Mapping the African research evidence base for educational policy and practice

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Abstract

This paper reports on a project to ‘map’ education research conducted by researchers and institutions based in sub-Saharan Africa as a basis for addressing the Sustainable Development Goals. A strong research base is required for governments, donors, NGOs, researchers and practitioners to engage in evidence-informed debate and decision-making on educational policy and practice. Despite signs that the volume of African education research has increased significantly over the past two decades, African scholarship is routinely ‘overlooked and undervalued’ (MacHure 2006), including studies with findings which are important for the achievement of the Continental Education Strategy for Africa, Agenda 2063, and the 2030 Agenda for Sustainable Development.

Researchers based in the North are in a comparatively privileged position when it comes to disseminating their work. African research outputs are spread across a wide array of journals, working papers, monographs and other publications, which poses a challenge to policymakers, researchers and others seeking to access the evidence base. As a result, African research regularly fails to attract the necessary attention to effect changes in learning and conditions in schools and other educational settings. In the absence of an accessible indigenous research evidence base, local knowledge and expertise is frequently overlooked in favour of solutions developed elsewhere, often in markedly different socio-cultural and material contexts. This project seeks to address this issue and raise the visibility and impact of African education research through the development of an open access database and accompanying literature review of African education research.

This study sought to identify social science research with implications for educational policy and practice conducted in the past decade by researchers and institutions based in sub-Saharan Africa. The research identification strategy involved two main strands. Firstly, structured searches were conducted using academic and ‘grey’ literature databases, including Scopus and BASE (Bielefeld Academic Search Engine). The latter draws on university repositories which have only recently become available online. The second strand involved a broad consultation of African researchers, institutions and organisations, including the Association for Development of Education in Africa (ADEA), in addition to NGOs, researchers and others based in the North. Steps were taken to maximise the scope of the consultation in terms of regional and thematic coverage. The search was conducted in English initially, with plans to incorporate Portuguese and French at a later stage.

Studies identified through this process were catalogued by author, institutional affiliation, country of focus, research methods, keywords, and number of citations. The keywords were developed through an iterative process of induction and deduction with reference to the Education Resources Information Center (ERIC) thesaurus, and other indexing systems. The study reveals significant variation in the research productivity of different institutions and countries in sub-Saharan Africa. Positive outliers are identified, with implications for knowledge sharing and capacity development. Analysis of the keywords offers comparative insights on national and regional research foci. The exercise indicates a significant untapped source of policy- and practice-relevant research evidence in areas such as school-level language policy and planning, early childhood education, literacy development, teacher deployment and retention, and ICT in education. Key findings in these areas are discussed.
What do we know about education research in sub-Saharan Africa?

- African education research is often ‘overlooked and undervalued’ (Maclure 2006)
- Strong growth in the quantity of African education research over the last 20 years (Cloete et al. 2015)

Peer-reviewed education research outputs by Africa-based researchers, 1997 – 1994

- Dispersed across a wide range of outlets (Bonini et al. 2015); no central location to access the African research evidence base
The project

June 2017

- Catalogue the work of researchers from sub-Saharan Africa (SSA) to produce ‘African Education Research Database’
- Review, evaluate and synthesise the literature to identify common themes, key findings & gaps

The project aims to:
- Strengthen the evidence base for policy and practice
- Raise the visibility of African research
- Identify priorities and partners for future research
Identify social science research with implications for education policy and practice conducted by researchers based in sub-Saharan Africa over the period 2007-2017.
Search strategy

**So far:**

Academic database search:
- education OR school (English, French, Portuguese)
- Filter = 48 countries in SSA
- Titles and abstracts searched by hand
- Details of eligible studies entered in xls – citation, authors, institutions, country of focus, research methods, thematic foci (up to 8 keywords), etc.
- Catalogued studies (2011-2017)

Search in specialist Portuguese databases undertaken (Rui da Silva, University of Porto)

**In progress:**

- Expert consultation:
  - via email and survey
  - blogs
  - conferences in Africa, Europe, North America
- Search French language databases
- Hiring research assistant
Analysis draws from 2609 studies:

- Scopus database, 76.5%
- Portuguese database, 15.2%
- Consultation, 5.8%
- Pearl-growing, 2.5%
Part 1. The landscape of education research in sub-Saharan Africa
<table>
<thead>
<tr>
<th>Country</th>
<th># of studies</th>
<th>% of total studies (2609)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nigeria</td>
<td>613</td>
<td>23.5%</td>
</tr>
<tr>
<td>Mozambique</td>
<td>263</td>
<td>10.1%</td>
</tr>
<tr>
<td>Kenya</td>
<td>236</td>
<td>9.0%</td>
</tr>
<tr>
<td>Ghana</td>
<td>225</td>
<td>8.6%</td>
</tr>
<tr>
<td>Uganda</td>
<td>140</td>
<td>5.4%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>130</td>
<td>5.0%</td>
</tr>
<tr>
<td>Botswana</td>
<td>113</td>
<td>4.3%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>111</td>
<td>4.3%</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>111</td>
<td>4.3%</td>
</tr>
<tr>
<td>Angola</td>
<td>102</td>
<td>3.9%</td>
</tr>
</tbody>
</table>
Table 2 Language of studies

<table>
<thead>
<tr>
<th>Language</th>
<th>% of studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>84.1%</td>
</tr>
<tr>
<td>Portuguese</td>
<td>14.8%</td>
</tr>
<tr>
<td>French</td>
<td>0.8%</td>
</tr>
<tr>
<td>Other</td>
<td>0.3%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>
Types of research output

Largest category is peer-reviewed articles = 79%

3* = High impact, ≥0.5 impact factor (leading international/continental journal)
2* = Medium impact, ≥0.2 impact factor (national journals)
1* = Low impact, ≈0.1 impact factor (journals with low status/questionable standards of peer review)
## Research methods

<table>
<thead>
<tr>
<th></th>
<th>Total (n=2609)</th>
<th>English (n=2194)</th>
<th>Portuguese (n=385)</th>
<th>Studies with ≥10 citations (n = 340)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative</td>
<td>34%</td>
<td>40%</td>
<td>6%</td>
<td>47%</td>
</tr>
<tr>
<td>Qualitative</td>
<td>30%</td>
<td>24%</td>
<td>69%</td>
<td>23%</td>
</tr>
<tr>
<td>Review</td>
<td>16%</td>
<td>17%</td>
<td>15%</td>
<td>19%</td>
</tr>
<tr>
<td>Mixed-methods</td>
<td>12%</td>
<td>13%</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>Unknown</td>
<td>7%</td>
<td>8%</td>
<td>2%</td>
<td>1%</td>
</tr>
</tbody>
</table>
Part 2. Is education research addressing the issues which affect the most disadvantaged in terms of access and learning?
Message 1: Research focuses on concerns of the elite, not the masses
Message 1: Research focuses on concerns of the elite, not the masses

Table 4 Enrolment by level as % of total student enrolment

<table>
<thead>
<tr>
<th>Level</th>
<th>Primary</th>
<th>Secondary</th>
<th>Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg</td>
<td>73.5%</td>
<td>24.7%</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

Based on data from 28 countries in SSA (Ilie & Rose 2017)
Message 2. The ‘learning crisis’ is not a focus

Large-scale assessments of literacy & numeracy (Chimobo 2009; Piper 2010; Tassew & Aregawi 2016; Mugo et al. 2015) show that many primary school students are not learning at an appropriate rate, especially disadvantaged students.

Student learning is not a major focus:

Student learning = 7.1%

Student motivation = 7.2%
Message 3: A declining focus on gender

9.3% of studies* address gender issues (e.g. gender-related disparities in relation to access, attainment or experiences in school)

Surprisingly, there appears to have been a decline in attention in recent years.

* Figures relate to 2* & 3* publications
Other thematic patterns

- ICT in education = 15.3%
- African languages = 6.7%
- Government spending on education = 3.8%
- Employment skills = 4.8%
Conclusion

• Room for greater alignment between education research in SSA and continental and global priorities

• Continue searching and cataloguing African research; online database available later this year

• Engage with the African research evidence base
References


Piper, B., 2010. *Ethiopia Early Grade Reading Assessment: Data Analysis Report: Language and Early Learning.* Available at: [https://www.eddataglobal.org](https://www.eddataglobal.org) (Accessed 01/03/13)
