

# Fostering Student Support and Self-directed Learning in Online Environments: A Qualitative Study of Higher Education Practices

Frieda Indileni Kavetuna <sup>1</sup>, Charlene Keja-Kaereho <sup>2</sup>,  
Brenden Rinouua Tjizu <sup>3</sup>

<sup>1,2</sup> Department of Higher Education and Lifelong Learning, University of Namibia, Windhoek, Namibia

<sup>3</sup> Department of Social Sciences, University of Namibia, Windhoek, Namibia, Faculty of Education and Human Sciences

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## Abstract

The rapid shift to online learning in higher education institutions has underscored the need for effective strategies to support students and promote self-directed learning (SDL) in virtual environments. Benson (2021) emphasizes the importance of designing learning environments that foster learner autonomy, particularly relevant to online education where students often need to manage their own learning processes. Many students who participate in online courses experience frustration and failure due to inadequate preparation for the demanding and isolated learning experience (Kim et al., 2014). However, robust student support systems and SDL provide a foundation for developing personalized systems that empower students to better organize their learning activities and track their progress. This qualitative study employs a phenomenological approach to investigate the relationship between SDL strategies, student support systems, and online learning environments in higher education. Data were collected through semi-structured interviews with a purposive sample of six educators and twelve students from diverse disciplines across multiple institutions. Thematic analysis, guided by Braun and Clarke's (2006) framework, was utilized to identify recurring patterns within the data. The findings reveal that online environments can enhance student engagement, improve learning outcomes, and foster the autonomy necessary for lifelong learning. Thus, the study revealed a subtlety landscape of online learning which is that: technology as an enabler, not a solution; support structures must be holistic and adaptive; and that autonomy requires careful, intentional pedagogical design. Participants emphasized the importance of designing virtual spaces that promote autonomy while offering necessary support structures.

**Keywords:** Online learning, Student support services, Self-directed learning

## **1. Introduction**

### **1.1. Background**

The landscape of higher education has undergone a dramatic transformation in recent years, with online learning becoming increasingly prevalent across institutions worldwide. This shift has been accelerated by technological advancements, changing student demographics, and the demand for flexible educational options. Benson (2021) emphasizes the importance of designing learning environments that foster learner autonomy—a principle particularly relevant to online education where students must manage their own learning processes.

### **1.2. Problem Statement**

Despite the growing popularity of online education, many students face significant challenges in adapting to virtual learning environments. Kim et al. (2014) highlight that many students experience frustration due to inadequate preparation for the demanding nature of online courses. This underscores the critical need to understand and address factors contributing to successful online learning experiences.

### **1.3. Research Questions**

The research questions that guided this study are:

1. How do self-directed learning strategies mediate student success in online environments?
2. What comprehensive support systems effectively facilitate online learning experiences?
3. What pedagogical approaches can simultaneously promote student autonomy and provide adequate support?
4. How can technological tools be strategically integrated to enhance self-directed learning in higher education?

## **2. Literature Review**

### **2.1. Theoretical Frameworks**

The theoretical frameworks underpinning this study are crucial for understanding the dynamics of self-directed learning (SDL) and student support systems within online learning environments. Three primary theories guide this research: Self-Determination Theory (SDT), Connectivism, and the Community of Inquiry Framework.

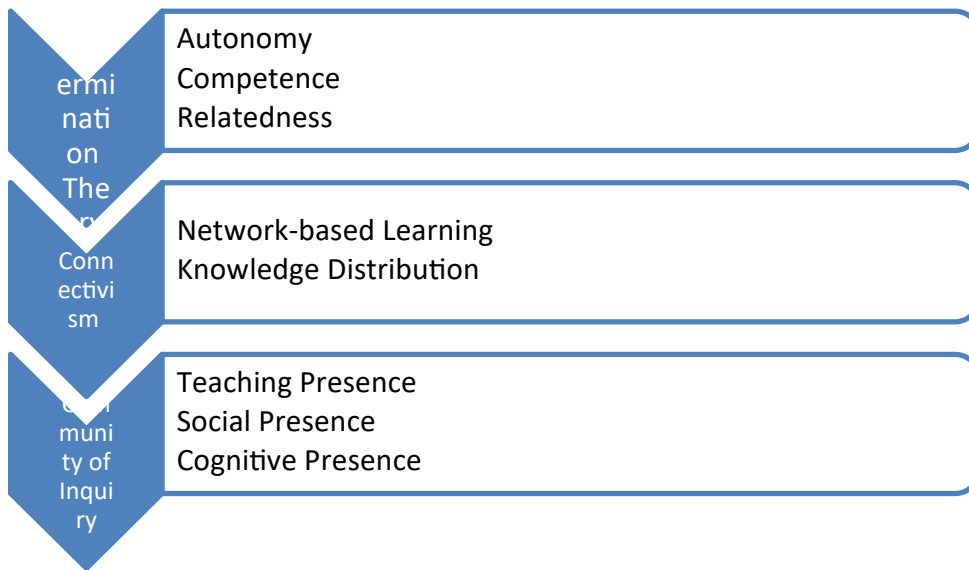
Self-Determination Theory (SDT) posits that individuals have three fundamental psychological needs: autonomy, competence, and relatedness. Autonomy refers to the need for individuals to feel in control of their learning processes, including choices in pathways and assessment methods. Competence involves mastering learning management systems and developing digital literacy skills, while relatedness emphasizes the importance of connections with peers and instructors. Research supports the notion that fulfilling these needs enhances intrinsic motivation, which is particularly relevant in online education where students often operate independently (Deci & Ryan, 2000).

Connectivism offers insights into how learning occurs in digital environments, emphasizing the role of networks and connections in knowledge acquisition. According to Siemens (2005), learning is a process of connecting specialized nodes, highlighting the importance of maintaining relationships within a networked learning environment. This theory is particularly pertinent to online education, where students must navigate a myriad of resources and interactions to construct their knowledge.

The Community of Inquiry Framework focuses on three essential elements: teaching presence, social presence, and cognitive presence. Teaching presence encompasses course design and facilitation, social presence involves the ability to connect with others in a meaningful way, and cognitive presence refers

to the extent to which learners can construct meaning through sustained reflection (Garrison et al., 2000). This framework underscores the importance of creating a supportive online community that fosters engagement and deeper learning.

### 2.1.1. Interconnections between the Theories



In summary, these theoretical foundations are grounded in the concept of student autonomy and self-directed learning. They provide a lens through which to examine the intersection of student support systems and self-directed learning in virtual environments. Benson (2021) emphasizes that designing learning environments that foster student autonomy is crucial for effective online education.

### 2.2. Self-Directed Learning in Online Environments

Self-directed learning has emerged as a crucial factor for success in online education. Students who develop strong SDL skills are better equipped to manage their own learning processes effectively, (Benson, 2021). According to Benson (2021) Key aspects of SDL include organizing learning activities, monitoring progress, maintaining motivation, and adapting to challenges.

**Organizing Learning Activities:** Students must take initiative in planning their studies, setting goals, and determining how they will achieve those goals.

**Monitoring Progress:** Effective SDL involves regularly assessing one's understanding and progress toward achieving academic objectives.

**Maintaining Motivation:** In the absence of traditional classroom structures, students need to cultivate intrinsic motivation to stay engaged with their studies.

**Adapting to Challenges:** SDL requires flexibility and resilience when faced with unexpected obstacles or changes in course content or delivery.

Research has shown that students who possess strong SDL skills tend to achieve higher academic performance (Knowles, 1975). For instance, Knowles (1975) argues that self-directed learners take initiative in their educational pursuits, leading to greater engagement and persistence. Additionally, SDL fosters lifelong learning habits that are essential in an ever-evolving job market (Candy, 1991). This adaptability is particularly important given the rapid technological changes influencing educational landscapes.

### **2.3. Student Support Systems**

Comprehensive student support systems are vital for facilitating successful online learning experiences. Kim et al. (2014) highlight that many students encounter frustration due to inadequate preparation for online courses. Effective support systems can include technical support services, academic advising and tutoring, peer support networks, and mental health resources.

Technical support services are critical for ensuring students can access course materials without hindrance (Alturki & Aldraiweesh, 2023). Personalized academic support helps students navigate course requirements and develop effective study strategies. Peer support networks foster a sense of community among students, reducing feelings of isolation—an issue often exacerbated in online settings (Huang et al., 2020). Mental health resources are also essential for helping students manage stress during challenging academic periods.

Alturki & Aldraiweesh (2023) found that students utilizing learning management systems like Blackboard demonstrated improved self-efficacy, problem-solving abilities, and academic performance. These findings suggest that well-designed support systems can significantly impact learning outcomes by providing necessary scaffolding for student success.

### **2.4. Technology Integration and Pedagogical Practices**

The integration of technology into pedagogical practices plays a crucial role in enhancing student engagement and academic achievement. Barnes (2017) emphasizes that effective teaching practices significantly improve academic outcomes, particularly for diverse learners. Educational technologies offer enhanced opportunities for individualized learning processes but require thoughtful implementation.

Utilizing interactive tools such as discussion forums or collaborative projects can promote active engagement among students while also supporting their SDL efforts (Garrison et al., 2010). However, educators must ensure that technology is integrated purposefully into their teaching strategies to avoid overwhelming students or creating barriers to learning.

Moreover, adaptive technologies can provide personalized feedback tailored to individual student needs, further enhancing the effectiveness of online education (Hattie & Timperley, 2007). As such, educators must continually assess their technological integration strategies to ensure they align with best practices for promoting student autonomy and engagement.

The literature review highlights the interconnectedness between self-directed learning, student support systems, and effective pedagogical practices within online education contexts. By grounding this study in established theoretical frameworks such as SDT, Connectivism, and the Community of Inquiry Framework, it becomes evident that fostering an environment conducive to SDL requires careful consideration of both technological tools and support mechanisms. The findings from this study will contribute valuable insights into how higher education institutions can enhance online learning experiences by prioritizing autonomy while providing necessary support structures for students.

## **3. Methodology**

### **3.1. Research Design**

This study employed a qualitative research approach using a phenomenological research design to investigate the lived experiences of both educators and students in online learning environments. This

methodology was chosen to gain deep insights into the complex interactions between self-directed learning, support systems, and learning outcomes.

### **3.2. Population, Sample and Sampling Procedure**

The study employed a purposive sampling strategy to carefully select a diverse and representative participant group consisting of six (6) educators drawn from various academic disciplines and twelve (12) students with heterogeneous levels of online learning experience. These participants were strategically recruited from multiple higher education institutions to ensure a comprehensive and distinct perspective on online learning environments. By intentionally selecting educators and students across different disciplines, the research aimed to capture a broad range of experiences and insights into self-directed learning and student support systems, thus enhancing the study's depth and potential transferability of findings to varied educational contexts.

### **3.3. Research Instruments and Data Collection Procedure**

Data collection in this study employed a multi-method qualitative approach utilizing three primary research instruments. Semi-structured interviews were conducted via video conferencing platforms, allowing researchers to engage with participants from diverse geographical locations while maintaining the flexibility and depth characteristic of qualitative inquiry. Complementing these interviews, the researchers performed comprehensive document analysis of course materials and support resources, which provided additional contextual insights into the online learning ecosystem. Furthermore, systematic observation of online learning environments and interaction patterns was undertaken to capture the subtle dynamics of digital educational spaces, enabling a holistic understanding of how students and educators navigate virtual learning platforms. This triangulated approach to data collection ensured a robust and distinctive exploration of self-directed learning experiences, allowing for rich, multi-dimensional insights that extended beyond the limitations of any single research method.

### **3.4. Data Analysis**

The data analysis process followed Braun and Clarke's (2006) rigorous six-phase framework for thematic analysis, ensuring a systematic and comprehensive approach to qualitative data interpretation. The first phase involved deep familiarization with the collected data, where researchers immersed themselves in the interview transcripts, observational notes, and document analyses to gain a holistic understanding of the content. During the initial coding phase, researchers meticulously examined the data, generating initial codes that captured key insights and patterns. The third phase focused on theme development, where these initial codes were clustered and organized into potential broader themes that represented significant patterns across the dataset. In the theme review phase, the researchers critically evaluated and refined these potential themes, ensuring they accurately represented the data and aligned with the research questions. The fifth phase involved precisely defining and naming the themes, carefully articulating the essence of each identified theme and its relationship to the overall research objectives. Finally, the report production phase synthesized these themes into a coherent narrative, transforming the raw data into meaningful insights about self-directed learning and student support in online educational environments. This systematic approach ensured a rigorous, transparent, and credible analysis of the qualitative data.

## **4. Presentation and Interpretation of Findings**

### **4.1. Theme 1: Technological Mediation of Self-Directed Learning**

The findings reveal that technological tools and platforms are pivotal in facilitating self-directed learning, with participants sharing diverse perspectives on how these digital resources shape their educational experiences.

Participants voiced that, “Technology isn’t just a tool; it’s my learning compass. The digital platforms help me track my progress and understand where I need to focus.” Postgraduate Student. Furthermore, another participant indicated that “Technology should empower, not replace human interaction.” - Senior Lecturer. Another lecturer points that, “I have seen how digital tools can transform learning from a passive to an active experience. Students now have the power to customize their learning journey.” On the other hand, there are diverse perspective pointing to say, “Sometimes, the technology feels overwhelming. It is not just about having tools, but understanding how to use them effectively.” (Undergraduate Student). An education indicated that, “We are teaching digital citizens, the ones we believe they were born in front of computers, but we cannot assume they know how to learn online. It requires intentional guidance and support beyond content matters.” (Lecturer in computer studies).

Participants consistently highlighted how digital platforms can:

- Provide structured learning pathways while allowing for flexibility
- Offer immediate feedback and progress tracking
- Enable personalized learning experiences
- Facilitate peer-to-peer collaboration and support
- Teaching beyond content matter with a holistically teaching approach

#### **4.2. Theme 2: Barriers and Challenges to Effective Online Learning**

The results highlight significant barriers and challenges that students face in online learning environments, emphasizing the obstacles that can hinder effective engagement in self-directed learning. Several common barriers to effective online learning emerged from the data such as:

- Technical difficulties and digital literacy challenges
- Time management and self-motivation issues
- Feelings of isolation and disconnection
- Difficulty in maintaining work-life-study balance

Participants indicated that, “The biggest challenge is not the technology, but managing my own motivation and time.” (Undergraduate Student). Moreover, “We need to redesign support systems to address digital literacy and emotional well-being of both our students and the support staff, irrespective of being an administrator or academic staff.” (Staff Development Fellow).

Participants also stated that, “Isolation is the biggest challenge. In a physical classroom, you can raise your hand, but online, it feels like you’re talking into a void, you may raise hand in online reactions, but when the facilitator or other participants are not focusing on that space, you will not be recognized as needing attention or to be given a chance to speak.” (Postgrad student). Knowingly most postgraduate students are also employees, thus, they stated that, “Balancing work, family, finances, and studies is like walking a tightrope. Online learning sounds convenient, but it demands incredible self-discipline, time and financial management.” (Postgraduate Student). Amongst all, some participants indicated that, “Digital literacy isn’t just about knowing how to click buttons. It is about understanding how to learn, how to find resources, how to engage critically, the how to teach and facilitate online for the lecturers.” (Undergraduate Student) . Another stated that, “I struggled with time management. Without the structured environment of a physical classroom, I found myself procrastinating.” (Undergraduate Student).

#### **4.3. Theme 3: Essential Support Structures**

The findings emphasize the importance of essential support structures, as students articulated their need for comprehensive resources and assistance to navigate the complexities of online education effectively.

Participants identified key support structures that contribute to successful online learning, among many to include:

- Technical support services
- Academic advising and tutoring
- Peer support networks
- Mental health and wellness resources

Participants said the following: “The peer support network was my lifeline. Knowing I was not alone in my struggles made a massive difference.” (Distance Learning Student). In addition, “Academic advising went beyond just course selection. My advisor helped me develop strategies for effective online learning.” (International Student)

Participants also voiced some holistic support perspectives such as: “Mental health resources are not a luxury; they are a necessity in online learning. The stress can be overwhelming.” (Lecturer). “Technical support is not just about fixing computer issues. It is about ensuring students can access their education without unnecessary barriers.” (Lecturer/Support Coordinator)

#### **4.4. Theme 4: Pedagogical Strategies for Promoting Autonomy**

Lastly, the results highlight the significance of effective pedagogical strategies in promoting student autonomy, with participants discussing various approaches that educators can adopt to foster an environment conducive to self-directed learning.

The study identified effective pedagogical strategies that foster student autonomy while maintaining necessary support namely:

- Scaffolded learning activities
- Clear learning objectives and expectations
- Regular feedback and assessment
- Flexible deadlines and personalized learning paths

Participants voiced that, “Flexible deadlines don’t mean no deadlines, please to the support staff, they need to understand this. They mean understanding my own learning rhythm.” (Student). Furthermore, students added that, “The best facilitators or lecturers do not just teach; they guide. They help you discover your own learning path.” (Postgrad student). From the lecturer or an educator perspective, “Autonomy is not about abandonment. It is about providing a scaffold that students can gradually learn to climb independently.” (Senior Lecturer). Moreover, a lecturer voiced that, “Assessment should be a learning tool, not just a measurement. Self-assessment and peer review teach critical reflection.” (Lecturer).

In summary, analysis revealed successful pedagogical strategies including scaffolded learning design, progressive complexity in assignments, guided practice opportunities. In terms of assessment strategies, these include authentic assessment methods, multiple assessment formats, self-assessment opportunities and peer review components.

## **5. Discussion of findings**

### **5.1. Participants Voices**

The results of this study underscore the critical importance of integrating self-directed learning (SDL) strategies with comprehensive student support systems in online education. The findings reveal that technology serves as a facilitator of SDL, empowering students to take ownership of their learning

journeys while also highlighting the necessity for intentional guidance to navigate these digital tools effectively. Participants expressed that while technology can enhance engagement and provide structured pathways, it can also be overwhelming without proper support. This duality emphasizes the need for higher education institutions to develop holistic support frameworks that not only address technical challenges but also foster a sense of community and connection among students. Furthermore, the emphasis on intentional pedagogical design reflects the necessity for educators to create learning environments that promote autonomy while ensuring that students receive adequate scaffolding. Overall, the results suggest that fostering effective online learning experiences requires a multifaceted approach that prioritizes both student autonomy and robust support systems, ultimately contributing to improved educational outcomes and lifelong learning skills.

## **5.2. Integration of Findings with Existing Literature**

The findings of this study align with Benson's (2021) emphasis on spatial perspectives in learning environments, particularly in how virtual spaces can be designed to promote autonomy while maintaining support structures. The findings further support Bakeer's (2023) findings regarding the positive influence of interactive teaching methods on student achievement outcomes. Moreover, on theoretical alignment, with drawing from Self-Determination Theory, the findings emphasize the need for support systems to address autonomy, competence and relatedness.

These voices reveal a subtlety landscape of online learning which is that: technology as an enabler, not a solution; support structures must be holistic and adaptive; and that autonomy requires careful, intentional pedagogical design.

## **5.3. Implications for Practice**

This study suggests several important implications for practice:

- The need for balanced support systems that promote independence while providing necessary guidance
- The importance of technological integration that enhances rather than hinders learning
- The value of flexible learning pathways that accommodate diverse student needs
- The crucial role of community building in online learning environments

## **5.4. Limitations and Future Research**

The study acknowledges several inherent limitations that provide valuable opportunities for future research. The relatively limited sample size and narrow institutional context constrain the generalizability of the findings, suggesting a need for broader, more expansive studies that include a more diverse range of higher education institutions across different geographical and educational settings. The research's focus on specific technological platforms and tools potentially narrows the understanding of online learning dynamics, indicating that future investigations should explore a wider array of digital learning environments and emerging technologies. Additionally, the temporal constraints of the study period limit the ability to capture long-term trends and longitudinal impacts of self-directed learning strategies, highlighting the importance of extended research designs that can track student development and technological evolution over extended periods. These limitations are not viewed as shortcomings, but rather as strategic entry points for subsequent research that can build upon and expand the current study's insights into online learning, student support systems, and self-directed learning methodologies. Future researchers are encouraged to address these constraints by designing more comprehensive, multi-institutional, and longitudinal studies that can provide a more holistic understanding of the complex landscape of online education.



## **6. Recommendations**

### **6.1. For Educational Institutions**

Educational institutions should develop comprehensive support frameworks that address both technical and pedagogical needs to enhance online learning experiences. Investing in faculty development for online teaching is crucial to ensure educators are equipped with the skills necessary to facilitate effective learning environments. Additionally, implementing regular assessments of support system effectiveness and creating clear policies for online learning delivery will help institutions adapt and improve their strategies in response to student needs.

### **6.2. For Educators/Facilitators/Instructors**

Educators and facilitators are encouraged to adopt flexible teaching approaches that accommodate diverse learning styles, ensuring that all students can engage meaningfully with the material. It is essential to integrate technology thoughtfully and purposefully, enhancing the learning experience without overwhelming students. Providing a clear structure while allowing for student autonomy fosters a sense of ownership over the learning process. Maintaining regular communication and feedback channels is crucial for supporting students as they navigate their online educational journeys.

### **6.3. For Students**

Students are encouraged to develop effective time management and self-regulation skills to enhance their online learning experience. Actively engaging with available support resources is essential for overcoming challenges and maximizing academic success. Additionally, building connections with peers and instructors, along with regularly assessing and adjusting learning strategies, can significantly improve their ability to navigate the complexities of online education.

### **6.4. Key Recommendations Emerging from Participants Voices:**

1. Develop technology-enhanced, human-centred learning approaches
2. Create comprehensive, empathetic support ecosystems
3. Design flexible pedagogical strategies that respect individual learning journeys
4. Prioritize digital literacy and emotional well-being

## **7. Conclusion**

This study has illuminated the intricate dynamics between self-directed learning (SDL), student support systems, and the role of technology in online education. Through qualitative analysis of the experiences of educators and students, it is evident that while technology serves as a powerful enabler of SDL, its effectiveness is contingent upon well-structured support systems and intentional pedagogical design. The findings indicate that comprehensive support frameworks—encompassing technical assistance, academic advising, peer networks, and mental health resources—are essential for fostering a conducive learning environment. Moreover, the study highlights the importance of creating online spaces that promote student autonomy while providing necessary guidance to navigate these digital landscapes effectively.

By grounding this research in established theoretical frameworks such as Self-Determination Theory, Connectivism, and the Community of Inquiry Framework, the study underscores the need for higher education institutions to prioritize both student autonomy and robust support mechanisms. The insights gained from this research contribute to a deeper understanding of how to enhance online learning experiences, ultimately preparing students for lifelong learning in an increasingly digital world. As educational institutions continue to adapt to the evolving landscape of online education, the

recommendations from this study can serve as a valuable resource for developing effective strategies that empower students and enrich their learning journeys.

## Authors' Biography

### Frieda Indileni Kavetuna



Frieda Indileni Kavetuna is a Lecturer at the University of Namibia in the Department of Higher Education and Lifelong Learning. Frieda's interests include, but are not limited to the following: Self-directed learning, project management, gender mainstreaming, monitoring and evaluation, learning and development. Her qualifications include Commonwealth Executive Master of Business Administration (Open University of Mauritius); Master of Education; B. Ed Degree in Education (Adult Education) and Diploma in Adult Education and Community Development from the University of Namibia. Frieda worked as a Development Planner at the then Ministry of Gender Equality and Child Welfare and as a National Development Advisor at the National Planning Commission.

### Charlene Kaereho



Charlene Kaereho is a Senior Lecturer and PhD student at the University of Namibia, where she also earned her Master's degree in Adult Education and Community Development. As a proactive community development worker, she is dedicated to enhancing engagement in both academic and community settings. Her research interests encompass a wide range of fields, prominently featuring community development and adult education, as well as sociology, open and distance learning, adult literacy, community health development, the green economy, education for sustainable development, and entrepreneurship. Additionally, she focuses on teaching and learning in higher education, student support, Learning design, instructional material development, educational research, cooperative and work-integrated learning, professional ethics, organizational learning, lifelong learning, and self-directed learning within higher education institutions.

Charlene embodies the principles of Ubuntu, which emphasize the importance of interconnectedness within communities. Her work reflects a commitment to fostering sustainable development through a holistic approach that integrates educational practices with community needs.

### Brenden Rinouua Tjizu



Brenden Rinouua Tjizu is the Veterinary Academic Hospital Administrator and an MA Anthropology student at the University of Namibia, where he holds a Bachelor's degree in Sociology and Industrial Psychology. He is a policy analyst and researcher specializing in climate change, indigenous economies, and community development. His academic background includes sociology, health and society, the fourth industrial revolution, future studies, social anthropology, and international relations. Currently, Brenden's research interests focus on climate change, blue oceans, solid waste management in Africa, indigenous economies, environmental sustainability, and self-directed learning in higher education institutions. He emphasizes the significance of local economies and cultural life while advocating for an

integrated approach that combines knowledge and environmental stewardship to foster sustainable

development in Africa. His work highlights the critical role of sociology in understanding community dynamics and the importance of self-directed learning as a means to empower students in their educational journeys.

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