Research in African universities to inform the Sustainable Development Goal for Education: visibility, gaps and future priorities

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Abstract

African research suffers from a crisis of visibility, often overlooked in global and regional policy debates. To redress this historical neglect this paper offers insights from a cross-national study of education research in 48 countries in sub-Saharan Africa. African universities’ research outputs are analysed to identify patterns in publication type, thematic foci and research methods. The extent to which universities are generating knowledge relevant to the achievement of the Sustainable Development Goal (SDG) for Education is considered.

Located within a broader project to catalogue education research in sub-Saharan Africa and develop an online database, this paper focuses on the publications of university-based researchers. The dataset comprises social science research outputs relevant to education policy and practice published over the period 2011-2017, which was identified through a structured search of the Scopus academic database and process of expert consultation.

Building on previous national (da Silva & Oliveira 2017) and regional (MacLure 2006; Poirier et al. 2015) inventories of education research in Africa, this study is more comprehensive in scope, and the first to consider the extent to which research outputs are able to inform the SDG for Education. In exploring the degree of alignment, this study addresses the status and role of universities in relation to national, regional and global priorities and identifies strengths and potential gaps within the African research evidence base. It is hoped that this study will contribute to future research planning and policy prioritisation which capitalises on African knowledge and expertise.
What do we know about education research in sub-Saharan Africa?

Some existing inventories & databases for specific contexts, but no central location to access the African research evidence base.

African education research is ‘overlooked and undervalued’ (Maclure 2006):

- Research is dispersed across a wide range of outlets
- Many studies exist only in hard copy with limited circulation
- Barriers to publishing in international peer-reviewed journals
- Vicious circle of low readership & engagement
- Local knowledge and expertise is neglected in favour of research & researchers from elsewhere: ‘epistemic injustice’.

Sources: Bonini et al. 2015, Fussy 2018, Thomas 2017, Fricker 2007
The project

June 2017

• Catalogue the work of SSA researchers to produce ‘African Education Research Database’
• Review literature to identify key findings & gaps
• Identify priorities & partners for future research
AFRICAN EDUCATION RESEARCH DATABASE

SEARCH DATABASE

http://essa-africa.org/AERD
Approach to cataloguing

- Systematic search of academic & grey literature databases; expert consultation (protocol available online)
- Catalogue: citation, authors, institutions, country of focus, research methods, thematic foci (up to 8 keywords), etc.
- Catalogued over 3000 studies (2011-2017)
- Search conducted in specialist Portuguese databases
- Search of French language databases underway
Key informant interviews

Interviews conducted with SSA researchers & policy actors on:

- priorities for research
- research impact
- experiences of funding
- partnerships and collaboration

14 researchers interviewed: Burkina Faso, Cameroon, Ethiopia, Kenya, Malawi, Nigeria, Senegal
Bibliometric analysis of the African Education Research Database

Analysis of the first 2609 studies:

- Academic databases, 76.5%
- Portuguese databases, 15.2%
- Expert consultation, 5.8%
- Pearl-growing, 2.5%
“You go to...Eastern and Southern African region and you find there is education research work going on there. But you go to...Central Africa, Francophone Africa – and you find: it’s missing.”
(Male researcher, Kenya)
African education research & HEIs

• Roughly 80-85% of studies conducted by researchers affiliated to universities (or other HEIs).
• Remainder affiliated to research centres, government institutions, NGOs, etc.
• In interviews, distinctions made between research centres and universities – training, capacity & resources
Whose agenda? A common view

“the parameters of inquiry are defined by the contracting organizations, most of which are foreign to Africa. It is thus difficult for many otherwise well-trained researchers to establish their own independent research programs when they are understandably drawn to opportunity structures that offer attractive facilities and salaries… [As a result,] African educational research has been dislocated from national contexts and has become largely the prerogative of researchers and institutions situated in North America and Europe.”

Source: Maclure (2006 p.82)
269 out of 2609 (10.3%) of studies provided funding details, suggesting that the large majority of studies are unfunded.

<table>
<thead>
<tr>
<th>Funders</th>
<th># of studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>DFID</td>
<td>33</td>
</tr>
<tr>
<td>William and Flora Hewlett Foundation</td>
<td>25</td>
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<tr>
<td>USAID</td>
<td>11</td>
</tr>
<tr>
<td>UNICEF</td>
<td>10</td>
</tr>
</tbody>
</table>

Table shows funders of ≥10 studies
“We have, in most cases,…disappointed individuals that have come here and said ‘Look here, we have this money. We want to do A B C D’ and we have said …“No, it’s not in our interest. If you want to work with us, here are the areas that are of interest to us.”” (Male researcher, Malawi)

“We adopt a pragmatic approach to addressing some of the areas that we have identified [as local priorities]. Within our consultancy practice we very often get approached by different types of organisations around the world to support them in their work using research. We accept these briefs if they align with our own interests, and we take an approach which says that we’re not only going to address this particular brief: we’re going to sit down with the client or partner and find out if there’s a little bit more that we can do as well. And this has led to [addressing topics]…which were not originally part of the discourse with these clients or partners…We believe that these are opportunities for us…to leverage resources…and to multiply the impact…We’re always looking for funding opportunities that are aligned with our own research interests.” (Female researcher, Nigeria)
Types of research output

Largest category is peer-reviewed articles = 79%

We categorised journals as:
• Reputable (international, regional or national, impact factor ≥0.2)
• Not reputable (lower impact factor, questionable standards of review, inc. predatory journals)

Nigeria = 40%
Ghana = 10%
Uganda, Ethiopia = 8%
Tanzania = 4%
Cameroon, Rwanda = 0%
## Research methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Total (n=2609)</th>
<th>English language (n=2194)</th>
<th>Portuguese language (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>Mixed methods</td>
<td>12%</td>
<td>13%</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>Review</td>
<td>16%</td>
<td>17%</td>
<td>15%</td>
<td>19%</td>
</tr>
<tr>
<td>Unknown</td>
<td>7%</td>
<td>8%</td>
<td>2%</td>
<td>1%</td>
</tr>
</tbody>
</table>
Research by educational level

- Higher education: 30%
- Secondary education: 25.3%
- Primary education: 17.7%
- Early childhood education: 2.8%
Research focuses on elite, not masses

Enrolment by level as % of total student enrolment

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

Based on data from 28 countries in SSA (Ilie & Rose 2017)

Francophone research by educational level

- Primary education: 25.2%
- Secondary education: 19.5%
- Higher education: 19.5%
- Early childhood education: 4.9%
Thematic areas

- Language & curriculum: 58.2%
- Teachers & teaching: 42.8%
- Policy & financing: 28%
- Institutional leadership, culture & facilities: 26%
- Equitable, inclusive education: 25.3%
- Students, access & learning: 24.6%
**Thematic patterns and trends**

- Employment skills = 5%

<table>
<thead>
<tr>
<th>Top keywords (Overall)</th>
<th>Top keywords (Francophone countries)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching methods = 16%</td>
<td>Education policy = 23%</td>
</tr>
<tr>
<td>ICT in education = 15%</td>
<td>Access to education = 20%</td>
</tr>
<tr>
<td>Teacher education = 15%</td>
<td>Government spending = 15%</td>
</tr>
<tr>
<td>Education policy = 9%</td>
<td>African languages = 12%</td>
</tr>
<tr>
<td>Teacher capacity = 9%</td>
<td>Gender disparities = 12%</td>
</tr>
</tbody>
</table>

![Employment skills graph](chart.png)
The ‘learning crisis’ is not a focus

Many students attending primary education in SSA (especially disadvantaged students) are not learning at an appropriate rate – evidenced in large-scale assessments of literacy & numeracy (Chimobo 2009; Mugo et al. 2015; Tassew & Aregawi 2016).

Student learning is not a major focus of education research in SSA.

Student learning = 7.1%

Student motivation = 7.2%
Conclusion

- A lot of research out there: *engage with it*!

- Progress towards global, regional & national goals requires greater recognition of African research and researchers

- Room for greater alignment between African education research and global, regional & national priorities


