

The Role of South Africa's Universities and Higher Education in Entrepreneurship Development

I Malatjie

National School of Government, South Africa

Abstract: South Africa is characterised by high unemployment over the recent years. Major concern is the youth unemployment rate that continued to rise to 56.4% in 2019 from 55.2% in the prior period and of which graduate unemployment is particularly higher. Lack of work experience and entrepreneurial skills contributes to this challenge. Thus entrepreneurship has been recognised as one of the tools that drives the economy of a country and entrepreneurial activities are not only the incubator of technological innovation, but they also provide employment opportunities and increase competitiveness. Entrepreneurship is pivotal to the growth of the South African economy and its future socio-political stability, without the creation of new businesses South Africa faces challenges of economic stagnation. Therefore, the important role and positive contribution of entrepreneurship and the promotion of entrepreneurial culture in educational, economic and social development in South Africa cannot be overlooked. This paper seeks to answer pertinent questions that relate to entrepreneurship. Why is entrepreneurship necessary for economic development? What can government do to promote entrepreneurship amongst South African youth? How can universities inculcate a culture of entrepreneurship within their students? Can entrepreneurship be promoted by including it in programme design and curriculum within universities? The answers to these questions and their implications to high youth unemployment and entrepreneurship development are discussed in this paper.

Keywords: Entrepreneurship, Entrepreneurship development, Government, unemployment

1. Introduction

The critical role and positive contribution of entrepreneurship and the promotion of a vigorous entrepreneurial culture in the economic and development of South Africa cannot be over emphasised. This comes at a time when the unemployment rate in South Africa increased to 29% in the second quarter of 2019 from 27.6% in the previous period. Statistics SA (2019) indicates that of major concern is the youth unemployment rate that continued to rise to 56.4% from 55.2% in the prior period. Mabeba (2019) emphasises that high youth unemployment means that young people are not gaining the skills or experience needed to drive the economy forward. Thus the quality of the education system and lack of work experience contribute to gaps in entrepreneurial skills.

Unemployment has increased in South Africa over the past few years due to large downsizing by various industries such as the mining, manufacturing and building sector and most recently the banking sector. This statement is supported by Segoi (2009) as quoted by Fatoki (2010) who asserts that unemployment has increased in South Africa as the

deepening economic recession has led to massive corporate downsizing. This is cause for concern for an average university student who is studying with the hope of graduating with a university degree and getting a job. The general perception is to earn an academic qualification in order to stand a better chance to find a job and earn a good salary. Times are tough and the market has changed, therefore, this calls for a change in the tertiary education that prepares students to be employees rather than employers.

Greene and Saridakis (2008) and Hoppe (2016) add that enterprising abilities are considered necessary not only on the labour market but also as an altered need to society as a whole. There is a need for individuals who can take responsibility, initiatives and show creativity for increasing their self-employability. Broader participation of youth in the formal economy through employment or entrepreneurship is required to achieve sustainable development and prosperity. Francke and Alexander (2019) assert that initiatives including job creation, poverty alleviation and access to entrepreneurial development/business finance must be prioritised by government. These initiatives would need support from

government to ensure success and sustainability. A model that will assist towards enhanced competitiveness and ultimately in alleviating poverty, unemployment and reducing economic inequality will be required. It is against this background that this paper seeks to answer the following related questions: (a) Why is entrepreneurship necessary for economic development? (b) What can government do to promote entrepreneurship amongst South African youth? (c) How can universities inculcate a culture of entrepreneurship within their students? (d) Can entrepreneurship be promoted by including it in programme design and curriculum within universities? This paper seeks to contribute to literature on entrepreneurship and specifically aims to examine the importance of entrepreneurship education amongst youth.

2. Entrepreneurship Development in South Africa

The South African economy is shedding jobs, and those that are being created if any are in the public sector. Thus current economic climate and high unemployment rate calls for a paradigm shift. The failure of the formal and public sector to absorb a growing number of job seekers in South Africa necessitates for a change in the culture of the society and government at large, therefore entrepreneurship is seen as the solution to the high unemployment rate. Mass and Herrington (2006) point out that entrepreneurship is a significant component of the solution to South Africa's development issues. Therefore, entrepreneurship is fundamental to the growth of the South African economy and its future socio-political stability. Obaji and Olugu (2014) indicate that the importance of entrepreneurship development in several economies globally cannot be over emphasized, as such majority of countries worldwide have established programmes to support entrepreneurship within their communities. South Africa should also invest in the establishment of entrepreneurship programmes in order to reduce high unemployment rate of youth.

Entrepreneurship has emerged since 2004 as a driving force for economic growth, employment creation and competitiveness. It is regarded as a dynamic process of vision, change and creation. Van Gelderen, Brand, Van Praag, Bodewes and Van Gils (2008) define entrepreneurship as an attitude that reflects an individual's motivation and

capacity to identify an opportunity and to pursue it, in order to produce new value or economic success. Entrepreneurship is the capacity and willingness to undertake conception, organisation and management of a productive venture with all attendant risks, while seeking profit as a reward. In the study by Rwigema and Venter (2004) entrepreneurship is defined as a process of conceptualising, organising, launching and through innovation, nurturing a business opportunity into a potentially high growth venture in a complex, unstable environment. Skolverket (2015) adds that entrepreneurship is a dynamic and social process, where individuals by themselves, or in collaboration, identify opportunities and do something with them in order to reshape ideas into practical and goal oriented activities in social, cultural and economic contexts.

According to researchers (Hisrich, Peters & Sheperd, 2013; Linan & Fayolle, 2015) entrepreneurship is a complex process involving entrepreneurial cognition and actions. Although psychological traits, demographic factors, environmental influence, family background, education and training of an individual have significant impact on perceived ease or difficulty of choosing an entrepreneurial career, predicting the exact combination of characteristics and context for new venture creation has been proven to be difficult due to dynamism of the entrepreneurial process. Timmons (2000) believes entrepreneurship to be the process of creating or seizing an opportunity and pursuing it, regardless of the resources currently controlled. Taking key concepts from a number of definitions, including the ones above, one can identify some important aspects of entrepreneurship as opportunity identification; innovation and creativity; getting resources; creating and growing a venture; risk taking; being rewarded and managing the business (Nieman & Niewenhuizen, 2009). Thus for South Africa to have a break-through in the high youth unemployment rate, policy makers need to come up with entrepreneurial initiatives and support for development programmes. Entrepreneurship is considered as a crucial growth agent of a country to achieve economic, social, technological and organisational development.

Entrepreneurs and entrepreneurship provide a wide range of economic benefits such as introducing innovative products and services, job creation, technology transfer, increased competitiveness and enabling social development (Acs, Autio &

Szerb, 2014; Bosman, Content, Sanders & Stam, 2018). South Africa needs to create a climate that is conducive for entrepreneurial development and have policies in place that will advance this cause of action. Youth must be orientated towards entrepreneurship at university level as this is an opportunity that will assist in the creation of jobs and alleviation of poverty. This sentiment is echoed by Fukugawa (2013) who describes entrepreneurship to mean a recognition or creation of business opportunities and the exploitation of the opportunities through new firm creation. Due to low level of economic growth, high unemployment and an unsatisfactory level of poverty in South Africa, entrepreneurship becomes a critical solution. Most people are either choosing entrepreneurship as their career path or they are forced to create their own employment (Nieman & Niewenhuizen, 2009).

3. The Importance of Entrepreneurship

Entrepreneurship is recognised as one of the tools that drive the economy of a country, entrepreneurial activities are not only the incubator of technological innovation but they also provide employment opportunities and increase competitiveness (Gree & Thurnik, 2003; Tucker & Selcuk, 2009). Economically, entrepreneurship revitalises markets as the creation of new business leads to job creation and this has a huge effect on the economy of the country. Socially, entrepreneurship tends to empower citizens and it generates innovation and shifts mind-sets that were previously sedate. Such changes have the potential to successfully integrate developing countries into the global economy (Nicolaidis, 2011).

Obaji and Olugu (2014) assert that entrepreneurship helps to bring about economic development through wealth creation, employment creation and enhancement of the competitiveness of the existing Small Medium Enterprises (SMEs). When there is employment generation as well as increase in the number of entrepreneurs or SMEs, economic development or growth usually takes place. In line with this, SMEs will employ local people and this will eradicate poverty and improve on economic development. Therefore, entrepreneurship is acknowledged as an engine of economic development and that the only way out for the totality of employable people in the country is through entrepreneurship initiatives. Because of the above background information, the role of entrepreneurship in the economies of most countries has been

acknowledged in the entrepreneurship literature. Entrepreneurs contributed to the economic development as well as commercialization of research and development (R&D) products and technology transfer. According to Nieman and Niewenhuizen (2009), entrepreneurship has and continues to have a fundamental effect on the economy of a country by establishing new and growing businesses that provide not only goods and services to customers but also job opportunities for individuals in various industries. Therefore, entrepreneurship plays a vital role in the survival and growth of any emerging economy, hence it is deemed as a crucial and important factor to the development and growth of the country.

4. The Role of Government in Entrepreneurship Development

Studies around the world (Kumar & Liu, 2005; Minniti, 2008; Friedman, 2011; Ihugba, Odii & Njonku, 2014) established that entrepreneurship is a vital ingredient for job creation as well as economic development, as the success of income generation for the major group of both rural and urban inhabitants without recognised paid jobs highly depends on entrepreneurship. Therefore, there is a need for government to minimise constraints on entrepreneurship through successful implementation of government policies irrespective of which administration is in power in order to achieve set goals. Government should provide much needed resources such as provision of environment conducive to business that will highly promote entrepreneurship, policies regulating and improving conditions of entrepreneurship and most importantly funding resources.

South Africa is faced with a challenge of high unemployment rate in the youth category. This is a growing problem as it affects the economy and will increase social-ills within our communities. Therefore, a drastic action needs to be taken to improve this situation and to invest in the growth and development of the country. It is against this background that the South African government has identified entrepreneurship and business development to promote economic growth (PWC, 1). According to Francke and Alexander (2019), entrepreneurship is vital to increase job creation, however entrepreneurship in SA is low in comparison with other emerging economies. This could be improved with government policies supported by

financial and non-financial backing. The National Development Plan (NDP) acknowledges that South Africa has a growing youthful population, which then presents an opportunity to boost economic growth, increase employment and reduce poverty. Therefore, a proposal was made by the National Youth Development Agency (NYDA) that youth service programmes be strengthened and new community-based programmes be introduced to offer young people life-skills training, entrepreneurship training and opportunities to participate in community development programmes. The NYDA believes that entrepreneurship has a great potential to increase youth economic participation (South Africa, 2014).

In their research, Obaji and Olugu (2014) indicated that as government is in the lead of the establishment, sponsorship and administration of most support programmes especially in developing countries, a proclamation from the government as it relates to entrepreneurship will go a long way to ensuring the sustainability and positive entrepreneurial practice. Thus it will bring economic development through SME development, job creation as well as wealth creation. A number of studies (Fatoki, 2010; Ncgobo & Keswa, 2017; Frank & Alexander, 2019) have been conducted that indicate that accessibility of monetary services is one of the significant factors for the continued existence of majority of newly formed firms as well as an essential element in entrepreneurship practice.

Nicolaedes, (2011) states that if South Africa is to meet and sustain the material needs of all its people, it is important that the government begins to develop a spirit of enterprise in which entrepreneurial ventures are acceptable and worthy of support. It is against this reason that South African government has realised the importance of entrepreneurship with regards to the growth of its economy and has therefore created policies and formed agencies that support entrepreneurial development. Agencies such as Small Enterprise Development Agency (SEDA) and National Development Youth Agency (NYDA) have been formed to encourage youth entrepreneurship and to assist with development of entrepreneurship in the country (Fatoki, 2010).

Currently there are government departments as well that have been mandated with entrepreneurial development and support, these are Department of Trade and Industry (DTI), Department of Economic

Development (DED) and Department of Small Business. Other agencies that have been established to distribute funds and offer support to emerging entrepreneurs are National Empowerment Fund (NEF) and the National Small Business Advisory Council (NSBAC). However, in the study by Ngcobo and Keswa (2017) it was observed that this type of information is not well communicated to youth and communities out there, which makes it difficult for youth to access funding/support for entrepreneurial development. Therefore, awareness campaigns of government support instruments should be prioritised.

If South Africa is to meet the needs of its people (reduced youth unemployment, poverty alleviation) it is quite imperative that government begin to vigorously develop a spirit of entrepreneurship in which entrepreneurial ventures are acceptable and worthy of support. Government should develop creativity, risk taking, learning and innovation amongst youth through education and necessary resources such as finance and infrastructure should be made available.

5. The Role of Higher Education and Universities in Entrepreneurship Education

Today, we live in a world where the future is uncertain, and it belongs to creators and innovators. Therefore, that is the reason why it is important to learn and study entrepreneurship. Entrepreneurship education serves as an excellent foundation for the types of creative, innovative ideas our country needs to succeed in the 21st century. Research by Grecu and Denes (2017) indicates that discoveries and inventions, revolutions and social movements have been the triggers of progress throughout history. However, in the 21st century, mankind has to face new challenges such as globalization, the rapid pace of innovation, the fast spread of technology (Fourth Industrial Revolution) and its high-speed adoption into everyday life. These factors and many others are not only changing how business and economies function but also the job market landscape. The knowledge and skills required by the present and future jobs are changing and consequently the education system at all levels has to respond and adapt to these new challenges.

In the ever changing and dynamic world that we live in, youth need to come up with new ways of

doing things and need to create businesses that will provide long-lasting employment for the country's citizens. Approximately 30 or so years ago, different sectors of the economy were growing and as such there was plenty of employment available, however, this has changed drastically therefore South African students need to graduate from school being innovation ready. Meaning that along with their conventional education, students need to receive critical thinking skills, communication and collaboration skills that will help them become entrepreneurial.

Given the dynamic economic context marked by profound and rapid changes, higher education institutions can no longer equip their graduates with all the knowledge and skills needed to perform in their professional life. Knowledge and skills needed for effectively functioning in a complex global world may be changing. The new jobs that will be created in the future will require individuals with entrepreneurial, scientific, creative and innovative skills (Grecu & Denes, 2017). Therefore, universities can assist in creating and contributing to an entrepreneurial society by instilling in their students at under-graduate and post graduate levels a sense of understanding of risks and rewards, of business creation and its destruction. They can also play a role in developing entrepreneurial traits in students, inculcating an entrepreneurial culture and can provide the necessary support for young entrepreneurs (Cornell, 1995; Davies, 2001).

In South Africa, the education system has been designed to prepare students to be job seekers. South Africans are not taught in schools and universities entrepreneurship skills as compared to other countries around the world. According to Johannisson (2009), the current educational practice gradually deforms student's natural ability of being entrepreneurial. Therefore, adopting an entrepreneurial approach implies that teaching has a certain orientation and supports abilities that are associated with being creative, seeing opportunities, being able to solve problems and being energetic, brave and innovative (Hoppe, Westerberg & Leffler, 2017).

Today's students are influenced by changes that happen around the world, changes such as technology, development and this is reflected in their behaviour and in the way they think. Things that used to work well are no longer valid and we

now have a growing generation of protesters and demanders who want something different other than traditional teacher-centred learning. Teaching needs to be innovative, entrepreneurially orientated and geared towards developing today's youth entrepreneurial skills (Hoppe, Westerberg & Leffler, 2017).

Education is the most effective means available to society at large to respond to societal challenges such as poverty and unemployment. Progress depends increasingly on capacities to research, innovate and adapt to the ever changing environment. Without education, youth participation in the cultural and socio-economic life is impossible. Based on the information above, education in universities should support and incorporate entrepreneurship into their programs. Thus entrepreneurship offers the possibility to experiment with pedagogy and curricula (UNESCO, 1998).

Studying entrepreneurship benefits students and learners from different social and economic backgrounds as it teaches people to cultivate unique skills and think outside the box. Moreover, it creates opportunities, instils confidence, ensures social justice and stimulates the economy. Entrepreneurship education provides young entrepreneurs with the skills and knowledge to come up with business ideas and develop their own ventures. Therefore, benefits of entrepreneurship to society are numerous and, as a result, entrepreneurial innovation is critical for any society to be globally competitive with technological advancements and creating new jobs.

Universities need to move away from the traditional theory based classroom teaching in order to prepare youth for the changing job market. Entrepreneurship education will equip students with abilities that increase their employment potential and include: abilities to solve problems, develop social interaction, abilities to find information and to handle it for decision making, planning, and communication skills. Entrepreneurial education and training provides individuals with the ability to recognise commercial opportunities, self-esteem, knowledge and skills to act on them. It includes instruction in opportunity recognition, commercialising a concept, managing resources and initiating a business venture. Traditional business disciplines such as marketing, management, finance and information systems are taught. However, the necessity of entrepreneurship education is undeniable (Grecu & Denes, 2017).

A question that follows is what is it that universities should do in order to foster entrepreneurship education? Everything starts with the commitment of the university leadership. There should be a structure in place that will coordinate and monitor the implementation of the measures needed to transform the university into an entrepreneurial one (Grecu & Denes, 2017). Raising awareness of the importance of entrepreneurship, both for the economy and for the future of the university is an ongoing process and it should target students, alumni, faculty, administrative staff and the whole community and business environment. Engaging employees in this process might be a difficult task but it is essential that everyone understands the short and long term commitment towards entrepreneurship education.

Grecu and Denes (2017) further states that entrepreneurship education should be seen from a university wide perspective and the increasing interest for this topic in a broader set of fields, combined with the enthusiasm of alumni from all fields to introduce a real-world dimension encourages the implementation of the entrepreneurial mind-set throughout the whole campus. The gap between real-life situations and the classroom theories and concepts can be bridged with the help of entrepreneurship education for students in different specialisation fields. Research conducted by Charney and Libecap (2002) indicates that there are numerous advantages to entrepreneurship education:

- Attracts substantial private sector financial contributions.
- Produces self-sufficient enterprising individuals.
- Produces successful business and industry leaders.
- Enhances a graduate's ability to create wealth.
- Produces champions of innovation.
- Leads to greater opportunities with advancing technologies.

In order for youth in South Africa to benefit from entrepreneurship education it is important that universities equip them with the necessary training to have entrepreneurial mind-sets. Therefore, it is imperative that university courses include the centrepiece of contemporary education which is

entrepreneurship. Students should be encouraged to start their own ventures, to take risks and to think out of the box. The above statement is supported by Thindisa (2014) who affirms the importance of proper skills development for improving and enhancing entrepreneurship through teaching and encouraging entrepreneurship training at all levels of education and society.

6. Results and Discussion

By fostering entrepreneurship, a society promotes the competitiveness of businesses. If real economic transformation is to occur in South Africa, there must be space for creativity and imagination in overhauled policies. The promotion of entrepreneurial thinking and action will be in essence to a very large extent to create employment, which is most sought after and desired for masses of unemployed South Africans. Therefore, entrepreneurship will be a driver for economic growth and its benefits will be particularly huge (Nicolaidis, 2011).

Universities should look at ways of integrating entrepreneurship education/training programmes to the university education system, this will give students a different skill set that empowers them to be creative, innovative and risk takers. This is evidenced by research that indicates that universities around the world have shifted their focus from traditional/academic to entrepreneurship-oriented education, instilling confidence in the budding entrepreneurs to turn their entrepreneurial ideas into reality (Fayolle, 2013; Lindberg, Bohman, Hulten & Wilson, 2017). If South Africa could build entrepreneurial mind-sets at universities, it could make a dent in the high unemployment rate (Dlamini, 2019:4).

A growing economy, rising employment and incomes, falling inequality, an improving education system, fertile conditions for entrepreneurship and career mobility will contribute significantly to the growth and development of South Africa as a country. However, this can be achieved by introducing programmes in the education system with an increasing pedagogical interest in entrepreneurship that supports student active learning processes, which include cooperation, energy, creativity and responsibility (Deuchar, 2004; Leffler, 2006; Hoppe, Westerberg & Leffler, 2017). Eradication of unemployment amongst youth can be achieved through modification in the education system by way of a need for schools to change their working and teaching methods. Enterprising

abilities are not only considered necessary on the labour market but also as an altered alternative for society as a whole. The need for individuals who can take responsibility, initiatives and show creativity for increasing their employability as well as their self-employability is emphasised by various authors (Greene & Saridakis, 2008; Hoppe, 2016; Hoppe, Westerberg & Leffler, 2017).

To promote entrepreneurship education and development amongst youth, the following measures should be put in place by government: (1) globalisation and rapid technological development give rise to more flexible labour organisations, which increases the need for energetic individuals in the entire labour market. Therefore, globalisation completely changes society, business and labour markets and our education system must change along with it (Gibb, 2002; Hoppe, Westerberg & Leffler, 2017). Therefore, entrepreneurship education should be encouraged as far back as in primary school level as learners' self-confidence about their ability to start a business later in life is to a large degree built on such education; (2) Private sector investment initiatives in entrepreneurial education should be encouraged through government incentives to private sector organisations which support quality entrepreneurial programs; (3) Non-governmental organisations should be well funded through local and international grants to assist with the training needs of youth entrepreneurship. Training seminars or workshops can be organised regularly to assist with student training and empowerment; (4) Mentorship approach can be put in place by government agencies to help students who are involved in entrepreneurship training at university, as classroom training still needs to be supplemented through practical training; (5) A concerted and unified approach is now needed to foster entrepreneurship with legislative reform necessary in respect of taxation, labour and education.

7. Conclusion and Recommendations

In a country where 1/3 of the entire population and more than half of youth are unemployed, entrepreneurship is seen as a viable option, albeit with risks attached to it. Therefore, the promotion of entrepreneurial thinking and action will to a large extent create employment and alleviate poverty, which is something that is desired by many South Africans. To answer the research question as outlined in the introduction: Can entrepreneurship be

promoted by including it in programme design and curriculum within universities? It is recommended that the South African education curriculum at school and university level be transformed in order to make entrepreneurship one of the most important subjects to be taught. An effective investment in national higher education initiatives concerning entrepreneurship, which will meet the needs of the population, will underpin the international standing of South Africa's higher education institutions.

It is recommended that universities, in their quest of introducing entrepreneurship education, introduce the following initiatives; curriculum changes to include entrepreneurship in all qualifications, establish an incubation centre to assist students with commercialisation of business ideas and establish forums between the university, industry and government. Universities should provide an environment, culture, practice and opportunities that encourage and promote entrepreneurship. Feters, Greene, Rice and Butler (2010) describe this environment as an entrepreneurial ecosystem where there can be an increase in entrepreneurial spirit, skills and support systems that together result in increased economic and social benefits. Finally, policy makers, that is government, industry and universities should update educational policies and come up with initiatives that will develop successful graduates who are entrepreneurially orientated.

References

- Acs, Z.J., Autio, E. & Szerb, L. 2014. National systems of entrepreneurship: Measurement issues and policy implications. *Research Policy*, 43(3):476-494.
- Bosman, N., Content, J., Sanders, M. & Stam, E. 2018. Institutions, entrepreneurship, and economic growth in Europe, *Small Business Economics*, 51(2):483-499.
- Charney, A. & Libecap, G.D. 2002. Impact of entrepreneurship education. *A Kauffman Research series*. Available at: www.unm.edu. Accessed 02/01/2020.
- Dlamini, P. 2019. Hooking up entrepreneurs at varsity. *City Press*, Sept. 22:4.
- Fatoki, O.O. 2010. Graduate Entrepreneurial intention in South Africa. *International Journal of Business and Management*, 5(9):87-98.
- Fayolle, A. 2013. Personal views on future of entrepreneurship education, *Entrepreneurship and Regional Development*, 25(7-8): 692-701.
- Feters, M.L., Greene, P.G., Rice, M.P. & Butler, J.S. 2010. *The Development of University Based Entrepreneurship Ecosystems. Global Practices*. Edward Elgar Publishing Inc: Massachusetts.

- Francke, E. & Alexander, B. 2019. Entrepreneurial development in South Africa through innovation: A model of poverty alleviation, *Acta Commercii*, 19(1):631. Available at: <https://doi.org/10.4102/ac.v19i1.631>.
- Fukugawa, N. 2013. Which factors do affect success of Business Incubators. *Journal of Advanced Management Science* 1(1): 71-74.
- Gee, A. & Thurnik, C. 2003. Firm selection and industry evolution: The post country performance of new firm. *Journal of Evolutionary Economics*, 4(4):243-264.
- Greco, V. & Denes, C. 2017. Benefits of entrepreneurship education and training of engineering students. MATEC web of conferences 121, 2017.
- Greene, F.J. & Saridakis, G. 2008. The role of higher education skills and support in graduate self-employment, *Studies in Higher Education*, 33(6):653-672.
- Hisrich, R.D., Peters, M.P. & Shepherd, D.A. 2013. *Entrepreneurship*, 9th ed., McGraw-Hill Higher Education: New York, NY.
- Hoppe, M. 2016. Policy and entrepreneurship education, *Small Business Economics*, 46(1):13-29.
- Hoppe, M., Westerberg, M. & Leffler, E. 2017. Educational approaches to entrepreneurship in higher education. A view of the Swedish horizon. *Education + Training*, 59(7/8):751-767.
- Johannisson, B. 2009. The Swedish school woes facing the challenges of entrepreneurship.
- Linan, F. & Chen, Y.W. 2009. Development and cross cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3):593-617.
- Linan, F. & Fayolle, A. 2015. A systematic literature review on entrepreneurial intentions: citation, thematic analyses, and research agenda. *International Entrepreneurship and Management Journal* 11:907-933.
- Lindberg, E., Bohman, H., Hulten, P. & Wilson, T. 2017. Enhancing students' entrepreneurial mind-set: A Swedish experience, *Education and Training*, 59(7-8):768-779.
- Mabeba, S.J. 2019. The impact of Internship Programme on Skills Development in the South African Public Institutions: Are Internships still relevant? In: *Proceedings of the 2019 4th Annual International Conference on Public Administration and Development Alternatives*, July 03-05, 2019, Johannesburg, South Africa. Available at: <http://ulspace.ul.ac.za/handle/10386/2688>. Accessed 10/02/2020.
- Mass, G. & Herrington, M. 2006. Global Entrepreneurship Monitor South Africa report. Available at: <http://www.gemconsortium.org/document.aspx?id756>. Accessed 28/9/2019.
- National Planning Commission. National Development Plan: Vision for 2030. Pretoria: The Presidency, 2011. Available at: <https://www.npconline.co.za>. Accessed 07/01/2020.
- Ncgobo, S. & Keswa, S. 2017. Exploring graduates governance perceptions of entrepreneurial development opportunities in agriculture. *Journal of Public Administration*, 52(3):576-588.
- Nicolaides, A. 2011. Entrepreneurship – The role of Higher education in South Africa. *Educational Research*, 2(4):1043-1050.
- Nieman, G. & Niewenhuizen, C. 2009. Entrepreneurship. A South African Perspective, second edition. Van Schaik: Pretoria.
- Obaji, N.O. & Olugu, M.U. 2014. The role of government policy in entrepreneurship development. *Science Journal of Business and Management*, 2(4):109-115.
- PWC. Supporting and promoting entrepreneurship and innovation. Available at: <https://www.pwc.co.za/en/press-room/vision-to-reality.html>. Accessed 27/09/2019.
- Rwigema, H. & Venter, R. 2004. Advanced Entrepreneurship. Cape Town: Oxford University Press South Africa.
- South Africa, Statistics-SA. 2019. South Africa Unemployment Rate. Available at: <https://tradingeconomics.com>. Accessed 23/09/2019.
- South Africa, Government of South Africa. 2014. More needs to be done to improve the effectiveness of Internship Programmes. News room media statements. Available at: <https://www.gov.za>. Accessed 30/03/2020.
- Stokverket. 2015. Create and dare on entrepreneurship in School, revised ed. Stockverket, Stockholm.
- Thindisa, L.M.V. 2014. Participation by smallholder farming entrepreneurs in agro-processing activities in South Africa. Unpublished Master of Management in Entrepreneurship and New Venture Creation. Johannesburg: University of the Witwatersrand.
- Timmons, A.J. 2000. New Venture Creation. Burr Ridge IC: Irwin McGraw-Hill.
- Tucker, D. & Selcuk, S. 2009. Which factors affect entrepreneurial intention of university students? *Journal of European Industrial Training*, 33(2):142-159.
- UNESCO. 1998. Higher Education in the Twenty-first Century Vision and Action, World Conference on Higher Education, Paris. Available at: <http://unesdoc.unesco.org/images/0011/001163/116345e.pdf>. Accessed 20/11/2019.
- Van Gelderen, M., Brand, M., Van Praag, M., Bodewes, W. & Van Gils, A. 2008. Explaining entrepreneurial intentions by means of the theory of planned behaviour. *Career Development International*, 13(6):538-559.