FutureX Journal, 76-88
Volume 3 (2), December 2025

Regenesys Education
ISSN: 2959-2798

Integrating Keynesian economics, Schumpeterian innovation, and connectivism for inclusive youth development in South Africa

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Keywords

Keynesian economics

Unemployment

Innovation

Entrepreneurship

Creative destruction

Connectivism

South Africa

Youth development

Abstract

In this article the interrelationship between the Keynesian theory of unemployment, Schumpeter's theory of innovation and entrepreneurship, and the theory of connectivism as a multidimensional approach to addressing youth unemployment and economic stagnation in South Africa is explored. The researcher employed a mixed-methods methodology to investigate how these theoretical frameworks can inform practical solutions in economic development, entrepreneurial stimulation, and knowledge acquisition. Findings reveal that an integrated application of these theories provides a robust strategy to combat unemployment, encourage innovation, and promote digitally driven learning among the youth. The article concludes by recommending policy actions grounded in these three theoretical perspectives to support inclusive economic development in regions such as Tshwane, in Gauteng, South Africa.

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1. Introduction

South Africa faces a youth unemployment crisis, which is exacerbated by a sluggish economy, a mismatch of skills, and limited entrepreneurial opportunities. There are theories, however, that are historically rooted, which offer insights into addressing these persistent issues. This article synthesises three key frameworks: Keynesian economics, which emphasises government intervention during downturns; Schumpeter's theory of innovation, highlighting entrepreneurship as a catalyst for change; and the theory of connectivism, focusing on learning through technology and networks. The fusion of these theories provides a blueprint for comprehensive policy and educational reform aimed at fostering economic inclusivity and resilience, especially for the youth.

2. Literature review

2.1 Keynesian theory of unemployment

The Great Depression in the 1930s exposed the limitations of traditional economic theories, which failed to provide effective strategies to tackle the global downturn and rising unemployment (Keynes, 1936). In response, British economist John Maynard Keynes proposed that relying solely on free-market mechanisms would not ensure full employment. He argued that active government involvement through public policy was essential to achieve economic stability and reduce joblessness (Jahan et al., 2014).

The Keynesian model has since influenced many nations' economic policies, particularly during recessions (Jahan et al., 2014; Blinder, 2020). In South Africa, the high rate of involuntary unemployment stems from low aggregate demand and a surplus of unskilled labour. Fiscal measures such as public works and infrastructure investment can help restore demand and employment (Chron Contributor, 2020). Given the severe unemployment crisis and economic challenges facing South Africa, the Keynesian theory of unemployment offers a fitting starting point for analysis.

2.1.1 *Importance of Keynesian principles*

A major strength of Keynesian economics lies in its emphasis on boosting employment during recessions. Economic slowdowns typically lead to job losses and lower consumer spending, which further trigger a downward spiral of reduced demand and further layoffs (Blinder, 2020). To counteract this, it becomes imperative for governments to inject financial support into the economy, thereby encouraging businesses to hire again. Initiatives such as public infrastructure

projects help reverse the decline in demand and potentially stop the cycle of falling employment (Chron Contributor, 2020).

2.1.2 *Global impact of Keynesian ideas*

Keynesian theory has heavily influenced many countries' economic policies, particularly during periods of economic recession (Blinder, 2020). It has served as the foundation for strategies like infrastructure investment, social support programmes, and job creation initiatives aimed at stimulating demand and lowering unemployment (Keynes, 1936). The theory stresses that unemployment is mainly due to insufficient demand rather than an oversupply of labour (Jahan et al., 2014). This view is especially relevant to South Africa, where low economic growth, excess unskilled labour, and limited demand contribute to the persistently high unemployment rates.

2.1.3 *A ground-breaking concept*

Keynes (1936) highlighted that long-term unemployment is the result of insufficient overall demand. In times of recession, uncertainty weakens consumer confidence, leading to a decline in spending, especially on high-value goods like homes and vehicles. This drop-in consumer activity often leads to reduced business investment, further diminishing demand (Jahan et al., 2014). According to Keynesian principles, it is the government's responsibility to step in and stimulate economic output. Government intervention can help moderate the highs and lows of economic cycles, ultimately reducing unemployment (Jahan et al., n.d.).

2.1.4 *Voluntary vs involuntary unemployment*

Keynes differentiated between two types of unemployment: voluntary, where individuals choose not to work at the current wage level, and involuntary, where people are willing to work but cannot find employment due to low demand (Keynes, 1936). In the South African context, involuntary unemployment is also influenced by employment equity policies, such as Broad-Based Black Economic Empowerment (B-BBEE), which may limit opportunities for certain groups. Keynes proposed that the government should adopt expansionary fiscal policies, including increased spending and tax reductions, to stimulate demand. These actions create a multiplier effect, boosting employment and reducing joblessness (Blinder, 2020). Investment in local development projects, especially at the municipal level, could help reduce unemployment in this way.

By implementing Keynesian strategies, the government can create a more favourable climate for businesses to grow and hire. Increased demand leads to higher employment, rising incomes, and greater consumption, thereby fuelling further economic growth (Eichengreen, 2020).

Delays in enacting Keynesian policies may diminish their effect. In South Africa, slow policy implementation has often rendered such measures ineffective, as the economic environment may change before they take effect (Karan, 2023). Keynes's work emphasises that aggregate demand and proactive government involvement can continue shaping macroeconomic thinking and policy (Hazlitt, n.d.).

2.1.5 *The ongoing relevance of Keynesian theory*

Keynesian ideas remain pertinent in today's economic climate, especially for addressing unemployment.

2.1.5.1 *Managing aggregate demand*

The theory highlights the need to maintain aggregate demand to ensure full employment. Governments frequently turn to fiscal or monetary measures to boost demand during recessions, particularly when household incomes and consumer spending decline (Blanchard, 2025).

2.1.5.2 *The role of fiscal stimulus*

Keynesian economics supports government spending to reduce unemployment. This aligns with ongoing debates around public investments, infrastructure development, and economic stimulus packages (Mankiw, 2014).

2.1.5.3 *Tackling cyclical unemployment*

The theory addresses job losses caused by economic cycles. With today's unpredictable economic conditions, Keynesian insights have helped guide responses to cyclical unemployment (Mankiw, 2014). Early intervention is critical to preventing short-term downturns from becoming long-term problems.

2.1.5.4 *Crisis management*

Keynesian strategies have been widely applied during global crises, such as the 2008 financial meltdown and the Covid-19 pandemic. Many governments have adopted stimulus measures inspired by Keynes to sustain employment (Karan, 2023).

2.1.5.5 *Public sector contributions*

Keynes's model emphasises the role of government in stabilising economies. This includes using public job creation, social support systems, and civic projects to reduce unemployment (Blanchard, 2025). For instance, the unemployed youth can be hired for tasks such as fixing potholes, cleaning public spaces, and restoring infrastructure. In sum, the Keynesian approach remains central to modern economic policy. Its focus on demand stimulation and employment support continues to influence how governments address unemployment challenges. While Keynes focuses on demand stimulation and employment, Schumpeter emphasises the cycle of innovation and the destruction of the old – a state of constant change.

2.2 Schumpeter's theory of innovation and entrepreneurship

Schumpeter (1911; 1942) positioned the entrepreneur as the linchpin of economic growth through innovation. He proposed that economic development arises not from equilibrium but from "creative destruction", a process by which outdated technologies and models are replaced with new ones. Entrepreneurship under this model requires creativity, boldness, and a vision for transformation (Ferreira et al., 2017). Schumpeter's ideas remain particularly pertinent during periods of economic upheaval, such as the current South African context (Gupta et al., 2024).

Schumpeter's innovation theory identifies the entrepreneur as a key innovator, introducing new products, services, or production methods to the market. In his later theory, which is integrated into a broader economic model of circular flow, he challenged the idea of economic equilibrium. Instead, he saw the economy as always evolving, in a constant state of flux, driven by innovation, which continuously disrupts any state of balance. This cycle of constant change is foundational to a dynamic economy (Ferreira et al., 2017).

As Schwab (2016) observes, the 21st century is marked by rapid and transformative technological innovations that continuously redefine the global economy. Schumpeter's framework highlights how innovation, entrepreneurship, and technological evolution are core

drivers of economic progress. The concept of entrepreneurship has also been reshaped in response to these global shifts. According to Schumpeter, entrepreneurship is a central force behind economic advancement and innovation (Kaya, 2015). It is a fundamental component of sustained economic growth (Schumpeter, 1942). However, job creation alone does not ensure regional development. Entrepreneurship must also align with modern global realities. Schumpeter's theory, embraced widely by business leaders, is among the most accepted views on innovative entrepreneurship (Ferreira et al., 2017).

2.2.1 *The entrepreneur in Schumpeter's view*

Schumpeter's theory, introduced in 1911, remains a prominent and globally applied model of entrepreneurship. In a complex and fast-changing world, he viewed innovation as the heart of entrepreneurship and a driving force in economic progress (Sledzik, 2013). For Schumpeter, economic growth is largely dependent on innovative entrepreneurship.

In his early works (1911; 1934), Schumpeter portrayed the entrepreneur as a profit-driven innovator. Swedberg (2016) outlines five types of innovations described by Schumpeter:

- Launching new products;
- Introducing novel production techniques;
- Entering new markets;
- Sourcing new raw materials; and
- Creating new business models or structures.

These five categories of innovation, new products, production methods, markets, resources, and organisational models underscore the multifaceted role of entrepreneurs in reshaping economies (Swedberg, 2016). While innovation fosters progress, it also displaces workers with "outdated" skills and can lead to unequal wealth distribution and environmental concerns (Kopp, 2024). This then calls for relevant and updated education at all levels to be stepped up.

2.2.2 *Entrepreneurship and innovation in focus*

Throughout his work, Schumpeter highlighted the active role entrepreneurs play in driving innovation. He believed that successful entrepreneurs combine forward-thinking vision, creativity, and knowledge to build sustainable ventures. Landau (2023) explains that for

Schumpeter, economic development is a purposeful, entrepreneur-led process. Entrepreneurs are seen as agents of change who fuel economic cycles through both triumphs and failures (Ferreira et al., 2017). Understanding Schumpeter's theory also requires acknowledging his strong support for capitalism. He argued that capitalism enables entrepreneurship by creating space for new markets and transforming existing economic systems. Entrepreneurs, in his view, constantly break down old systems and introduce new ones. He called this ongoing process "creative destruction," which he saw as a key feature of how capitalism evolves (Gupta et al., 2024).

2.2.3 *Schumpeterian growth and creative destruction*

Schumpeter asserted that innovation requires skill and courage, just like inventing. He coined the term "creative destruction" to describe how entrepreneurial innovations displace outdated products, skills, and technologies. Similarly, outdated educational practices should be replaced with newer methods like those proposed in connectivism. As Schumpeter suggested, constant change is essential for societal improvement and economic growth (Alm & Cox, 2023). This process is at the heart of Schumpeter's growth theory. As Adler (2019) explains, creative destruction is a key mechanism where new innovations outpace and replace older systems. The theory has resulted in fresh growth models and distinct predictions, making it unique compared to other economic theories. It reinforces the idea that innovation and destruction of the old are crucial to economic development (Ferreira et al., 2017).

2.2.4 *Capitalism's resilience in economic downturns*

Schumpeter's experience during major global crises like the world wars and the Great Depression has shaped his perspective. While many lost faith in capitalism during these times, he remained focused on its economic potential (Adler, 2019). Despite the inequalities within capitalist systems, he believed in their power to drive growth and improve living standards for ordinary people. He saw transformative change through innovation as a path to economic renewal, a belief grounded in his concept of creative destruction (Gupta et al., 2024).

It is through this lens that Schumpeter described how constant innovation in business and technology pushes outdated skills aside and helps dynamic organisations thrive. This process illustrates how competitive advantages are always shifting in response to evolving consumer demands and environmental factors (Amesho et al., 2022).

2.2.5 *Continued relevance of Schumpeter's theory*

South Africa's current economic challenges echo those of the 1920s and 1930s. During that earlier era, new ideas about innovation and entrepreneurship, like Schumpeter's, emerged. He viewed entrepreneurs as essential to the capitalist system (Schumpeter, 1942). Even decades after his death, Schumpeter's ideas remain influential. He believed that entrepreneurial innovation fuels economic growth but also creates instability, forcing companies to adapt or risk collapse. In 2020, the Fraser Institute highlighted the relevance of Schumpeter's call for competition and entrepreneurial freedom as essential tools for recovering from economic crises (Mayer et al., 2022).

2.2.5.1 *Global acceptance of Schumpeter's theory*

Today, Schumpeter's theory continues to gain traction, especially in the age of rapid technological advancement. Industries focused on cutting-edge technologies like satellites, lasers, and fibre optics exemplify the principle of creative destruction. These developments are especially relevant within the context of the Fourth Industrial Revolution (4IR). As education adapts to modern realities, educators also rely on evolving theories to guide their methods. When traditional theories such as behaviourism or constructivism fall short, newer frameworks must emerge, either by refining older ones or creating something entirely new.

2.3 Evolving theories in the digital age

In the digital era, new educational theories are gaining ground. Connectivism, for example, is an emerging theory particularly suited to e-learning and network-based education. It focuses on the role of technology in shaping how we learn and understand, so we may grow economically (Goldie, 2016). Creativity and innovation, as suggested by Schumpeter, are essential to modern education, reshaping both how learning is delivered and understood. Since learning is a foundational activity in people's lives, a better understanding of how it occurs remains a major area of focus in educational research.

2.4. Theory of connectivism

George Siemens (2004) and Stephen Downes (2006) are recognised as key proponents of the theory of connectivism, which they define as a network-based learning model where knowledge exists beyond the individual and is constantly evolving. The theory of connectivism reflects the digital age's impact on learning. It posits that expertise exists in networks and learning is a process of navigating, growing, and participating in those networks (Pappas,

2023). In this framework, knowledge is not owned or created solely by formal institutions. Instead, organisations are encouraged to interact with the continuous flow of information to extract meaning (Herlo, 2017). In an era where information sharing is ubiquitous and rapid (Hillyer, 2020), connectivism encourages youth to become active participants in knowledge creation, enhancing their adaptability in a dynamic economy. This theory is particularly applicable in education and entrepreneurship training, where digital literacy and collaborative platforms are essential for preparing young people for the 4IR-driven economy.

In today's digital landscape, technology is integrated into nearly every facet of life. Rapid advancements are transforming economies, changing how we communicate, influencing relationships, and revolutionising the way we learn. Despite living in an era defined by digital connectivity, many educational institutions struggle to keep up with the pace of technological evolution due to its constant rapid changes (Kavanagh, 2019).

2.4.1 *Connecting to the source of knowledge*

Connectivism is distinguished as a contemporary theory of learning that emphasises acquiring knowledge by linking to its source. Western Governors University (2024) describes it as a complex, technology-enhanced learning method spread across the internet. One of the greatest challenges for any educational theory, including connectivism, is equipping learners with the ability to adapt and learn for an unpredictable future. As Stafford (2023) explains, connectivism is the first comprehensive theory that directly addresses how the internet and new communication tools impact learning.

2.4.2 *The internet's role in knowledge sharing*

The internet has dramatically improved how accessible knowledge is today. It has become vital in both formal and informal education, allowing learners to interact with information from various disciplines and locations. This shift means that the learning process is no longer dominated by institutions; learners now play an active role in creating knowledge, not just consuming it (Shrivastava, 2018). According to Herlo (2017), connectivism views knowledge as being spread across a web of connected "nodes" (which can include people, groups, or digital systems), and learning is the ability to create and navigate these connections. These nodes share and transform information into meaningful knowledge.

This theory reflects a departure from traditional views on education, highlighting the influence of information technology on learning. Today's learners have vast resources at their disposal—from digital libraries and peer-reviewed journals to social media and blogs—allowing them to access information anytime and from anywhere (Mampota et al., 2023).

2.4.3 *Promoting collaboration through connectivism*

Connectivism encourages learning that is self-directed, adaptable, and student-paced. Its flexible structure fosters interaction between educators and learners. Learning is often quick and responsive, driven by the learners' interests and goals (Corbett & Spinello, 2020). It makes use of social networks and digital tools to support learning, recognising that such technologies facilitate the flow of knowledge due to their interconnected nature. Platforms like YouTube, blogs, Twitter, podcasts, and discussion forums allow for informal learning experiences and build community among students. These tools also enable instant access to knowledge (Kumar & Pooja, 2022). Furthermore, connectivism supports collaborative learning, where individuals work together toward shared objectives. As Corbett & Spinello (2020) point out, knowledge in this model is acquired through social interaction. Such collaboration enhances both the efficiency and relevance of learning by assuming that expertise is distributed across the network. Learning thus becomes both a personal and collective process.

3. Methodology

This study employed a mixed-methods approach, integrating both qualitative and quantitative data collection. Primary data was collected through structured interviews with policymakers, educators, and young entrepreneurs in Tshwane, alongside surveys administered to 300 unemployed youths. Secondary data was analysed from government policy documents, economic reports, and academic sources. The aim was to triangulate theoretical perspectives with real-world insights into unemployment, entrepreneurial barriers, and digital learning adoption. Qualitative data were thematically analysed to extract patterns of challenges and opportunities. Quantitative responses were statistically evaluated to determine correlations between entrepreneurial activity, government intervention, and access to digital networks.

4. Findings

4.1. Unemployment and government intervention

Most respondents expressed a strong belief in the necessity of government-led job creation schemes, aligning with Keynesian prescriptions. Infrastructure programmes and municipal development were seen as high-impact avenues to absorb unskilled labour.

4.2. Entrepreneurial activity and barriers

Findings confirmed that while there is a strong entrepreneurial spirit among youth, barriers such as lack of funding, mentorship, and market access persist. Those who had access to digital platforms and entrepreneurial training were more likely to have launched sustainable ventures, reflecting Schumpeter's emphasis on innovation.

4.3. Role of digital learning

Survey results indicated that 68% of respondents were actively learning through online platforms. However, digital inequality remains a barrier, particularly in rural areas. The theory of connectivism was validated in its application to real-world learning and skill development among youth.

4.4. Integrated theoretical framework for youth development

The study found that an integrated model that includes Keynesian job creation for immediate relief, Schumpeterian entrepreneurship for long-term innovation, and connectivist learning for continuous adaptation offered the most comprehensive solution to youth unemployment.

5. Conclusion

South Africa's complex socioeconomic challenges require multidimensional strategies. The Keynesian model offers a short-term remedy through government intervention in economic downturns, while Schumpeter's theory promotes sustainable development via innovation and entrepreneurship. Connectivism introduces a modern learning paradigm essential for adapting to the knowledge economy. Together, these theories form a comprehensive framework for fostering youth development, economic inclusion, and societal resilience. Policy recommendations include increasing public investment in digital infrastructure, supporting entrepreneurial ecosystems, and embedding innovative digital curricula in educational institutions.

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