Testing for evaluation in African Languages:
17 August 2017
Nompumelelo Mohohlwane
Outline

• **Part 1: What does schooling in SA look like?**
  – Background of education status
  – Language in South Africa
  – Literature and research on reading in SA

• **Part 2: Assessing reading**
  – Why does assessing reading matter?
  – Status of assessment in classroom
  – Assessing components of reading

• **Part 3: Evaluating reading at scale**
  – Importance of evaluating reading at scale
  – Measurement examples
  – Recommendations
Background

• Improved access over the past decade in East and Southern Africa:
  – 97%+ of 7-15 year old learners
  – **Increase from 39% to 58%** of learners getting Matric (1995-2015)
  – **Increase from 60 000 to 120 000** Matric Bachelor passes since 2008

• **BUT poor learner attainment**: low performance in Maths, Science and Languages

• New benchmark for reading levels in Grade 4 Pre-PIRLS 2011
  – **29%** of Grade 4 learners did not have the rudimentary reading skills for Grade 2 level
  – **More than 50%** of learners tested in Sepedi and Tshivenda are at risk
  – **57% of Sepedi** children did not meet the lowest international benchmark
Complex language dynamics in SA

ANA 2013 Language of Assessment

Gr1 | Gr2 | Gr3 | Gr4 | Gr5 | Gr6 | Gr9
---|---|---|---|---|---|---
English: 23% | 23% | 24% | 90% | 90% | 90% | 91%
isiZulu: 13% | 22% | 20% | 9% | 9% | 9% | 8%
isiXhosa: 9% | 8% | 8% | 9% | 9% | 9% | 8%
Sepedi: 6% | 5% | 5% | 0% | 0% | 0% | 0%
Afrikaans: 0% | 0% | 0% | 0% | 0% | 0% | 0%
Setswana: 0% | 0% | 0% | 0% | 0% | 0% | 0%
Sesotho: 0% | 0% | 0% | 0% | 0% | 0% | 0%
Xitsonga: 0% | 0% | 0% | 0% | 0% | 0% | 0%
siSwati: 0% | 0% | 0% | 0% | 0% | 0% | 0%
Venda: 0% | 0% | 0% | 0% | 0% | 0% | 0%
isiNdebele: 0% | 0% | 0% | 0% | 0% | 0% | 0%
Can children read in African languages?

PrePIRLS 2011 - Proportion of Grade 4 students that are illiterate and the proportion who cannot read for meaning (in LOLT Gr1-3)

Using prePIRLS 2011 illiterate: cannot reach low benchmark. Read for meaning: reach intermediate benchmark. Note: prePIRLS not % Illiterate  % Cannot read for meaning

- Western Cape: 27% 11%
- Gauteng: 21% 44%
- KwaZulu-Natal: 26% 57%
- Eastern Cape: 32% 60%
- Mpumalanga: 32% 63%
- North West: 29% 66%
- Limpopo: 50% 83%
- South Africa: 29% 58%
Do children in English or Afrikaans LOLT schools learn to read?

PIRLS 2011 - Proportion of Gr5 students in English & Afrikaans schools acquiring basic reading skills by school location

Note: Proportion reaching low international benchmark in PIRLS 2011. SA tested 3515 grade 5 students in 92 schools where Eng/Afr was LO
Language Inequality in SA

• Only 58% of Africans reported being able to read and write in Home Language. This is 95% for Whites

• Direct relationship between English proficiency and earning in SA
  – Study showed men reading and writing in English earn 55% more
  – Those with English proficiency & post-schooling qualification earn 97% more

• Apartheid-era policies - inequalities can be seen along a number of correlated dimensions, including
  – Language,
  – Geographical location,
  – Socioeconomic status,
  – Race
  – Former department
International literature: Benefit of initial learning in Home Lang

Taylor and von Fintel (2016)
- learners with home language instruction in the Foundation Phase performed better in English in Grade 4, 5 and 6.

Spaull (2016)
- Learners tested in both HL & then English in Grade 3
  - Average for HL test was 33%, worse in English
Why does assessing reading matter?

• Specific ways to assess reading – important for classroom practice
• Schreiner (2003) suggests that automaticity in cognitive function frees up 90% of working memory for higher-order skills

• NCS (CAPS) requires assessment but:
  – Lack of reading & writing opportunities in class
  – Chorusing rather than individual reading
  – Weak assessment of reading
  – Little systematic instruction of phonics
  – The lack of reading homework
  – Minimal reading of extended texts in the early grades
  – Low expectations about reading
Components of reading

- **Phonemic awareness:** Being able to hear, identify and manipulate individual phonemes (sounds) in spoken words and understand that spoken words and syllables are made up of speech sounds.

- **Alphabetic principle:** Understanding that words are made up of letters that represent segments of speech; understanding the systematic relationships between letters and phonemes (sounds).

- **Vocabulary:** Word knowledge, word instruction and word learning strategies and usage.

- **Comprehension:** Being able to construct meaning from written text.

- **Fluency:** Being able to read connected text quickly, accurately and with meaningful expression (prosody).
Measurement of Reading in African languages

• Curriculum provides requirements for assessing but no specific standardised tool

• EGRA – most widely used tool
  – Letter sound recognition
  – Word recognition
  – Non-word recognition
  – Oral Reading Fluency & comprehension

• Significance of standardizing learner assessments
  – classroom
  – At scale
Measurement of Reading in African languages

• Benchmarks for reading in English are known – based on evidence
  – Learners at the 50\textsuperscript{th} percentile should read 107 words correct a minute (Hasbrouck & Tindal, 2006)
• But these do not exist for African language
  – Insufficient understanding of African lang typology
  – Gaps in current tools to measure reading in African languages

EXAMPLE

• English has a complex vowel system
• African languages only have 5-7 vowels
• English has \textbf{21 single consonants \& 6 digraphs},
• African languages have a combination of single consonants, and many digraphs, trigraphs and 4-5 letter phonemes.
• \textbf{E.g} hl, tl, ty, mb, nk, ndl, hlw, tsh, kgw), ntlh, ntšhw, mpfh
Measurement of Reading in African languages

<table>
<thead>
<tr>
<th>Language</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>There was a stranger who was very hungry. He came to a village and asked for food. Nobody had any food.</td>
</tr>
<tr>
<td>N Sotho</td>
<td>Ka le lengwe la matšatši mosepedi yo a bego a na le tlala. O fihlile motseng wo mongwe a kgopele dijo. Go be go se na yo a bego a na le dijo.</td>
</tr>
<tr>
<td>Xitsonga</td>
<td>Siku rin’wana mufambi loyi a ri na ndlala. U fikile emugangeni. A kombela swakudya, kambe a ku nga ri na loyi.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Words in Sentence1</th>
<th>Words in Sentence2</th>
<th>Words in Sentence3</th>
<th>Total words</th>
<th>Words per sentence</th>
<th>Letters per word</th>
<th>Total single syllable words: V/ CV</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Sotho</td>
<td>13</td>
<td>8</td>
<td>12</td>
<td>33</td>
<td>11</td>
<td>3.2</td>
<td>19</td>
</tr>
<tr>
<td>Tsonga</td>
<td>8</td>
<td>3</td>
<td>10</td>
<td>21</td>
<td>7</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Zulu</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>11</td>
<td>3.6</td>
<td>8</td>
<td>0</td>
</tr>
</tbody>
</table>
Conclusion & Recommendation

• Recognition that learner performance is poor in both Home Language & English

• Need to target quality of teaching in both Home Language & English – reading specific

• Need for empirical language-specific norms and benchmarks for indigenous African languages

• Reading in African languages is under-researched and under-theorised
  – Need for dedicated academic attention to theory & tools for measurement
Thank you