapidly developing automotive

technology industry by receiving a comprehensive education which integrates technical excellence with various competencies including communication, human relation, problem-solving, critical thinking, and entrepreneurial skills.

## ■ CONCLUSIONS

In conclusion, there is an important association between graduates' college-acquired skills and the applicability of the automotive technology course to their careers. Graduates who believe their education and careers are closely aligned are more likely to successfully apply the competencies they have obtained, which will increase their job satisfaction and help them succeed in the automotive technology industry. These skills are crucial in determining graduates' career pathways and their capacity to succeed in the jobs they choose within the sector. Additionally, the information shows how important a comprehensive education in automotive is for preparing graduates for a competitive and fast-paced sector. Their entry into the profession is facilitated, but it also gives them the tools they need to succeed, overcome challenges, and make a real difference in the development and innovation of the automotive industry. This emphasizes the significance of continuously improving automotive technology programs to make sure they remain in line with market expectations and graduates' changing needs.

For recommendation, the state university participated in this study may utilize the proposed curriculum design which may undergo for further discussion with the field experts and academic council. This design integrates technical courses with essential soft skills development that will give practical, hands-on instruction a high priority in well-equipped automotive workshops and labs. Additionally, provide students the chance to participate in cooperative education programs or internships with companies to expose them to the

real world. Hence, other educational institutions may also utilize or may conduct tracer study to contextualize their programs based on the assessment and profiling of their graduates. They may also explore other variables or attributes that may help their programs improve and become more globally competitive.

## ■ REFERENCES

- Ali, Z., & Bhaskar, S. B. (2016). Basic statistical tools in research and data analysis. *Indian journal of anaesthesia*, 60(9), 662.
- Andersen, D., Lue Kessing, M., & Østergaard, J. (2021). 'We have equal opportunities—in theory': Lay perceptions of privilege, meritocracy and inequality in Denmark. *Sociology*, 55(6), 1117-1134.
- Appianing, J., & Van Eck, R. N. (2015). Gender differences in college students' perceptions of technology-related jobs in computer science. *International Journal of Gender, Science and Technology*, 7(1), 28-56.
- Aquino, J.M.D., Culajara, J. C., Ancho, I., & Barrameda, C. (2021a). Education Leaders, Research Scholars, and Expert Practitioners: Feedback of Employers and Immediate Heads of Educational Management Graduates.
- Aquino, J.M.D., Kalacas, M.R.B., & Pinuela, F.S. (2021b). Employability Tracer Study of Bachelor of Science in Industrial Technology from the year 2016-2020: Basis for the Areas that Needs Improvement in BSIT Program.
- Boon, C., & Biron, M. (2016). Temporal issues in person–organization fit, person–job fit and turnover: The role of leader–member exchange. *Human relations*, 69(12), 2177-2200.
- CHED Graduate Tracer Study (2017). Retrieved from <https://www.scribd.com/document/>

- 357568637/CHED-Graduate-Tracer-Study
- Cuadra, L. J., Aure, M. R. K. L., & Gonzaga, G. L. (2019). The use of tracer study in improving undergraduate programs in the university. *Asia Pacific Higher Education Research Journal (APHERJ)*, 6(1).
- Deming, W. E. (2018). *The new economics for industry, government, education*. MIT press.
- Etikan, I., & Bala, K. (2017). Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, 5(6), 00149.
- Frey, C. B., & Osborne, M. A. (2017). The future of employment: How susceptible are jobs to computerisation?. *Technological forecasting and social change*, 114, 254-280.
- Gines, A. C. (2014). Tracer study of PNU graduates. *American International Journal of Contemporary Research*, 4(3), 81-98.
- Grotkowska, G., Wincenciak, L., & Gajderowicz, T. (2015). Ivory-tower or market-oriented enterprise: The role of higher education institutions in shaping graduate employability in the domain of science. *Higher Education Research & Development*, 34(5), 869-882.
- Hallo, L., & Nguyen, T. (2021). Holistic view of intuition and analysis in leadership decision-making and problem-solving. *Administrative Sciences*, 12(1), 4.
- Hollihan, T. A., & Baaske, K. T. (2022). *Arguments and arguing: The products and process of human decision making*. Waveland Press.
- Jackson, D. (2014). Factors influencing job attainment in recent Bachelor graduates: evidence from Australia. *Higher Education*, 68, 135-153.
- Karaca-Atik, A., Meeuwisse, M., Gorgievski, M., & Smeets, G. (2023). Uncovering important 21st-century skills for sustainable career development of social sciences graduates: a systematic review. *Educational Research Review*, 100528.
- Kiboi, J. (2017). *Challenges facing the entry of graduates of technical training institutions into self-employment: the case of north rift region* (Doctoral dissertation, University of Eldoret).
- Kolb, D. A., Boyatzis, R. E., & Mainemelis, C. (2014). *Experiential learning theory: Previous research and new directions*. In *Perspectives on thinking, learning, and cognitive styles* (pp. 227-247). Routledge.
- Konrad, A. M., Moore, M. E., Ng, E. S., Doherty, A. J., & Breward, K. (2013). Temporary work, underemployment and workplace accommodations: Relationship to well being for workers with disabilities. *British Journal of Management*, 24(3), 367-382.
- Kossek, E. E. (2016). Managing work-life boundaries in the digital age. *Organizational Dynamics*, 45(3), 258-270.
- Laguador, J. M., & Dotong, C. I. (2013). Tracer study of BS computer engineering graduates of Lyceum of the Philippines University. *International Journal of Management, IT and Engineering*, 3(8), 387.
- Lenzi, M., Vieno, A., Santinello, M., Nation, M., & Voight, A. (2014). The role played by the family in shaping early and middle adolescent civic responsibility. *The Journal of Early Adolescence*, 34(2), 251-278.
- Liu, O. L., Frankel, L., & Roohr, K. C. (2014). *Assessing critical thinking in higher education: Current state and directions for*

- next generation assessment. *ETS Research Report Series*, 2014(1), 1-23.
- Lufkin, M. E., Wiberg, M., Jenkins, C. R., Berardi, S. L., Boyer, T., Eardley, E., & Huss, J. (2014). Gender equity in career and technical education. In *Handbook for achieving gender equity through education* (pp. 451-474). Routledge.
- Lüthje, B. (2014). Labour relations, production regimes and labour conflicts in the Chinese automotive industry. *International Labour Review*, 153(4), 535-560.
- Markauskaite, L., & Goodyear, P. (2017). Epistemic fluency and professional education. *Innovation, Knowledgeable Action and Actionable Knowledge*.
- Montuerto, R. C., & Muring, R. S. (2019). Tracer study of the bachelor of science in industrial technology graduates of palompon institute of technology.
- Noon, M., & Morrell, K. (2017). *The realities of work: Experiencing work and employment in contemporary society*. Bloomsbury Publishing.
- Ornstein, A. C., Levine, D. U., Gutek, G., & Vocke, D. E. (2016). *Foundations of education*. Cengage learning.
- Osibanjo, O. A., Adeniji, A. A., Falola, H. O., & Heirsmac, P. T. (2014). Compensation packages: a strategic tool for employees' performance and retention. *Leonardo Journal of Sciences*, 25(1), 65-84.
- Pelczarski, K. (2016). Should you accept that job offer?. *Tribology & Lubrication Technology*, 72(9), 82.
- Queralt Lange, J. (2023). The goods (and bads) of self-employment. *The Journal of Political Philosophy*. 2023. 23 p.
- Ramirez, T. L., Cruz, L. T., & Alcantara, N. V. (2014). Tracer study of RTU graduates: an analysis. *Researchers World*, 5(1), 66.
- RaziqA., & Maulabakhsh, R. (2015). Impact of working environment on job satisfaction. *Procedia Economics and Finance*, 23, 717-725.
- Robst, J., & VanGilder, J. (2016). Salary and job satisfaction among economics and business graduates: The effect of match between degree field and job. *International Review of Economics Education*, 21, 30-40.
- Rosaz, J., Slonim, R., & Villeval, M. C. (2016). Quitting and peer effects at work. *Labour Economics*, 39, 55-67.
- Savickas, M. L. (2013). Career construction theory and practice. *Career development and counseling: Putting theory and research to work*, 2, 144-180.
- Solem, M., Kollasch, A., & Lee, J. (2013). Career goals, pathways and competencies of geography graduate students in the USA. *Journal of Geography in Higher Education*, 37(1), 92-116.
- Spasova, S., Bouget, D., Ghailani, D., & Vanhercke, B. (2017). Access to social protection for people working on non-standard contracts and as self-employed in Europe. *A study of national policies. Brussels: European Commission*.
- Szucs, L. E., Andrzejewski, J. D., Robin, L., Telljohann, S., Pitt Barnes, S., & Hunt, P. (2021). The health education teacher instructional competency framework: a conceptual guide for quality instruction in school health. *Journal of School Health*, 91(10), 774-787.
- Thomas, J., McDonagh, D., & Canning, L. (2014). Developing the arts entrepreneur: The 'learning cloud'. *The Design Journal*, 17(3), 425-443.
- Torres, V., Hernández, E., & Martínez, S. (2023). *Understanding the latinx experience: developmental and contextual influences*. Taylor & Francis.
- Tymon, A. (2013). The student perspective on employability. *Studies in higher education*, 38(6), 841-856.



- Van Noy, M., Trimble, M., Jenkins, D., Barnett, E., & Wachen, J. (2016). Guided pathways to careers: Four dimensions of structure in community college career-technical programs. *Community College Review*, 44(4), 263-285.
- Wicaksono, P., & Priyadi, L. (2016). Decent work in global production network: lessons learnt from the Indonesian automotive sector. *Journal of Southeast Asian Economies (JSEAE)*, 33(1), 95-110.
- Wong, I. A., Wan, Y. K. P., & Gao, J. H. (2017). How to attract and retain Generation Y employees? An exploration of career choice and the meaning of work. *Tourism Management Perspectives*, 23, 140-150.