

# Learning and Learning Difficulties in Africa

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## SPECIAL POINTS OF INTEREST:

- Reading Skills Start to Develop Before the School Age
- Overview of Literacy Situations in Africa
- Celebrating World Literacy Week Activities

## INSIDE THIS ISSUE:

- Reading Skills Start to Develop Before the School Age 1
- GL Diploma Training Programme 3
- Overview of Literacy Situations in Africa 3
- Celebrating World Literacy Week 6
- Reading Support for Zambian Children (RESUZ) 7

## READING SKILLS START TO DEVELOP BEFORE THE SCHOOL AGE

by Dr Ritva Ketonen, Niilo Mäki Institute, Finland

*First on the paper there are only shapes that do not have any meaning or connections. When a letter is paired with a sound and sounds together make syllables and words, a door to a new world has opened.*



Learning to read is a wonder that happens automatically for most children. However, for some it requires years of hard work. According to Dr Ketonen the identification of reading problems has improved, which provides opportunities for prevention.

It is known that the letter naming skill is a good predictor of future reading skill. It is recommended to follow the development of child's letter knowledge even before the school age. At that time children have a natural interest to letters, but some just don't seem to remember them, says Dr Ketonen.

Difficulties in learning to read are strongly associated to hereditary factors. Those children who have reading problems in the family or who don't have adequate pre-reading skills are at risk. The earlier a child gets support, the better opportunities s/he has

in the future. These pre-reading skills can be supported in various ways. The most important is to practice letter-sound knowledge and phonological awareness. Phonological awareness means a skill to divide speech to sounds and syllables and make words from them. Merely teaching the letters is not enough. Basic reading skills start to develop already at the age of 3-4 years when phonological awareness begins to emerge. At that time children are interested in nursery rhymes which are a start for the development of phonological skills. Also, children often realize that the strange symbols on the paper and parent's reading are linked to each other. This is called print awareness.

Reading problems are often caused by phonological problems: challenges in learning letters and sounds, and identifying sounds and

syllables in words. A child can also have difficulties in rapid naming and working memory: It is difficult to read, if s/he is unable to remember the letter names and corresponding sounds immediately, or forgets the beginning of the word by the time s/he reaches to the end of the word.



Origins of the naming problems are unknown, but naming skills can be practiced by various descriptive plays, naming tasks and storytelling exercises. Working memory can be in turn supported by pictures, clear and repeated instructions.

Child's motivation, concentration and observation skills are also important factors in developing reading skills.

According to research findings, the best way to work with children at risk, are short, several learning sessions in small group settings. These sessions should be fun and motivating to the children and could include playing with letters and letter-sounds. The success is highly dependent on the amount of support the child receives. Child's own motivation and self perception as a learner are also deciding factors. The support and encouragement received at home, nursery and school are in particular

important role in this development.

Ekapeli (GraphoGame) is a specialized computer based learning game developed with the support of the Ministry of Education (Finland) to support early reading skills. The game facilitates independent learning of letter-sound correspondences and word formulation at child's own pace and levels. There are also game versions for preschool children, for training reading fluency, and for immigrant children in Finland. In addition, there are African bantu language versions in Swahili (Tanzania) and kikuyu (Kenya), as well as Nyanja (Zambia).

These African versions are used in new Niilo Mäki Institute's administered non-governmental development cooperation project Grapho Learning (GL) Diploma training Programme focusing on training experts in the area of reading rehabilitation.

Interview extract by Dr Ritva Ketonen, a speech therapist, researcher and a trainer at Niilo Mäki Institute and a lecturer at the University of Helsinki, Finland. She is also a Grapho Learning (GL) Diploma training programme manager.

*(photo by Hanna Arola: Dr Ritva Ketonen and Dr Juha-Matti Latvala, Director of Niilo Mäki Institute)*

## Suggested Activities

### Learning letters and sounds and phonological awareness

- \* letter cards, letter memory games, finger alphabets, association cards (letter and corresponding picture)
- \* stories and rhymes
- \* syllabification, and making up words beginning with certain syllable or letter e.g. ki and ku

### Improving rapid naming skill

- \* description and definition games such as junior alias
- \* lotto and memory games help to practice memorizing words faster
- \* writing shopping lists (using subheadings – e.g. vegetables and fruits.)
- \* classification exercises – classifying things based on e.g. their shapes, size and colours

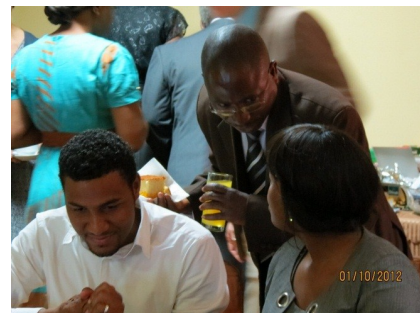
### Supporting working memory

- \* learning by doing
- \* using pictures to support memory
- \* classifying and categorizing information
- \* learning by heart/ memorizing e.g. alphabet

## 1st International Grapho Learning (GL) Diploma training programme seminar in Lusaka, Zambia

The Grapho Learning (GL) Diploma training programme trainers and trainees from Zambia, Tanzania, Kenya, Namibia and Finland held their 1<sup>st</sup> International seminar in Lusaka, Zambia in October, 2012.

The programme focuses on addressing the challenge of overcoming severe reading disorder (dyslexia) by training experts who can provide individually tailored rehabilitation services for children in need of specialized support in learning. One of the tools used in this training is Graphogame (Ekapeli), technology based learning game. Diploma programme will give trainees the basic knowledge of learning difficulties needed in clinical practice to help children who struggle with learning, especially in learning to read. Trainees will also receive a high level of expertise in using Graphogame technology for remediation.



The partner institutions and departments in the GL programme are: Department of Educational Psychology and Inclusive Education, University of Namibia (UNAM); Department of Educational Psychology, Sociology and Special Education, University of Zambia (UNZA); Zambia Institute of Special Education (ZAMISE); Kenya Institute of Special Education (KISE), Kenya; the School of Education, Pwani University College, Kenya; and Department of Educational Psychology, Kenyatta University (KU), Kenya; School of Education, University of Dar es Salaam, Tanzania and Sebastian Kolowa Memorial University (SEKOMU) (former Sebastian Kolowa University College of Tumaini University Makumira, SEKUco), Tanzania.

Please check [www.grapholearning.info](http://www.grapholearning.info) and [www.nmi.fi](http://www.nmi.fi)

Photo by: Hanna Arola

## Overview of Literacy Situations in Africa

### Namibia

#### Language Situation

- There are 14 written languages in Namibia with a standardized orthography.
- In addition, there are also about 16 oral languages for which no orthography exists.
- 11 languages are used in schools.
- English is the country's official language, although it is the mother tongue of only 1.9% of the population.

At the time of independence in 1990, there were two official languages in the territory: Afrikaans and English. English is now the only official language in Namibia as decided by the government 22 years ago.

The main reason given for this decision was that English is a world language and that it would be difficult to choose any one of the Namibian languages as the official language of the country. It was believed that English would be a unifying force that would promote national integration, unity and inter-cultural understanding.

#### Language Policy in Schools

- Language Policy for Schools states that learners should be taught in their mother tongue from Grades 1 to 3. Grade 4 is regarded as a transitional year when the change from mother tongue instruction is made into English.

- English is to be taught as a subject from Grades 1 to 12.
- According to the Policy, if parents or the school wish to use English as the medium of instruction in Grades 1-3, they need to gain permission from the Ministry of Education.
- Almost 40% of Grade 6 learners only reach Level 3-Basic Reading (interprets meaning in a short and simple text by reading on or reading back), while only 2.5 % manage to reach competency Level 8.
- At primary school level, about 52 per cent of lower primary teachers struggle with the official language.

### Factors

- Inconsistency in implementation of the Language Policy in the lower grades has affected how well Namibian learners learn to read.
- lack of methodology in teaching reading,
- controversy/inconsistency in the knowledge of phonics amongst teachers,
- Lack of teacher support and the importance of teaching comprehension skills.

### Zambia

#### Language Situation

- Zambia is a multi-lingual society with 10 different indigenous languages, each with several dialects.
- After Zambia became independent in 1964 English was chosen as the medium of instruction for all subjects from Grade 1.
- In response to the low reading levels, the Zambian government undertook major reforms in the area of language policy.

#### Language Policy in Schools

In 1996 Zambia adopted Educating Our Future policy which outlines that the initial reading skills in Grade 1 should be taught in a native language and that literacy in Zambian Languages should be a mandatory part of national examinations throughout the school.

There are 8 official languages used in the country:

Icibemba, CiNyanja, Kiika-onde, Citonga, Silozi, CiLuvala and CiLunda and English.

- The Primary Reading Programme (PRP) was introduced in 2000 which moved methodological approach from “Whole word” to the “Phonetic approach”.
- Children in Grade 1 are taught to read in the most prevalent local language in each zone, preferably their mother tongue and a shift is begun to English in Grade 2.
- However, the reading levels of majority of Zambian children are still low and only 1/3 of Zambian children are able to read at the level expected of their grade.
- About 60% and above have been scoring below average in Local Languages and English.

### Factors

- Deficits in phonemic awareness skills and lack of proficiency in the language of instruction.
- Teacher competence.
- Inadequate teaching and learning materials in the mother tongue.
- High teacher-pupil ratio.
- Low literacy levels among parents.

### Kenya

#### Language Situation

- There are several languages spoken within ethnic communities which make about 40 stable languages in Kenya with up to about 70 dialects.
- English and Kiswahili are the two inter-ethnic languages but in reality English is the official language and Kiswahili is the national language. More complexity brings the emergence of unstable languages, *Sheng*, *English*, and code mixing of local languages with English and Kiswahili.
- English is used as a language of instruction, and in examination.

#### Language Policy in Schools

- Children are taught in their mother tongue up to standard 3 when English is introduced as a language of instruction. In urban and peri-urban areas, Kiswahili or English are to be used depending on the most dominant language of the area.
- Children learn approx. 6 subjects in class 1. The learning materials for these subjects are mainly in English except for Kiswahili, which is taught as one of the subjects.
- Many primary school children were unable to demonstrate basic reading and numeracy skills.



- the children in class 2, only 33% could read a paragraph of their level, another 33% would not read a word.
- 50% pupils completing class 8 could not read a class two story.

### Factors

- Illiterate parents.
- Teacher-pupil absenteeism.
- Lack of proficiency in English language which is used as medium of instruction by teachers.
- Overcrowded classrooms.
- Lack of adequate learning and instructional materials.

### Tanzania

#### Language situation

- After independence, the government made the Kiswahili language the national language to unite people of more than 120 languages.
- Kiswahili was also announced as an official language together with English.
- 1 in 5 primary school leavers cannot read standard 2 level Kiswahili.

- Only 3 in 10 standard 3 pupils can read basic Kiswahili story and do basic Mathematics.
- Only 1 in 10 standard 3 pupils can read basic English story.
- Grade 2 and 3 children have difficulties in identifying sounds of Kiswahili language.
- Close to 10% of grade 4 pupils fail the national exam which measure mostly the ability to read and write.

#### Language Policy in Schools

- The government introduced kiswahili in all public primary schools as a teaching language. It is also learnt as subject at all levels of education.
- By the mid-1980s, Tanzania was one of the countries with the highest literacy rates in Africa, reaching 98%.
- The current literacy rate of people ages 15 and above who can, with understanding, read and write a short,

simple statement on their everyday life is 72.9%.

- Children at age 13 complete primary education without adequate reading and writing skills.

#### Reasons for the decline

- Lack of strong political will.
- Small budget allocated to the Ministry of Education and Vocational Training - largely dependent on donor's money.
- Absence of well organized adult literacy education programs.
- Low morale among teachers and adult literacy instructors who are inadequately trained and incompetent to face challenges.

#### Factors

- Poor teaching and learning Environment.
- Lack of motivation among the teachers.
- Lack of qualified and competent teachers.
- Poor teaching approaches to learning to read—whole word and linguistic approach.
- Poor home and literacy environments.



Dr Oswell Chakulimba, Dean, School of Education, UNZA (left), gave opening remarks at GL seminar. Mr Kalima Kalima, EPPSE, UNZA (right)



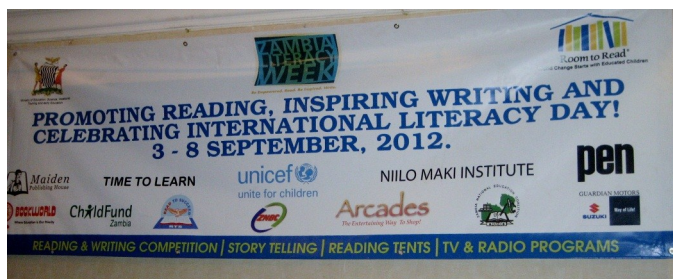
GL seminar participants from Kenyatta University: Dr Mukambi (left) and Dr Dinga (right)



GL seminar participants also visited 2 basic schools in Kafue District where Room to Read have special reading programmes.

## Celebrating World Literacy Week - ZAMISE Assessment and Rehabilitation Centre baseline Reading Screening Activity by Fred (Bishop) Mwale, Zamise

The World Literacy Week was held on 3-9 September 2012 under the theme *Promoting Reading, Inspiring Writing and Celebrating International Literacy Day*. During the week various organizations engaged to literacy related activities such as book donations to schools, storytelling and writing events, radio and radio programs, Poetry Writing, Writers' Workshops, March past in Lusaka and in provinces. During the week, Zambia Institute of Special Education (ZAMISE) Assessment and Rehabilitation Center (ARC) team conducted a study "Baseline Assessment of Grade 2 Reading Skills" in selected schools in Chongwe District in Lusaka province with the support of Niilo Mäki Institute, Finland. In addition to the study, ARC conducted sensitization talks to the teachers at the schools.



The aim of the study was to sample and measure the existing reading and literacy competencies of Grade 2 pupils in selected schools in Chongwe area. The study was guided by the objective "To find out the levels of Reading and writing achievement of Grade 2 pupils after 18 months of literacy instruction following the Zambia Primary Reading Programme (PRP) curriculum". These pupils had spent 12 months on the NBTL (National Break-through To Literacy) and 6 months on the SITE (Step InTo English) programmes.

The study was conducted in four (4) selected basic Schools in Chongwe which were located along the Great East road: Silver Rest Basic School, Matipula Basic School, Chongwe Basic School and Chitemalesa Basic School. The schools are situated in semi rural district settings serving surrounding commercial and small scale farming communities as well as town and village populations.

Simple Random sampling procedure was used to select 50 Grade 2 pupils for the screening. The assessment tool used was the BASAT (Basic Skills Assessment Tool). The BASAT was designed to assess Reading and Writing skills of Grade 1 and Grade 2 children. The English version was used as Grade 2 children were at the SITE stage of the Zambia Primary Reading Programme (PRP). The BASAT was administered on an individual basis by a team of assessors (lecturers) from ZAMISE Assessment and Rehabilitation Centre (ZARC).

The findings of the screening exercise showed that although a good number (53%) of children had Letter Knowledge (note especially when reciting from the memory, the random letter knowledge test was found more challenging) they had low competencies on Letter Sound Knowledge (45%), and Phonological Awareness (37%). The majority (69%) could not Read and a good number (49%) were unable to write their own name and 1-3 lettered words when dictated to them.

Zambian World Literacy Week activities were coordinated by Room to Read.

For further information, please email Fred Mwale, Zamise Assessment and Rehabilitation Center Coordinator (ZARC) at [fredmwale2000\(at\)yahoo.co.uk](mailto:fredmwale2000(at)yahoo.co.uk).

## Reading Support for Zambian Children (RESUZ) Research project appreciation and Consultation workshop for Schools by Francis Sampa

Reading Support for Zambian Children (RESUZ) is a research project that was initiated by collaboration between the University of Zambia (UNZA) and the University of Jyväskylä of Finland. The research focuses on helping children to learn to read in local languages by applying systematic phonics by drilling carefully chosen connections between spoken and written items. Grade I learners are exposed to letter-sound knowledge in transparent local language CiNyanja by use of Graphogame in cell phones.

A total of 42 schools, 585 grade I learners, 84 teachers and 42 head teachers have been involved in this research. The lead investigators are Professor Heikki Lyytinen from University of Jyväskylä, Finland and Professor Robert Serpell from University of Zambia. PhD students, as Project Leaders (5) have focused on different areas of early literacy development: family background (Tamara Chansa Kabali, teacher skills (Christopher Yalukanda), teacher attitudes and practices (Jacqueline Jere-Folotiya), biological risk factors (Jonathan Munachaka) and teacher training and curriculum

development (Francis Sampa). A number of UNZA students were involved in the project as Research Assistants.

The workshop convened in late October, 2012 at University of Zambia bringing together all those who had been involved in the successful implementation of the research. The workshop created a platform for sharing experiences and discussing ways of improving implementation of the research. A total of 129 teachers and head teachers from 42 schools from Lusaka District attended the workshop.

Overall, the teachers provided positive feedback of the research activities; Graphogame could be integrated as Independent Learning Activity to curriculum; it helped children in differentiating sounds and it was observed that their pronunciation of letter sounds and also spelling improved. The Game is also entertaining and, motivating, easy to play and educating. On the other hand, a few teachers felt that a small number of phones limited participation and disadvantaged other pupils and the phones can easily be damaged. Therefore, administering the game in big classes can be time consuming.

A computer based Graphogame could cater a larger number of pupils. The participants recommended that the teachers should be further trained and motivated in teaching reading, and children should have reading materials e.g. story books available to practice their emerging reading skill.



In order to appreciate the contributions made by the teachers, school administration and schools as a whole, the Acting Director for Teacher Education and Specialized Services, James Chilufya, with the courtesy of Niilo Mäki Institute, Finland, presented together with Prof Serpell, a cell phone to each of the schools (photo above).

*For further information on RESUZ, please email Francis Sampa at [Sampafrancis\(at\)gmail.com](mailto:Sampafrancis(at)gmail.com)*

Photo by: Jonathan Munachaka



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Niilo Mäki Institute

*Wishing You All a Merry Christmas  
and Happy and Prosperous New Year!*



### **Newsletter details**

The Newsletter is a publication of Niilo Mäki Institute, Finland. The aim is to provide a forum to network and exchange knowledge and latest research in the field of learning difficulties among various stakeholders and interested parties.

Niilo Mäki Institute has been working in Africa over 20 years, providing neuropsychology training for education professionals in the continent. The Newsletter links partners and colleagues from previous and current NMI Africa projects ([www.nmi.fi](http://www.nmi.fi)).

We are always looking for contributions, articles and comments for next issue. Those interested in contributing to the next issue, please contact: Pia ([pia.krimark\(at\)nmi.fi](mailto:pia.krimark@nmi.fi)).