



The Role of an African University in Community Development: A Systematic Review

Eyitayo Francis Adanlawo¹  & Nomusa Yolanda Nkomo-Asare² 

¹ Social Transformation Research Entity, North-West University, Mafikeng, South Africa.

² Department of Economics, University of Zululand, KwaDlangezwa, South Africa.

ABSTRACT

Many perceive universities as crucial to providing the necessary knowledge for development. It was anticipated that African universities would play a significant role in meeting the demands of the communities. This study explains the role that African universities play in community development. A systematic review was conducted to synthesize available research. This study reveals that the university is an important player in community development and collaboration with local people will promote sustainable development. Viewed through the lens of the infusion model, this paper encourages reevaluating community participation at African universities as a means of promoting sustainable community development. The study concludes that incorporating local perspectives into the university's goals for knowledge generation, dissemination, and social engagement will benefit the institution and its aim to promote sustainable development. It is advisable to establish successful partnerships in community-based initiatives that prioritize effective information exchange, collaborative learning, and reciprocal advantages. This study contributes to the growing body of knowledge on the role of higher education in fostering community resilience and empowerment. By highlighting successful case studies and best practices, it provides a roadmap for universities seeking to improve their impact on local communities while fulfilling their educational missions.

Correspondence

Eyitayo Francis Adanlawo
Email: eyitayofadan@gmail.com,
44642555@nwu.ac.za

Publication History

Received:
31st May, 2025
Accepted:
12th September, 2025.
Published:
31st October, 2025.

To Cite this Article:

Adanlawo, Eyitayo Francis ,
and Nomusa Yolanda
Nkomo-Asare. "The Role of
an African University in
Community Development:
A Systematic Review."
*Journal of Education and
Learning Technology* 6, no.
10 (2025): 1010 - 1021.
<https://doi.org/10.38159/jelt.20256106>.

Keywords: *Community development, Local Knowledge, Sustainable development, Infusion model, Internationalisation, University*

INTRODUCTION

Universities are widely regarded as essential in providing the knowledge necessary for development. Pee & Vululleh aver that universities are the place for knowledge generation knowledge for the good of the public and knowledge that can drive and transform the community.¹ According to Xaba et al., universities are often perceived as ivory towers, and there are no widely accepted criteria for assessing the significance of a rural university's role in serving its community.² Consequently, their role in identifying sustainable solutions to problems impeding the attainment of a better standard of living for rural residents remains inadequate. This impression results from the universities' seeming incapacity to describe and provide examples of how they can achieve the previously described intended objective.

¹ S. Pee and N Vululleh, "Role of Universities in Transforming Society: Challenges and Practices," *International Perspectives on Policies, Practices & Pedagogies for Promoting Social Responsibility in Higher Education* 32 (2020): 67–79.

² Fikile Xaba, Eyitayo Francis Adanlawo, and Mpho Chaka, "Exploring Higher Education Policies Regulating Breastfeeding on University Campuses: Implications for the Wellbeing of Women Academics," *International Journal of Research in Business and Social Science* (2147- 4478) 14, no. 2 (March 7, 2025): 325–31, <https://doi.org/10.20525/ijrbs.v14i2.3897>.

Universities actively collaborate with local communities through partnerships, resulting in knowledge co-creation and sustained, mutually beneficial outcomes. These initiatives offer locals the opportunity to convene and participate in community development by actively recognising needs, offering resources, and exchanging ideas to achieve sustainable outcomes. Therefore, it should be regarded as worthwhile for African universities with a mission of involvement aimed at driving long-term community development agendas. In existing literature on education for sustainable community development, partnerships, obstacles, and outcomes are only a few of the subjects covered.³ However, insufficient research has been conducted on how African universities may promote sustainable community development goals. This is especially true for African universities, where few studies have been conducted on how universities foster local development, let alone community participation.

Higher education institutions, especially universities, in sub-Saharan Africa are being asked to do more to combat poverty and advance rural development.⁴ To become more sympathetically and productively involved with their communities, universities need to rethink their service initiatives. Increasing university engagement with local communities, civic organizations, businesses, and industry partners for local development is one strategy to make them relevant. It can be argued that African universities can participate in initiatives that will alleviate poverty and promote community development by drawing on Mbah's concept of ecological university, which states that an involved university can try to recognize and respond to regional needs as part of its care mission.⁵

In developing countries, where governments frequently fall short, universities are expected to assume the responsibility for growth and development.⁶ However, many rural universities often do not take advantage of the benefits offered by their local communities and remain disconnected from the needs of these communities. If universities are to actively pursue their development aims, they should be "citadels, not silos, defending communities around them rather than being inward-looking."⁷ Universities located in rural areas, especially in developing nations, nonetheless function in ways that do not align with the goals and expectations of their communities. Therefore, it makes sense to implement interventions aimed at redefining their roles in community development and social transformation in general.⁸

To achieve the study aim, relevant literature pertaining to community development, community engagement, internationalisation, and university and community development was systematically reviewed. The paper is structured as follows: introduction, theoretical foundation, review, recommendations, and conclusion.

THEORETICAL FOUNDATION

The "infusion model," also known as the "infusion approach," refers to a teaching style that combines concepts or skills from one subject area into another, boosting student understanding and relevance.⁹

³ Catalina Quiroz-Niño and María Ángeles Murga-Menoyo, "Social and Solidarity Economy, Sustainable Development Goals, and Community Development: The Mission of Adult Education & Training," *Sustainability* 9, no. 12 (2017): 2164; Debra Rowe and Krista Hiser, "Higher Education for Sustainable Development in the Community and through Partnerships," *Routledge Handbook of Higher Education for Sustainable Development*, 2015, 315–30.

⁴ Ali Sulaiman Talib Al Shuaili, "The Relationship between Schoolwork Stress and Teachers' Job Satisfaction: A Study in the Context of Omani Schools," *International Journal of Future Multidisciplinary Research* 6, no. 5 (2024): 1–15; Judith T M Gulikers et al., "The Effect of Practical Experience on Perceptions of Assessment Authenticity, Study Approach, and Learning Outcomes," *Learning and Instruction* 18, no. 2 (2008): 172–86.

⁵ Marcellus Mbah, "Can Local Knowledge Make the Difference? Rethinking Universities' Community Engagement and Prospect for Sustainable Community Development," *The Journal of Environmental Education* 50, no. 1 (January 2, 2019): 11–22, <https://doi.org/10.1080/00958964.2018.1462136>.

⁶ Singobile Immaculate Mncwango and Eytayo Francis Adanlawo, "Reducing Youth Unemployment Through Entrepreneurship Education Interventions: The Case of South Africa," *Educational Process International Journal* 16, no. 1 (2025), <https://doi.org/10.22521/edupij.2025.16.261>; Rodrigo Arocena, Bo Göransson, and Judith Sutz, "Knowledge Policies and Universities in Developing Countries: Inclusive Development and the 'Developmental University,'" *Technology in Society* 41 (May 2015): 10–20, <https://doi.org/10.1016/j.techsoc.2014.10.004>.

⁷ John Lambersky, "Understanding the Human Side of School Leadership: Principals' Impact on Teachers' Morale, Self-Efficacy, Stress, and Commitment," *Leadership and Policy in Schools* 15, no. 4 (2016): 379–405.

⁸ Bulelwa Maphela and Eytayo Francis Adanlawo, "Road Infrastructure in South Africa: What Is Missing?," *International Journal of Business Ecosystem & Strategy* (2687-2293) 7, no. 2 (May 2, 2025): 470–78, <https://doi.org/10.36096/ijbes.v7i2.738>.

⁹ Kayi Ntinda and Bruce Reed, "A Learning Communities Infusion Model for Enhancing Rehabilitation Counselor Education Programs," *Journal of Applied Rehabilitation Counseling* 56, no. 1 (March 1, 2025): 12–28, <https://doi.org/10.1891/JARC-2024->

The theory essentially joins content and abilities from multiple topics together to produce a more holistic learning experience. Infusion, also known as integration, is a teaching and learning strategy that incorporates knowledge and abilities from one subject area with another, with educational goals in both, according to Foulger et al.¹⁰ Deepening students' understanding of both the subject and the field is the aim of this integration, which enables the two disciplines to reinforce and support one another.

Oborah states that the infusion approach strikes a balance between participation, research, and instruction.¹¹ This method encourages active engagement from learners while simultaneously fostering a research-oriented mindset that improves instructional effectiveness. By integrating these elements, educators can create a more dynamic and interactive learning environment. Research and teaching/learning outcomes are stated in a way that responds to new problems. This infusion model recognizes that the university trains students to be responsible citizens, as evidenced by their civic participation and social responsibility, in addition to preparing them for work. This holistic approach not only equips students with the necessary skills for their future careers but also instils a sense of duty towards their communities.

Ultimately, by blending academic knowledge with real-world applications, universities can cultivate a generation of informed and engaged individuals ready to tackle contemporary challenges. By conducting innovative research and producing scientific findings, the infusion model can be viewed as questioning the conventional notion of excellence in higher education.¹² This approach encourages institutions to redefine success by prioritizing impact over prestige. As a result, universities can foster a collaborative environment in which students, faculty, and community members work together to create sustainable solutions that benefit society.

Zhang and Yuan assert that the infusion approach effectively facilitated the teaching and learning of critical thinking skills.¹³ The infusion approach in universities invites a transformative shift that challenges the traditional metrics of excellence, urging institutions to prioritize meaningful impact over mere prestige. By fostering a collaborative environment, this approach not only cultivates innovative solutions to pressing social issues but also encourages the development of critical thinking skills among students.¹⁴ As educators embrace this model, they create a space where knowledge is shared and diverse perspectives are valued, ultimately preparing learners to navigate complex challenges in an increasingly interconnected world. Through this lens, the university can evolve into a dynamic force for positive change, shaping individuals who are not just knowledgeable but also equipped to contribute thoughtfully and effectively to society.

METHODOLOGY

The literature review was conducted using Google Scholar (GS) and Web of Science databases. We were able to access a broader choice of materials by utilizing WoS and GS. A variety of keywords are used in publications to describe university involvement in community development, and the literature on the role of universities has evolved from multiple perspectives. To search the two databases, we used eight keywords: African university, community development, community engagement, local knowledge, sustainable development, internationalization, infusion model, and rural community. To

0019; Terry L. Rizzo and Barry Lavay, "Using an Infusion Model to Prepare Inclusion-Ready Physical Educators," *Palaestra* 39, no. 1 (March 3, 2025), <https://doi.org/10.18666/PALAEASTRA-2025-V39-I1-12966>.

¹⁰ Teresa S. Foulger, Keith Wetzel, and Ray R. Buss, "Moving Toward a Technology Infusion Approach: Considerations for Teacher Preparation Programs," *Journal of Digital Learning in Teacher Education* 35, no. 2 (April 3, 2019): 79–91, <https://doi.org/10.1080/21532974.2019.1568325>.

¹¹ James Omatule Oborah, "Effectiveness of the Infusion Teaching Approach for the Development of General ICT Skills in Nigerian Tertiary Education," *Journal of Research in Innovative Teaching & Learning* 15, no. 2 (October 20, 2022): 245–58, <https://doi.org/10.1108/JRIT-11-2021-0076>.

¹² Keji Fan, "Can the Infusion Teaching of Critical Thinking Improve Chinese Secondary Students' Critical Thinking and Academic Attainment? Findings from a Randomised Controlled Trial," *Thinking Skills and Creativity* 53 (September 2024): 101597, <https://doi.org/10.1016/j.tsc.2024.101597>; Yue Lin, "The Infusion Approach," in *Developing Critical Thinking in EFL Classes* (Singapore: Springer Singapore, 2018), 9–17, https://doi.org/10.1007/978-981-10-7784-5_2.

¹³ Yinglin Liu et al., "An Analysis of Factors Influencing Undergraduate Students' Learning Preference in Nursing Laboratory Courses with Virtual Reality Technology: A Scoping Review," *Education and Information Technologies*, 2024, 1–46.

¹⁴ Mustafa Kayyali, "Digital Literacy in Higher Education: Preparing Students for the Workforce of the Future," *International Journal of Information Science and Computing* 11, no. 1 (June 25, 2024): 1, <https://doi.org/10.30954/2348-7437.1.2024.6>.

capture the most recent arguments, the search included all published documents from 2015 to 2025. The search turned up 187 journal articles. We narrowed the search to eliminate several publications based on their publication in low-ranked journals and year of publication. Based on titles and abstracts, we chose 51 publications to review (46 peer-reviewed journals and 5 books). The 51 documents provided the foundation for the final analysis. Together with the literature review, that content analysis serves as the empirical foundation of the article.

DISCUSSION

Community Development

It is crucial to define the term "community" to comprehend the concept of "community development." A wide range of entities can and are referred to as communities.¹⁵ According to Nyeleti and Maphela, a community is a geographically constrained area where people go about their everyday lives, engage with one another in a range of organizations, and use a variety of behaviours and activities to express shared interests.¹⁶ People can still collaborate in the local community to do a variety of jobs. Community development, according to Dalampira & Nastis is the process through which residents come together to act as a group and come up with solutions for shared issues.¹⁷ Wang et al. believe that it frequently occurs when community members actively engage in the process of development.¹⁸ The quality of life in rural communities can be improved by utilizing their unique strengths and resources.

It is necessary to dissect the idea of "development," since it can be used in a variety of ways depending on the challenges involved.¹⁹ The concept of development implies more than just an increase.²⁰ When we talk about growth, we might mean more infrastructure, more jobs, more schools, etc. But the word "development" denotes a real improvement in circumstances, such as better living conditions, less environmental harm, better healthcare, and more investments for the community's benefit.²¹ A people-centred approach, on the other hand, offers development studies a micro foundation. This method assumes that growth includes both the right to have a meaningful life and the fulfilment of fundamental needs. An economic framework serves as the foundation for the prevalent and contemporary definition of "development".²² According to this viewpoint, universities play a utilitarian function in producing new knowledge and educating knowledge workers who are only interested in meeting a country's economic demands.²³ Therefore, universities are considered an essential instrument for improving both the economic growth of societies and the well-being of individuals.

Therefore, community development serves as an example of a collaborative and interconnected approach to change.²⁴ Community-based organizations and government agencies functioning in an

¹⁵ E. F. Adanlawo, "Community Development: The Use of Corporate Social Responsibility Initiatives by Shopping Centre Landlords" (University of Zululand, 2017).

¹⁶ Gail Chauke Nyeleti and Bulelwa Maphela, "The Socio-Economic Effects of Delayed Rural Road Construction Projects: The Case of Malamulele," *Pakistan Journal of Life and Social Sciences (PJLSS)* 22, no. 2 (2024), <https://doi.org/10.57239/PJLSS-2024-22.2.001312>.

¹⁷ Evropi-Sofia Dalampira and Stefanos A. Nastis, "Mapping Sustainable Development Goals: A Network Analysis Framework," *Sustainable Development* 28, no. 1 (January 2, 2020): 46–55, <https://doi.org/10.1002/sd.1964>.

¹⁸ Ernest W Brewer, Geraldine Torrisi-Steele, and Viktor Wang, "Survey Research: Core Principles and Discussion Points," in *Scholarly Publishing and Research Methods Across Disciplines* (IGI Global, 2019), 257–76.

¹⁹ Mpho Chaka and Eytayo Francis Adanlawo, "The Role of Communication in Nation-Building: A Theoretical Framework for South African National Unity," *Studies in Media and Communication* 12, no. 3 (July 24, 2024): 325, <https://doi.org/10.11114/smc.v12i3.7070>; Alexandra Titz, Terry Cannon, and Fred Krüger, "Uncovering 'Community': Challenging an Elusive Concept in Development and Disaster Related Work," *Societies* 8, no. 3 (August 31, 2018): 71, <https://doi.org/10.3390/soc8030071>.

²⁰ Chaka and Adanlawo, "The Role of Communication in Nation-Building: A Theoretical Framework for South African National Unity"; Titz, Cannon, and Krüger, "Uncovering 'Community': Challenging an Elusive Concept in Development and Disaster Related Work."

²¹ Zayyanu Muhammed and Ismaila Rimi Abubakar, "Improving the Quality of Life of Urban Communities in Developing Countries," in *Responsible Consumption and Production* (Cham: Springer International Publishing, 2020), 357–70, https://doi.org/10.1007/978-3-319-95726-5_25.

²² Titz, Cannon, and Krüger, "Uncovering 'Community': Challenging an Elusive Concept in Development and Disaster Related Work."

²³ Brewer, Torrisi-Steele, and Wang, "Survey Research: Core Principles and Discussion Points"; Shah Bano and John Taylor, "Universities and the Knowledge-Based Economy: Perceptions from a Developing Country," *Higher Education Research & Development* 34, no. 2 (March 4, 2015): 242–55, <https://doi.org/10.1080/07294360.2014.956696>.

²⁴ Mpho Chaka and Eytayo Francis Adanlawo, "The Impact of Ethnicity on South Africa's National Unity," *African Renaissance* 20, no. 2 (2023): 315.

interconnected environment are also included in group efforts for the goal of "change," which is manifested in the shape of communal growth. Since the university is a part of the community, each sector's capacity to integrate its uniqueness and work with other sectors is crucial to the realisation of community development.²⁵ Universities may provide administrative and financial assistance to community members. To support community-led planning and execution of local development projects, universities should work to close this gap. It is crucial to remember that a key component of community development is the involvement of residents in their own social transformation. As a result, any external intervention needs to respect the community's structures and norms. Benefits of community participation include enhancing academic and intellectual work at universities, partly by providing staff and students with practical experience that can enhance teaching and research.

Community Engagement

Fitzgerald et al. and McKelvey and Zaring define engagement as the collaboration of a university's resources and expertise with those of the public to enhance research, scholarship, and innovation.²⁶ The term "community engagement" refers to a variety of initiatives that meet particular social, economic and political requirements of communities, such as volunteer labour and learning that takes place within the community.²⁷ Universities can create links with local environments in ways that improve graduate employability and help communities when they work to develop general skills in their students through community involvement.

As a means of adding a more profound understanding of context, location, and applicability to teaching and research, community engagement is an essential component of both. The terms "community service," "knowledge-based community service," "community engagement," and "scholarship of engagement" have all been used to describe community engagement.²⁸ Fitzgerald et al. state that there are numerous ways that community participation can occur in a university setting.²⁹ These include service-learning, professional community service, community-based research, participatory action research, and distance learning. Xaba and Adanlawo aver that community engagement, in its broadest definition, is the blending and integrating of research, teaching, and service in relation to recognized community development concerns.³⁰ Fairness, justice, empowerment, participation, and self-determination are the tenets of community engagement, which is based on organizing people in a specific area.

According to Nkomo and Adanlawo, the laws and policies that govern the higher education system in South Africa define community involvement as one of the key pillars of university operations, along with teaching, learning, and research.³¹ Fostering social responsibility and raising students' knowledge are two of the roles played by universities in social and economic development through

²⁵ Mary Emery and Cornelia Flora, "Spiraling-up: Mapping Community Transformation with Community Capitals Framework," in *50 Years of Community Development Vol I* (Routledge, 2020), 163–79; Miwa A. Takeuchi et al., "Transdisciplinarity in STEM Education: A Critical Review," *Studies in Science Education* 56, no. 2 (July 2, 2020): 213–53, <https://doi.org/10.1080/03057267.2020.1755802>.

²⁶ Hiram E. Fitzgerald et al., "The Centrality of Engagement in Higher Education," in *Building the Field of Higher Education Engagement* (New York: Routledge, 2023), 220–28, <https://doi.org/10.4324/9781003443353-12a>; Maureen McKelvey and Olof Zaring, "Co-Delivery of Social Innovations: Exploring the University's Role in Academic Engagement with Society," *Industry and Innovation* 25, no. 6 (July 3, 2018): 594–611, <https://doi.org/10.1080/13662716.2017.1295364>.

²⁷ Bulelwa Maphela, "Does the Local Economic Development (LED) Agenda Have a Role in the Management of Human Remains in Gauteng and Mbombela?," *African Journal of Development Studies* 13, no. 1 (2023): 155; Paul Leidig and William Oakes, "Model for Project-Based Community Engagement," *International Journal for Service Learning in Engineering, Humanitarian Engineering and Social Entrepreneurship* 16, no. 2 (October 5, 2021): 1–13, <https://doi.org/10.24908/ijse.v16i2.14809>.

²⁸ B Sibhensana and S Maistry, "Conceptualising Public-Private Partnerships for Social Innovation through Community Engagement in Higher Education Institutions," *South African Journal of Higher Education* 37, no. 1 (2023): 185–205; McKelvey and Zaring, "Co-Delivery of Social Innovations: Exploring the University's Role in Academic Engagement with Society."

²⁹ Fitzgerald et al., "The Centrality of Engagement in Higher Education."

³⁰ Fikile Xaba and Eyitayo Francis Adanlawo, "The Potential Role of Ecotourism in Sustainable Development: A Systematic Review," *Journal of Ecohumanism* 3, no. 4 (August 28, 2024): 3356–67, <https://doi.org/10.62754/joe.v3i4.3852>.

³¹ Nomusa Yolanda Nkomo and Eyitayo Francis Adanlawo, "The Effects of Education on Tobacco Consumption: A Panel Data Analysis," *Journal of Ecohumanism* 3, no. 3 (July 31, 2024): 308–16, <https://doi.org/10.62754/joe.v3i3.3605>.

community involvement. The involved university collaborates with locals to promote the variety of community engagement that promotes social and personal well-being.³²

It is critical to differentiate between development in the community and development of the community to comprehend this engagement strategy. According to Quiroz-Niño and Murga-Menoyo, community development encompasses beneficial endeavours, such as workforce training programs, company retention, and job creation.³³ As local community residents work together on projects and challenges, particularly those that create connections across groups and interest lines, a larger process known as community development takes place. In other words, community development entails deliberate attempts to fortify the community field. These initiatives' focus on building connections and channels of communication across interest groups is their most crucial feature. In a nutshell, community development entails deliberate efforts to increase local ability to improve the social and personal well-being of residents.

A three-pronged approach is necessary to ensure that community growth does not jeopardize community development.³⁴ In addition to ensuring that individuals have the means to meet their basic requirements, it must promote the growth of universities. Additionally, it ought to promote social justice and equity. Historically, community development has been the primary focus of university outreach initiatives. This is a suitable approach in many cases. However, there is evidence that growth promotion tactics can support community development when they reduce inequality and other obstacles to engagement.

According to Kelly and Given, the enabling mechanisms that assist the execution of community engagement policies have had a major impact on the university's achievement.³⁵ The following are the most important enabling mechanisms: (1) designating an executive to oversee community engagement; (2) creating a campus presence with a community engagement office; (3) designating a senior academic and support staff member to oversee the operationalization of community engagement; (4) creating faculty-based and institution-wide committees for community engagement; and (5) incorporating community engagement into employee rewards and promotions programmes.³⁶

Information processing is a fundamental university function in our global knowledge economy and society.³⁷ This suggests that the capacity of individuals, communities, and institutions to grow will have a direct impact on the calibre, efficacy, and applicability of the university system. According to Jones et al., internalization thus supports the necessity of making sure that community participation includes stakeholders outside of the campus.³⁸

Internationalisation

According to Rastogi and Sharma, it is equally important to view internationalization as a modern process that aims to support the economic, social, cultural, and human development of communities and nations.³⁹ By improving the global component of instruction, research, community service and collaboration with partners, universities may play a significant role in bringing about change and

³² Maphela and Adanlawo, "Road Infrastructure in South Africa: What Is Missing?"; P. Molthan-Hill et al., "Climate Change Education at Universities: Relevance and Strategies for Every Disciplining," in *Handbook of Climate Change Mitigation and Adaptation* (Cham.: Springer International Publishing, 2022), 3395–3457.

³³ Quiroz-Niño and Murga-Menoyo, "Social and Solidarity Economy, Sustainable Development Goals, and Community Development: The Mission of Adult Education & Training."

³⁴ Zheng Yongnian and Yuan Randong, "A Three-Pronged New Development Model for Overcoming the Middle-Technology Trap in China," *Asian Review of Political Economy* 3, no. 1 (October 21, 2024): 18, <https://doi.org/10.1007/s44216-024-00039-z>.

³⁵ Wade B. Kelly and Lisa M. Given, "The Community Engagement for Impact (CEFI) Framework: An Evidence-Based Strategy to Facilitate Social Change," *Studies in Higher Education* 49, no. 3 (March 3, 2024): 441–59, <https://doi.org/10.1080/03075079.2023.2238762>.

³⁶ Kelly and Given, "The Community Engagement for Impact (CEFI) Framework: An Evidence-Based Strategy to Facilitate Social Change."

³⁷ Mpho Chaka and Eyitayo Francis Adanlawo, "Role of Public Relations (PR) in Nation-Building: A Case Study of South Africa," *Journal of Nation-Building and Policy Studies* 6, no. 3 (2022): 5.

³⁸ David Jones and Emily Smith, "Community Involvement in Offender Reintegration," *Journal of Criminal Justice Studies* 28, no. 2 (2021): 142–58.

³⁹ Ayush Rastogi and Jainendra Kumar Sharma, "Globalisation and Internationalisation in the Contemporary World: A Human Rights Perspective," *GNLU JL Dev. & Pol.* 14 (2024): 167.

progress.⁴⁰ The basic premise is that the university, and its global component, can be crucial to bolstering and maintaining Africa's development, especially in terms of accelerating the continent's progress toward the National Development Plans (NDPs). By means of official, informal, and non-formal training and education initiatives, universities are thought to be an efficient means of developing human resource capacity.⁴¹ The potential of universities to produce graduates who can contribute to the labour market and generate new information for the knowledge economy has received a lot of attention. Although they are significant contributions, universities still have a responsibility to play in addressing social, cultural, health, and governance challenges, as well as human development.

Internationalisation has undoubtedly had a significant impact on university internationalization, which is defined as a range of global endeavours, such as research projects, new international academic programs, international linkages, partnerships, and projects, and academic mobility for instructors and students.⁴² For many, university internationalization means collaborating with academic institutions abroad to update and modify teaching and curricula.

Examples of agenda-changing globalization forces include the unprecedented advancements in social media and information technologies, the widespread effects of trade agreements and economic liberalization, and the increased cross-border movement of people, ideas, money, values, products, services, and technology.⁴³ While internationalization and the dynamic process of globalization are distinct, they are strongly related. Relationships between and among nations, people, institutions, and cultures are implied by the fundamental idea of inter-nation. Both the scope of globalization and the fundamental idea of global or worldwide flow are very different from this. According to Owolabi et al. the part that university employees and students must perform is a commonality among the several definitions.⁴⁴

University and Community Development

Universities play an essential role in delivering the new information and skills needed to solve the challenges of sustainable development in a community.⁴⁵ Through academic functions, universities contribute to society by: (1) teaching (education); (2) research (knowledge generation) and (3) outreach (direct knowledge transfer). According to Adanlawo and Chaka, universities use their academic capabilities to carry out their outreach role in the process of technological upgrading.⁴⁶ It can be rightly said that universities can play a key role in development of organizations' technological capabilities, as universities create new technical skills and knowledge and develop human resources. These new technical skills and knowledge are initial resources that organizations can acquire and further contribute to community development. According to Sulaiman et al., the creation of a fruitful connection between knowledge and university engagement initiatives is crucial to the link between universities and

⁴⁰ Theophile Shyiramunda and Dmitri van den Bersselaar, "Local Community Development and Higher Education Institutions: Moving from the Triple Helix to the Quadruple Helix Model," *International Review of Education* 70, no. 1 (February 12, 2024): 51–85, <https://doi.org/10.1007/s11159-023-10037-7>.

⁴¹ Adriana Cristina Ferreira Caldana et al., "A Hybrid Approach to Sustainable Development Competencies: The Role of Formal, Informal and Non-Formal Learning Experiences," *International Journal of Sustainability in Higher Education* 24, no. 2 (January 24, 2023): 235–58, <https://doi.org/10.1108/IJSHE-10-2020-0420>.

⁴² Hans de Wit and Philip G. Altbach, "Internationalization in Higher Education: Global Trends and Recommendations for Its Future," *Policy Reviews in Higher Education* 5, no. 1 (January 2, 2021): 28–46, <https://doi.org/10.1080/23322969.2020.1820898>.

⁴³ Claudio Fazio et al., "Strategies for Active Learning to Improve Student Learning and Attitudes towards Physics," in *Teaching-Learning Contemporary Physics: From Research to Practice* (Springer, 2021), 213–33.

⁴⁴ Tarisai Kudakwashe Manyati et al., "Exploring the Potential for Enhancing Green Skills Training, Innovation and Sustainable Livelihoods in Informal Spaces of Harare, Zimbabwe: Identifying Gaps and Opportunities," *IIMBG Journal of Sustainable Business and Innovation* 2, no. 1 (2024): 60–79.

⁴⁵ Alexa Ray R. Fernando and Gizelle P. Tajan, "Education for Sustainable Development (ESD) through Participatory Research (PR): A Systematic Review," *Journal of Cleaner Production* 482 (December 2024): 144237, <https://doi.org/10.1016/j.jclepro.2024.144237>.

⁴⁶ Chaka and Adanlawo, "The Impact of Ethnicity on South Africa's National Unity."

development.⁴⁷ Mbah avers that one of the most important roles of universities is to produce graduates who have the skills and talents needed to satisfy the expectations of the modern world and employers.⁴⁸

Universities may be perceived as actively participating in and collaborating with local communities through networks and collaborations, resulting in knowledge co-creation and constructive, long-lasting effects for both parties.⁴⁹ Locals may be given opportunities by such programs to actively engage in identifying community needs in order to contribute to the development of their communities. Therefore, it should be worthwhile for African institutions to come up with strategies to capture local knowledge systems as part of their engagement mission to advance sustainable development objectives. Essentially, universities' contribution to community development is to foster a feeling of equity for all members of the community.⁵⁰ As posited by Fernando and Tajan, universities are in a unique situation where they are accountable to both governments and communities.⁵¹ To generate, mobilize, and apply the knowledge required for managing and developing sustainable development initiatives, universities and communities must collaborate. All community members must be encouraged to participate in education as part of the push for equity and community development.

Universities are more important to communities now than they were in the past.⁵² Universities support people by developing skills, producing information, and training leaders. They also advise governments on policy issues. They are at the centre of crucial research that enables a nation to promote inventions, attract foreign capital, and participate in academic and scientific exchanges.⁵³ Universities can play a vital role in fostering the development of a modern, open, respectful, tolerant, and democratic society, provided they are allowed to thrive.

Arocena et al. add that universities have the knowledge and skills necessary to enable local capacity building and support through resource management or direct service delivery.⁵⁴ However, university lecturers must simultaneously embrace their roles as experts and citizens if university potential is to be achieved. According to this perspective, colleges must view their role as fostering community development by intentionally emphasizing civic renewal while simultaneously offering knowledgeable counsel and support. The university must work to create a complementary relationship between academic success and general welfare to attain these goals.

RECOMMENDATIONS

By establishing the supportive environments that encourage the group interaction that is essential to both community and individual social well-being, universities can play a significant role in community development. Universities must devise ways to interact with people outside of their campus to lessen the impact of outside forces if they hope to contribute to the welfare of society. Successful partnerships in community-based programs should emphasize robust information sharing, co-learning, and mutual benefits. Moreover, universities that want to have a transformative impact on their communities must listen to and collaborate with various partners. They must actively participate in public forums where topics are being discussed and argued to accomplish this. They must first translate these problems into

⁴⁷ Al Shuaili, "The Relationship between Schoolwork Stress and Teachers' Job Satisfaction: A Study in the Context of Omani Schools."

⁴⁸ Mbah, "Can Local Knowledge Make the Difference? Rethinking Universities' Community Engagement and Prospect for Sustainable Community Development."

⁴⁹ Gulikers et al., "The Effect of Practical Experience on Perceptions of Assessment Authenticity, Study Approach, and Learning Outcomes."

⁵⁰ Clayton Hurd and Timothy K. Stanton, "Community Engagement as Community Development: Making the Case for Multilateral, Collaborative, Equity-Focused Campus-Community Partnerships," *Community Development* 54, no. 6 (November 2, 2023): 875–98, <https://doi.org/10.1080/15575330.2022.2121297>; Leah Hakkola et al., "An Equity-Minded Approach to Faculty Development in a Community of Practice," *Innovative Higher Education* 46, no. 4 (August 12, 2021): 393–410, <https://doi.org/10.1007/s10755-020-09540-8>.

⁵¹ Fernando and Tajan, "Education for Sustainable Development (ESD) through Participatory Research (PR): A Systematic Review."

⁵² Hurd and Stanton, "Community Engagement as Community Development: Making the Case for Multilateral, Collaborative, Equity-Focused Campus-Community Partnerships"; Mbah, "Can Local Knowledge Make the Difference? Rethinking Universities' Community Engagement and Prospect for Sustainable Community Development."

⁵³ Pee and Vululleh, "Role of Universities in Transforming Society: Challenges and Practices."

⁵⁴ Arocena, Göransson, and Sutz, "Knowledge Policies and Universities in Developing Countries: Inclusive Development and the 'Developmental University.'"

theoretical terms, and then translate the theoretical framing of these problems back into the language and methods that effectively contribute to problem-solving and public discourse.

Expanding the engagement agenda to support community development and establishing institutional platforms and resources to promote public scholarship are the two main challenges facing universities. Instead of using a traditional, isolated approach to teaching, research, and engagement, universities should focus on community empowerment and collaborative efforts in response to the evolving demands of rural areas. In other words, the key contributions of universities to societies should be integrated and directed towards the economic and social development of the societies.

CONCLUSION

Universities were highlighted in this study as an important player in community development. Furthermore, the study stressed that when local people collaborated with universities using a participatory learning strategy in the learning process, it would be advantageous to promote sustainable development. Universities have important roles in a development context when it comes to policy implications. More specifically, the development of rural communities depends on universities' outreach efforts and their integration of teaching and research. Thus, the government must encourage and fund linkages between universities and the community. By fostering these connections, the government can ensure that academic resources and knowledge are used effectively to address local needs, ultimately leading to more sustainable and impactful community development. Strengthening these partnerships not only enhances educational outcomes but also empowers communities to participate actively in their own growth. This study contributes to the growing body of knowledge on the role of higher education in fostering community resilience and empowerment. By highlighting successful case studies and best practices, it provides a roadmap for universities seeking to improve their impact on local communities while fulfilling their educational missions.

ACKNOWLEDGEMENT

All authors have read and agreed to the published version of the manuscript.

Funding: No funding was received for this research.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

BIBLIOGRAPHY

- Adanlawo, Eyitayo Francis. "Community Development: The Use of Corporate Social Responsibility Initiatives by Shopping Centre Landlords ." University of Zululand, 2017.
- Arocena, Rodrigo, Bo Göransson, and Judith Sutz. "Knowledge Policies and Universities in Developing Countries: Inclusive Development and the 'Developmental University.'" *Technology in Society* 41 (May 2015): 10–20. <https://doi.org/10.1016/j.techsoc.2014.10.004>.
- Bano, Shah, and John Taylor. "Universities and the Knowledge-Based Economy: Perceptions from a Developing Country." *Higher Education Research & Development* 34, no. 2 (March 4, 2015): 242–55. <https://doi.org/10.1080/07294360.2014.956696>.
- Brewer, Ernest W, Geraldine Torrisi-Steele, and Viktor Wang. "Survey Research: Core Principles and Discussion Points." In *Scholarly Publishing and Research Methods Across Disciplines*, 257–76. IGI Global, 2019.
- Caldana, Adriana Cristina Ferreira, João Henrique Paulino Pires Eustachio, Bárbara Lespinasse Sampaio, Maria Luiza Gianotto, Aurora Contiero Talarico, and André Cavalcante da Silva Batalhão. "A Hybrid Approach to Sustainable Development Competencies: The Role of Formal, Informal and Non-Formal Learning Experiences." *International Journal of Sustainability in Higher Education* 24, no. 2 (January 24, 2023): 235–58. <https://doi.org/10.1108/IJSHE-10-2020-0420>.
- Chaka, Mpho, and Eyitayo Francis Adanlawo. "Role of Public Relations (PR) in Nation-Building: A Case Study of South Africa." *Journal of Nation-Building and Policy Studies* 6, no. 3 (2022): 5. https://hdl.handle.net/10520/ejc-aa_jonps_v6_n3_a1

- Chaka, Mpho, and Eyitayo Francis Adanlawo. "The Impact of Ethnicity on South Africa's National Unity." *African Renaissance* 20, no. 2 (2023): 315. https://hdl.handle.net/10520/ejc-aa_afren_v20_n2_a16
- Chaka, Mpho, and Eyitayo Francis Adanlawo. "The Role of Communication in Nation-Building: A Theoretical Framework for South African National Unity." *Studies in Media and Communication* 12, no. 3 (July 24, 2024): 325. <https://doi.org/10.11114/smc.v12i3.7070>.
- Dalampira, Evropi-Sofia, and Stefanos A. Nastis. "Mapping Sustainable Development Goals: A Network Analysis Framework." *Sustainable Development* 28, no. 1 (January 2, 2020): 46–55. <https://doi.org/10.1002/sd.1964>.
- Emery, Mary, and Cornelia Flora. "Spiraling-up: Mapping Community Transformation with Community Capitals Framework." In *50 Years of Community Development Vol I*, 163–79. Routledge, 2020.
- Fan, Keji. "Can the Infusion Teaching of Critical Thinking Improve Chinese Secondary Students' Critical Thinking and Academic Attainment? Findings from a Randomised Controlled Trial." *Thinking Skills and Creativity* 53 (September 2024): 101597. <https://doi.org/10.1016/j.tsc.2024.101597>.
- Fazio, Claudio, Marina Carpineti, Sergej Faletič, Marco Giliberti, Gareth Jones, Eilish Mcloughlin, Gorazd Planinšič, and Onofrio Rosario Battaglia. "Strategies for Active Learning to Improve Student Learning and Attitudes towards Physics." In *Teaching-Learning Contemporary Physics: From Research to Practice*, 213–33. Springer, 2021.
- Fernando, Alexa Ray R., and Gizelle P. Tajan. "Education for Sustainable Development (ESD) through Participatory Research (PR): A Systematic Review." *Journal of Cleaner Production* 482 (December 2024): 144237. <https://doi.org/10.1016/j.jclepro.2024.144237>.
- Fitzgerald, Hiram E., Karen Bruns, Steven T. Sonka, Andrew Furco, and Louis Swanson. "The Centrality of Engagement in Higher Education." In *Building the Field of Higher Education Engagement*, 220–28. New York: Routledge, 2023. <https://doi.org/10.4324/9781003443353-12a>.
- Foulger, Teresa S., Keith Wetzel, and Ray R. Buss. "Moving Toward a Technology Infusion Approach: Considerations for Teacher Preparation Programs." *Journal of Digital Learning in Teacher Education* 35, no. 2 (April 3, 2019): 79–91. <https://doi.org/10.1080/21532974.2019.1568325>.
- Gulikers, Judith T M, Liesbeth Kester, Paul A Kirschner, and Theo J Bastiaens. "The Effect of Practical Experience on Perceptions of Assessment Authenticity, Study Approach, and Learning Outcomes." *Learning and Instruction* 18, no. 2 (2008): 172–86.
- Hakkola, Leah, Mollie A. Ruben, Cam McDonnell, Liliana L. Herakova, Rebecca Buchanan, and Karen Robbie. "An Equity-Minded Approach to Faculty Development in a Community of Practice." *Innovative Higher Education* 46, no. 4 (August 12, 2021): 393–410. <https://doi.org/10.1007/s10755-020-09540-8>.
- Hurd, Clayton, and Timothy K. Stanton. "Community Engagement as Community Development: Making the Case for Multilateral, Collaborative, Equity-Focused Campus-Community Partnerships." *Community Development* 54, no. 6 (November 2, 2023): 875–98. <https://doi.org/10.1080/15575330.2022.2121297>.
- Jones, David, and Emily Smith. "Community Involvement in Offender Reintegration." *Journal of Criminal Justice Studies* 28, no. 2 (2021): 142–58.
- Kayyali, Mustafa. "Digital Literacy in Higher Education: Preparing Students for the Workforce of the Future." *International Journal of Information Science and Computing* 11, no. 1 (June 25, 2024): 1. <https://doi.org/10.30954/2348-7437.1.2024.6>.
- Kelly, Wade B., and Lisa M. Given. "The Community Engagement for Impact (CEFI) Framework : An Evidence-Based Strategy to Facilitate Social Change." *Studies in Higher Education* 49, no. 3 (March 3, 2024): 441–59. <https://doi.org/10.1080/03075079.2023.2238762>.
- Lambersky, John. "Understanding the Human Side of School Leadership: Principals' Impact on Teachers' Morale, Self-Efficacy, Stress, and Commitment." *Leadership and Policy in Schools* 15, no. 4 (2016): 379–405.

- Leidig, Paul, and William Oakes. "Model for Project-Based Community Engagement." *International Journal for Service Learning in Engineering, Humanitarian Engineering and Social Entrepreneurship* 16, no. 2 (October 5, 2021): 1–13. <https://doi.org/10.24908/ijse.v16i2.14809>.
- Lin, Yue. "The Infusion Approach." In *Developing Critical Thinking in EFL Classes*, 9–17. Singapore: Springer Singapore, 2018. https://doi.org/10.1007/978-981-10-7784-5_2.
- Liu, Yinglin, Rui Li, Yue Diao, Meixue Hou, Hua Yuan, and Xiuying Zhang. "An Analysis of Factors Influencing Undergraduate Students' Learning Preference in Nursing Laboratory Courses with Virtual Reality Technology: A Scoping Review." *Education and Information Technologies*, 2024, 1–46.
- Manyati, Tarisai Kudakwashe, Billy Ganizani Kalima, Temitope Owolabi, and Morgen Mutsau. "Exploring the Potential for Enhancing Green Skills Training, Innovation and Sustainable Livelihoods in Informal Spaces of Harare, Zimbabwe: Identifying Gaps and Opportunities." *IIMBG Journal of Sustainable Business and Innovation* 2, no. 1 (2024): 60–79.
- Maphela, Bulelwa. "Does the Local Economic Development (LED) Agenda Have a Role in the Management of Human Remains in Gauteng and Mbombela?" *African Journal of Development Studies* 13, no. 1 (2023): 155.
- Maphela, Bulelwa, and Eyitayo Francis Adanlawo. "Road Infrastructure in South Africa: What Is Missing?" *International Journal of Business Ecosystem & Strategy* (2687-2293) 7, no. 2 (May 2, 2025): 470–78. <https://doi.org/10.36096/ijbes.v7i2.738>.
- Mbah, Marcellus. "Can Local Knowledge Make the Difference? Rethinking Universities' Community Engagement and Prospect for Sustainable Community Development." *The Journal of Environmental Education* 50, no. 1 (January 2, 2019): 11–22. <https://doi.org/10.1080/00958964.2018.1462136>.
- McKelvey, Maureen, and Olof Zaring. "Co-Delivery of Social Innovations: Exploring the University's Role in Academic Engagement with Society." *Industry and Innovation* 25, no. 6 (July 3, 2018): 594–611. <https://doi.org/10.1080/13662716.2017.1295364>.
- Mncwango, Sinqobile Immaculate, and Eyitayo Francis Adanlawo. "Reducing Youth Unemployment Through Entrepreneurship Education Interventions: The Case of South Africa." *Educational Process International Journal* 16, no. 1 (2025). <https://doi.org/10.22521/edupij.2025.16.261>.
- Molthan-Hill, P., L. Blaj-Ward, M.F. Mbah, and T.S. Ledley. "Climate Change Education at Universities: Relevance and Strategies for Every Disciplining." In *Handbook of Climate Change Mitigation and Adaptation*, 3395–3457. Cham.: Springer International Publishing, 2022.
- Muhammed, Zayyanu, and Ismaila Rimi Abubakar. "Improving the Quality of Life of Urban Communities in Developing Countries." In *Responsible Consumption and Production*, 357–70. Cham: Springer International Publishing, 2020. https://doi.org/10.1007/978-3-319-95726-5_25.
- Nkomo, Nomusa Yolanda, and Eyitayo Francis Adanlawo. "The Effects of Education on Tobacco Consumption: A Panel Data Analysis." *Journal of Ecohumanism* 3, no. 3 (July 31, 2024): 308–16. <https://doi.org/10.62754/joe.v3i3.3605>.
- Ntinda, Kayi, and Bruce Reed. "A Learning Communities Infusion Model for Enhancing Rehabilitation Counselor Education Programs." *Journal of Applied Rehabilitation Counseling* 56, no. 1 (March 1, 2025): 12–28. <https://doi.org/10.1891/JARC-2024-0019>.
- Nyeleti, Gail Chauke, and Bulelwa Maphela. "The Socio-Economic Effects of Delayed Rural Road Construction Projects: The Case of Malamulele." *Pakistan Journal of Life and Social Sciences (PJLSS)* 22, no. 2 (2024). <https://doi.org/10.57239/PJLSS-2024-22.2.001312>.
- Oborah, James Omatule. "Effectiveness of the Infusion Teaching Approach for the Development of General ICT Skills in Nigerian Tertiary Education." *Journal of Research in Innovative Teaching & Learning* 15, no. 2 (October 20, 2022): 245–58. <https://doi.org/10.1108/JRIT-11-2021-0076>.
- Pee, S, and N Vululleh. "Role of Universities in Transforming Society: Challenges and Practices." *International Perspectives on Policies, Practices & Pedagogies for Promoting Social Responsibility in Higher Education* 32 (2020): 67–79.
- Quiroz-Niño, Catalina, and María Ángeles Murga-Menoyo. "Social and Solidarity Economy, Sustainable Development Goals, and Community Development: The Mission of Adult

- Education & Training.” *Sustainability* 9, no. 12 (2017): 2164.
- Rastogi, Ayush, and Jainendra Kumar Sharma. “Globalisation and Internationalisation in the Contemporary World: A Human Rights Perspective.” *GNLU JL Dev. & Pol.* 14 (2024): 167.
- Rizzo, Terry L., and Barry Lavay. “Using an Infusion Model to Prepare Inclusion-Ready Physical Educators.” *Palaestra* 39, no. 1 (March 3, 2025). <https://doi.org/10.18666/PALAESTR-2025-V39-I1-12966>.
- Rowe, Debra, and Krista Hiser. “Higher Education for Sustainable Development in the Community and through Partnerships.” *Routledge Handbook of Higher Education for Sustainable Development*, 2015, 315–30.
- Shuaili, Ali Sulaiman Talib Al. “The Relationship between Schoolwork Stress and Teachers’ Job Satisfaction: A Study in the Context of Omani Schools.” *International Journal of Future Multidisciplinary Research* 6, no. 5 (2024): 1–15.
- Shyiramunda, Theophile, and Dmitri van den Bersselaar. “Local Community Development and Higher Education Institutions: Moving from the Triple Helix to the Quadruple Helix Model.” *International Review of Education* 70, no. 1 (February 12, 2024): 51–85. <https://doi.org/10.1007/s11159-023-10037-7>.
- Sibhensana, B, and S Maistry. “Conceptualising Public-Private Partnerships for Social Innovation through Community Engagement in Higher Education Institutions.” *South African Journal of Higher Education* 37, no. 1 (2023): 185–205.
- Takeuchi, Miwa A., Pratim Sengupta, Marie-Claire Shanahan, Jennifer D. Adams, and Maryam Hachem. “Transdisciplinarity in STEM Education: A Critical Review.” *Studies in Science Education* 56, no. 2 (July 2, 2020): 213–53. <https://doi.org/10.1080/03057267.2020.1755802>.
- Titz, Alexandra, Terry Cannon, and Fred Krüger. “Uncovering ‘Community’: Challenging an Elusive Concept in Development and Disaster Related Work.” *Societies* 8, no. 3 (August 31, 2018): 71. <https://doi.org/10.3390/soc8030071>.
- Wit, Hans de, and Philip G. Altbach. “Internationalization in Higher Education: Global Trends and Recommendations for Its Future.” *Policy Reviews in Higher Education* 5, no. 1 (January 2, 2021): 28–46. <https://doi.org/10.1080/23322969.2020.1820898>.
- Xaba, Fikile, and Eyitayo Francis Adanlawo. “The Potential Role of Ecotourism in Sustainable Development: A Systematic Review.” *Journal of Ecohumanism* 3, no. 4 (August 28, 2024): 3356–67. <https://doi.org/10.62754/joe.v3i4.3852>.
- Xaba, Fikile, Eyitayo Francis Adanlawo, and Mpho Chaka. “Exploring Higher Education Policies Regulating Breastfeeding on University Campuses: Implications for the Wellbeing of Women Academics.” *International Journal of Research in Business and Social Science (2147- 4478)* 14, no. 2 (March 7, 2025): 325–31. <https://doi.org/10.20525/ijrbs.v14i2.3897>.
- Yongnian, Zheng, and Yuan Randong. “A Three-Pronged New Development Model for Overcoming the Middle-Technology Trap in China.” *Asian Review of Political Economy* 3, no. 1 (October 21, 2024): 18. <https://doi.org/10.1007/s44216-024-00039-z>.

ABOUT AUTHORS

Dr. Eyitayo Francis Adanlawo is a researcher at North-West University, South Africa. He is a member of the Public Relations Institute of Southern Africa. Dr. Adanlawo has published over 80 articles in reputable journals. His research interests cut across public relations, corporate social responsibility, media studies, community development, nation-building, and curriculum development, among others.

Dr. Nomusa Yolanda Nkomo-Asare is a lecturer in the department of economics, University of Zululand, South Africa.