High school learner's interest and readiness to start a business: evidence from South African schools

RYLYNE MANDE NCHU¹; ROBERTSON TENGEH²; LORRAINE HASSAN³; CHUX GERVASE IWU⁴

¹Research Assistant, MSc. Faculty of Business and Management Sciences, Cape Peninsula University of Technology, SOUTH AFRICA, Address: Symphony Way, Bellville, Cape Town, 7535, SOUTH AFRICA, rylelangwe@yahoo.com

²Senior Lecturer, PhD, Faculty of Business and Management Sciences, Cape Peninsula University of Technology, SOUTH AFRICA, Address: Symphony Way, Bellville, Cape Town, 7535, SOUTH AFRICA, TengehR@cput.ac.za

³Professor, PhD, Fundani (Academic Staff Development), Cape Peninsula University of Technology, SOUTH AFRICA, Address: Symphony Way, Bellville, Cape Town, 7535, SOUTH AFRICA, HassanL@cput.ac.za

⁴Professor, PhD, Faculty of Business and Management Sciences, Cape Peninsula University of Technology, SOUTH AFRICA, Address: Symphony Way, Bellville, Cape Town, 7535, SOUTH AFRICA, , Corresponding author: IwuC@cput.ac.za; chuxiwu@gmail.com

Abstract: - Given the growing interest in entrepreneurship education and the quest to provide entrepreneurial skills to all including the youths, the study investigates high school learners' interest and readiness to start a business in South Africa. A group of high school learners (n=403) from select high schools in Cape Town was purposively sampled using self-administrated questionnaires while personal interviews were held with all Business Studies teachers in the participating schools (n=9). The results of this study indicate that 52% of the learners are interested in starting a business, while 73% of them were from moderate income schools. A chi square test was performed to determine if the race and income level of the school influenced learners' responses, and we found no statistical significance (P > 0.01). An overwhelming majority of the learners (73%) was of the view that they could start a business with the help of the knowledge and skills gained in the entrepreneurship education received. Suggestions on how to increase high school learners' entrepreneurial intent and readiness to start a business upon leaving high school include the implementation of frequent learner visits to businesses as well as inviting entrepreneurs to give talks to learners. The goal of any scientific social enquiry such as the one pursued in this study, is to produce knowledge that assists in distilling viewpoints that express accurate necessities for socioeconomic development. Therefore, the practical implications of the study reside in the reinforcement of the need for a curriculum that addresses entrepreneurship education in South African high schools.

Key-Words: - entrepreneurship education, learner interest, learner readiness, start up business, South Africa; sub-Saharan Africa

1 Introduction

The focus of this study was learners' interest and readiness in starting up businesses. Entrepreneurship and the creation of small businesses continue to act as drivers of every economy (North, 2002). Specifically, a major driver of the economy is the creation of small business ventures, which have the capacity to create jobs thereby boosting the economy and consequently improving the national competitiveness of the nation in the world business market (Nicolaides, 2011). With the unemployment rate in South Africa at 26.4% according to Statistics South Africa (2015), 70% of whom are youths, there is a need for high school learners to be trained and prepared to become self-employed after school. More so, it is believed that the education of an entrepreneur will greatly influence his/her perception of entrepreneurship. Nicolaides (2011) affirms that to change learners' perception of entrepreneurship, an educational environment is needed where entrepreneurial ideas are generated, shaped and practised.

It comes as no surprise that very few school leavers find employment after school. According to Horn (2006) only about 7% of successful Grade 12 learners (learners who have successfully completed secondary education) find employment in the formal sector. Driven by these statistics, current research points at weaknesses in the education system that limits entrepreneurial activity in South Africa (Orford, 2004). Much of the weaknesses have been located around factors such as South Africa's "apartheid history, the migration of skilled professionals to other parts of the world before and during 1994, and policies such as Affirmation Action that led to many skilled professionals leaving the country for fear that the policy would not be to their advantage" (Mateus, Iwu & Allen-Ile, 2014). These factors can be said to be responsible for the poor socioeconomic growth of the nation.

Without doubt, the availability of requisite skills is central to the socioeconomic development of any nation. Entrepreneurial skills are considered valuable in any economy owing to its potential to reduce poverty, improve standards of living and create employment especially in an emerging economy such as South Africa. In fact, we believe that teaching learners to become creative, innovative and responsible citizens as well as to develop their entrepreneurial skills is the focal point of entrepreneurship education (North, 2002), which is considered as "a significant stimulant for students' decision to become entrepreneurs" (Iwu, Ezeuduji, Eresia-Eke & Tengeh, 2016).

2 Aim

The aim of this study was to understand high school learner's interest and readiness in starting a business. In pursuing this, we needed to (1) determine the level of readiness with respect to the entrepreneurial skills acquired; and (2) estimate the probability of a progression to entrepreneurship.

3 Literature review

In South Africa, there has been an increasing need to develop educational programmes to encourage and enhance entrepreneurship. This is possibly on the heels of the clamour by government and civil society that more avenues need to be explored to improve the socioeconomic status of South Africans. On this basis, there has been an improvement in the number of educational programmes that included entrepreneurship and have or business subjects in their curricula. For instance, Tengeh, Iwu and Nchu (2015), in a review of the curricula of programmes of universities of technology found that entrepreneurship and business related subjects were part of the curricula in non-business departments such as Engineering. As far back as 1996, Marè pointed out that developing the basic entrepreneurial skills should form an integral part of school curricula, which consequently cultivates a positive attitude towards entrepreneurship. The expectation is that this should serve to prepare future entrants into the labour market to be able to create and enhance enterprise creation. This way they create their own jobs and add to the growth of the economy.

Essentially, there is a need in South Africa to address the employability of school leavers through the development of innovative entrepreneurship education by educational institutions. In order to promote skilled opportunity-oriented entrepreneurs, learners must be exposed to entrepreneurship activities in schools (Govender, 2008). Therefore, entrepreneurship education should consist of content that is innovative and reflective in order to be able to enhance the successes of new business ventures (Elmuti, Khoury, & Omran 2012).

According to a study by Nieuwenhuizen and Groenewald (2008), exposure to entrepreneurial training may spark an interest in entrepreneurship and or desire to start a business. This goes to point out that entrepreneurship education and training are very important for business creation and business success.

Entrepreneurship education models often vary suggesting that there is no single approach to entrepreneurship education programme. Therefore not a single approach can be used in all entrepreneurship education situations. With entrepreneurship education, individuals and entrepreneurs alike will be able to acquire innovative problem solving skills, become more flexible and open minded, more selfreliant and also more creative in their thinking (Henry, Hill & Leitch, 2005). These can be considered essential elements for a viable economic development in any country. Hence there is a need for a well-structured and resolute approach to the enhancement and development of entrepreneurial skills. A good follow is model to the lifelong entrepreneurship model as portrayed in Figure 1. This model is acknowledged by many researchers (for example Kroon, De Klerk and Dippenaar, 2003; Linan, 2007; Ibrahim, Bakar, Asimiran, Mohamed & Zakaria, 2015) for its capacity to provide easy to use guide to entrepreneurship education. Kroon et al (2003) for instance seem impressed with the model because of its emphasis that "all young people should be exposed to entrepreneurship education in a lifelong learning process, where all role players fulfil a role". Ibrahim, Bakar, Asimiran, Mohamed and Zakaria (2015) recently espoused the worthiness of the model creating substantial focus in for entrepreneurship. Their opinion, which aligns with that of Linan (2007), was that "entrepreneurship education should be considered as a model of lifelong learning" which has "salient characteristics that are formally independent and that would be developed without the need for a tight coordination between them". In our case, we find that aspects of this study point to the need for a constructive basic business skills acquisition which leads to the inculcation of entrepreneurship competencies that support the likelihood of business startup and effective expansion thereof.



Figure 1: A lifelong entrepreneurship education model. Source: Ashmore, 1990.

To cultivate interest in entrepreneurship requires a number of influential factors. According to Smallbone and Welter (2001), some of these influential factors include active government participation through (1)legislation and policies that encourage innovative practices; (2) addressing operating costs of small firms who need to comply with certain regulations; and (3) placing some value on enterprise and entrepreneurship education. A common feature in these factors is the compelling need to provide skills training to both established and burgeoning entrepreneurs so that they can familiarise themselves with entrepreneurship competencies for starting and managing business operations.

4 Research Method

A mixed method – qualitative and quantitative - was used for this study. Mixed methods assist in covering reasonable grounds of enquiry often elucidating grey areas which one aspect of the method may not reveal. For instance, Mateus, Iwu and Allen-Ile (2014) noted that owing to the social context of their enquiry, it was important to resort to a mixed method. With reference to this study, the strength of a qualitative strategy lies in its capacity to explore opinions, perceptions and identify evidence of the readiness of learners to pursue entrepreneurial activity and or startup on completion of their studies.

To participate in this study, participants needed to meet certain conditions. Firstly, the learner must be in Grade 12 (the final year of high school). Secondly, one of the subjects the learner enrolled for must be Business Studies. Altogether, 403 que stionnaires were properly filled out and returned. Nine schools were chosen for this study by way of purposive sampling. Interviews were held with the teachers who taught Business Studies in the nine schools that participated in the study. The qualitative approach allowed the researchers to gain insight into learners' interest and readiness to become entrepreneurs. Both quantifying and non-quantifying data analysis methods were used to interpret the data. Descriptive analysis techniques were used to analyse the survey data while data sets were subjected to Chi square and Kruskal-Wallis tests using statistics software such as Past and Excel.

Results in the form of responses that are pertinent to the focus of the study (i.e. learners' interest and readiness to pursue entrepreneurship) are presented in the next section followed by a discussion of the results.

5 Results

5.1 Learners' interest in starting a business

The questionnaire had items which intended to determine learners' interest in becoming entrepreneurs or starting up businesses after they leave school or in the near future. One of such items asked learners if they knew or associated with any successful entrepreneur and if they used these entrepreneurs as a source of learning. Another item sought answers to what the learners would do on graduation.

5.1.1 Learners' exposure to entrepreneurship and to role models

Literature reveals that one of the factors that spur entrepreneurial interest is the exposure to entrepreneurial role models. In this study, one of the items in the questionnaire sought to know if the learners were familiar with any entrepreneur and how much they considered those as role models. From the results as illustrated in Figure 2, 79% of the learners said they knew successful entrepreneurs.



Figure 2: Learners' exposure to entrepreneurship through role models

Interestingly, when asked if they used the successful entrepreneurs they knew as a source of learning (role models, inspiration) so as to determine their interest in becoming an entrepreneur, only 29%; (93 learners) of the 79%; (319 learners) of learners said yes. See Table 1 below.

a source o	Tlearning			
Category	Learners who use entrepreneurs as a source of learning			
	Frequency Percentage			
Yes	93	29%		
No	226	71%		
Total	319	100%		

Table 1: Learners who	use entrepreneurs a	S
a source of learning		

In South Africa, there are three categories of schools namely independent schools, government schools and governing bodyfunded public schools. So we thought it was necessary to find out if the type of school attended may have any bearing on the level of exposure learners get with respect to association with entrepreneurs. Independent schools are characterised as more expensive and patronised by very high income earners while governing body-funded public schools (formerly known as Mo del C schools) are public schools that are administered and partly funded by a governing body that comprises mostly parents and alumni. Chi square test was performed on t he data of learners who admitted that they used these entrepreneurs as a source of learning.

Table	2:	School	type	and	the	use	of
entrep	rene	eurs as a	source	of lea	arnin	g	

School Type	Frequency	Percentage
Low income schools	30	32%
Moderate income schools	48	52%
High income schools	15	16%
Total	93	100%

The results show that the differences in responses by the learners who use entrepreneurs as a source of learning were not statistically significant (df = 2; $X^2 = 0.15$; P >0.05). This means that no matter what the school type was in terms of income level, their responses were not influenced by the school type shown in Table 2.

Again, considering that we wanted to be certain about the influence of certain variables such as type of school, and ethnicity, the learners ethnic properties were statistically analysed using Chi square to determine the degree of association between learners who are exposed to entrepreneurial role models and those who are not.

Table 3: Ethnic distribution of learners who answered yes to using entrepreneurs as a source of learning

Ethnic	Frequency	Percentage
group		
Black	46	50%
Coloured	25	27%
Indian	5	5%
White	15	16%

Others	2	2%
Tatal	93	100%
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The result in Table 3 shows that 50% of the learners who agreed to using entrepreneurs as a source of learning or mentorship were Black. And from the Chi square analysis performed there was no statistical significance to their responses (df = 5; $X^2 = 0.6$; P >0.05).

5.1.2 Expectation of learners when they leave school

The results as shown in Table 4 suggest that a majority of the learners (91%) want to further their education after high school. This shows that there is a high level of emphasis placed on further education across the various school types be it high, moderate or low income schools. Interestingly, the desire for self-employment came second (52%) in terms of learners' expectations after school.

The differences in the responses by the learners who intend to start a business after they leave high school were statistically significant (df = 5; $X^2 = 125.17$; P <0.05). The results show that there is a 95% confidence level that the responses of the learners on their expectations after they leave school were not influenced by their school types. Therefore more than half (52%) of the learners across all income level schools are interested in starting up businesses after they leave school.

Table 4: Learners'	expectations after
leaving school	

Variables (Expectations)	Category	
(Yes	No
Business/Industry employment	49%	51%
Family employment	20%	80%
Further my education	91%	9%
Government employment	33%	67%
Self-employment	52%	48%
Work in local organisation	32%	68%

5.2 Learners' readiness to start a business

Evidence abound in literature which suggests that exposure to business studies has a close

association to the possibility of someone starting a b usiness. In fact, entrepreneurship education is significantly associated with the probability of success in the business environment (Pambault, Hassan & Iwu, 2015). With this in mind, the learners were asked if they could leverage the knowledge gained in business studies to start a business. Essentially, we wanted to know if the lessons learned in the subject had prepared them enough to contemplate starting a business.

5.2.1 Learners' ability to start a business from the knowledge and skills gained

A major component of the subject Business Studies, includes business activities such as Market day –sale of cakes, muffins, etc; and classroom tasks such as selling an idea to a group of students (with the use of slide shows for effect), and class debates. These activities are aimed to stimulate learner interest in business, bolster confidence and possibly provide the foundation for advancement into entrepreneurship.

The results as portrayed in Table 5 indicate that an overwhelming majority (73%) of the learners (293 learners), concurred that the knowledge gained from the entrepreneurship classes are sufficient to motivate them to start a business. Nineteen percent of the learners (75 learners) strongly agree that they would be able to start a business with the knowledge gained. Seven percent of the learners (i.e. 30) were uncertain whether with the knowledge gained they would be able to start a business. One percent (five learners) disagreed that with the knowledge gained they would be able to start a business.

Table 5: Ability and readiness to start abusiness

Variables	Ability to start a business from knowledge and skills gained		
	Frequency	Percentage	
Strongly agree	75	19%	
Agree	293	73%	
Neither agree nor	30	7%	

disagree		
Disagree	5	1%
Total	403	100%

There was a statistical significance (df = 2; X^2 = 15.0; P <0.001) following the Chi Square test (X^2) performed on the responses of the learners who strongly agreed that they would be able to start a business with the knowledge and skills acquired from business studies as opposed to those learners who did not strongly agree. From the results as shown in Table 6, majority (90%) of the learners, who strongly agreed to the likelihood of starting a business were from low income schools and this was significantly different or higher than those from other income schools.

Table 6: School type distribution of learners
who strongly agreed that knowledge and
skills gained can enable them to start a
business

School Type	Total number of learners	Total number of learners who strongly agreed	Percentage of learners who strongly agreed
Low income schools	88	79	90%
Moderate income schools	249	172	69%
High income schools	58	45	78%

5.3 Teachers' opinion on learners' interest in entrepreneurship and the ability to start a business

Questions were posed to the teachers on a 10point Likert scale to enable us understand their perception of the learners' interest in entrepreneurship. The result as shown in Table 7 indicates that teachers from low income schools had a high mean in terms of all the variables analysed. The average mean of low income teachers who agreed that learners had an interest in business was 8.8 on a scale of 10 with a standard error of 0.6, while moderate and high income school teachers had an average mean of 6.7 and 6.0 r espectively. In spite of the high mean observed in all the variables tested (see Table 7) from the low income school teachers, there was no statistical significance (P>0.05) in the responses of teachers in all income levels (low income, moderate income and high income schools).

Table 7: Teachers' opinions of learners'interest in entrepreneurship

Variabl es	Catego Sca	Kruskal- Wallis statistics		
	Low	Moderat e	High	P- Valu e
Interest in business	8.8±0. 6	6.7±0.9	6.0±0. 0	0.08
Ability to start up business	5.8±1. 6	5.3±0.3	6.0±1	0.73

5.3.1 Teachers' viewpoint of learners' readiness to apply the knowledge acquired

56% of the teachers were of the view that their learners would be able to apply the knowledge and skills that they have acquired from the subject, Business Studies. See Table 8.

Table 8: Teachers' opinion of learners' readiness to apply the knowledge and skills acquired

Would	Response		
learners be	Frequency	Percentage	
ready to apply			
in the business			
world what			
they have			
learned?			
Strongly agree	2	22%	
Agree	5	56%	
Neutral	2	22%	
Total	9	100%	

6 Discussion

6.1 Learners interest in starting a business 6.1.1 Use of successful entrepreneurs as role models

A large number of learners indicated that they knew some successful entrepreneurs (see Figure. 2). The study finds this encouraging because of the likelihood of the learners using them as r ole models. There is considerable agreement among scholars (for example Dohse & Walter, 2012; Ozaralli & Rivenburgh, 2016) that knowing a su ccessful entrepreneur can initiate the intention to become While Ozaralli entrepreneurial. and Rivenburgh (2016) refer to "creative catalysts" as influential in ones decision to become entrepreneurial, Dohse and Walter (2012) place emphasis on what they call "know-who" principle. Essentially, these authors advocate meeting and spending time with creative people who will assist with the procurement of relevant persons in the pursuit of entrepreneurship intention. Thus, Fayolle and Klandt (2006) agree by suggesting that it is necessary to adopt a learning approach that will include the active participation of role models in the assessment as well as in the actual learning. The teaching of entrepreneurship education could be enhanced through the use of role models.

However, when asked if they used them as a source of learning, the results as shown in Table 1 indicate that only 29% of the 79% of the learners affirmed the use of entrepreneurs as a source of learning and mentorship in becoming successful entrepreneurs. Teacher respondents however explained that simply knowing an entrepreneur does not necessarily mean that they would be emulated or inspire learners. This also corroborates the findings from the learners who indicated that only 29% (see Table 1) of those who knew successful entrepreneurs use them as a source of learning or reference.

The United States of America (USA) places great emphasis on close relations between schools and local businesses. Teacher respondents in the current study indicated that they did not involve local entrepreneurs in the teaching of entrepreneurship education due to time constraints and also because local entrepreneurs were unwilling to assist. This short-changes a more profound appreciation of entrepreneurial skills especially considering that the availability and use of role models can impact the extent to which learners are likely to opt for entrepreneurship as a c areer option.

On the basis of this, we can argue that the entrepreneurial knowledge that was provided could have been much more meaningful and perhaps easier to practice if learners could see, identify and experience what they learn.

6.1.2 Career aspirations after high school

Learners were asked what they would like to become after they leave high school. From the results as shown in Table 4, 91% percent of learners indicated an interest in further education. This is an ideal, but unfortunately research shows the opposite. Horn (2006) noted that due to the high cost of tertiary education and the stringent academic requirements, only 10% of school leavers will be accepted by tertiary institutions to further their studies. This is a frustrating situation for a young person who may not necessarily be inspired to look for other options such as starting a small business.

Interestingly, 52% of learners would rather seek to own a b usiness and not further education or paid employment. Most South Africans tend to seek jobs with financial security rather than take the risk and create new ventures (Kroon & Meyer, 2001). In any case, one needs to be educated and qualified to be able to attain a job with financial security which includes a fixed salary, pension fund, medical insurance and other benefits. The findings of this study are in line with this notion, as the vast majority of the learners indicated an intention to pursue further studies. The third highest option chosen was to find a job in a business or industry. Thus, this study found that a little less than half of the learner respondents were not interested in starting their own business as they were not encouraged to perceive entrepreneurship as a career option. Though, surprisingly, 49% of the learners would prefer to work in someone's own business to starting their own businesses. The data further indicates that 20% of learners responded that they would work in a family owned business, meaning just a few of the learners are exposed to the culture of creating businesses through their association with family members.

It is interesting to note that in all nine cases (schools) of this study there is a strong statistical significance level among the various responses by the learners on what they intend to do after high school. From the Chi square statistics (see Table 4) there is a 9 5% significance level with a P-value of 2.519SE-25 (P>0.05) that the responses of the learners with respect to their expectations after school were not the same nor were they influenced by the level of income of the schools.

6.2 Learners' readiness to start a business 6.2.1 Starting a business from knowledge and skills gained

Table 5 portrays learners' ability and readiness to start a business from the knowledge gained in school. A total of 293 learners (73%) agreed that from the knowledge and skills gained from the subject they would be able to start a business (see Table 5). This is a rather optimistic stance especially if one considers the response of learners to an item in the questionnaire where they expressed their concern over insufficient practical activities that can augment real life business applications. This view was further confirmed by teacher responses. In Table 8, 56% of the teachers indicated that the knowledge and skills provided by the current entrepreneurship education programme was not sufficient to allow learners to start their own business immediately after school. Teachers explained that entrepreneurship education provides the necessary foundational knowledge needed to start a business but learners would require more time to practise these skills and to refine their knowledge before they are able to start their own business. This admission suggests that the experience provided by the current entrepreneurship education programme was not sufficient to allow learners to start their own businesses immediately after school.

That notwithstanding, the results in Table 6 indicate that majority (79%) of learners consider entrepreneurship education as reasonably empowering i.e. providing the necessary knowledge and skills, to start a business. These findings may help us to understand the notion that the introduction of entrepreneurship education in schools positively impacted on entrepreneurial activity in most countries such as the USA and China. Kuratko (2005:577) maintains that despite the growth of entrepreneurship and remarkable developments in the field of entrepreneurship education it remains a challenged discipline. However, it is how countries deal with the

challenges of entrepreneurship and entrepreneurship education that can determine future economic success.

7 Conclusion

Given the growing interest in entrepreneurship education and the quest for entrepreneurial skills to all including the youths, we investigated high school learners' interest and readiness to start a business in South Africa. This is against the backdrop of the significance of entrepreneurship as a major driver of socioeconomic growth. Beyond this avowed necessity for entrepreneurship, most nations nowadays have begun to extend the study of entrepreneurship to basic education levels such as primary and secondary schools. In order to find out how entrepreneurship engagement may be enhanced, studies such as this are undertaken. The findings of studies of this nature then assist with either refining the curricula of schools and or possibly uncovering other ways of providing opportunities for an enlarged entrepreneurial engagement.

This study finds among others, that the current entrepreneurship education programme limits the development of creativity among school leavers because there are few practical activities to inspire learners to become creative and innovative. In order to increase the learners' interest and readiness in becoming entrepreneurs all stakeholders namely the government, the business sector, teachers, learners and parents have to play a role. The study also found that successful business owners who can serve as mentors and role models are not used in the teaching of entrepreneurship education and in our opinion this creates a m isalignment between theory and practice of entrepreneurship education. Text books make reference to celebrity entrepreneurs whom learners look up to without realizing that they first have to start their own business to get to that stage eventually.

We therefore suggest that schools should have a system whereby alumni who have become entrepreneurs should be invited back to their alma mater to share their success stories. It is recommended that schools develop a programme or a memorandum of understanding between local businesses whereby learners are offered holiday jobs at the businesses. In this way learners would gain hands-on experience of entrepreneurship. The counsel provided here is consistent with the aspirations of the lifelong entrepreneurship education model of Ashmore (1990).

It is also suggested that the Department of Education or the schools could launch several award winning competitions such as the best business plan, the most creative or innovative business idea, or the best in-school business, to encourage entrepreneurial activities among learners. During events such as these, local businesses can serve as members of the panel of judges for the different competitions. The establishment of platforms where foreign institutions are engaged on t he subject of entrepreneurship and entrepreneurship education is suggested as way of broadening the discourse pertaining to entrepreneurship and entrepreneurship education development, but more importantly allowing for the sharing of best practices among participants.

In closing, we reiterate that one of the factors that have suppressed entrepreneurship in South Africa is the absence of education and training programs for entrepreneurs. Therefore we join the clamour to raise entrepreneurial awareness and create foundational skills programs whose content include basic business, administration, financial and other skills. As the study has shown there is even more sense for learners in high schools to be introduced to programs of this kind so that mind sets can be changed early for the purposes of an impactful entrepreneurial uptake.

8 Scope for future research

There is a need for an in-depth exploration of students' and industry needs to inform the design of curricular and extracurricular interventions, which address entrepreneurship education and business start-ups.

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