

Research Article

Extensiveness of Probono Entrepreneurship Program in Promoting Entrepreneurial Business Ventures Among Secondary School Students in Tanzania

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Abstract

Youth in Tanzania are still struggling with transforming entrepreneurial knowledge into viable business ventures, despite the increasing emphasis on entrepreneurship as the pathway to economic advancement. This challenge raises concerns about the extensiveness of school-based entrepreneurship initiatives, thereby necessitating the evaluation study, on the extensiveness of Probono Entrepreneurship Program (PEP) in promoting entrepreneurial business ventures among secondary school students in Tanzania. The study aimed to assess how PEP contributed to developing entrepreneurial capacities among students. The evaluation was guided by CIRO evaluation model, employing a convergent design within a mixed-methods approach. The target population comprised 1,162 participants, including 790 students, 11 Club Lead Teachers, one program consult, and 360 program alumni. Probability and non-probability sampling techniques were used; the Census sampling technique, proportional stratified random sampling technique, total population and snowball sampling technique were applied to obtain 10 schools, 260 students, 10 club lead teachers, 10 program alumni and 1 program consultant. The students sample size was determined through the use of Crejcie and Morgan table (1970). Data were collected through a questionnaire, an interview guide, and an observation guide. Face and content validity was ensured by research experts from Mwenge Catholic University (MWECAU). A pilot study involved 1 secondary school with 26 students and 1 club lead teacher. The reliability of the Likert-type items from the questionnaires was ensured using Cronbach's Alpha, where $r = 0.845$. The trustworthiness of the qualitative data collection instruments was ensured through triangulation and member checking. Quantitative data were analyzed using descriptive and inferential statistics, while qualitative data were analyzed thematically. The study found there is significant and positive relationship between training offered in PEP and students' entrepreneurial business ventures. The study concluded that training offered by PEP has successfully achieved its goal of promoting entrepreneurial business ventures among secondary schools' students to a high extent. It was recommended that PEP should diversity and expand the program to more schools in order to amplify its impact on youth entrepreneurship.

Keywords

Extensiveness, Probono Entrepreneurship Program, Entrepreneurial Business Ventures

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1. Introduction

Entrepreneurship is globally recognized as a catalyst for economic growth and innovation, making it an essential element in addressing the global unemployment challenge. Its potential to drive social and economic advancement has drawn attention from government and international organizations, particularly for creating business opportunities for youth, women, and marginalized group [19]. Nevertheless, Unemployment remains a persistent social and economic issue across many countries. Since, as the number of educated individual rises rapidly, job opportunities remain scarce resulting to many educated youths even those with excellent academic qualifications struggle to find employment due to the insufficient of entrepreneurial skills that can enable them to be self-employed when the formal employment are scarce [7, 27]. In response, many educational institutions have begun shifting from theoretical approaches to practical, entrepreneurship- centered education to foster skills in innovation and creativity for self-employment. This involves implementing various entrepreneurship programs in schools to supplement traditional education with entrepreneurial training, preparing students with the ability to start and run new business ventures post-graduation [29].

Many countries in the world have introduced various entrepreneurship initiatives to better prepare students for self-employment. Preparing students involves building the capacity of students to come up with their entrepreneurship business ventures that, in one way or another, could mitigate the issue of unemployment in the future. Starting with the United States of America, which has advanced its preparation of students for self-employment by integrating entrepreneurial education into school curricula. It has also allowed various Entrepreneurship Programs in schools, like Uncharted Learning and The National Consortium for Entrepreneurship Education. The programs offered real-world experiences and provided professional development resources for teachers, ensuring that entrepreneurial concepts are embedded across K-12 education [8, 23]. In the United Kingdom, similar efforts include the School Entrepreneurship Education Program (SEEP) and the School Enterprise Challenge initiated by Teach a Man to Fish (TAMTF) in London, in which students develop business plans and launch school-based enterprises, all these efforts are designed to equip students with the skills which are helpful to make them capable of starting their business ventures [22].

In sub-Saharan African countries, South Africa in particular, there have been different policies and initiatives have been introduced from primary to higher educational levels to equip students with the necessary skills and mindset. The Department of Basic Education (DBE) has launched the Entrepreneurship Development in Schools (EDS) program, which focuses on teaching entrepreneurial skills to students in Grades 4 to 9 [4]. Additionally, the South African Government has developed a framework for entrepreneurship

education in Higher education, promoting the inclusion of entrepreneurship modules in university curricula [5]. Rwanda has also made some entrepreneurship reforms, especially in its secondary school education, by introducing mandatory entrepreneurship courses, with a focus on interactive teaching methods and labor market skills [10].

In Tanzania, the preparation of youth for self-employment has a long history dating back to the Arusha Declaration of 1967, when the Education for Self-Reliance (ESR) was introduced by the late Julius K. Nyerere. The primary goal of the Education for Self-Reliance Philosophy was to equip people with practical and vocational skills that could enable them to initiate new productive ventures rather than depending on formal employment. ESR sought to instill entrepreneurial mindset, encouraging Tanzanians to pursue independent and innovative paths toward economic empowerment [16]. In 2005, Tanzania introduced a Competency-Based Curriculum (CBC) designed to equip students with practical skills and competencies, laying the groundwork for self-employability [24].

Furthermore, the Tanzania 2014 Educational and Training Policy (ETP) 2023 edition sections 2.4.3 (d) and 2.4.3 (h), emphasize that education aims to develop students' competence in entrepreneurship, instill love for work, and prepare them for self-employment [25]. Additionally, the Tanzania Development Vision 2050 maintains a similar focus aiming to create a well-educated, skilled and learning society that embrace entrepreneurship and financial literacy that will in turn drive into socio economic development and sustainable growth [26]. Despite these national initiatives that aim to nurture entrepreneurship mindset among the Tanzanian society, still the transformation of youth mindsets towards self-employment remains a topic of debate.

Moreover, the Government of Tanzania, through the Ministry of Community Development, Gender, Women and Special Groups, has been collaborating closely with various charity organizations such as Probono School Partnership for One World to support education in Tanzania by developing different programs and projects in schools. Probono has introduced several projects in schools such as teacher training program, scholarship program, Construction project, and entrepreneurship program. Among these, the entrepreneurship program is the main focus of this study. Therefore, Probono Entrepreneurship Program (PEP) was introduced in Tanzania in 2021 in response to the rising youth unemployment rate. The National Bureau of Statistics (NBS) reported that the unemployment rate among youth in Tanzania increased from 2.44% in 2019 to 2.78% in 2020, and further to 2.87% in 2021 [14]. This escalating unemployment issue prompted the initiation of PEP as an intervention. The Probono Entrepreneurship Program focuses on three objectives: shifting the mindset of youth towards self-employment, promoting the acquisition of soft skills among secondary school students, and encour-

aging entrepreneurial business ventures among students.

The program has been operating in phases, phase one commenced in 2021 and concluded in early 2024, serving as the benchmark for this summative evaluation. Phase two began in early 2024 and will continue until 2026. The Probono Entrepreneurship Program has been implemented in three regions of Tanzania: Kilimanjaro, Arusha, and Dar-es-Salaam [18]. This summative evaluation focused on these three regions where the program was implemented. Given that the program has been operational for three years in secondary schools to prepare young people for self-employment, the effectiveness of PEP Phase One in meeting its objectives remains unclear due to the lack of summative evaluation. This gap could directly impact the implementation of Phase Two, which commenced earlier this year. The necessity to determine the extent to which PEP Phase One objectives were met, the obstacles encountered, and the proposed solutions to these challenges are the driving factors behind the evaluation of the Probono Entrepreneurship Program's first phase in preparing secondary school students for self-employment in Tanzania.

2. Purpose of Evaluation

The purpose of this evaluation is to investigate on the effectiveness of the Probono Entrepreneurship Program in preparing students to initiate different business ventures. Despite the implementation of the program, its effectiveness in preparing secondary school students for coming with various business ventures remains uncertain. Findings from [6, 12] indicate that youth continue to face challenges in self-employment. Similarly, a report from the Tanzania Entrepreneurship Foundation reveals that a significant number of youth-led businesses fail due to insufficient training, which hinders the development of essential entrepreneurial competencies [21]. This raises concerns about whether the Probono Entrepreneurship Program has been sufficiently effective in promoting entrepreneurial business ventures among students. Although formative reports provided by the program implementers offer some insights into routine implementation, there has been no external summative evaluation conducted to evaluate the program on preparing students for self-employment. Therefore, this study aimed to fill the gap by conducting a summative evaluation on the effectiveness of Probono Entrepreneurship Program in promoting entrepreneurial business ventures among secondary school students in Tanzania.

3. Evaluation Question

To what extent has PEP been effective in promoting entrepreneurial business ventures among secondary school students in Tanzania?

4. Evaluation Hypothesis

H₁: There is a significant relationship between the training offered in Probono Entrepreneurship Program and entrepreneurial business ventures initiated by students in schools.

5. Significance of the Evaluation

The findings from this summative evaluation will be of great significance to the program implementers and donors by informing them how PEP has achieved in meeting its objectives since this summative evaluation will be rich in recommendations concerning Probono Entrepreneurship Program Phase One, which can inform decisions concerning the program. Moreover, findings from this evaluation will be rich in information for advising the Ministry of Education on how the integration of entrepreneurship programs in schools will take place, including challenges and solutions, something that can provide a road map towards the inclusion of entrepreneurial elements in Tanzania's Educational Policy. Moreover, this evaluation study will be used by other evaluators as a stepping stone in developing a further body of knowledge since this evaluation will consist of valuable data and relevant information on the effectiveness of PEP in Promoting business ventures among secondary students.

6. Evaluation Model

This evaluation study was guided by the CIRO evaluation model. The acronym CIRO stands for Context, Input, Reaction, and Output, with each component of the model concentrating on a distinct aspect of the evaluation process. The model was proposed by Peter Warr, Michael Bird, and Neil Rackham in 1970 [28]. The model evaluates four areas including: The context, this phase involves assessing the environment in which the training occur. It includes identifying the needs of the students that the program aim to address, establishing objectives for the training program, and determining the relevance and appropriateness of the training. The goal is to ensure alignment with the organization's goals and the trainees' needs. The second is the input phase, which examines the resources, materials, and methods used in the training program. It involves evaluating the quality and suitability of the training content, the trainers, the training methods, and any other resources employed. The focus is on ensuring that the input factors are capable of delivering the desired training outcomes. The third phase is reaction, in this phase, the evaluator focuses on the immediate reactions to the training, gathering feedback on participants' satisfaction with the program. This phase aims to assess the effectiveness of the training and identify areas for improvement. The last phase is the output, in which the evaluator assesses the results of the training program, concentrating on measuring the effectiveness of the training in achieving its objectives and

this is the key area that this summative evaluation focused on.

The CIRO evaluation model stands out for its comprehensive coverage of all stages of a training program, ensuring a thorough assessment of context, input, reaction, and output. It enables immediate feedback collection to promptly address issues and enhance the training experience. By focusing on measurable outcomes, including changes in skills and organizational impact, it offers clear insights into program effectiveness. Its structured approach supports continuous improvement by systematically identifying strengths and weaknesses, and guiding informed decisions for future enhancements. Moreover, its adaptability to diverse training types and organizational settings makes it a versatile and valuable tool for evaluating training programs [28].

CIRO Evaluation model is characterized by some weaknesses, such as complexity and resource demands that can pose challenges, requiring substantial time, expertise, and financial commitment. Time constraints can further restrict thorough evaluations across all phases, potentially compromising the depth of assessment [1].

Despite its weaknesses, the CIRO model remains relevant in evaluating this training program because it includes important evaluation phase such as the Context, Input, Reaction and Output Phase. The CIROs Output phase is particularly relevant to this summative evaluation, which aims to assess the results of the Probono Entrepreneurship Program on promoting secondary school students' entrepreneurial business ventures. Moreover, this program to be evaluated focuses on training students on entrepreneurship skills, attitudes and knowledge, which aligns well with CIRO's core focus areas.

7. Review of Empirical Studies

The Extent to which Entrepreneurship Programs Promote Entrepreneurial Business Ventures among Secondary School Students

Starting entrepreneurship ventures and businesses has been one of the major targets of different entrepreneurship programs in schools. With regard to this theme, various empirical studies were reviewed to provide information on the way entrepreneurship initiatives in schools promote Entrepreneurship ventures among students.

Garvao et al. (2020) conducted a study in Portugal on the role of entrepreneurship education and training programs in advancing entrepreneurial skills and new ventures. The study involved a questionnaire distributed to 103 participants of entrepreneurship education and training programs (EETP). The findings revealed that the entrepreneurship education program significantly enhanced participants' capacities and competencies, promoting greater autonomy and facilitating the creation of new business ideas which is one of the key focuses of the current study [9]. Meanwhile, it placed limited emphasis on how these entrepreneurship programs foster

business ventures. To address this gap, the current study focused on demonstrating how entrepreneurship programs promote entrepreneurial business ventures among secondary school students in Tanzania.

Mohammad and Mohammad (2023) conducted a study in Malaysia, exploring the understanding of entrepreneurship education in secondary schools. The study employed a quantitative approach and used a survey method by distributing a questionnaire to respondents. The target population comprised 22 secondary schools in Perlis state, with a total of 266 respondents completing the questionnaire. The study revealed a strong correlation between entrepreneurship education and the concepts of owning and managing a business among the secondary school students [13]. However, it relied solely on a single data collection instrument, specifically quantitative surveys based on numerical information, thereby lacking the capture of feelings and experiences from natural settings that could have been gleaned through qualitative instruments. To address this gap, the current study incorporated both quantitative and qualitative data collection instruments to provide a deeper understanding of students' and teachers' attitudes, motivations, and feelings towards the entrepreneurship program, thereby ensuring the reliability and credibility of the findings.

Krisnaresanti et al. (2020) conducted a study in Indonesia analyzing entrepreneurship education in creating new entrepreneurs, with the aim of examining the role of entrepreneurship education in this process. It employed a qualitative research approach and administered open-ended questionnaires to 63 student respondents. The major finding highlighted that the entrepreneurship learning process has the potential to cultivate an entrepreneurial spirit and motivate individuals to pursue business ventures. Additionally, it revealed that presenting entrepreneurship material equips respondents with valuable knowledge and experience, thereby sparking their interest in initiating new businesses. As the way of promoting business ventures among the students. Nonetheless, the context of the study, characterized by different political, social, and cultural aspects, limits the generalizability of the findings beyond its specific setting. To address this gap, a similar study was conducted in Tanzania to provide insights that are more contextually relevant and applicable to the Tanzanian environment.

Paul and Marano (2023) conducted a study in the Philippines on the integration of entrepreneurial competencies and students' potential in business ventures among TLE Junior High Schools. The focus of the study was to identify the entrepreneurial competencies of the students and their potential for business ventures. The respondents of the study were Grade 9 and 10 students at Sta. Cruz National High School. The study used a descriptive correlation research design employing a quantitative research technique. A non-standardized survey questionnaire was used, which comprised ten (10) items to identify the entrepreneurial competencies of the students and ten (10) items to assess

their potential for business ventures. The study found a significant relationship between entrepreneurial competency and the students' abilities and skills for business ventures [17]. Since the former study briefly addressed the impact of entrepreneurship initiatives on business ventures, the current study was conducted to investigate the extent to which the program promotes business ventures among secondary school students in Tanzania.

Ndofirepi (2020) conducted a study in Zimbabwe on the relationship between entrepreneurship education and entrepreneurial goal intentions. The purpose of this study was to test whether selected psychological traits mediated the predictive relationship between the perceived effects of entrepreneurship education and entrepreneurial intentions. A cross-sectional survey involving 308 students in Tanzania was employed. The study adopted a quantitative approach based on a cross-sectional survey design, administering a closed-ended questionnaire. The findings revealed that the effects of the entrepreneurship education variable had a positive and statistically significant relationship with the need for achievement, risk-taking propensity, and entrepreneurial goal intentions [15]. The exclusive use of closed-ended questionnaires for data collection may compromise the validity of the findings. Moreover, since the study focused on entrepreneurship education, there is a need to address this gap by employing both questionnaires and interview guides, and conducting research that specifically focuses on entrepreneurship programs to facilitate the collection of in-depth information, thereby enhancing the validity and richness of the findings.

8. Summary of Literature Review and Demonstration of Evaluation Gaps

The reviewed studies provided some significant insights about entrepreneurial initiatives in schools in promoting entrepreneurial business ventures among secondary school students. However, some empirical studies were carried out qualitatively outside Tanzania context, such as Indonesia, thus limits the generalizability and transferability of the findings. Additionally, some studies based their conclusions on a single method of data collection, something which raises concern about the validity of the findings. In response, the current study addressed the methodological gap by employing both qualitative and quantitative data collection methods to ensure the depth and credibility of the findings. It has also addressed the contextual gap by carrying out the current study in Tanzania, ensuring the insights gained are more relevant and applicable to the local context. Furthermore, some empirical studies did not adequately capture the aspect of effectiveness of entrepreneurship programs in specific, often focusing instead on entrepreneurship education as a classroom subject. This justifies the knowledge gap that the current study sought to address. Notably, none of the empir-

ical studies reviewed has specifically examined on effectiveness of PEP on promoting business ventures among students. Therefore, this summative evaluation study aimed to fill the gap by evaluating the effectiveness of PEP in promoting entrepreneurial business ventures among secondary school students.

9. Research Methodology

This evaluation study employed convergent design under a mixed methods approach. The design allows the researcher to collect both quantitative and qualitative data simultaneously and integrate them to thoroughly analyse the research problem and provide a comprehensive understanding, and any discrepancies or conflicting results are explored further for clarification [3]. The target population consisted of 1162 participants, including: 790 students, 11 club lead teachers, 1 program consultant, and 360 program alumni. Probability and non-probability sampling techniques were used; the Census sampling technique, proportional stratified random sampling technique, total population and snowball sampling technique were applied to obtain 10 schools, 260 students, 10 club lead teachers, 10 program alumni and 1 program consultant. Data were collected through a questionnaire, an interview guide and an observation guide. Content and face validity were ensured by MWECAU research and evaluation experts. A pilot study involved 1 secondary school, 26 students and one club lead teacher, considering that the sample size for the pilot study was ten percent of the sample size in the actual study and it was excluded from the actual study. The reliability of the Likert-type items in the questionnaire was estimated using Cronbach's Alpha Coefficient, where $r = 0.845$. The trustworthiness of the qualitative data was ensured through triangulation and member checking method. Quantitative data were analyzed using descriptive and inferential statistics and the hypothesis was tested through simple linear regression analysis at 0.05 (α). Qualitative data were analyzed following thematic analysis procedures as outlined by Cresswell and Cresswell (2023). Ethical considerations were keenly adhered to through the use of informed consent, ensuring confidentiality, avoiding plagiarism, ensuring anonymity and avoiding fabrication of data.

10. Evaluation Findings and Discussion

This evaluation study aimed to evaluate the effectiveness of Probono Entrepreneurship Program in promoting entrepreneurial business ventures among Secondary School Students in Tanzania. A six-point Likert scale was used, where 1 = Very Low Extent (VLE), 2 = Low Extent (LE), 3 = Some Extent (SE), 4 = Moderate (M), 5 = High Extent (HE), and 6 = Very High Extent (VHE). The percentage rates were described as follows: 15 = extreme minority, 16-31 = minority, 32-47 = moderate, 48-63 = majority, 64-79 = very high ma-

jority, 80-99 = extreme majority, and 100 = overwhelming majority, adapted from [20]. The scale for the mean scores is described as 1.0 - 2.0 = Low extent, 2.1- 4.0 =Moderate, 4.1-

6.0 = High Extent, adapted from [2]. Responses from students are summarized in Table 1.

Table 1. Students' Responses on the Extent to which Probono Entrepreneurship Program (PEP) has Promoted Entrepreneurial Business Ventures among Secondary School Students (n=260).

Statements	VLE		VL		SE		M		HE		VHE		M
	f	%	F	%	f	%	f	%	f	%	f	%	
Participation in PEP has increased interest in starting a business	0	0.0	0	0.0	4	1.5	20	7.7	78	30.0	158	60.8	5.50
Training given by PEP helped gain practical skills in business planning	1	0.4	0	0.0	1	0.4	22	8.5	74	28.5	162	62.3	5.52
PEP has provided Valuable resources for developing entrepreneurial ideas	9	3.5	4	1.5	13	5.0	49	18.8	86	33.1	99	38.1	4.91
Participation in PEP has enhanced understanding of how to manage a business	1	0.4	2	0.8	9	3.5	22	8.5	101	38.8	125	48.1	5.29
PEP has linked the participants with experts who can guide business ventures	11	4.2	7	2.7	11	4.2	56	21.5	82	31.5	93	35.8	4.81
Training provided in PEP has increased confidence in taking entrepreneurial risks.	0	0.0	0	0.0	9	3.5	28	10.8	75	28.8	148	56.9	5.39
PEP has improved the ability to identify and exploit business opportunities	2	0.8	3	1.2	4	1.5	36	13.8	96	36.9	119	45.8	5.22
PEP has improved the ability to develop good business ideas	1	0.4	1	0.4	4	1.5	28	10.8	75	28.8	151	58.1	5.42
PEP has provided practical experience in running entrepreneurial projects.	1	0.4	2	0.8	7	2.7	37	14.2	91	35.0	122	46.9	5.23
PEP club has contributed to the launch of different financial projects in schools	0	0.0	0	0.0	12	4.6	52	20.0	77	29.6	119	45.8	5.17
Grand Mean													5.246

Source: Field Data (2025)

Key: 1 = Very Low Extent (VLE), 2 = Low Extent (LE), 3 = Some Extent (SE), 4 = Moderate (M), 5 = High Extent (HE), and 6 = Very High Extent (VHE). f = frequencies, % =Percentages, M=Mean

Data in Table 1 indicates that the extreme majority (90.8%) of students reported that the Probono Entrepreneurship Program has increased their interest in starting a business, with a high or very high extent. In contrast, an extreme minority (9.2%) did not share this sentiment. The students' mean score was 5.50, suggesting that the Probono Entrepreneurship Program has effectively enhanced the interest in starting business among secondary school students to a high extent. The data

from the students' responses reveal a strong collective consensus regarding the program's effectiveness in fostering business interest. This highlights the importance of integrating entrepreneurship programs in schools as a vital tool for nurturing students' entrepreneurial aspirations. It emphasizes the necessity of instilling an entrepreneurial spirit through such programs to develop students' interest in starting their own businesses. These findings are further corroborated by

Program Alumni 1, who, during a phone interview, stated:

The training I received from the PEP club has increased my interest in doing business. As a result, after completing Form Four, my interest led me to start making peanut butter, which I sold in local shops near our home. However, I later ceased the business after joining Form Five. Even after returning to school, that interest never faded. That's why, after completing my advanced secondary education and joining college, I decided to get involved in graphic design and photography. All of this is because of how PEP prepared me. (PA1 Phone interview, 26th April 2025).

Moreover, the club's lead teacher during the face-to-face interview "3" asserted that:

PEP has greatly prepared students in the area of entrepreneurship. Many began the training without any knowledge of entrepreneurship, but now most students are interested in starting their businesses in the future. This has also led to increased participation in entrepreneurial activities at school compared to before. (Face-to-face interview with CLT3, 20th February 2025).

The insights provided by PA1 and CLT3 support the assertion that participation in the PEP has heightened students' interest in starting businesses. They both emphasized how PEP has stimulated their enthusiasm for entrepreneurship, which continues to influence their pursuit of various business initiatives after completing the program. The findings highlight that PEP has catalyzed students' interest in business, resulting in greater involvement in entrepreneurial activities within the school. Additionally, the findings highlight the instrumental role of the Probono Entrepreneurship Program in cultivating business interest among students. This aligns with the conclusions of [11], who affirmed that entrepreneurship education can foster an entrepreneurial spirit and inspire students to engage in business ventures.

On the other hand, data in Table 1 shows that, extreme majority (86.9%) of students rated the PEP's effectiveness in improving their ability to develop good business ideas as a high and very high, while the extreme minority (12.3%) rated the improvement as moderate and some extent. Meanwhile, the other extreme minority rated the improvement as low and very low. The students' mean score was 5.42, indicating that PEP has enhanced their ability to develop good business ideas to a high extent. The findings suggest that incorporating entrepreneurship programs in schools is a strong catalyst for generating innovative and viable business ideas among students. This was supported by the Program Consultant (PC), who stated during a phone interview:

PEP Clubs have been providing students with a platform to showcase their business ideas through activities such as club participation and various exhibitions. PEP has also motivated schools and students with outstanding ideas by recognizing and supporting them. For example, Probono has been covering transport, accommodation, and meal costs for students selected to present their exceptional ideas at exhibitions (PC Phone Interview, 25th April 2025).

Additionally, the Club Lead Teacher 11 (CLT 11) asserted that:

PEP has been actively encouraging students to generate various business ideas. However, some of these ideas have proven to be too costly to implement. For instance, the students were highly enthusiastic about starting a poultry project, but we were unable to proceed due to a lack of necessary resources (CLT 11 Face-to-Face Interview, 9th April 2025).

The perspectives provided by the Program Consultant and Club Lead Teacher align with the students' responses regarding PEP's role in enhancing their ability to develop good business ideas. Their insights highlight the deliberate strategies employed within PEP to encourage students to formulate viable business ideas; however, some ideas appear to be prohibitively expensive to implement. This indicates that while PEP has effectively initiated various strategies to inspire students to generate diverse business ideas, the lack of substantial resources can hinder the realization of some of these concepts. The findings are consistent with [9], who confirmed that the Entrepreneurship Education Program significantly enhances participants' capacities and competencies, promoting greater autonomy and facilitating the creation of new business ideas through the deliberate efforts of the program's implementers.

Furthermore, the data in Table 1 indicates that a very high majority (75.4%) of students rated that PEP Club's contribution to the launch of various financial projects in schools as a high and very high. Conversely, a minority (24.6%) of students reported that the PEP Club had contributed to the launch of financial projects to a moderate and to some extent. The students' mean score was 5.17, suggesting that the PEP Club has contributed to the launch of financial projects in schools to a high extent. This also implies that the Probono Entrepreneurship Program has equipped students with practical experience and relevant skills, enabling them to initiate various financial startups within their schools. Real financial projects expose students to practical business scenarios and thus provide them with authentic entrepreneurial experiences that prepare them to undertake actual business ventures after completing their education.

The fact that a minority of students rated the PEP Club's contribution to the launch of financial projects as moderate or to some extent suggests that the practical implementation of the training varied across schools. This inconsistency appears to be influenced by differences in resources, commitment, and the creative initiatives of Club Lead Teachers. As a result, some schools successfully launched business ventures, while others were less effective in achieving the program's objectives. During an interview with Club Lead Teacher "10" (CLT10), he confirmed that *"so far, we don't have any projects launched due to little commitment among the club members, and the few projects we had are no longer operational"* (CLT 10, face-to-face interview, 27th March 2025). Insights from CLT 10 suggest that in some schools, once the program was phased out, all financial projects were

discontinued, and there was no development of new business ventures as intended by the program. This was attributed to a decline in commitment and full engagement from both students and lead teachers. In contrast, other schools exhibited different outcomes, as explained by Club Lead Teacher "7," who insisted that:

To date, we have launched numerous financial projects initiated by members of the PEP Club. These projects include the student bank project, which serves as the cornerstone of our efforts, a liquid and bar soap production initiative, a vegetable gardening project, a salon project for repairing students' shoes, and a peanut selling venture. The peanut project is particularly advanced, as students have developed a machine capable of selling peanuts autonomously. These initiatives are a direct result of the training provided to our youth in the PEP Club (CLT7 Face-to-Face Interview, 18th March 2025).

The insight provided by Club Lead Teacher from school "I" and "F" reveals contradiction on the issue on the effectiveness of the program on initiation of the financial projects in schools imply that the effectiveness of the program was not uniform across different schools depending on the nature of the students and support from the school administration, to further triangulate data and strengthen the validity of the information, an observation was carried out in schools J, H, C, F, D and A to verify what had been said by with regard to the launching of financial projects in schools by PEP club members. The evidence collected through observation showed various projects initiated by students in schools, and projects witnessed includes salon project, spice making project, liquid soap making project, groundnut selling project,

students' banking project as well as flower vessels making project. The observation indicates the way PEP empowered students to apply business skills in real-world scenarios, ending up coming with financial projects in school.

Data obtained from students' questionnaire, face to face interview and observation align with the view that the Probono Entrepreneurship Program contributed to the launch of different financial projects in schools. This experience has made students realize that learning how to run a business project is different from being given the actual opportunity to do so. It proves that practical experience is essential in entrepreneurship education if the goal is to equip learners with the skills to solve real-world financial challenges. The findings necessitate the need to enhance school environments to support hands-on learning in financial projects to open the room for innovation and the development of student-led business startups. The findings align with [17], highlighting the significance of entrepreneurial competency related to students' ability and skills for business ventures.

The study, further aimed to establish whether there is a significant relationship between the extent of training offered by PEP and the number of business ventures initiated by secondary students in secondary schools. To assess the extent of training offered in PEP, a closed-ended question using a Likert scale was included. Respondents were asked to indicate their perception of the training provided by selecting one option from five predefined choices. The study also determined the number of ventures initiated by students through a multiple-response question, which allowed respondents to select more than one business venture from the provided list. The results of these two items are summarized in Table 2.

Table 2. Descriptive Statistics (n=260).

	Mean	Std. Deviation	N
Business Ventures Initiated by PEP Club Members	3.8846	1.30123	260
Extent of the training offered by PEP	3.9962	.80298	260

Source: Field data 2025

Data presented in Table 2 indicates the extent of training offered in the Probono Entrepreneurship Program (PEP), with a mean score of 3.9962 suggesting that participants perceive the training as high or effective. The lower standard deviation of 0.80298 implies that there is less variability in responses regarding the training. Conversely, business ventures initiated by students yielded a mean score of 3.8846, indicating that, on average, members initiated a moderate number of business ventures. The standard deviation of 1.30123 signifies a moderate level of variability in the number of business ventures initiated among members. This indicates that while some members have initiated numerous

ventures, others may have initiated fewer. The findings align with the CIRO evaluation model, suggesting that if the context is relevant, the inputs are effective, and the reactions are positive, the program can produce desirable outputs, including an increase in business initiatives.

Furthermore, simple linear regression analysis was employed to determine the predictive relationship between variables, computed using SPSS version 27. Simple linear regression is appropriate as it predicts the relationship and provides both the strength and direction of the relationship. The null hypothesis was:

H_0 There is no significant relationship between Probono

Entrepreneurship Program and entrepreneurial business ventures initiated by students in schools.

Significance level:

The hypothesis was tested at the significance level of 0.05. The significance level of 0.05 means that 5% of the results may be found by chance and 95% of the results represent the confidence level in the actual results on the relationship between Probono Entrepreneurship Program and entrepreneurial business ventures initiated by students.

Assumptions of Simple Linear Regression Analysis

The assumptions of simple linear regression are; There should be a linear relationship between the independent and

dependent variable (s); There should be no outliers in the given observation; Scale of data should be interval or ratio scale; the chosen sample should be representative of the population and also all variables should be normally distributed. Normality means that the residuals, which are the differences between the actual and the predicted values, are normally distributed, have zero and maintain consistent variance across all levels of the independent variables.

Decision Rule: The decision to reject or fail the null hypothesis is based on the following condition: If (P value $\leq$ 0.05, H_0 is rejected), if (P-value > 0.05, H_0 is not rejected). The outputs are summarized in [Tables 3 and 4](#).

Table 3. Significance Level of the Extent of Training Offered in PEP on the Number of Business Ventures initiated by students (n=260).

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	191.619	1	191.619	200.219	.000 ^b
	Residual	246.919	258	.957		
	Total	438.538	259			

a. Dependent Variable: Business Ventures Initiated by students

b. Predictors: (Constant), Extent of the training offered in PEP

Source: Field Data (2025)

Table 4. Regression Model Summary Showing the Effect of the Extent of the Training Offered in PEP on the Number of Entrepreneurial Business Ventures Initiated by Students.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.661 ^a	.437	.435	.978

a) Predictors: (Constant), Extent of the training offered in PEP

Source: Field Data (2025)

Data in [Table 3](#), were analyzed using regression analysis using SPSS version 23, with the extent of the training offered in PEP as the independent variables and business ventures initiated by students as dependent variable. The analysis showed P value of $(0.00) \leq 0.05$, indicating a significant relationship between the extent of the training offered in PEP and the number of business ventures initiated by students. Supporting this, [Table 4](#) shows Correlation coefficient (R) of 0.661 which indicates a moderate strong positive relationship between the extent of training offered in PEP and entrepreneurial business ventures initiated by students, this implies that as the extent of training increases, the dependent variable which is entrepreneurial business ventures also increase. It also means that the entrepreneurial training offered by PEP has tangible outcomes, as students who receive more training are significantly more likely to initiate business ventures. Furthermore, the table also shows Coeffi-

cient of determination (R Square) = 0.437, indicating that 43.7% of the variation in student entrepreneurial business ventures is attributed by the training received. This also implies that other factors contributed to 56.3% beyond the training offered by PEP. Findings from this study affirm with the study done by [\[15\]](#) In Zimbabwe, the study found that the effects of entrepreneurship education variable had a positive and statistically significant relationship entrepreneurial goal intentions.

Generally, the study found that PEP has significant and positive relationship with students' entrepreneurial business ventures. The training offered through the Program has effectively contributed to the initiation of business ventures among students. However, while the training is the major contributing factor, there are other factors that also influence the entrepreneurial outcomes.

11. Conclusion

Based on the finding the study concluded that there is a significant and positive relationship between Probono Entrepreneurship Program and entrepreneurial business ventures initiated by students in students in school. The program has effectively contributed to the initiation of business ventures among students. However, while the training is the major contributing factor, there are other factors that also influence the entrepreneurial outcomes.

12. Recommendation

Based on the conclusion, the study recommend that, PEP should diversify its entrepreneurial training by incorporating other complementary programs to foster entrepreneurial development among students. Additionally, The Government of the United Republic of Tanzania, under the Ministry of Education, Science and Technology, should customize the program and expand it to more secondary schools and regions in Tanzania under the Public-Private-Partnership (PPP) to broaden its positive impact on youths' entrepreneurial skills and self-reliance.

Abbreviations

CBC	Competence-Based Curriculum
CIRO	Context Input Reaction Output
EDS	Entrepreneurship Development in Schools
PEP	Probono Entrepreneurship Program
NBS	National Bureau of Statistics
PPP	Public Private Partnership
EETP	Entrepreneurship Education and Training Program
ESR	Education for Self-Reliance
ETP	Education and Training Policy
MWECAU	Mwenge Catholic University
SEEP	School Entrepreneurship Education Program
TAMTF	Teach a Man to Fish

Conflicts of Interest

The authors declare no conflicts of interest.

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