

Recent Experiences Using Bloom to Develop Materials in Ethiopia

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Global Reading Network

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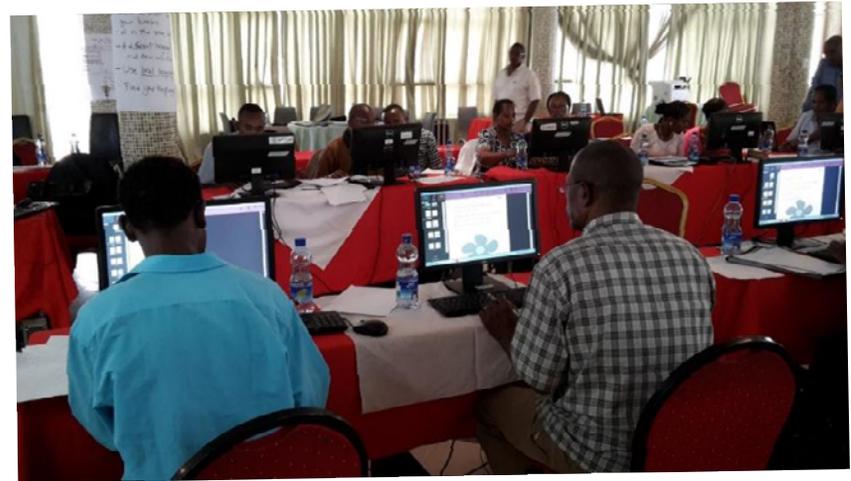
Workshop context: READ TA

- *Reading for Ethiopia's Achievement Developed, Technical Assistance* (READ TA)
- Focused on developing materials for the lower grades that are tightly tied to the curriculum
- Included both *decodable* and *leveled* books
- Written to meet the Ministry of Education Standards for Supplementary Reading Materials
 - Unfortunately, still in draft form
 - But the workshop gave a context for further developing them
 - 10 versions of the guiding document during the workshop!
 - Guidance captured in the Bloom configuration then distributed to participants' computers as "BloomPacks"



Workshops

- Two three-week workshops
 - Hawassa (Southern Nations, Nationalities, and Peoples' Region)
 - Addis Ababa
- One computer provided for every two participants
- Some participants brought their own computers
- Teams of ≈ 6 people per language
- Goal of 20 books per language



Workshop Participants

- 38 participants total for 7 languages
- One Ministry of Education representative at each workshop
- Broad range of skill level
 - Some beginning computer users
 - Some more advanced
 - This affected the pace of the workshop
 - Typists provided to do some of the typing for participants
 - Some had written stories/texts before
 - Other were new writers



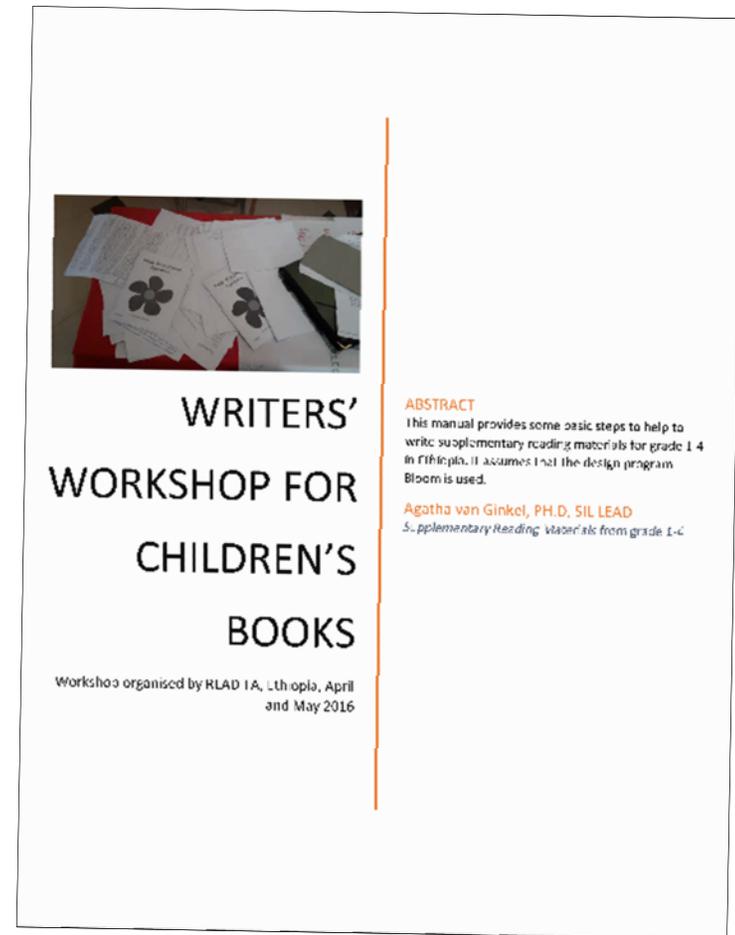
Training Approach

- Blended technology and writing instruction
 - Typically writing instruction in the morning and Bloom training in the afternoon
 - But Bloom issues could be mentioned/discussed during writer training, and writing issues could be mentioned/discussed during software training
- “I do, We do, You do”
 - Each aspect of the program demonstrated, then done together before participants expected to do it on their own
 - Practice exercises to learn the basic computer skills
 - Practice exercise to learn to write different types of stories
 - Extensive “learning by doing”



Writing Topics Covered

- Manual for writing supplementary reading materials for grades 1-4
- Covers:
 - Decodable Readers
 - Levelled Readers
 - Cross-cutting issues
 - Steps for writing different types of texts
- Text types:
 - Narrative
 - Expository



Ministry of Education Guidelines for SRMs

- Intended grade and semester
- Font size
- Line spacing
- Pages per book
- Words per book
- Words per page
- Words per sentence (both average and maximum)
- Adjustments for length of words in a given language
- Maximum and average word length in syllables
- Use and placement of illustrations (e.g., one every fourth page)
- Use of chapter headings and subheadings
- Page breaks
- Text “density” by genre (narrative vs. expository)
- Font size for title on cover, title on title page, headings and subheadings, etc.



Configuring Bloom for the Languages: Decodable Text

- **List all the graphemes**
- Provide sample texts
- Introduce the letters by stages and provide sight words

Set up Decodable Reader Tool

Powered by [SynPhony](#), the Search Engine for Literacy.

Letters | Sample Words | Decodable Stages

To help you make decodable readers, Bloom needs to know the letters and letter combinations that you will be teaching.

Letters and Letter Combinations

a aa b bb c ch chch cc d dd e ee f ff g gg h i ii j jj k kk l l' l' ll m 'm mm n 'n ndi nn nqi nyry o oo p ph phph pp q qq r rr s sh shsh ss t ts tt u uu v v'v vv w x xx v'v vv z zh

Separate each letter or letter combination with a space. For example, here is what we might use for the English language:

a b c ch d e f g h i j k l m n ng o p q r s sh t th u v w x y z '-

Notice that the English list includes symbols that are used to make words, like ' in it's.

Help OK Cancel



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Letters Sample Words **Decodable Stages**

We are using lists of allowed words to define stages
 We are using letters with sight words to define stages

To help you make decodable readers, Bloom can suggest words that fit within the current stage. There are two ways to give words to Bloom:

1) Type Words Here

2) Place Text Files in Your [Sample Texts Folder](#)

C:\Users\Paul\Desktop\Hadiyya\Sample Texts\ReaderToolsWords-hdy.json

Help OK Cancel



Configuring Bloom for the Languages: Decodable Text

- List all the graphemes
- Provide sample texts
- **Introduce the letters by stages and provide sight words**

The screenshot shows the 'Set up Decodable Reader Tool' interface. It has three tabs: 'Letters', 'Sample Words', and 'Decodable Stages'. The 'Decodable Stages' tab is active. The interface is powered by SynPhony, the Search Engine for Literacy.

Stages

Stage	Letters	Sight Words
12	h ii	yihe yamukko
13	b l	ciila ixoi Kollo dimoo b
14	uu y	Uullor hawweena qoo
15	q '	besichchi aduuncho
16	'l 'n	kurukk doonameena w
17	f x	ciilichcho daajji gaaz t
18	c w	landichcho wixukko c
19	'm 'y	luwwa sogukko uwwut
20	j z	ciilluwwi xissukko misl
21	v 'w	laachcha aanshaqqimi
22	ndi nqi	muccurooma siidukko
23	kk nn	gaabbukko siidukko d

Stage 15

New Sight Words

besichchi aduuncho wotalla
annichchim

1482 matching words

- Annor
- Kollo
- Losa'n
- Uullor
- a
- aa
- aa'aa
- aa'amaa
- aa'amu
- aa'e
- aa'eena
- aa'oo'isa
- aa'oobee'ane
- aa'oobee'isa

Previous and New Letters

'n	ndi	nn	nqi	nyny	o
oo	p	ph	phph	pp	q
qq	r	rr	s	sh	shsh
ss	t	ts	tt	u	uu
v	w	'w	ww	x	xx

Click on letters to add them to this stage.

Drag rows to reorder stages. [Remove Stage 15](#)

Buttons: Help, OK, Cancel



Configuring Bloom for the Languages: Leveled Text

- Set maximum words per *sentence*
- ...words per *page*
- ...words per *book*
- Maximum “unique words per book”
- “Things to remember”

Set up Leveled Reader Tool

Powered by [SynPhony](#), the Search Engine for Literacy.

Reader Levels

Reader Levels

Level	Sentence	Page	Book	Unique
1	9	13	64	-
2	11	23	144	-
3	14	38	304	-
4	16	52	624	-
5	17	80	1280	-
6	18	118	1888	-
7	20	174	2784	-
8	22	200	4000	-

[Add Level](#)

Drag rows to reorder levels. [Remove Level 1](#)

Level 1

- Maximum Words in each Sentence
- Maximum Words on each Page
- Maximum Words per Book
- Maximum Unique Words per Book

Things to remember for this level:

- Use 1-2 simple sentences per page
- Each sentence starts on a new line
- Most words are native to the language
- 75% are frequent words, learnt before
- High repetition of words
- One large simple illustration per page
- Text below the illustration
- Familiar content (within the word)

Help OK Cancel



Let's look at some books

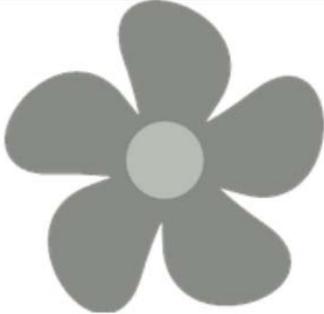
- The decodable and leveled tools are not only helpful to the writer but also to the person checking the books
- If you edit the book and select the decodable tool, you can page through the book and look for words highlighted with blue
- If you select the decodable tool, you can see whether the book has any pages with sentences too long or too many words per page right away
- If there is something out of range, you then page through the file and look for the orange highlighting (for a sentence that is too long) or orange border around the page (for a page with too many words)



Non-decodable words

- In this book, all the words were decodable until the last page.
- The writer should be encouraged to consider whether decodable words could be substituted for the non-decodable ones

Basic Text & Picture Change Layout



Dimar qamo'o qombaa
dabarona **darabbo'o.**
Qamo'om aad burito'o.
Aturee Danto'oo
liiranta'a magara
marameena **ki'amukko.**

Hadivisa



More non-decodable text

- This book seemed to have a good bit of non-decodable text.
- It would be good to review and make sure the correct decodable stage was selected. If so, the book needs a good bit of editing.

Basic Text & Picture

Change Layout



Lar mine **waatto'o**.

Caafaam laro

moo'oohaare mat wee'i

bee'e.

Quunqora itamonam "Ka!

Wee'ahe? Hinke maraa!"

yaa ooso **quuqukko**.

Hadiyisa

Basic Text & Picture

Change Layout



Oosim hurbaata **itimma**

uramaa mini biira

gibamukko.

Caafaamim ooso

moo'oohaare bee'ame'e.

Caafaam baasam baa'a

batibat ihonam **xotto'o**.

Hadiyisa

Oosiname ama hurbaata

amdiisso'o.

Wees hurbaatam laro

egedoo oosina **itissamo**.

Hadiyisa



Good job!

- This leveled book doesn't have any sentences or paragraphs that are beyond the maximum allowed.



Lulle'omannem, gaqqi
muccurooma
ege'lakkobeelas
fayya'oomanne lobakat
hawwojja afisookko.
Eebikkina hundi ammanem
gaqqi muccurooma
ege'linona.

Hadiwisa

Decodable Reader Tool

Leveled Reader Tool

Setup Levels

'Level 2 of 8'

Word Counts

	Max	Actual
This Page		
per page	23	14
longest sentence	17	8
This Book		
total	144	91
per page	23	14
unique		67
avg per sentence		10

For this Level

Talking Book Tool



Metrics wrong?

- In reviewing the leveled books, I noticed that in no book was the number of words per page anywhere near the maximum
- In fact, the actual number of words were close to half of the maximum
- The same is true for “words per page”
- No book reviewed had even half of the number of words allowed, yet there were pages filled with text
- Conclusion: We set the per page metric too high and that in turn impacted the way we calculated the maximum words per page

Level	Max	Actual
Level 4 of 8	52	29
Level 5 of 8	80	39
Level 6 of 8	118	0
Level 7 of 8	174	0
Level 8 of 8	200	84

Level	Max	Actual
Level 4 of 8	624	261
Level 5 of 8	1280	341
Level 6 of 8	1888	740
Level 7 of 8	2784	1017
Level 8 of 8	4000	1259



Too many words

- Where you do sometimes see the number of words per page too high is in the earliest books
- In this decodable and level 1 book, there are too many words per page and per sentence
- The picture should have been large, but the writer shrunk it so that they could get all the text to fit
- The writer should either edit down the text or move some to another page

Basic Text & Picture Change Layout



Lob qamaam qamo'o is
besha "Danto'aam
kollo geero?" Yito'o
Ature Danto'ona, "Ka
qamo'o hane lobi
dimara ki'isaa
darabo?" Yito'o.

Hadiyyisa

Decodable Reader Tool

Leveled Reader Tool

Set up Levels

Level 1 of 8

Word Counts

	Max	Actual
This Page		
per page	13	19
longest sentence	9	10
This Book		
total	64	65
per page	13	19
unique		54
avg per sentence		7

For this Level

Talking Book Tool

More...



Lessons learned

- As with any training, you have to adapt to the skill level of the participants. In this case a key variable was level of computer skill and experience with writing texts in L1.
 - Some people were still mastering very basic computer skills (like double-clicking the mouse).
 - People with more computer skill could progress more quickly and write more titles
 - People with more experience writing texts were able to handle more texts and difficult kinds of texts
- It would have been *much* easier if the standards for materials had been final before the workshop started.
 - The guiding document went through at least 10 versions
 - Each version required changes to be made to the Bloom templates
 - Bloom templates then had to be distributed to all the participants' computers



Technology Matters

- Viruses cause lots of trouble!
- Installing the software on each computer, managing software updates
- Backing up the Bloom collections daily
- It helps to have a live Internet connection but that isn't essential



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