

Indigenous Knowledge and Curriculum Reform in Education for Sustainable Development



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Introduction

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- Africa is endowed with indigenous knowledge. In fact, Heto and Mino (2022) noted that *African indigenous knowledge* is resilient.
- Mkwizu and Monametsi (2021) advocated for incorporating indigenous knowledge in the manufacturing sector for Botswana and Tanzania while Serگون et al. (2022) for economic values in Kenya.
- This presentation departs the discussion of indigenous knowledge from manufacturing to education for sustainable development.

Statement of the Problem

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COVID-19 pandemic affected the education sector thus calling for curriculum reform. There is a persistent problem of no integration of indigenous knowledge in schools or universities (Kaya & Seleti, 2013; Silva et al., 2023). Hence, this paper's objective is to explore indigenous knowledge and curriculum reform in education for sustainable development.

Study Question

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This presentation's specific objective is to explore trends of indigenous knowledge and curriculum reform in education for sustainable development in Africa. Hence the question;

“What are the trends on indigenous knowledge and curriculum reform in education for sustainable development in Africa?”

Significance of this Study

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The outcome of this paper can help education leadership and stakeholders achieve Sustainable Development Goals (SDGs) by considering indigenous knowledge when reforming the education system for sustainable development.

Key Concepts

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Definition of key concepts according to this presentation:

i) **Indigenous knowledge** refers to local peoples' knowledge of handling and managing their livelihoods.

For example, Ngoro Agrotechnology of Mbinga District in Ruvuma region of Tanzania indicated in Malley et al. (2004) defines Ngoro as an indigenous, sustainable and profitable soil, water and nutrient conservation system in hilly areas.

Key Concepts

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ii) **Sustainable Development (SD)** is adopted and defined according to Mensah (2019) by stating that SD is inter- and intragenerational equity which is anchored on three-dimensional interconnected pillars of environment, economy, and society.

Methodology

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Method

Reason for selection

Systematic Literature Review (SLR)

Adopted SLR steps by Silva et al. (2023) to review trends on indigenous knowledge and curriculum reform in education for sustainable development in Africa.

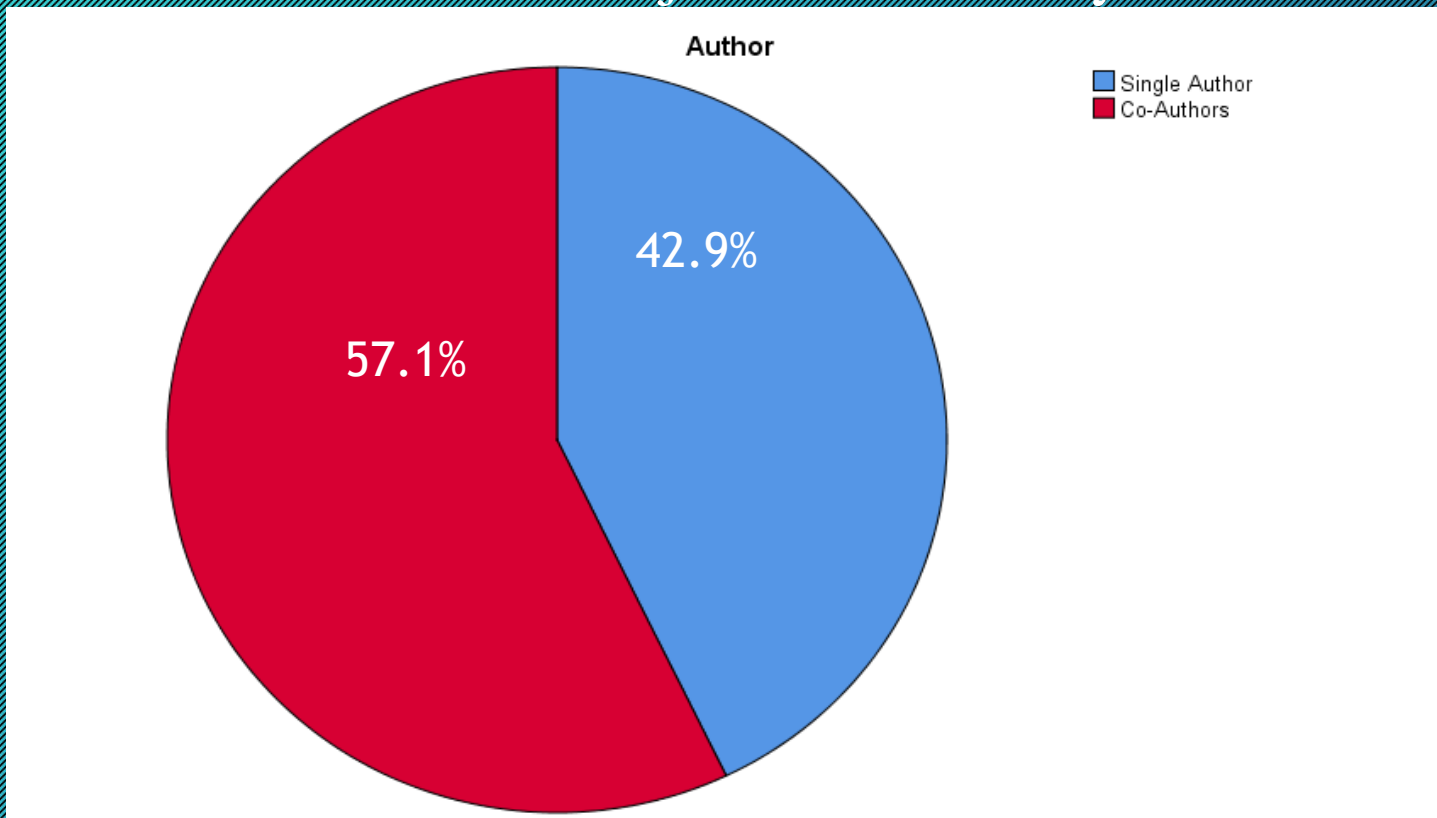
Sample of journal articles

From AlterNative which is an International Journal of Indigenous Peoples. Search is 112 peer-reviewed research articles. Only 7 journal articles (2005 to 2023) were relevant to address the paper objective.

Findings and Discussion

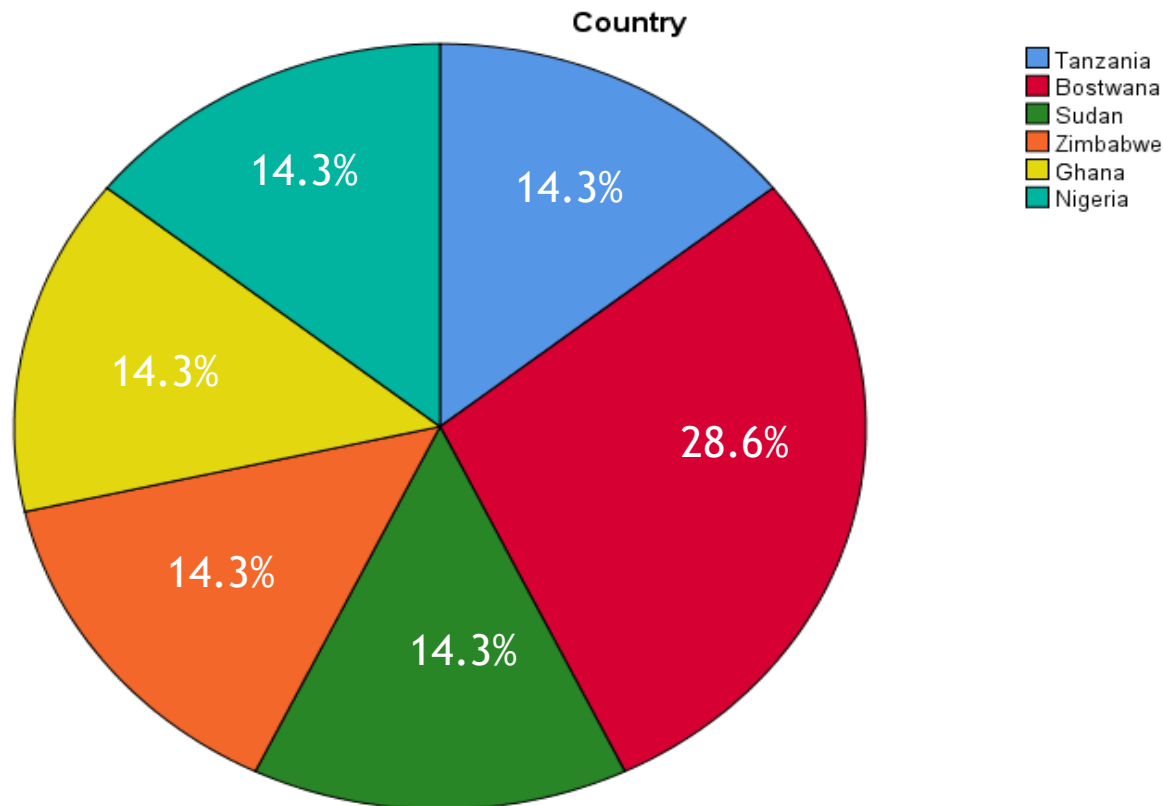
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Profile of reviewed journal articles by Author



Findings and Discussion

Profile of reviewed journal articles by Country

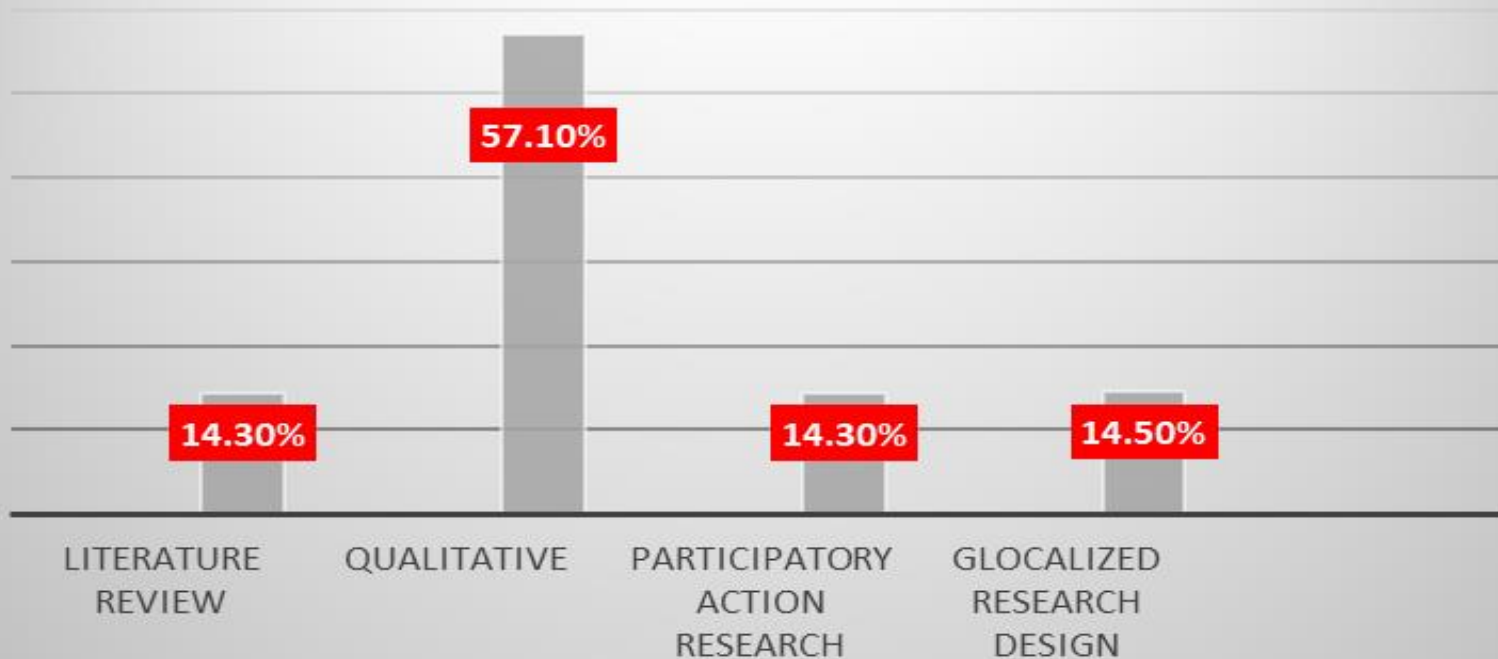


Findings and Discussion

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Profile of reviewed journal articles by Methods

Methods



Findings and Discussion

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Table 1: Trends on Indigenous Knowledge (IK) and curriculum reform

Source	IK and curriculum reform
Heto and Mino (2022)	In Ghana: African IK exists. Recommended for educators to make conscious efforts to integrate these bodies of knowledge for learners to develop into true human beings.
Olaniyan and Govender (2023)	In Nigeria: Roots and tubers farmers' preference in adapting to climate change use IK because it is effective, easily accessible and inexpensive. Recommended for IK into mainstream adaptation strategies and Agricultural Curriculum in Nigeria.
Khudu-Petersen and Mamvuto (2016)	Botswana: Used Botho model (African philosophy on caring, sharing, showing respect/compassion) to integrate drop out women back to school by enabling them pass Junior Certificate Examination (JCE) to continue with secondary education.

Findings and Discussion

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- Trends show relatively few articles on IK and curriculum reform in education in the context of Africa for the particular journal. This finding supports Kaya and Seleti (2013) from South Africa on the need for more research in IK and integration of IK in education.
- On IK, for instance, in Botswana the “Botho” model helps women advance their education while for “Ngoro” is to sustain agriculture in hilly areas. This implies that these IK can be used for sustainable development and emulated by other African countries.

Conclusion

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- Trends are:

In terms of SD, the existence of IK like “Ngoro” technology, and “Botho” model for livelihood is evident but the integration of IK in education is still lagging behind.

Few scholarly articles on IK and curriculum reform. Existing articles are mainly co-authorship and from Botswana that apply qualitative method.

- Practical implication: The education leadership to make efforts on **integrating IK in reforming curriculum** for SD.

Conclusion

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- Limitation of this paper is on the use of systematic literature review approach with a sample from one journal.
- Future studies to sample more journals when conducting a systematic literature review. Other researchers may opt for quantitative methods to map IK and curriculum reform in Africa.

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