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Student entrepreneurship status quo from a rural-based university perspective in South Africa

Estado actual del emprendimiento estudiantil desde la perspectiva de una universidad rural en Sudáfrica.

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ABSTRACT

Student entrepreneurship is now widely regarded as a catalyst for employment creation, economic development and poverty reduction in South Africa and the world over. Despite this recognition, students in rural-based universities in the country rarely participate in entrepreneurship and innovation activities. Yet, reasons for the limited participation are scantily known. Bearing this

in mind, this paper sought to understand students' entrepreneurship status quo and dynamics at the University of Venda in the rural Vhembe District. A qualitative case study was conducted to deeply unearth the unknown facets of student entrepreneurship, such as their entrepreneurship aspirations, challenges encountered, university initiatives to promote entrepreneurship and possible suggestions for promoting students' enterprise development. This was achieved following a qualitative approach. Data were collected using an open-ended semi-structured interview guide. Twenty students, ranging from first-year to PhD level contributed to the study. Results highlighted that students' entrepreneurial aspirations are closely aligned with opportunities that are available in the rural setting such as heritage, tourism, student products and services. However, key challenges like the lack of entrepreneurial role models, limited capital and poor time management derail the growth of students' adventures. Amid this predicament, university-led initiatives are still falling short in addressing these challenges. Thus, a concerted effort is required to provide student-informed solutions that are conversant with rural settings to promote entrepreneurial development and mindsets.

Keywords: entrepreneurship, development, innovation, rural community, students

RESUMEN

El emprendimiento estudiantil es ampliamente reconocido hoy en día como un catalizador para la creación de empleo, el desarrollo económico y la reducción de la pobreza tanto en Sudáfrica como en el resto del mundo. A pesar de este reconocimiento, los estudiantes de universidades ubicadas en zonas rurales del país rara vez participan en actividades de emprendimiento e innovación. Sin embargo, las razones detrás de esta escasa participación son poco conocidas. Teniendo esto en cuenta, el presente estudio buscó comprender el estado actual y las dinámicas del emprendimiento estudiantil en la Universidad de Venda, situada en el distrito rural de Vhembe. Se llevó a cabo un estudio de caso cualitativo con el fin de descubrir en profundidad aspectos poco explorados del emprendimiento estudiantil, tales como sus aspiraciones emprendedoras, los desafíos que enfrentan, las iniciativas universitarias para fomentar el emprendimiento y posibles sugerencias para promover el desarrollo empresarial de los estudiantes. Para ello, se adoptó un enfoque cualitativo. Los datos se recopilaban mediante una guía de entrevistas semi-estructuradas con preguntas abiertas. Veinte estudiantes, desde primer año hasta nivel doctoral, participaron en el estudio. Los resultados revelaron que las aspiraciones emprendedoras de los estudiantes están estrechamente relacionadas con las oportunidades disponibles en el entorno rural, como el patrimonio cultural, el turismo y la oferta de productos y servicios para estudiantes. No obstante, desafíos clave como la falta de modelos a seguir en el ámbito emprendedor, el capital limitado y una deficiente gestión del tiempo obstaculizan el crecimiento de sus iniciativas. En este contexto, las iniciativas impulsadas por la universidad aún resultan insuficientes para abordar dichos desafíos. Por tanto, se requiere un esfuerzo conjunto para ofrecer soluciones informadas por los propios estudiantes y adaptadas al entorno rural, con el fin de promover el desarrollo del emprendimiento y de una mentalidad emprendedora.

Palabras clave: emprendimiento, desarrollo, innovación, comunidad rural, estudiantes.

INTRODUCTION

South African rural communities face persistent challenges related to socioeconomic development, such as high youth unemployment, poverty limited access to quality education and resources (Dhlamini et al., 2021). Rural-based universities often struggle to produce skilled graduates who meet the job market requirements (Zapkau et al., 2017; Ojiaku et al., 2018). Moreover, limited industries in rural spaces further constrain the employment opportunities and exposure for students in rural areas. Within this scope, entrepreneurship education has emerged as a potential solution to address these challenges by equipping students with the skills and mindset required to venture into the business world and contribute to economic growth (Arshi et al., 2020). Although Devkota et al. (2022) note that the role of rural-based universities in facilitating the creation of an entrepreneurial society has become more pronounced over the past few years (Devkota et al., 2022), yet there is no evidence to show that student entrepreneurship is growing.

The South African education system is lacking when it comes to entrepreneurship education and the transformation of student entrepreneurial mindset. The system seems to promote white-collar jobs rather than self-employment. In situations where entrepreneurship is taught, the focus is mainly on the theory of entrepreneurship rather than its practice (Radebe & Vezi-Magigaba, 2021). Thus, student graduates are more inclined to seek jobs rather than initiate entrepreneurial adventures. The situation is even worse in rural universities that face challenges such as a lack of practical entrepreneurial experience, inadequate curriculum, and inexperienced entrepreneurship trainers (Radebe & Vezi-Magigaba, 2021). Limited university support systems, underdeveloped campus entrepreneurial networks, and insufficient mentorship opportunities also derail entrepreneurial development (Olumuyiwa et al., 2023). Although these challenges are common in most rural-based universities, their severity and influence differ with the entrepreneurial landscape and environment which prevails in different areas. Thus, empirical studies to understand entrepreneurial landscapes, challenges and opportunities are critical to the success of any student entrepreneurial development endeavours.

Like other global institutions, the University of Venda has recently shown its interest in becoming an entrepreneurial institution as stipulated in its strategic plan for 2021-2025. The strategic plan, as stipulated in strategic thrust number 2 (Entrepreneurial University & student-centeredness), seeks to encourage entrepreneurial culture within and outside the university to promote rural economic development. This ambition is well stipulated in the four key objectives, which include (1) to develop an entrepreneurial culture, (2) to ensure financial stability, (3) to be an anchor institution for effective integrated local and regional development and (4) to develop enterprise. The entrepreneurial university approach offers a promising pathway to drive economic growth, develop student entrepreneurship and address societal challenges through knowledge core-creation, innovation, and job creation. While a clear vision and mission, along with a strong commitment to realising an entrepreneurial university, have been demonstrated, there exists a missing link on a scientific pathway evolving from empirical foundations to understand the institutional entrepreneurial landscape, student aspirations, challenges that might hinder progress and suggestions thereof. Understanding these facets is critical to strategically guiding the university planning and policy formulation to enhance student-centredness and entrepreneurial innovations in the local context. Failure to understand students' perceptions regarding the institutional aspirations to develop an entrepreneurial mindset and practice may result in students resenting the university's efforts due to a mismatch between their ambitions and what is on offer. Given this background, the current study sought to understand students' entrepreneurial backgrounds, aspirations, and challenges, as a stepping stone towards finding context-based ways of promoting

innovation on and off campus. Understanding these aspects contributes to the scarce knowledge on student entrepreneurship, particularly in rural universities of South Africa, and provides critical insights to these institutions.

LITERATURE REVIEW

Significance of students' entrepreneurship

Various interpretations of the entrepreneurship concept exist. Prince et al., (2021) defined it as a process that involves business creation, uncertainty, innovation, value creation and opportunity recognition. This definition covers most of the aspects that entrepreneurship in its different forms entails and thus, is adopted in this study. In this regard, an entrepreneur is best described as a person with innovative traits, optimistic, a risk taker with an entrepreneurial intention and an internal locus of control (Ozaralli & Rivenburgh, 2016). There is now growing evidence that entrepreneurs create employment and make significant contributions to the economy (Bignotti & Myres, 2022). For this reason, there is growing encouragement for youth entrepreneurship in South African rural areas where job opportunities are scarce while natural resources, land and human capital are available.

The development of student entrepreneurship within South African universities has garnered significant attention in recent years, driven by the imperative to address high youth unemployment rates and foster economic growth. Universities have increasingly recognised their pivotal role in cultivating entrepreneurial mindsets and capabilities among students. A study by Ismail et al. (2024) adopts an entrepreneurial ecosystem perspective to examine student entrepreneurship support (SES) at South African public universities. The research highlights that while various SES initiatives, such as entrepreneurship societies, competitions, incubators, and workshops, are present, their effectiveness is often hampered by a lack of coordination and strategic integration. The study emphasises the necessity for top management commitment, coherent entrepreneurship policies, and robust external partnerships to enhance the impact of SES. Moreover, the research underscores the importance of tailoring SES strategies to the unique contexts of individual universities, suggesting that a one-size-fits-all approach may be suboptimal.

Entrepreneurial education has been touted as a pathway to students' entrepreneurial skills acquisition, innovation and business creation. Wei, Liu, & Sha, (2019), note that a functional entrepreneurship education programme has the potential to aid students in developing skills such as creativity, digital communication, innovation, and sustainability-mindedness. The same scholars further emphasise the role of entrepreneurial education in instilling creative attitudes and entrepreneurial mindsets for the socioeconomic growth of a society. Despite these notions, in Egypt, Salem & Mobarak (2019) found that despite huge financial allocations and annual expenditures on the higher education sector in South Africa, most recent graduates exhibit inadequate entrepreneurial skill levels. Ikuemonisan et al. (2022), further note that the traditional approach of offering entrepreneurship education programmes at many Institutions does not help to develop entrepreneurial intentions and potential among graduates. This also applies to rural-based universities such as the University of Venda where student entrepreneurship activities are low despite the various entrepreneurial courses being offered. Given this discourse, it is critical to understand the students' entrepreneurial intentions, university initiatives for boosting entrepreneurship and challenges preventing derailing student innovativeness. This can help coin a new *modus operandi* for promoting entrepreneurship among students in the rural setting.

Entrepreneurial tendencies and intention

Examining individual and contextual factors is critical to understanding the entrepreneurial tendencies or potential of a person (Erkoç & Kert, 2013). Hongdiyanto (2018) found Individual factors such as psychological aspects, which include the tendency to take risks, desire for independence and autonomy (Audretsch, 2012), achievement motivation (Lange, 2012), self-confidence and internal locus of control (Hidayat & Veronica, 2022). Samjess et al. (2022) consider the need for achievement and locus of control as essential traits of an entrepreneur.

Other researchers have emphasised the importance of contextual factors in shaping entrepreneurial potential. Bernhofer and Han (2014) emphasize the need to understand the connection between a person's entrepreneurial tendencies, interests and social background. More so, family background and support and cultural dimensions also play a key role in harnessing entrepreneurial potential and tendencies among youth, especially in the Asian region (Cardella et al. 2020). Considering this aspect, the entrepreneurial intention can thus be challenging to realize for people without outstanding, thriving entrepreneurs who are accessible and available to serve as role models. In the same vein, support in different forms is critical to activate students' entrepreneurial potential. Past research has clearly shown the importance of understanding context, entrepreneurial aspirations, tendencies and background to activate entrepreneurial tendencies. Therefore, the current study seeks to understand students' entrepreneurial ambitions, goals, backgrounds and challenges, as a stepping stone towards finding context-based ways of promoting innovation on and off campus. The following section describes the methodology followed in the study.

Urban versus rural-based university entrepreneurship

Entrepreneurship in South Africa exhibits diverse characteristics shaped by geography, institutional affiliation, and socio-economic context. University entrepreneurship, particularly in South Africa, tends to differ significantly from non-university entrepreneurship, with further variations noted between rural and urban environments (Peng & Xu, 2024). Entrepreneurship within urban-based universities typically benefits from substantial infrastructure, institutional support, and access to dynamic markets. For instance, universities located in metropolitan regions, such as the Durban University of Technology, have established entrepreneurship centres aimed at promoting innovation and reducing graduate unemployment (Musariwa & Tinonetsana, 2023). These centres function as platforms that equip students with business skills, provide access to seed funding, and facilitate interactions with industry mentors. Such organised interventions enhance the likelihood of entrepreneurial success and sustainability within urban university environments.

Conversely, rural-based universities encounter considerable constraints in fostering entrepreneurial activities. The University of Venda, located in the Vhembe district of Limpopo Province, exemplifies the challenges and opportunities associated with rural university entrepreneurship. Studies highlight that entrepreneurial development in such institutions depends on five core factors: the cultivation of entrepreneurial knowledge and skills, integration of indigenous entrepreneurship systems, promotion of engaged scholarship, focus on value creation and commercialisation, and collaboration with local stakeholders in the value chain (Ndou & Rampedi, 2022). These components reflect a holistic approach necessary for overcoming the limitations posed by geographic and infrastructural constraints.

METHODOLOGY

Study area

The study was conducted at the University of Venda. The University of Venda is a comprehensive rural-based institution of higher education situated in the Vhembe District of Limpopo Province (Thohoyandou town) in South Africa. The institution was established in 1982 to address the educational needs of the inhabitants of the Venda Bantustan, who were still largely marginalised by the apartheid government. The institution has evolved through various stages of development and currently caters for approximately 17,000 students across four faculties. However, despite the development strides made in the past decades, the University is still regarded as a Historically Disadvantaged Institution (HDI). It faces challenges such as limited financial sustainability, the digital divide, students limited exposure to employment and understaffing. This is mainly due to past injustices during the Apartheid era coupled with the slow pace of transformation and its rural location. The Institution is situated near various heritage sites and tourist attraction areas such as Mapungubwe National Park, Thulamela Archaeological Site, and Kruger National Park, among other natural resource endowments. It is also in an area highly known for agricultural productivity. Thus, students' entrepreneurial aspirations will facilitate meaningful interactions and collaborative partnerships with various community stakeholders and businesses to foster the exploration of their abundant resources for economic development. The university's policy supports and encourages student mobility and entrepreneurial activities abroad are offered to students. However, financial resource scarcity limits student mobility and exposure to entrepreneurial activities abroad.

Design

A qualitative approach was followed to explore unknown aspects such as the student's entrepreneurial interest, motives, needs and challenges. The lack of information on these aspects, particularly from a rural-based university perspective, necessitates an in-depth inquiry into the issue. A case study design was utilised. A total of 20 students from undergraduate to PhD level participated in the study. A purposive sampling technique was utilised to select students who were either already participating in entrepreneurial adventures or were aspiring to participate. Rich in-depth data were gathered through semi-structured interview guides. Semi-structured interview guides are a powerful tool in qualitative studies as they allow for follow-up questions when a researcher seeks clarity on certain responses (Galletta, 2013). This increased the richness and quality of data. The semi-structured interview guide consisted of 8 key questions which are: 1. Do you think entrepreneurship is a desirable career path, yes/no and why? 2. What are your entrepreneurial aspirations/ideas? 3. What goals do you aim to achieve through entrepreneurship? 4. What challenges stop you from being an entrepreneur/ hindering your entrepreneurial adventure? 5. What resources do you need most to venture into entrepreneurship? 6. Which initiatives have the university established to promote student entrepreneurship? 7. What unique entrepreneurial opportunities do you see at the university and the surrounding communities? 8. What can be done better to create an environment that fosters an entrepreneurial mindset among students? Data was collected in October 2024. One researcher and two research assistants collected the data through face to face interviews and telephonically.

The Thematic Network Analysis technique was employed to analyse the qualitative data using the Atlas ti version 9 software platform. Atlas ti. is a qualitative data analysis platform that allows for transparency, rigor, and precision. Once uploaded into the software in textual word format, the data was organised into families and coded using open coding, code list, and code in vivo tools.

This was done for each entered transcript from the individual participant. The inclusion criteria for the codes were guided by the research questions and objectives. Codes which fell within the scope of the objectives were considered. To increase rigour and easy remembrance, memos and comments were created for interesting segments of the data (quotations) along the coding process. One researcher and two research assistants who collected the data collaborated in the codification process to ensure validity and transparency. Several codes were developed, and some were merged later depending on their similarities and meaning. The emerging codes became the main themes and subthemes emerging from the results. The themes, subthemes and selected quotations were utilised to develop network diagrams that are presented in this paper.

The study was conducted after obtaining an ethical clearance from the University of Venda Research Ethics Committee. Permission to collect data was also sought from students who participated through a letter confirming informed consent. The letter categorically explains the right of respondents to voluntarily participate in the study and withdraw whenever they feel uncomfortable. Participant names were excluded from the response notes to protect their identity and privacy. Data was also kept safely and away from public viewing to maintain confidentiality.

RESULTS

Demographic details

Table 1 below shows that the study comprised 20 participants. In terms of age, the majority (8) were between 26-30, followed by 5 who were between 20-25 years old and the least (3) were above 36 years old. Gender wise, 8 were male while the remaining were female. Most of the participants (7) were from the business management field, 6 were from development studies, while the fewest were from environmental sciences. Results also showed that most of the participants were from entrepreneurial families.

Table 1. Participants' demographic details

Participants details		Number of participants
Age	20-25	5
	26-30	8
	31-35	4
	36 and above	3
	Total	20
Gender	Male	12
	Female	8
Field of study	Business management	7
	Development studies	6
	Agricultural sciences	4
	Environmental sciences	3
Family entrepreneurial background	Yes	12
	No	8

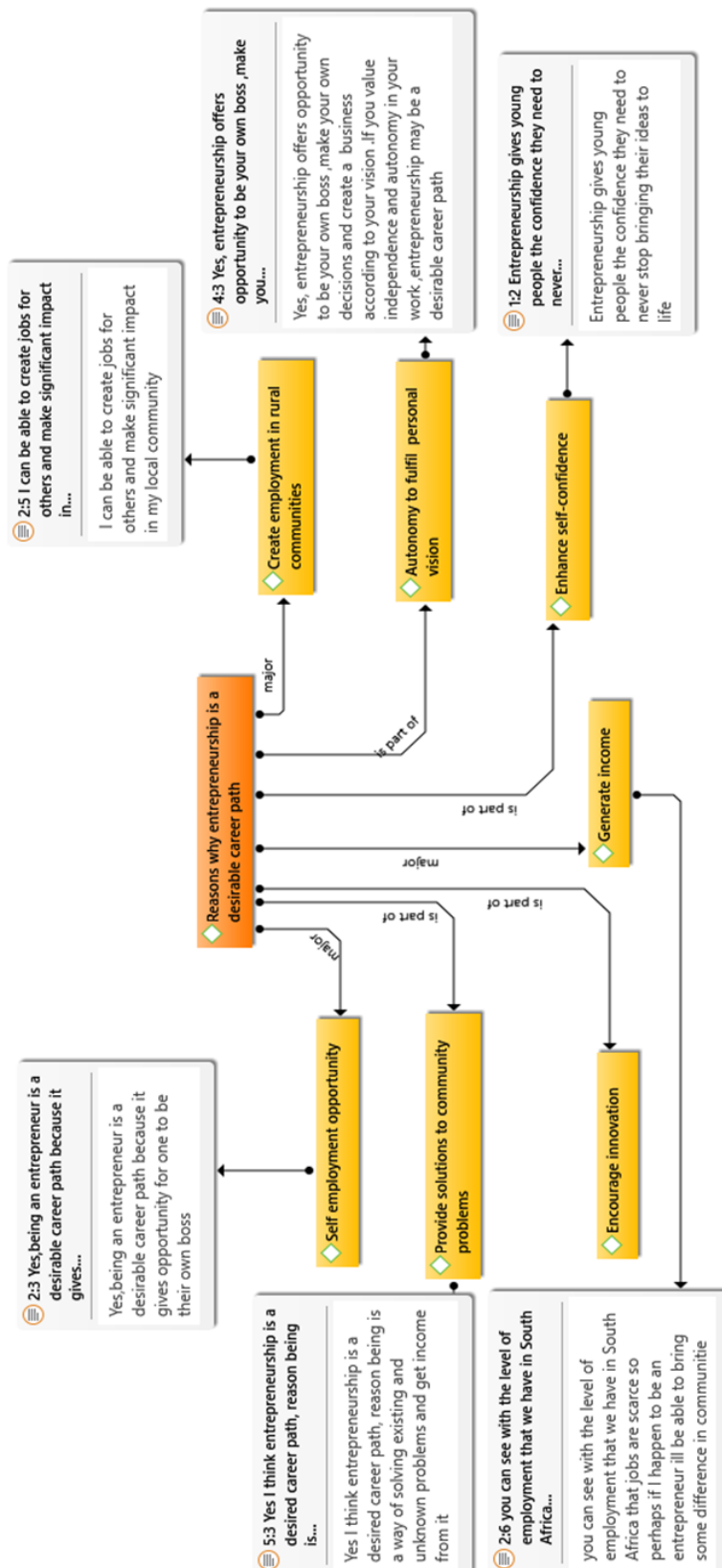
Entrepreneurship as a desirable career path

This section aims to understand whether students regard entrepreneurship as a desirable career path. Results unanimously showed that all participants regarded entrepreneurship as a

desirable career path, especially given limited employment opportunities in rural areas. As shown in Figure 1 which is a thematic network diagram extracted from the Atlas ti version 8 network, entrepreneurship is regarded as desirable because it gives autonomy to fulfil a personal vision, create employment in rural communities, encourage innovation, enhance self-confidence, generate income, provide solutions to community problems and provides self-employment opportunity. These thematic areas are described in the following subsections.

Autonomy to fulfil a personal vision. Results showed that entrepreneurship allows students to explore their unique interests and passions, giving them the autonomy to craft a career that aligns with their vision. In a rural-based setting like the University of Venda, this autonomy empowers students to create businesses catering for their local community's specific needs and characteristics. This independence encourages self-directed growth, helping students become leaders who can drive change and innovation within their hometowns.

Figure 1. Reasons why student entrepreneurship is desirable



Create employment in rural communities The local area has limited job opportunities, which leads to a brain drain as graduates move to urban areas. In this regard, through entrepreneurship, students can become job creators rather than job seekers, which helps in retaining skilled personnel and reducing migration from rural areas. New enterprises contribute to local economies, providing employment for other rural dwellers and improving the overall economic stability of the community.

Encourage innovation. Students understood that entrepreneurship is fundamentally creative, enabling them to think outside the box and find unique solutions to real-world problems. This innovative spirit is especially valuable in rural settings, where resources are limited, and traditional methods need refreshing. By fostering innovation, student entrepreneurs will introduce new products, services, or processes that address local needs in novel ways, thereby contributing to the community's development.

Enhance self-confidence. It was also noted that entrepreneurship can instil confidence as students navigate challenges, make strategic decisions, and experience the results of their efforts. This hands-on experience builds self-esteem and resilience, equipping students with the confidence to tackle future challenges in their careers. Increased self-confidence is particularly valuable in rural areas, where students may feel less connected to opportunities and need extra motivation to realize their potential.

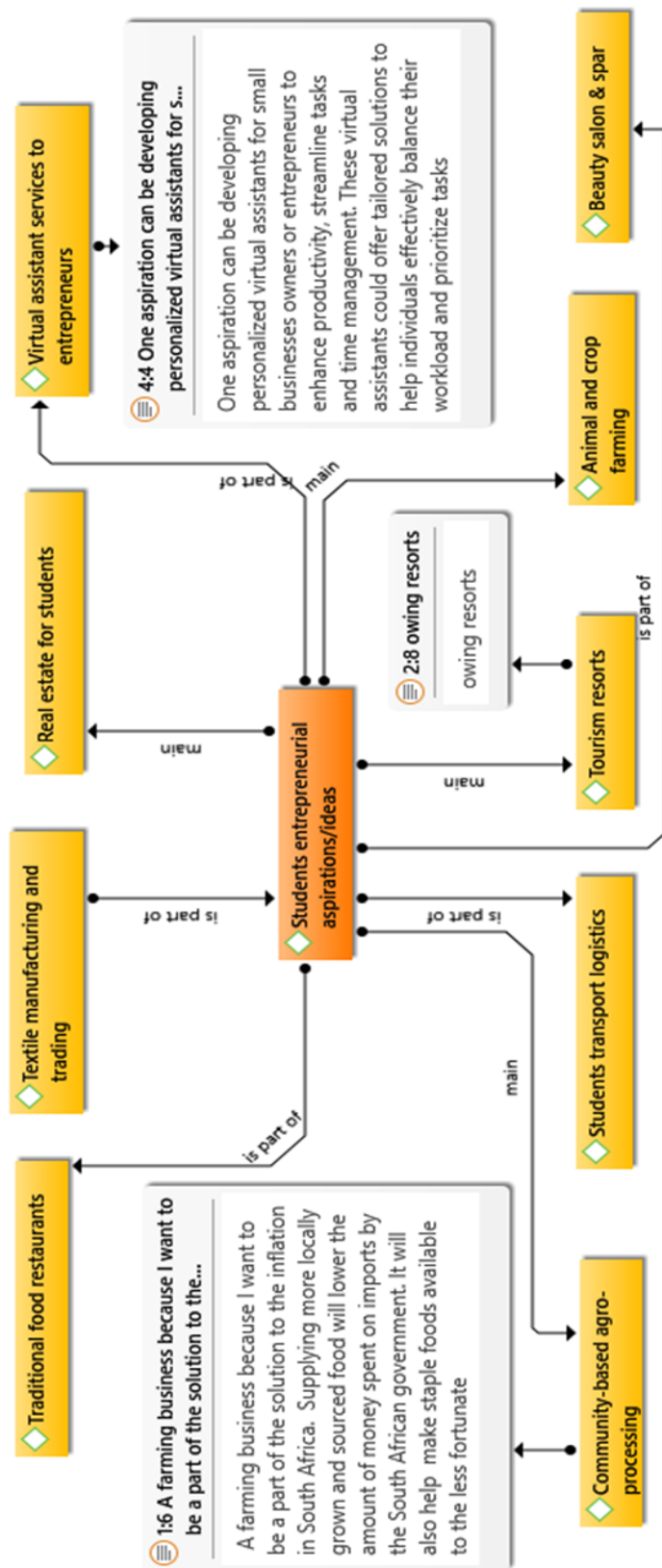
Generate income. Above all, entrepreneurship generates income which is a significant a significant motivator for many students. Entrepreneurship provides an avenue for students to earn an income while still in school, potentially reducing reliance on loans or part-time jobs. In the local rural area, where high-paying jobs are scarce, student-led businesses create a steady income source and contribute to personal and family financial stability.

Provide solutions to community problems. Lastly, the local rural communities face unique challenges that require context-specific solutions. Therefore, Student entrepreneurs who live and study in the area are well-positioned to understand these needs deeply and develop targeted solutions. Whether it's a business that improves access to essential goods or services, or one that addresses agricultural, health, or education challenges, student-led initiatives can significantly impact community welfare.

Students' entrepreneurship aspirations

Results in this section showed diverse aspirations that students in rural-based universities have to contribute to economic development, community well-being, and cultural preservation. These aspirations and selected quotations from participants are well furnished in Figure 2.

Figure 2. Students Entrepreneurial Aspirations



Animal and crop production business is one of the student's aspirations. This is because agriculture remains a cornerstone of the local rural economy and student entrepreneurs interested in animal and crop farming can make a substantial impact. By adopting sustainable practices and innovative techniques, students can improve yields and product quality, addressing both local demand and potential regional markets.

Most students also preferred venturing into community-based agro-processing. This business idea allows students to create value-added products that can be sold locally or beyond, increasing profits for local farmers and reducing waste. Students see an opportunity in agriculture produce from the agriculture department where animal and crop produce are normally sold without value addition. Besides, others are interested in real estate for students. With limited housing options available for the University, student entrepreneurs seek to address this gap by developing affordable real estate specifically for students. This includes shared apartments, dormitories, or hostels that provide a safe, convenient, and affordable living space. Real estate for students creates a stable revenue stream and helps solve housing issues that many rural universities face, enhancing student retention and satisfaction. The local area is rich with heritage and tourist attractions which are not fully utilised. For this reason, some students reportedly aspired to start tourism resorts to provide entertainment for both outsiders and locals.

This also helps to preserve local heritage and encourages environmental sustainability through eco-friendly tourism. Other uncommon student aspirations included beauty salons & spar, student transport logistics, textile manufacturing and trading, traditional food restaurants and virtual assistant services to entrepreneurs. Worth noting is the fact that, although international entrepreneurial opportunities exist, students in rural based universities are less exposed and those who are exposed lack support to explore those opportunities. Therefore most students aspiration are limited to local and national reach.

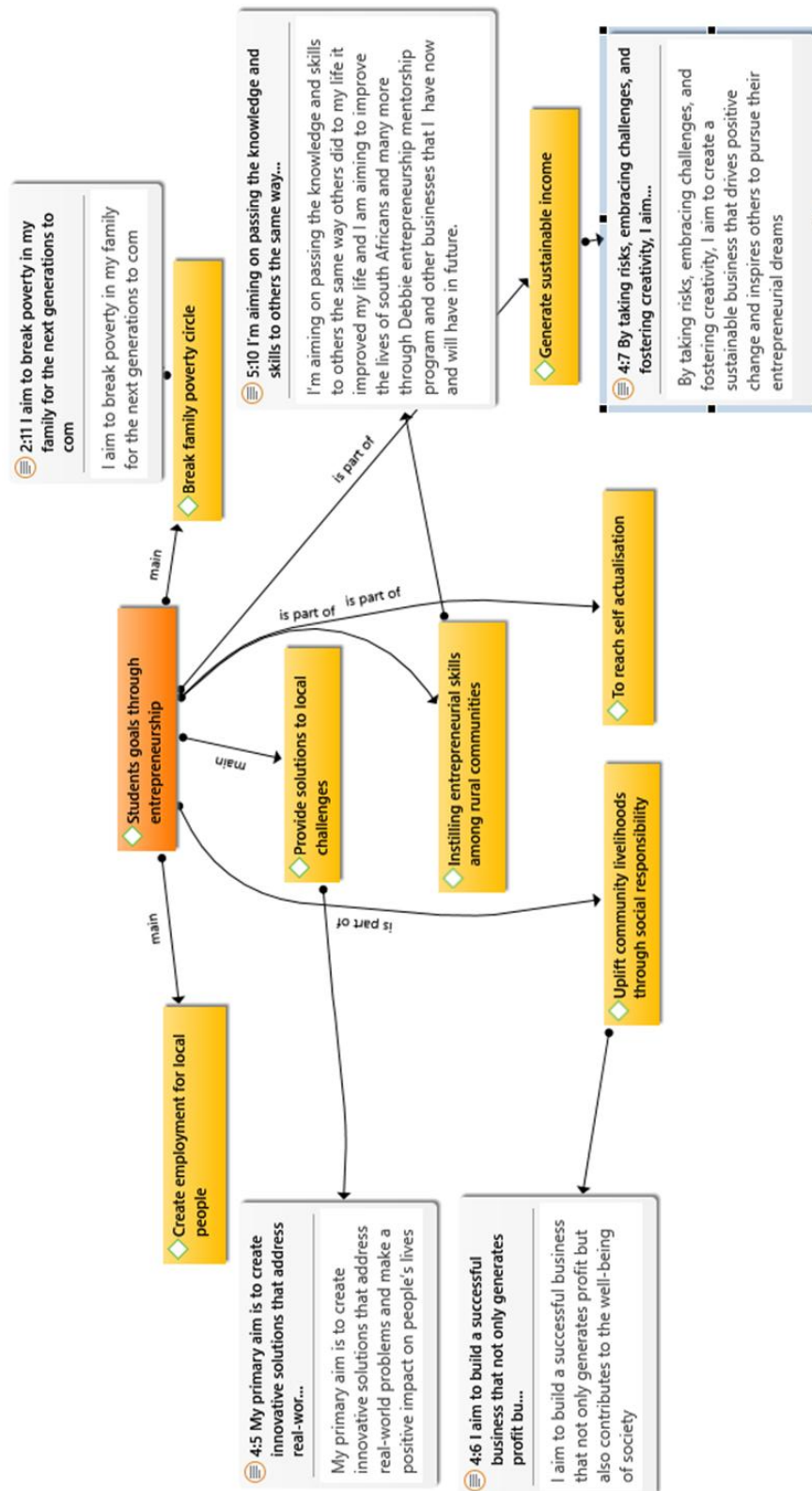
Students entrepreneurial motivations

In this section, we sought to unpack the entrepreneurial goals of students. Results presented in Figure 3 show that students had both economic and social impact goals through entrepreneurship. The main entrepreneurial goals were breaking the family poverty cycle, providing solutions to local problems and creating employment for local people.

Break the family poverty cycle. Results showed that many students are from rural backgrounds and regard entrepreneurship to improve their families' financial situations. By establishing successful businesses, they can generate steady income streams that lift their families out of poverty and create long-term financial stability. This goal goes beyond personal gain, as breaking the cycle of poverty also benefits future generations by providing them with better educational and healthcare opportunities, setting a foundation for lasting economic independence.

Create employment for local people. Job opportunities are often limited in the local rural area. Thus, student entrepreneurs who establish businesses seek to become job creators, providing employment for residents and reducing reliance on external employment options.

Figure 3 Students' Entrepreneurial motivations



This is especially impactful in reducing rural-to-urban migration, as local employment opportunities help retain talent within the community, fostering economic stability and a thriving local economy.

Provide solutions to local challenges. The local area is faced with specific challenges, such as limited access to healthcare, education, essential services, and climate change-induced disasters. Therefore, students who intend to venture into entrepreneurship seek to identify and address these needs through innovative business ideas. By providing solutions tailored to local issues, they can improve quality of life, fill gaps in existing services, and contribute to a healthier, more vibrant community. These businesses not only solve immediate problems but also foster a sense of self-reliance and progress within the area.

Other goals reported include generating sustainable income and instilling entrepreneurial skills among rural communities. Students who pursue entrepreneurship intend to serve as role models and mentors to other community members. Sharing skills such as business planning, financial literacy, marketing, and problem-solving empowers others to consider self-employment as a viable career path. Moreover, entrepreneurial students seek to reach self-actualization through following their passion, vision and values. Lastly, student entrepreneurship can uplift the livelihoods of community members through social responsibility duties.

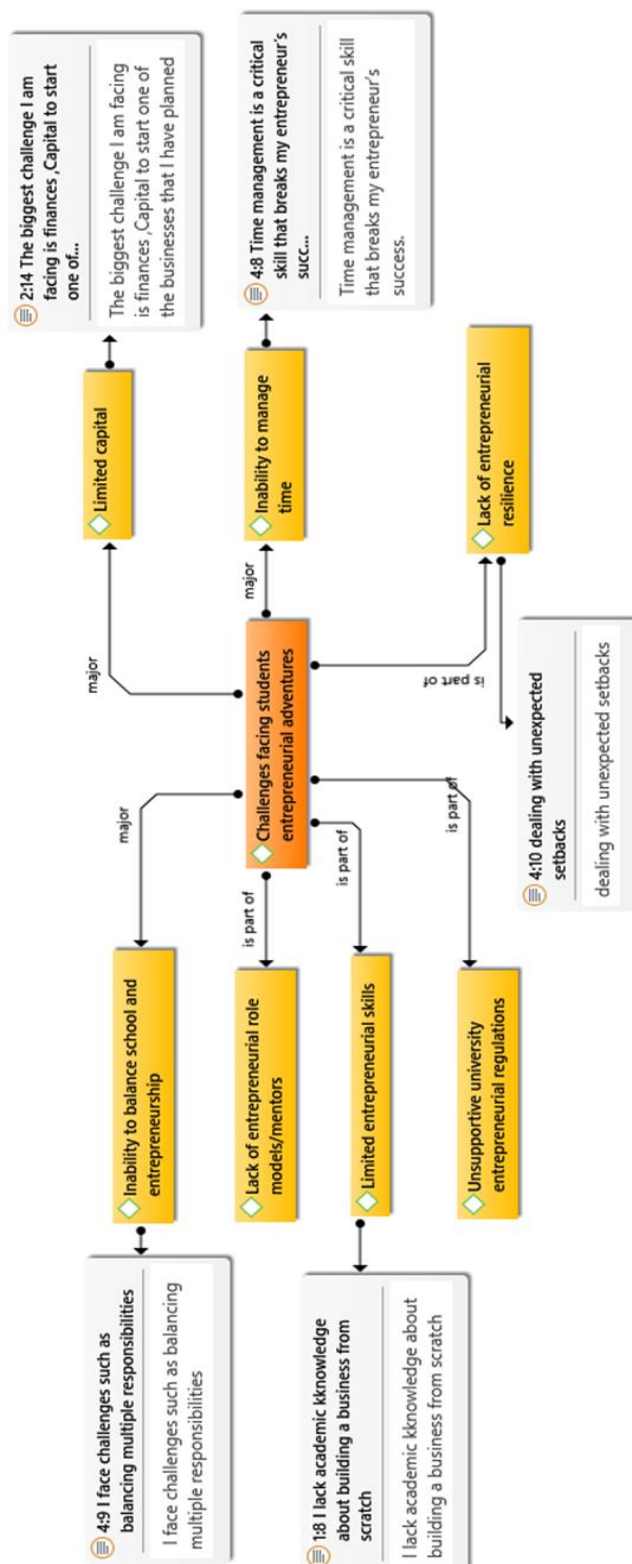
Challenges facing student entrepreneurs

Despite students' entrepreneurial aspirations and missions, various challenges either hinder their entrance into entrepreneurship or hamper their growth. Although many challenges were highlighted, the major ones include the inability to balance school and entrepreneurship, the inability to manage time and limited capital. The challenges are presented in Figure 4 and described in the following sections.

Inability to balance school and entrepreneurship Balancing academic responsibilities with the demands of running a business is a major challenge for student entrepreneurs. Schoolwork, exams, and assignments require a significant time commitment, which conflicts with the demands of managing a business. This dual responsibility leads to stress and burnout, as students struggle to meet the expectations of both. Worse, in a rural university, limited resources or support structures make it even harder to find effective ways to divide their time, impacting both academic performance and business success.

Limited capital It was noted that access to funding is a major hurdle for student entrepreneurs, particularly in the rural context where financial institutions are scarce, and investment opportunities are limited. Students also lack personal savings or assets to invest in their businesses and face difficulties in securing loans due to a lack of collateral or credit history. Additionally, the rural settings lack networks of venture capitalists, and students have limited awareness of funding options such as grants or microloans. This lack of capital restricts business growth, limits inventory and reduces marketing efforts.

Figure 4 Challenges facing students' entrepreneurs



Lack of entrepreneurial resilience Resilience, or the ability to persist through setbacks, is essential in entrepreneurship, where challenges and failures are common. However, many

students lack the resilience needed to cope with the ups and downs of running a business, particularly because they have little prior experience. In the rural setting, where community support and mentorship are limited, students feel isolated and more susceptible to discouragement when they face business obstacles. This leads to premature abandonment of entrepreneurial efforts in the face of adversity.

Lack of entrepreneurial role models/mentors Mentorship and role models are crucial for guiding and inspiring young entrepreneurs, but the rural setting lacks a network of established entrepreneurs who can offer advice, encouragement, and practical insights. Without exposure to experienced mentors, students struggle to navigate complex business decisions, miss out on strategic opportunities, and lack a broader vision for growth. It was also noted that the absence of visible role models also affects motivation, as students may feel that success stories in entrepreneurship are out of reach or limited to urban settings.

Limited entrepreneurial skills Limited entrepreneurial skills are another big challenge for student entrepreneurs operating at the University of Venda. They lack both formal and informal formal in entrepreneurship, such as courses in business management, finance, marketing, and customer relations. This skill gap hinders their ability to manage day-to-day business operations effectively, forecast financial needs, or market their products and services successfully. Without foundational skills, students make avoidable mistakes, struggle to attract customers and face difficulties in scaling their businesses.

Unsupportive University Entrepreneurial Regulations Another worrying challenge is the lack of supportive regulations and policies from the university. Existing regulations and policies are not conducive to student entrepreneurship. Restrictions on business operations, limitations on on-campus resources, limited business operation period of only six months and bureaucratic red tape discourage entrepreneurial initiatives. Additionally, the university incubators are not necessarily nurturing students' businesses currently and there are limited dedicated spaces for students to work on business ideas thus, stifling creativity and practical application of entrepreneurial knowledge. This unsupportive environment makes it challenging for students to pursue their business aspirations alongside their studies

Resources required for students' entrepreneurship initiatives

This section reveals the main resources required by student entrepreneurs to either start or grow existing businesses. The resulting thematic areas are presented in Figure 5. Students regarded startup capital as one of the main resources they require. Access to initial funding is crucial, as it provides the resources needed to purchase materials and equipment and cover early operational costs. In rural settings such as the study area, this involves loans, grants, or subsidies aimed at promoting local entrepreneurship and economic growth.

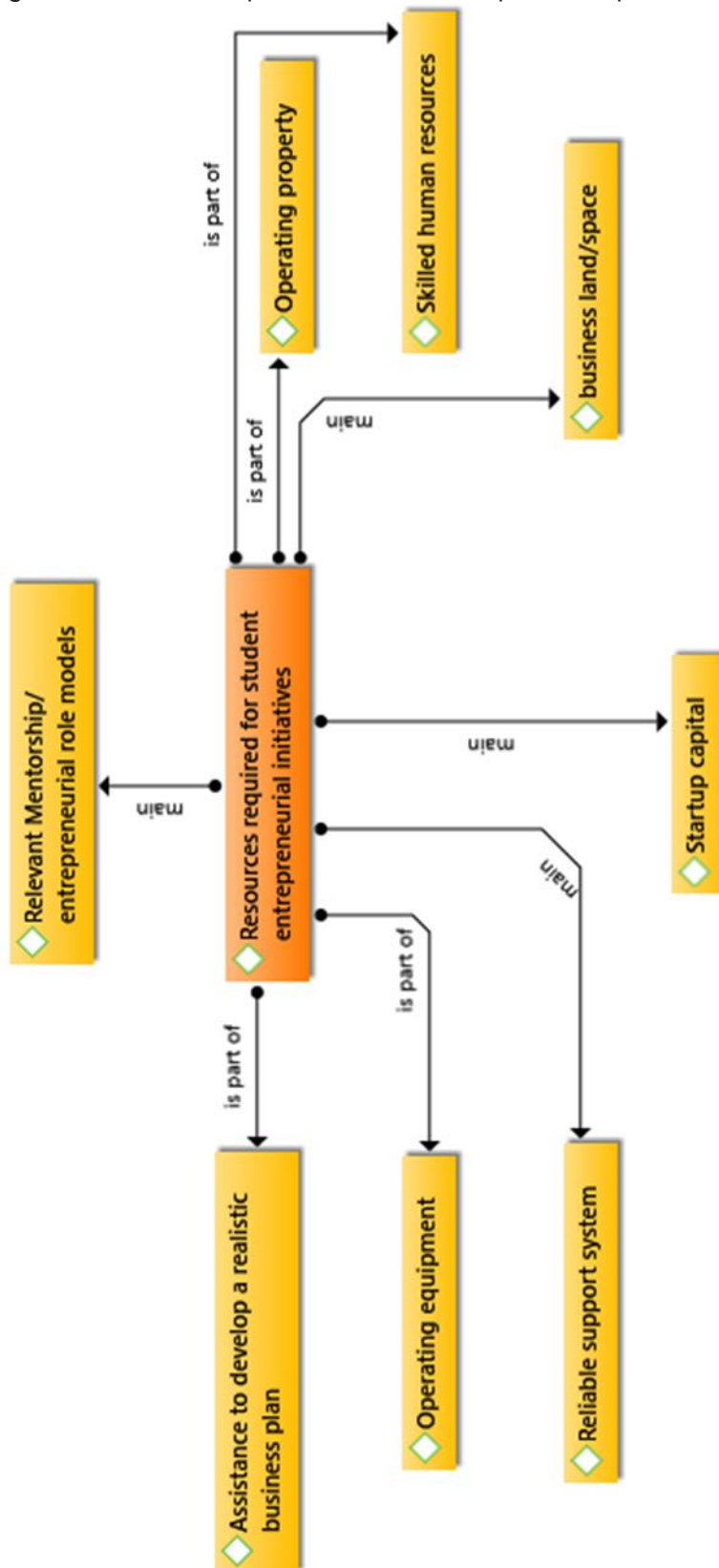
Relevant mentorship/entrepreneurial role models are largely required. Mentorship from established entrepreneurs, especially those with experience in rural settings, provides valuable insights and inspiration. Role models can guide students through challenges unique to rural businesses, helping them navigate regulatory requirements, market trends, and community engagement effectively. Furthermore, students noted that they highly require a reliable support system. This includes a network of local business professionals, community leaders, educational institutions, and family members. This network is critical for morale, feedback, and practical support, such as local resources or connections.

Some were interested in accessing skilled personnel in various entrepreneurial adventures. Having access to skilled workers or trained individuals familiar with the specific requirements of rural business operations is vital. This includes local talent or volunteers who are trained in areas relevant to the business, from technical skills to management and marketing. Others further alluded

to the desire to gain skills in developing realistic business plans. This involves guidance from experienced professionals to help students create viable business plans tailored to rural markets. Such assistance covers market research, financial forecasting, risk assessment, and goal setting, ensuring the plan is practical and achievable within the local context.

Business land is also critically required. Having access to land or physical space is crucial, especially in rural areas where businesses might require space for production or farming. Access to affordable or subsidized business land allows young entrepreneurs to start operations without significant rental costs. Lastly, operating equipment is desired. In the local rural areas, such equipment could vary from farming tools and construction machinery to computers and communication devices, depending on the nature of the business. Ensuring equipment availability and accessibility allows students to build efficiency in their operations.

Figure 5 Resources required for student entrepreneurship initiatives



University Initiatives to Promote Entrepreneurship

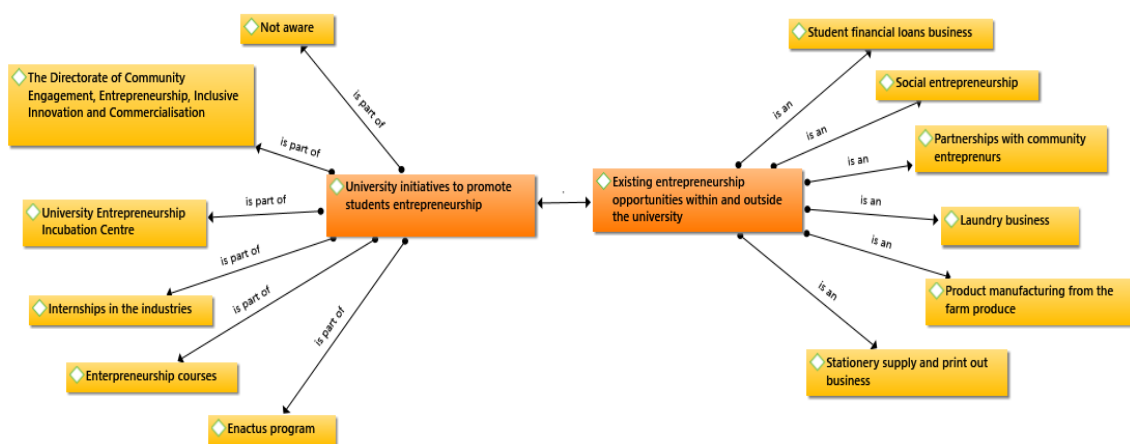
Figure 6 is a network diagram showing the various university initiatives to promote student entrepreneurship as well as various opportunities that exist within and outside the institution. The university initiatives are described below. These insights about the initiatives were drawn from students and were also verified with the university relevant office for accuracy. The main identified entrepreneurship opportunities included social entrepreneurship, student loans, laundry, partnerships with local business communities of practice, product manufacturing from university farm produce, stationery and printing services.

Enactus program Recently, the has various support programs to support student entrepreneurship. Enactus is one of the long-existing programs that encourage students to address social, economic, and environmental challenges through entrepreneurial action. In essence, students form teams to develop innovative projects, gaining hands-on experience and leadership skills while promoting sustainable development in local communities. This program is supposed to foster practical entrepreneurship skills and empower students to make a positive impact. However, in practice, the program is not as effective as students normally just participate in competition debates without implementing practical entrepreneurial projects.

Entrepreneurship courses It was also noted that the university has recently introduced entrepreneurship courses. The courses focus on entrepreneurship, aiming to equip students with fundamental business knowledge and skills. These courses cover essential topics such as business planning, marketing, finance, and innovation, tailored to prepare students for real-world entrepreneurial ventures. The courses emphasize problem-solving and creative thinking, laying a strong theoretical foundation for future entrepreneurs. However, for these courses to successfully transform students' minds, there is a need for more practical entrepreneurial initiatives on and off campus.

Internship programs in local industries There are also various internship programs in local industries. These internships are meant to provide students with valuable work experience in relevant industries, helping them understand business operations, industry trends, and professional expectations. By placing students in local businesses or startups, these internships expose them to practical aspects of entrepreneurship and business management, bridging the gap between academic knowledge and practical application. However, this has not yet translated into an increase in student entrepreneurship.

Figure 6 University initiatives to promote student entrepreneurship



Directorate of Community Engagement, Entrepreneurship, Inclusive Innovation, and Commercialization (DCEEIIC) The university recently established the Directorate of Community Engagement, Entrepreneurship, Inclusive Innovation, and Commercialization (DCEEIIC). This Directorate focuses on fostering community-oriented entrepreneurship and innovation. It promotes initiatives that engage students with local communities, encouraging projects that solve community problems while generating economic value. This support hub offers resources for students to develop marketable innovations that address social and economic needs within their community.

Entrepreneurship incubation centre Lastly, the university recently established an Entrepreneurship Incubation Centre (UCFERI). The entrepreneurship incubation centre provides a dedicated space where student entrepreneurs can access resources to nurture their business ideas. The centre offers mentorship, office space, networking opportunities, and business development support. It serves as a launchpad for students to turn their ideas into viable businesses, with support at every stage of the startup process, from ideation to commercialization. Despite its potential, the centre has not yet influenced student entrepreneurship on campus. This is mainly due to a lack of impactful entrepreneurship programs and limited exemplary mentors.

Suggestions for promoting student entrepreneurship

This section focuses on unpacking the suggestions for improving student entrepreneurship on and off campus. Various suggestions were made, with the main ones being mentorship from exemplary entrepreneurs, customized entrepreneurial short courses, networking and pitching competition events, and fast-tracking students and external entrepreneur collaborations. Figure 3.7 projects all suggestions and selected verbatim words from participants. These suggestions are well described below.

Customized entrepreneurial short courses Most students suggested the need for offering customized short courses that focus on specific entrepreneurial skills (e.g. innovation opportunities, grant proposal writing, enterprise resilience, digital marketing, pitching and networking prowess) rather than common traditional entrepreneurial courses such as business management and record-keeping that most already know. Customized courses can attract a wide range of students and make entrepreneurship more accessible. These courses also help to build targeted skills that align with specific students' interests and career goals.

Mentorship from exemplary entrepreneurs Students at the university highlighted that there is no entrepreneurial culture on campus. This implies that there are limited exemplary entrepreneurs among students, staff mentors and even alumni who can motivate students. In this regard, there is a need to ensure that those mandated to mentor student entrepreneurs are exemplary and motivating. Connecting students with successful entrepreneurs as mentors offers insights and guidance that formal education alone cannot provide. Mentorship programs allow students to gain perspectives on handling challenges, finding opportunities, and building resilience. These role models can inspire students to persevere and think ambitiously.

Networking and pitching competition events Students also advocated for more networking and pitching competition events. Hosting regular pitch competitions, hackathons, and networking events on campus allows students to test their ideas, gain feedback, and connect with potential investors, partners and customers. These events build confidence, encourage a competitive spirit, and provide students with real-world exposure to entrepreneurship.

Develop an entrepreneurial culture Some believe that creating an environment where entrepreneurship is celebrated can motivate students to explore it as a viable path. This could include visible support from faculty and leadership, promoting stories of successful student entrepreneurs, and organizing regular events centred around innovation and entrepreneurship.

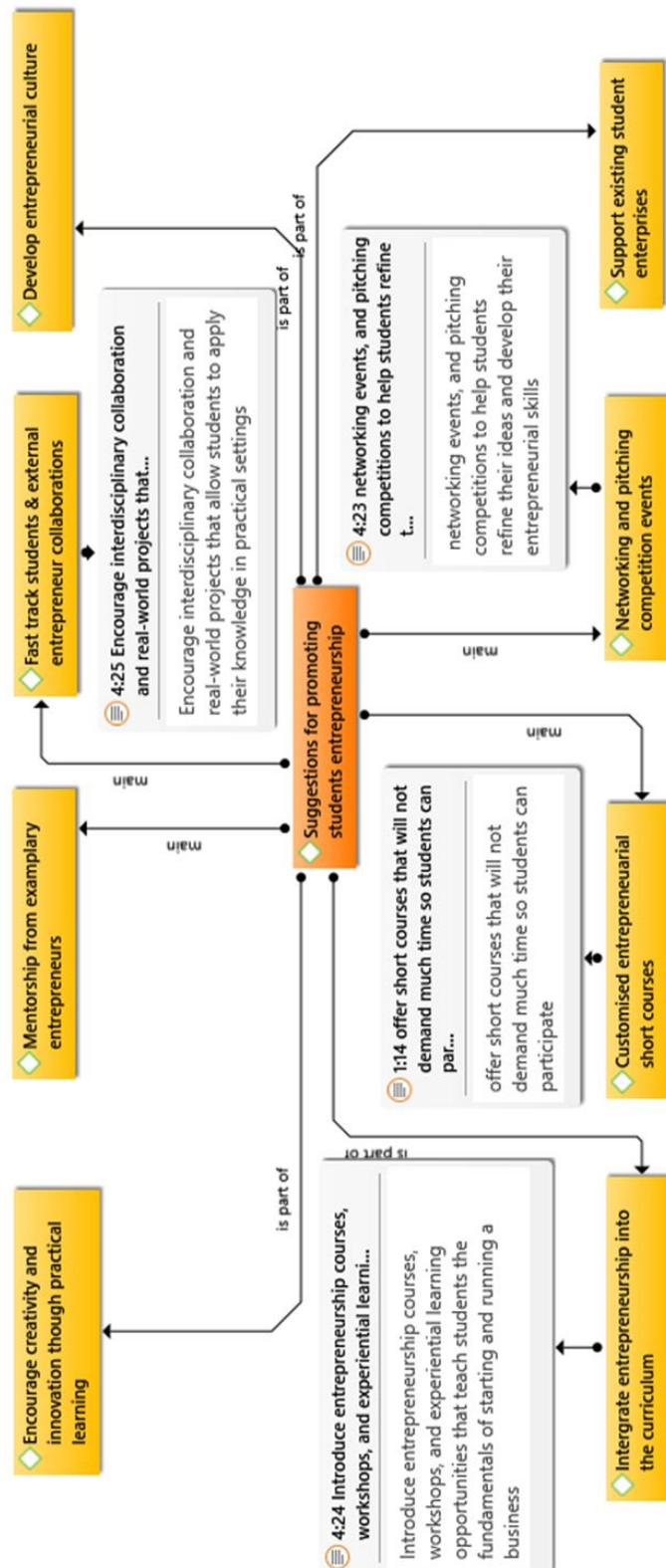
Establishing entrepreneurship clubs and communities within the campus can also strengthen this culture.

Encourage creativity and innovation through practical learning It was also suggested that offering hands-on projects, prototyping sessions, and creative problem-solving exercises can enable students to experiment, fail, and learn from experience. Providing access to maker spaces, labs, and digital tools encourages students to bring their ideas to life and gain confidence in taking risks and thinking creatively.

Fast-track student and external entrepreneur collaborations Although students acknowledged the university's efforts to foster collaboration. Building partnerships with successful local entrepreneurs or alumni will provide students with valuable networking opportunities, internships, and collaborative projects. Establishing formalized channels for these collaborations such as entrepreneurship seminars, internships, or project-based partnerships helps students learn from real-world experiences and expand their professional networks.

Integrate Entrepreneurship into the Curriculum Others preferred incorporating entrepreneurial concepts into courses across disciplines. This can be done by integrating case studies and practical projects into existing courses or offering interdisciplinary classes where students from different fields collaborate on business ideas.

Figure 7 Suggestions for promoting students' entrepreneurship



Support existing student enterprises Supporting already existing student enterprises is a critical foundation for motivating growth and new entrances. This includes providing resources,

funding, guidance, access to grants, mentorship, incubator spaces, and opportunities to showcase their businesses at university events. More so, recognizing and celebrating their achievements fosters a positive entrepreneurial spirit across the campus.

DISCUSSION

Students at the rural institution largely view entrepreneurship as a desirable career path and have many entrepreneurial aspirations such as tourism resorts in the heritage-rich area, agro-processing and real estate. Similarly, surveys of commerce students in rural provinces of South Africa revealed high entrepreneurial intentions, with the majority planning to start businesses in the future (Malebana & Swanepoel, 2019). However, the intended enterprise is distinct here due to the available opportunities. Students' entrepreneurship at the University of Venda faces numerous barriers that stifle potential for growth or even entrance into business. One of the main challenges; and one that's often underestimated, is the time demand for both (Richardson, 2017). In our context, students tend to find themselves stretched thin between coursework and business activities, which in rural settings becomes more stressful due to limited resources and support networks. Previously Mencken & Tolbert (2016) initially reported that generally securing capital in rural areas is difficult due to limited access to traditional funding sources. Similarly, for students, securing loans or other sources of capital is tough without personal assets or credit history, especially in a rural area where banks and investors are scarce. Students also lack resilience, a critical trait that some students lack, leading them to give up easily at the first sign of failure. Limited access to mentors, a challenge specific to the local rural context, means students have no one to turn to when they hit a wall. This absence of role models leaves them uncertain and demotivated, leading many to question the attainability of entrepreneurial success.

A final barrier lies within the university policies themselves. Regulations are limiting on-campus business activities, bureaucratic hurdles, and inadequate support for incubation. This resonates with general findings from Qian & Yao (2017) that universities often struggle with bureaucracy, risk-averse cultures, and tenure policies that discourage faculty startups. Without management support, proper space or resources, students are finding it difficult to foster creativity or even apply what they learn theoretically. Altogether, these challenges combine to make student entrepreneurship a challenging path at the University of Venda.

In a bid to reduce these challenges and encourage students' entrepreneurship, the University of Venda has put forth multiple initiatives to get students into entrepreneurship. There's a decent framework, but it is not functioning perfectly in practice. For instance, Enactus is a program meant to encourage student-led solutions to social, economic, and environmental problems. Enactus is a program which is in over 36 countries and is a critical tool for economic and social development (Omotosho et al., 2023). For instance, the Enactus CUValles program at the University of Guadalajara has developed 71 projects, trained over 5,000 people in business models, and achieved success in national competitions (Díaz Pérez et al., 2021). However, in our case, students engage more in debates and competitions than any real hands-on entrepreneurial work, which ultimately blunts the program's potential impact. Entrepreneurship courses, which cover essential business elements, are offered too. These provide students with a structured approach to areas such as planning, marketing and finance. Unfortunately, these are often theoretical. For students to develop entrepreneurial thinking, these courses need more practical work, ideally both on campus and outside of it.

The university has local industry internships, and these should logically be valuable. As per Bawica (2021), such programs offer access to business environments and professional

expectations that are otherwise difficult to experience academically. However, in the local context, they have not yet increased student entrepreneurship, perhaps because they lack a concrete mechanism that connects internships to launching individual ventures. The newly established Directorate of Community Engagement, Entrepreneurship, Inclusive Innovation, and Commercialization provides a community-focused mindset. In theory, the Directorate should give students a solid channel to design and commercialize marketable innovations addressing social needs. If implemented as per plan, there's hope that this community-centric approach could yield longer-term value. Furthermore, the Entrepreneurship Incubation Center was established to offer students office space, business development resources, networking links, and mentorship. Ideally, all tools are needed to support student-led business ideas from start to commercialization. Although with limited success in supporting student entrepreneurship ambassador programs, the center has not yet fostered widespread entrepreneurship on campus. This is partly because the center lacks strong mentorship and effective programming. While the foundation is in place, there are critical gaps in execution and mentorship, areas crucial for driving impactful student entrepreneurship.

The ineffectiveness of most of the current university initiatives prompted students to suggest various mechanisms to promote student entrepreneurship. As opposed to Ramos's (2023) suggestions to integrate entrepreneurship into the curriculum, students prefer customized short courses tailored to specific entrepreneurial skills (e.g., innovation, grant writing, digital marketing) which are relevant but do not consume most of their time. More so, seeking mentorship from exemplary entrepreneurs also emerged as a crucial suggestion. This entails addressing the lack of an entrepreneurial culture on campus by connecting students with successful mentors. Additionally, in line with earlier findings by Bell & Bell (2016) students advocated for more networking and pitch events, which would offer them exposure, feedback, and connections with investors and partners, elements vital for building entrepreneurial confidence and real-world readiness. Lastly, students expressed a desire for practical, experiential learning, hands-on projects, prototyping, and access to creative labs—enabling them to develop their ideas and learn through trial and error. For a student-centred university, adopting these co-created suggestions is critical for successfully promoting entrepreneurship. This study provide a context based overview of students entrepreneurship in rural settings, information which is scarce in literature. Therefore the study contribute to the developing body of knowledge in rural student entrepreneurship. The study provides rural specific solutions to increase students entrepreneurship which is critical in South Africa where unemployment is on the rise and entrepreneurship is a key solution. However, because the study was conducted in one institution comparative studies in various rural based universities are necessary for generalization purposes.

Recommendations

- Focus on developing an entrepreneurial culture through various ways such as rewarding student entrepreneurs, providing exposure opportunities to innovators operating in rural setups for guidance and inspiration. This has been successfully done at the University of Development Studies in Ghana, which operates in the rural northern belt of Ghana. The institution integrates exposure to rural entrepreneurs and community recognition into its Third Trimester Field Practical Programme (TTFPP). Students are placed in rural areas and partner with local innovators to co-develop and test business ideas.
- Providing financial, moral and innovation support for student entrepreneurial ventures in a controlled university environment to properly incubate student entrepreneurs before they move into real-world entrepreneurship in a rural context. For instance, this has brought success at the Egerton University, which supports student entrepreneurs through its Agribusiness Incubator, focusing on value chains in agriculture in rural areas.

- Develop a strong and inspiring alumni of successful entrepreneurs who can be exemplary mentors to students, as opposed to utilising mentors without any entrepreneurial history no success stories. Success through this strategy has been witnessed at North West University, Mafikeng campus in rural parts of the North West Province. The campus has integrated entrepreneurial success stories from its alumni into student development through Business Mentorship Circles.
- Establish a structured entrepreneurial service-learning program with local industries and innovation hubs in rural setups. This allows interested students from all fields to be placed in relevant industries and hubs for a certain period to gain practical entrepreneurial experience in the rural context. This has brought success at Fort Hare, which is based in the rural Eastern Cape. The institution utilise its Agri-Innovation Park and partnerships with local SMEs and agro-processing firms to deliver practical entrepreneurial learning.
- Provide customised entrepreneurial short courses focusing on key contemporary innovation aspects such as digitalisation, technology advancement and market agility.

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