

GAMIFICATION OF RAPID WORD COLLECTION

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Introduction



- **How can we make word collection fun?**
- **How can we apply gamification to dictionary making?**

Structure of talk

I: Background

II: Trial Study

III: Results & Discussion

Dictionary Development Program (Moe 2007:2)

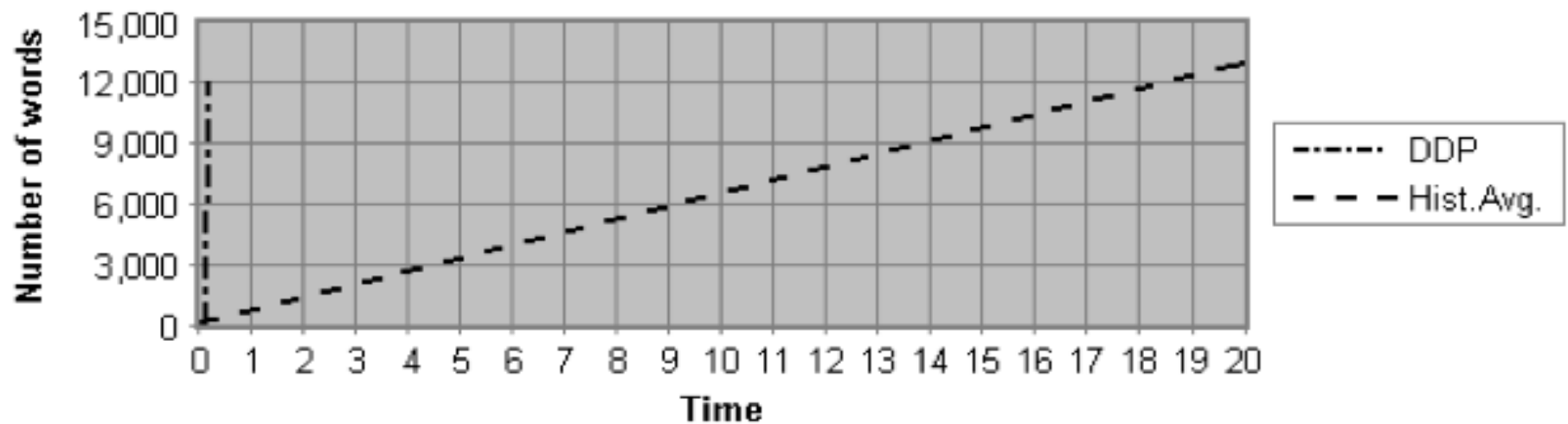


Chart 1: A comparison of rates for collecting words

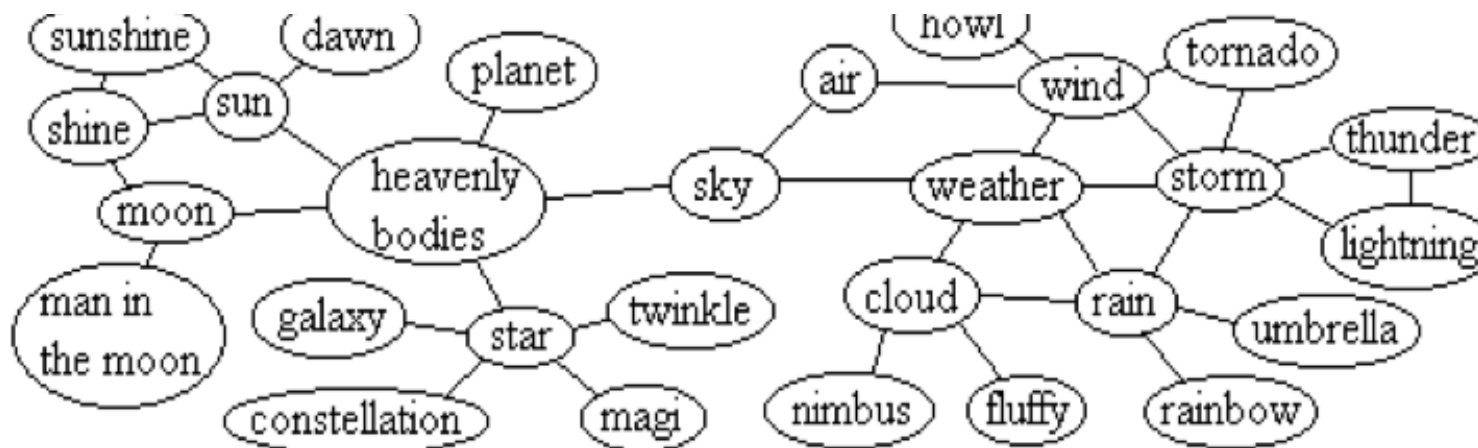


Chart 2: The domain 'Sky' and its subdomains

Dictionary Development Program (Moe 2007:5)

What's involved?

The production of a dictionary involves five basic stages.

- (1) A very high percentage of the vocabulary is collected using the list of semantic domains.
- (2) The resulting classified word list is expanded into a basic dictionary by adding one field at a time.
- (3) Working domain by domain, each word is defined.
- (4) Each entry is edited to prepare it for publication.
- (5) The front and back matter is prepared, including the book covers, title page, introduction, and

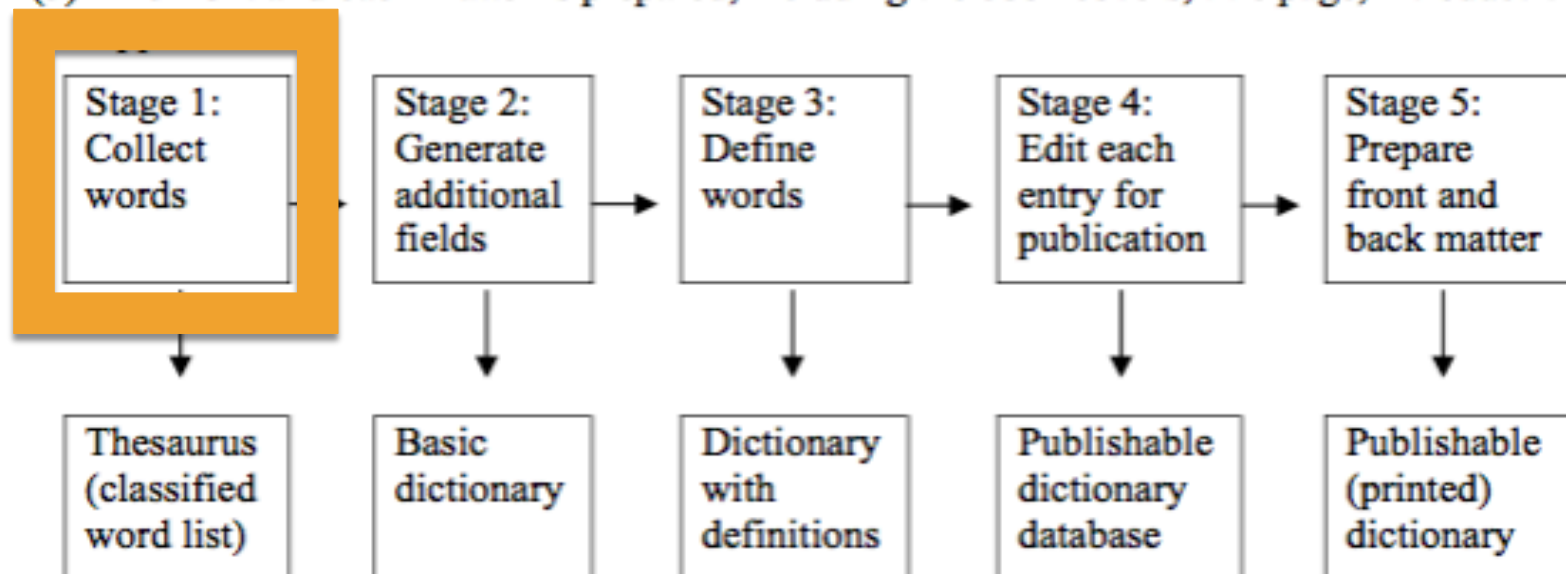


Chart 4: Stages in dictionary development

Gamification



- **What is gamification?**
 - **use of game thinking in ‘non-game’ contexts, for the purpose of productivity**
 - **taps into people’s natural desires (e.g. for achievement, competition etc.)**

Background to this study



- **University of Oregon in Eugene**
- **Conducted after a Field Methods class on the Mòòré language (Gur)**
- **Swadesh / 1700 comparative African wordlist**

Language Background: Mòòré



- **Gur, Niger-Congo**
 - Spoken in Burkina Faso
 - Speakers living in Eugene, Oregon
 - No standardized orthography
- **Main language of school instruction is French**
- **Main language consultant:**
Timbwaoga Aimé Judicaël Ouermi

Word collection during class



- **Purpose: phonetics/phonology**
- **Method: wordlist with one speaker**
- **Issues in class:**
 - **bordom**
 - **salience of French words**
 - **10-15 words per hour**

Trial study



- **4 speakers**
- **Literate in French and English**
- **One test game (in English).**
- **Two word games:**
 - **Group round**
 - **Individual round**

Trial study



- **Instructions given to participants**
 - **Game 1 (group)**
 - **Game 2 (individual)**
- **Scoring system**
- **Post-game questionnaire**

Example Scorecards: Group

| December 2014 | |
|---|--|
| Category: Foods (rice, banana, bananas, steak, soup etc.) | |
| Round 1: in category (2 points each) | Round 1: other related words (1 point each) |
| <p> <i>moni sagbo ki</i> <i>Kan mana Kolgo, benpa</i> <i>mana, manga, banna</i> <i>minho, bimkon, zingo</i> <i>ganore, zom kon, pora</i> <i>Zom ne, kourakoura, tég dépè</i> <i>kou zouia, mang, <u>royaie</u></i> <i>bendé, mouena, kepla</i> <i>man. kounpa, zina, wolsuia</i> <i>ben re,</i> </p> | <p> <i>50</i> <i>+ 136</i> <i><u>86</u></i> </p> |
| <p> <i>25</i> <i>x 2</i> <i><u>50</u></i> </p> | |
| Round 2: additional in category (# points) | |
| <p> <i>Kagui, Bito, Tega, Keen, Zom Zom, Zom,</i> <i>Sili,</i> </p> | |
| <p> <i>7</i> <i>x 3</i> <i><u>21</u></i> </p> | |

| Category: Foods (rice, banana, bananas, steak, soup etc.) | |
|---|--|
| Round 1: in category (2 points each) | Round 1: other related words (1 point each) |
| <p> <i>Benga</i> <i>Libo</i> <i>Meui</i> <i>Colgo Kologo</i> <i>Maana</i> <i>Zudo</i> <i>Zagbo</i> <i>Rando</i> <i>Noaga</i> <i>Namco</i> <i>Bito</i> <i>Noaga</i> <i>Boulpuka</i> <i>Hankounga</i> <i>Meda</i> <i>Rando</i> </p> | <p> <i>Sama</i> <i>Zimma !</i> <i>Nem Kando</i> <i>Man Kong</i> <i>Zanne</i> <i>Goure</i> <i>Kougn</i> </p> |
| <p> <i>25</i> <i>x 2</i> <i><u>50</u></i> </p> | <p> <i>44</i> <i>+ 21</i> <i><u>65</u></i> </p> |
| Round 2: additional in category (# points) | |
| <p> <i>Kang</i> <i>Ki</i> <i>Kou ana</i> <i>Kagui</i> <i>Kourakoura</i> <i>Zom kon</i> </p> | |
| <p> <i>Kon</i> <i>Zom ne</i> <i>toued</i> <i>mona</i> <i>mona</i> <i>wolsuia</i> </p> | |
| <p> <i>12</i> <i>x 3</i> <i><u>36</u></i> </p> | |

Example Scorecards: Group

| Category: Foods (rice, banana, bananas, steak, soup etc.) | | |
|---|----------------------|--|
| Round 1: in category (2 points each) | | Round 1: other related words (1 point each) |
| ✓ Benga | ✓ Sanna | <div> 44 + 21 <hr/> 65 <hr/> </div> |
| ✓ Libo | ✓ Zimma ? | |
| ✓ Mei | ✓ New Kando | |
| ✓ Colo Kōlogo | ✓ Man. Kō | |
| ✓ Maama | ✓ Zanne | |
| ✓ Zindo | ✓ Goure | |
| ✓ Zagbo | ✓ Rougn | |
| ✓ Rondo | | |
| ✓ Noaga | | |
| ✓ Noundo | | |
| ✓ Rita | | |

Example Scorecards: Individual

Mòdré Word Collection
December 2014

Category: **Body parts (head, nose, leg, heart, brain, finger, toe, heel etc.)**

Individual: One point for every unique word. Must be IN category.

Zou go ✓ roemoli (2) 1
 Zontou 2 | góré ✓
 nouya a noaxe ✓
 Zoubolo a nou poga (2) 1
 gamp 2 | nou rapa
 nougan ✓ keiba (2) 1
 soup. bila bini (2) 1
 nougbissi 2 1
 nouginga
 nífrí 2 1
 nina ✓
 ní komba 2 1
 l. l. -

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Results



- **One hour and 30 minute session**
- **4 speakers**
- **261 words**

Results



7 semantic domains:

- **Food**
- **Birds**
- **Weather**
- **Animals & Insects**
- **Geography/Landscape (physical)**
- **Body Parts**
- **Family Terms**

Results



- **Speakers not trained in Mòòré orthography**
- **Still able to write out words**

Results



- **Participant experience:**
 - **Generally enjoyable**
 - **Said they would play again**
 - **What they enjoyed:**
 - **Debate / Negotiation**
 - **Learning new words**
 - **Competition**

Considerations



- **Word collection phase only: game provided words but not glosses**
- **Follow-up required for glosses, but it could be built into a game**

Considerations



- **Important to decide on good / fair scoring system**
- **Award system?**

Considerations



- **What happens when one speaker is ‘much better’ than others?**
- **Is this intimidating for people?**
- **What about speakers’ pride?**

Considerations



- **Important factors:**
 - **Age**
 - **Gender**
 - **Level of fluency**
 - **Ethnic identity**

Thinking ahead



- **How happens with non-literate speakers?**
 - **Can each group be assigned someone already able to take notes in working orthography?**
 - **= One scribe for every group**
 - **Groups take turns, one person does tally**
 - **= One scribe for entire session**

Thinking ahead



- **Why might this be useful in a field context?**
 - **Making better use of time with large number of speakers**
 - **Might increase interest**
 - **Encourage consultants to come back**

Acknowledgements

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