Exploring the Relationship between Entrepreneurship Education and Small Business Ownership among Polytechnic Graduates

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Abstract: This research work was carried out to investigate the relationship between entrepreneurship education and the likelihood of polytechnic graduates Kaduna Polytechnic (KADPOLY) and Nuhu Bamalli Polytechnic (NUBAPOLY) owning a small business. The research aims to test the null hypothesis that there is no significant relationship between entrepreneurship education and small business ownership and the alternative hypothesis that there is a significant relationship. The study examined the impact of entrepreneurship education on graduates' entrepreneurial aspirations and their likelihood of starting and owning a small business. It analyzed data from polytechnic graduates in Nigeria, specifically focusing on Kaduna State. The research utilizes quantitative methods, including statistical analysis, to evaluate the relationship between entrepreneurship education and small business ownership. The study shows a strong relationship between entrepreneurship education and the likelihood of graduates owning a small business with significant value (0.000) which change the mindset of the graduates towards entrepreneurship and this will reduce the unemployment rate in the country. The study concludes that students exhibit an entrepreneurial mindset and recommends fostering an entrepreneurial culture in Nigerian polytechnics, instilling entrepreneurial traits, and supporting students in undertaking autonomous projects. The government could also provide financial support to encourage polytechnic graduates to start businesses so as to put their skills into practice.

Keywords: Entrepreneurship education, Graduates, Small-business, Unemployment.

INTRODUCTION

Entrepreneurship has become a prominent topic of study among researchers, academicians, and policymakers worldwide. It is characterized by various definitions and concepts, with risk-taking, innovation, and the identification and exploitation of opportunities being consistent themes in the research. Entrepreneurship is considered crucial for achieving rapid economic development and reducing unemployment, poverty, and underdevelopment, particularly in developing countries. Naude (2011) highlights three factors that have contributed to the growning significance of entrepreneurship: the emergence of an entrepreneurial economy, the creative entrepreneurial revolution, and a shift in focus by donor organizations towards private sector development in the least developed countries.

In Nigeria, numerous policies and programs have been implemented over the past three decades to promote entrepreneurship. However, despite the widespread belief that entrepreneurship development can eradicate poverty, create jobs, and drive economic growth, if not the country will continue to face high unemployment rates. Between 2000 and 2011, Nigeria's unemployment rate increased from 13.1% to 23.9%, with youth unemployment estimated to be over 50%. Moreover, in 2010, more than 60.9% of the population was living in extreme poverty (IMF, 2013; Risenetworks, 2013). The low human development index further highlights the urgent need for entrepreneurship development to stimulate economic growth and generate employment opportunities (UNDP, 2006).

Schumpeter (1934, 1942) views entrepreneurship as a risk-taking innovator who plays a vital role in driving rapid economic development through "creative destruction," which involves replacing outdated technologies and ideas with new ones. Gartner (1988) defines entrepreneurship as the establishment of new organizations, while Leibenstein (1968) emphasizes the activities necessary to initiate or sustain an enterprise. Martin and Osberg (2007)

propose three factors that contribute to entrepreneurship: the presence of opportunities, the personal competencies required to recognize and seize those opportunities, and the ability to transform opportunities into viable businesses.

Baron and Henry (2010) argue that entrepreneurs not only identify existing possibilities but also create new ones, leading to the emergence of opportunities that did not previously exist. Shane and Venkataraman (2000) contend that the essence of entrepreneurship lies in recognizing, exploring, and exploiting opportunities. However, to fully harness the benefits of entrepreneurship in Nigeria, the government must implement policies and programs that promote entrepreneurship and address various challenges, including infrastructure, access to finance, education, and training.

Entrepreneurship has garnered significant academic interest due to its potential impact on economic development. Although scholars have different definitions and perspectives from the above paragraphs, they agree on the importance of risk-taking, innovation, and the identification of opportunities. Nigeria's government has implemented entrepreneurship-related initiatives for several decades, but unemployment rates remain high, and a large portion of the population lives in extreme poverty. To drive economic growth and employment creation, addressing obstacles to entrepreneurship, such as inadequate infrastructure, limited access to finance, and therefore need for entrepreneurship education, is crucial.

The aim of this research is to explore the relationship between entrepreneurship education and small business ownership among polytechnic graduates. The following objectives have been established to achieve this aim:

i. To examine the impact of entrepreneurship education on the entrepreneurial aspirations of polytechnic graduates.
ii. To assess the likelihood of polytechnic graduates starting and owning a small business based on their exposure to entrepreneurship education.

By addressing these objectives, this research aims to shed light on the role of entrepreneurship education in influencing the likelihood of polytechnic graduates owning a small business. The findings will provide valuable insights for policymakers, educators, and stakeholders in promoting entrepreneurship and supporting the entrepreneurial aspirations of polytechnic graduates.

Research Question:

The research question for this study is: Does entrepreneurship education affect the likelihood of polytechnic graduates owning a small business?

The study aims to examine the relationship between entrepreneurship education and the likelihood of polytechnic graduates owning a small business. Specifically, the research seeks to examine the relationship between entrepreneurship education and small business ownership among polytechnic graduates in Nigeria, with a focus on Kaduna State. The primary research question explores whether there is a significant relationship between entrepreneurship education and the likelihood of graduates owning a small business.

By analyzing the data and conducting statistical analysis, the study aims to provide insights into the role of entrepreneurship education in fostering entrepreneurial ventures among polytechnic graduates. The findings will contribute to a better understanding of the importance of entrepreneurship education and its potential influence on small business ownership among graduates in the context of Nigerian polytechnics.

Hypothesis:

Null Hypothesis (H_o): There is no significant relationship between entrepreneurship education and the likelihood of polytechnic graduates owning a small business.

Alternative Hypothesis (H_1): There is a significant relationship between entrepreneurship education and the likelihood of polytechnic graduates owning a small business.

REVIEW OF RELATED LITERATURE

In every research endeavor, the process of consulting and reviewing related literature holds great significance. It serves as a crucial framework for the research work, providing guidance and serving as a foundation for further exploration. By thoroughly examining the existing body of knowledge, researchers gain valuable insights into the subject matter,

enabling them to define the research problem accurately. Furthermore, this review helps in recognizing the significance of the research and identifying appropriate data collection procedures, study designs, and potential sources of data.

Conceptual Framework

A conceptual framework serves as a concise explanation of the phenomenon being studied, accompanied by a graphical or visual representation of its major variables. In the context of entrepreneurship education, several key elements are considered. These elements provide a foundation for understanding the dynamics of entrepreneurship education and its impact on students' entrepreneurial skills and knowledge. One crucial element is the entrepreneurial mindset, which encompasses attitudes, values, and beliefs associated with successful entrepreneurship, such as risk-taking, innovation, and self-motivation.

The conceptual framework acknowledges the importance of entrepreneurial support systems. These systems consist of resources and networks that assist entrepreneurs in their journey towards success. Examples of such support systems include mentorship programs, business incubators, and funding sources. By leveraging these support systems, aspiring entrepreneurs can access guidance, expertise, and financial backing, which can significantly enhance their chances of building and growing successful ventures.

Concept of Entrepreneurship Education

The concept of entrepreneurship education revolves around formalized teachings that aim to inform, train, and educate individuals interested in participating in socio-economic development through entrepreneurial endeavors. According to UNESCO/ILO (2002), entrepreneurship education encompasses a range of educational activities that promote entrepreneurship awareness, business creation, and small business development. This can include courses covering subjects such as business planning, financial management, marketing, and other relevant topics associated with entrepreneurship. The primary objective of entrepreneurship education is to equip students with the necessary skills, knowledge, and confidence to identify and pursue business opportunities effectively.

Theoretical Framework

In this study, the primary objective is to establish a framework for entrepreneurship education within a polytechnic setting. The focus lies in nurturing an entrepreneurial mindset and fostering entrepreneurial activities throughout the institution, encompassing departments, staff, stakeholders, and, most significantly, the students. The study underlines the imperative for the polytechnic to prioritize entrepreneurship education, recognizing its significance in preparing students for entrepreneurial endeavors and socio-economic development. It highlights the essential role played by institutional support systems and networking in effectively cultivating entrepreneurship.

Review of Related Empirical Studies

The history of the Nigerian educational system traces back to the colonial era, where education policies were formulated to meet the needs of the colonizers, focusing on generating a labor force for the effective management of the Nigerian colony and protectorates (Aladekomo, 2004). However, efforts were made by the government to link the National Education Policy of 1981 with self-employment and industrial policy. The policy aimed to prioritize the development of scientists and technicians through higher education rather than focusing on self-employment, with the primary objective of filling government or public office positions (Aladekomo, 2004). Consequently, questions have been raised regarding whether technical and professional institutions are the ideal platforms for training technicians for professional life. The emphasis lies in building skills, scientific knowledge, and the ability to employ hand and machine for production goals, which professional training may not encompass.

Additionally, concerns over job shortages and rising unemployment have sparked interest in entrepreneurship education (EE) as a potential solution (Fakae, 2005; Onifade, 2002). EE provides aspiring entrepreneurs with valuable information about vocational education and training programs within the educational system, particularly in Polytechnics. Researching entrepreneurship as a subject of study has the potential to shed light on how large corporations can become more entrepreneurial and how new markets and

businesses are created (Read and Sarasvathy, 2005). Entrepreneurship education aims to foster students' abilities to generate ideas and translate them into action, emphasizing creativity, innovation, and risk-taking. The objective is to enhance individuals' capacity to seize opportunities, both in entrepreneurship and in their daily lives.

METHODS

This section provides an overview of the methodological approach employed to accomplish the study's objectives. It begins by outlining the key aspects of the research design, data collection, and analysis process. The research hypotheses proposed for investigation are also presented. The primary emphasis is placed on the research design, including details on the type of data utilized and its sources, the determination of the sample size, the attributes of the sampling frame, and the chosen sampling strategy. Additionally, the section encompasses information on the selection of data collection equipment, the design of the questionnaire, and the methodologies employed to measure and analyze the collected data.

Research Design

In order to decrease the likelihood of personal bias and avoid relying solely on one method or response from one institution, a multi-method approach was used for this study. The objectivity of the investigation is strengthened by this method. It was necessary to combine primary survey-based data with secondary data from institutional records for the study's methodology. The applications for both qualitative and quantitative data were numerous. Selected graduates from the chosen colleges were given a carefully crafted questionnaire. This was done to gather different viewpoints, cross-referenced data, and unbiased data confirmation. This is relevant to the ongoing research since we are linking entrepreneurial education to a variable (job creation) that has been assessed in the past.

Sources of Data

A standardized questionnaire was given to graduates of the chosen Polytechnics, Kaduna Polytechnic (KADPOLY) and Nuhu Bamalli Polytechnic (NUBAPOLY) and disseminated around the three Metropolitan Authorities in Kaduna State in order to gather data. This source is thought to be reliable and accurate because it is the main source and provides the research with up-to-date information.

Population of the Study

Graduates from the two institutions (polytechnics) in the State make up the target population. The eleven urban Local Government Areas that make up this study are included in the three metropolitan bodies established by the Kaduna State Government in October 2021: The Kaduna Capital Authority, Kafanchan Municipal Authority, and Zaria Metropolitan Authority. Because they contain the highest proportion of polytechnic graduates in the state, these recently founded metropolitan authorities were chosen.

The four local government areas of Kaduna North, Kaduna South, Igabi, and Chikun make up the Kaduna Capital Authority, which is located in the Kaduna Central Senatorial Zone. Similar to this, the Kafanchan Municipal Authority is comprised of the Jema'a, Kaura, and Zangon Kataf Local Government Areas in the South Senatorial Zone. Last but not least, the municipal governments of Zaria, Soba, Sabon Gari, and Giwa make up the Zaria Metropolitan Authority. The last Local Government Area is now situated in the Central Senatorial Zone, as opposed to the North Senatorial Zone, where the first three are.

Sample Size and Sampling Procedure

The sample frame for this study is made up of Polytechnic Graduate students with ND with minimum of one year after completion and HND qualifications with minimum of one year after NYSC (National Youth Service Corps) from the three Kaduna State Metropolitan Authorities; Kaduna Capital Authority, Kafanchan Municipal Authority and Zaria Metropolitan Authority. Using Stratified Random Sampling procedures (Stratified random sampling is typically used by researchers when trying to evaluate data from different subgroups or strata. It allows them to quickly obtain a sample population that best represents the entire population being studied), a sample size of forty (40) is deemed sufficient for conducting the questionnaire in each program from three Metropolitan Authorities of the two polytechnics, yielding a total sample size of 240. A population size of 600 was used with 5% margin of error. The sample size was determined using this formula $\frac{N}{1+N.e^2}$

Pilot Testing

A pilot study is commonly used to examine the viability of techniques, processes, questionnaires, and interviews, as well as how they interact in a specific setting. A pilot study may also uncover any ethical or practical concerns that may impede the main investigation (Doody & Doody, 2015). As a result, before embarking on a larger study, researchers conduct pilot studies to identify design flaws, improve data collection and analytic techniques, familiarize and train research staff, assess recruiting procedures, and collect critical information on participant burden (Prescott & Soeken, 1989; Beebe, 2007).

To assess the survey's validity, a pilot study was conducted with responses from a small sample of respondents. Cronbach's alpha was utilized to evaluate the reliability of the acquired data, and any necessary changes or improvements were implemented as a result. It is calculated by averaging the inter-item correlation and the variances of the items. It is regarded as a conservative assessment of a test's dependability. A frequently accepted alpha value is 0.7 or higher, but this varies depending on the topic of research and the aim of the test.

Statistical Analysis Procedure

The study's data was analyzed using both descriptive and inferential statistical methods. The Exploratory analysis includes tabular presentation, percentages, and comparison, in contrast to the inferential statistical method, which predominantly uses Chi-square analysis with SPSS statistical software version 23. A chi-square distribution was used to determine whether there is a significant relationship between entrepreneurship education and the likelihood of polytechnic graduates owning a small business.

RESULTS

This section provided the findings of a study on Exploring the Relationship between Entrepreneurship Education and Small Business Ownership among Polytechnic Graduates. Questionnaire was distributed to graduates of the state's two polytechnics to the Kaduna Metropolitan Authorities, which generated the results.

Table 1: Frequency distribution of ND Graduates owning a small business

Metropolitan Authority	Yes		No		Total	%
	Frequency	%	Frequency	%		
Kaduna Capital Teritory	21	52.5	19	47.5	40	100
Zaria Municipal	19	47.5	21	52.5	40	100
Kafanchan Municipal	18	45	22	55	40	100
Total	**58**	**48.3**	**62**	**51.7**	**120**	**100**

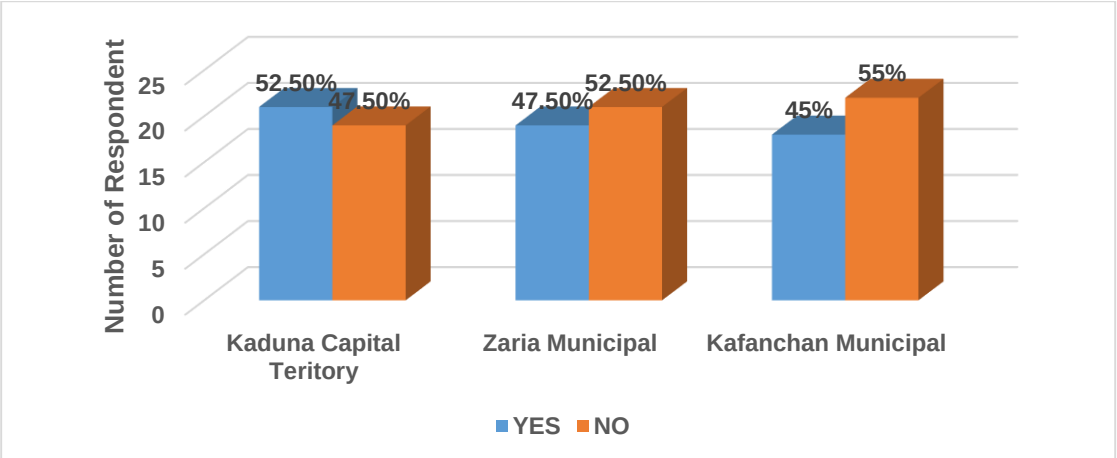

Figure 1a: ND Graduates owning a small business

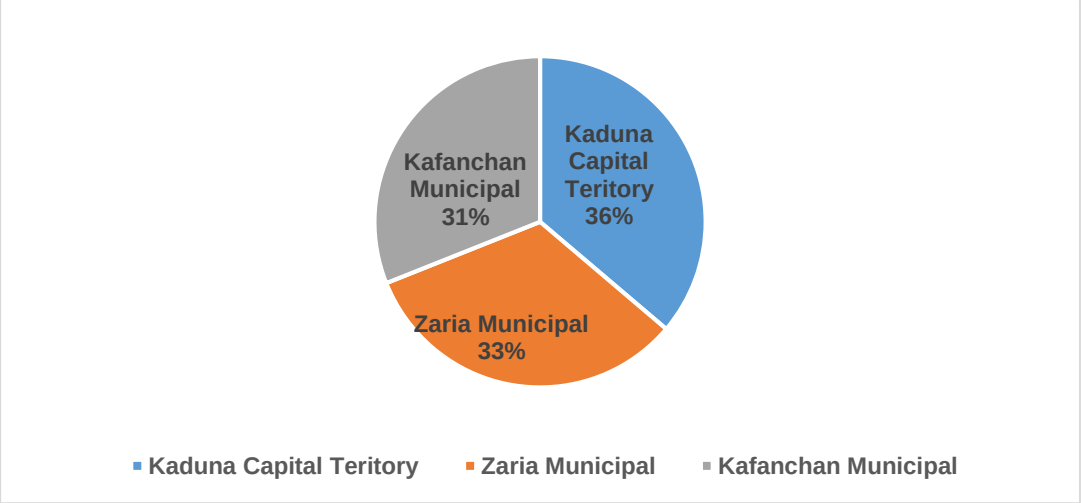

Figure 1b: ND Graduates owning a small business

Table 2: HND Graduates owning a small business

Metropolitan Authority	Yes		No		Total	%
	Frequency	%	Frequency	%		
Kaduna Capital Teritory	29	72.5	11	27.5	40	100
Zaria Municipal	26	65	14	35	40	100
Kafanchan Municipal	34	85	6	15	40	100
Total	**89**	**82.2**	**31**	**17.8**	**120**	**100**

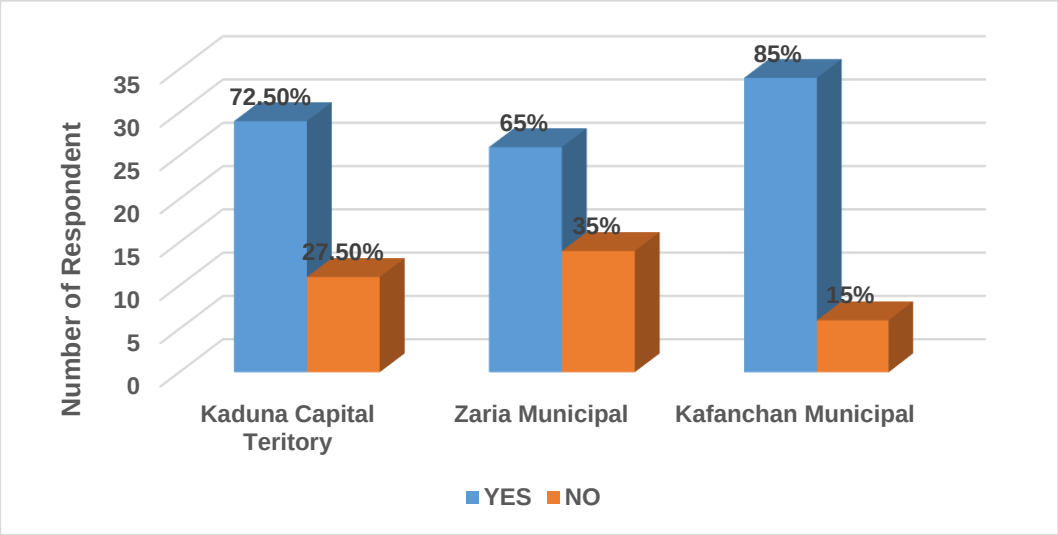

Figure 2a: HND Graduates owning a small business

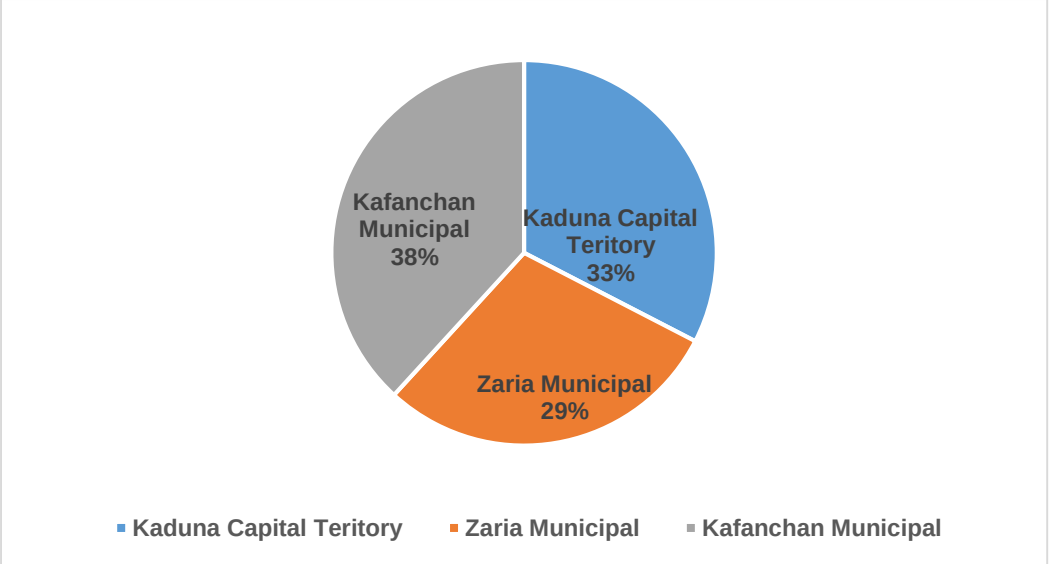

Figure 2b: HND Graduates owning a small Business

The above Tables 1 and 2, Figures 1 (a and b), and Figures 2 (a and b), describe the responses of graduates in the three (3) Metropolitan Authorities of Kaduna State about whether or not they own a business relevant to their course of study for both ND and HND, respectively.

Table 3: Chi Square relationship between Entrepreneurship education and ND graduates owning a business

Test Statistics		
	Graduate Status Owning a Small Business	Failed to accept
Chi-Square	000	64.067
df	1	1
Asymp. Sig.	.000	.000

Table 3 shows the outputs of Chi-Square test values and Sig-Values that determine the significant relationship between entrepreneurship education and the likelihood of polytechnic graduates owning a small business.

DISCUSSION

The Graduates (respondents) in Tables 1 and 2, Figures 1 (a and b), and Figures 2 (a and b) above revealed their experience running a small business, which will inspire future students to be self-employed after graduation.

The relationship between Entrepreneurship education and the likelihood of polytechnic graduates owning a small business is shown in Table 3 above. The chi-square value (64.067) and the significant value (0.000), also known as the P-Value, are both significant values. As a result, we conducted the test at a 95% level of significance and compared it to the Sig Value or P-Value (0.000). Since the P-Value (0.000) is lower than 0.05, we failed to accept the null hypothesis and concluded that "There is a significant relationship between Entrepreneurship education and the likelihood of polytechnic graduates owning a small business".

SUMMARY OF FINDINGS

The following are the research's main findings:

The majority of these respondents are economically engaged, mature enough to determine their entrepreneurial ambitions, and inclined to pursue self-employment as a career option, which is the explanation for this.

The analysis demonstrates a highly significant relationship between entrepreneurship education and the likelihood of polytechnic graduates owning a small business using the Chi-Square test.

CONCLUSION

In conclusion, the level of Entrepreneurship Education determined the mind-set of graduates to own a small business. From the result above, HND graduates owning a small business are more likely than ND graduates.

The analysis using the chi-square test revealed a very statistically significant with P-value (0.000). Therefore, the relationship between entrepreneurship education and the likelihood of polytechnic graduates owning a small business is highly significant.

RECOMMENDATIONS

Given these findings, Nigerian polytechnics should foster an entrepreneurial culture among their students in order to prepare them for value creation, job creation, and self-employment, all of which would result in wealth development for both the individual and the country as a whole.

Both direct and indirect methods are required to instil important entrepreneurial characteristics such as concentration, vision, discipline, creativity, risk-taking, and others.

To reward these characteristics, the government and institutions concerned should make an effort to encourage students to take on an autonomous entrepreneurial venture that they must plan and implement each year of their study. This strategy will significantly help pupils build their entrepreneurship skills.

To promote polytechnic graduates, the government may give loans, grants, or subsidies to start their own firms as they have acquired entrepreneurship skills.

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