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Author(s): Fadjukoff, Päivi

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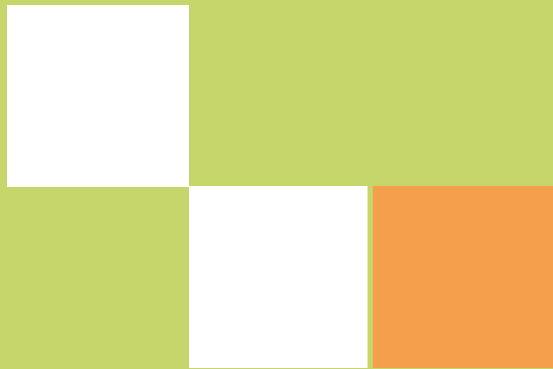
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Promoting 21st Century Literacy Education in Zambia

Päivi Fadjukoff



■ Case description

The aim of the project CAPOLSA (Centre for Promotion of Literacy in Sub-Saharan Africa) was to establish a strong literacy centre at the University of Zambia (UNZA). The long-term goal is to have international visibility and impact, specifically in African countries facing similar challenges to Zambia. This literacy training approach is based on the Grapho Learning Initiative and the innovative and efficient digital-based learning game, GraphoGame, that has been developed based on scientific studies led by Professor Heikki Lyytinen at the University of Jyväskylä (JYU). He was the responsible project leader, together with Professor Robert Serpell at UNZA. The project implementation period was from 1 May 2011 to 31 December 2012.

The social context of CAPOLSA

As emphasised by UNESCO (2013a, 2013b), literacy is a fundamental right. It is the foundation for both basic education and lifelong learning, as well as for career development. Promotion of literacy is also a key strategic requirement for progressive social change in Africa aimed at poverty reduction and democratisation. Literate citizens are able to interact more broadly over space and time with other humans, accessing and contributing to the cumulative wisdom of humanity. They are better able to understand and claim their civil rights and to participate effectively in the critical evaluation of public policies. And they are able to acquire new skills and knowledge relevant to productive economic activity. Due to the importance of literacy to national wellbeing and the economy, the World Bank (2013) maintains records of national literacy rates, defined as *“the percentage of the population age 15 and above who can with understanding, read and write a short, simple statement on their everyday life. Generally, ‘literacy’ also encompasses ‘numeracy’, the ability to make simple arithmetic calculations.”*

Although literacy has long been acknowledged to be instrumental in enhancing human capabilities, illiteracy has remained a challenge specifically in the African continent. It has received too little political attention in many African countries: According to the UNESCO (2013a) Regional Bureau for Education in Africa, only 1% of the national education budget of most African governments is earmarked to address the issue of literacy. Africa is the only continent where more than half of parents are not able to help their children with homework due to illiteracy. As many as 38% of African adults (some 153 million) are illiterate, two-thirds of these are women. In Sub-Saharan Africa, the total adult

literacy rate in the years 2005-2011 was 71% in men and only 54% in women, although noticeably higher rates among youth (76% in young men and 67% in young women, 15 to 24 years of age) signals that an increase in female literacy may be forthcoming. In Zambia the literacy rate was in total 81% for adult men, and 62% for women, and 82% and 67% for young men and young women. (World Bank 2013.) However, it is uncertain whether the above minimum requirement for literacy is sufficient for optimal educational, vocational, or political development and involvement.

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In Africa, multilingualism constitutes a great challenge both for individual literacy development and for national literacy programs. The one language–one nation ideology of language policy and national identity was increasingly questioned in the 1980s and 1990s. Since then, multilingual language policies, which recognise ethnic and linguistic pluralism as resources for nation building, have increased (Hornberger 2002). Since the beginning of their independence, the language of teaching and initial literacy has been a topic of debate in many post-colonial Sub-Saharan countries (Obanya 1996). Specifically in the multilingual countries, the medium of instruction has in practice continued to be English. The learning of one's indigenous mother tongue is regarded as less important. (Obanya 1996; Banda et al. 2012).

Our partner country Zambia, situated in the centre of Sub-Saharan Africa, has a very rich linguistic heritage. There are 73 tribes of which each has its own dialect. Nevertheless, all Zambian indigenous languages belong to the Bantu languages and are related to one another. A comprehensive survey of the languages in Zambia was carried out in 1978 (Ohannessian & Kashoki 1978). At present, seven indigenous languages have an official status in the country.

Zambia has consistently, since its political independence in 1964, placed a high priority on making education widely available to its citizens and has invested heavily in the expansion of educational provision, especially at the basic level. Year after year since 2005, an almost universal primary school enrolment has been achieved. Zambian children are expected to learn initial literacy skills in their provincial language (one of the seven indigenous languages) during first grade and gradually switching to English starting in second grade. Both an indigenous language and English are mandatory subjects in public schools, but the language of instruction is still usually English. The language of instruc-

	Nursery School Education*	Primary School Education	Secondary School Education	Tertiary Education
Language of Instruction (LoI) in Education	English	English	English	English
Language for Initial Literacy in English and Zambian Languages (Grade 1–2)	Not regulated, but they do more activities in English, e.g. learning the English alphabet	One of the seven official Zambia languages (grades 1–2) only for the literacy hour	N/A	N/A
Literacy Hour		One of the seven official Zambian languages and English (grades 3–7)	Extensive reading lessons are only in English	N/A

Table 2: Post-independence language policy in education in Zambia (obtained from Banda, Mostert & Wikan, 2012, 14).

* Please note that nursery schools are primarily in the private sector, subject to minimal regulation and accessed by less than 30% of the population.

tion is then differentiated from the language for initial literacy as described in Table 1. With the exception of the literacy lesson, all subjects in schools are taught in English.

Reading difficulties have constantly been very common in Zambian schools. The Zambian Ministry of Education concluded in the national curriculum “Educating our Future” already in 1996 that the results of the educational policy had thus far been unsatisfactory. Children with very little contact with English outside school were required to learn concepts through English medium. The curriculum (Ministry of Education 1996, 39) concluded: *“The fact that initial reading skills are taught in and through a language that is unfamiliar to the majority of children is believed to be a major contributory factor to the backwardness in reading shown by many Zambian children.”*. Yet, the Ministry

simultaneously noted (ibid.) that a transformation to using the indigenous languages in education would mean unbearably huge costs and implementation problems as both learning materials and teacher training have been developed in English.

Although significant reforms were introduced in 1998, including a policy change to using the indigenous languages familiar to children as the medium of initial literacy instruction in the first grade of all government schools, literacy levels among enrolled primary school learners continue to fall far short of expectations. In a study by Matfwali (2005), 106 randomly selected third grade pupils who had participated in the new reading program were tested for their literacy skills in the indigenous language studied, Cinyanja. Only 46% could name the letters of the alphabet, and only 29% could relate the given sounds to appropriate letters. Due to orthographical transparency of this language, reading acquisition should have been possible for the majority of pupils during the first year of school.

The aim of the project CAPOLSA was to establish, at UNZA, a strong literacy centre with international visibility and impact. The Centre would carry out applied research and teacher education on ways of improving reading acquisition in the indigenous languages of Africa, specifically concentrating in the Sub-Saharan countries facing similar challenges to Zambia.

Banda, Mostert, and Wikan (2012) remind us that merely changing the medium of instruction from English to an African language would not improve the quality of education. They see challenges in three main areas: (a) the standardisation of the orthographies of the various Zambian languages used for initial literacy in various regions, as various dialects are used by learners; (b) the production of reading materials in the children's mother tongues, and multilingual dictionaries to promote a reading culture, and (c) the development of teacher training and teaching aids in the Zambian languages, and use of effective and innovative teaching methods. In addition, they consider it necessary to identify possible ways of raising the social and economic status of the Zambian languages and culture in the area of entrepreneurship and apprenticeship.

The overall aims and achieved results of CAPOLSA

The aim of the project CAPOLSA was to establish, at UNZA, a strong literacy centre with international visibility and impact. The Centre would carry out applied research and teacher education on ways of improving reading acquisition in the indigenous languages of Africa, specifically concentrating in the Sub-Saharan countries facing similar challenges to Zambia. Establishing this African centre of expertise was part of the larger *Grapho Learning Initiative*,

launched in 2011 by JYU and the Niilo Mäki Institute. This global initiative aims at assisting millions of children in learning to read in their local language, with the help of technology and the know-how of the most well-informed experts of reading acquisition in the world, using the innovative and efficient digital-based learning game, GraphoGame, that was developed based on scientific studies led by Professor Heikki Lyytinen at JYU. (Grapho Learning Initiative 2013).

According to the project plan, the planned activities of the established CAPOLSA included the following:

1. the promotion of support for children's acquisition of literacy in Zambian languages among parents, families, and pre-school teachers,
2. the provision of technical support in curriculum and instruction to the various training institutions mandated to prepare teachers for initial literacy instruction in the nation's lower primary school grades,
3. the creation, collation and dissemination of child-friendly reading materials in the Zambian languages used as media for initial literacy instruction,
4. the development of guidelines for the harmonisation of orthographies across the different Bantu languages as used in the various countries of sub-Saharan Africa, and
5. the specialised, advanced education of a critical mass of experts at UNZA for the conduct of such research.

The final goal was to have an efficiently functioning resource centre for supporting all Sub-Saharan African children in learning to read in the indigenous language they speak when entering school. The ultimate beneficiaries of the present project will therefore be the next generation of Zambian children, who will receive more appropriate and effective support for the initial acquisition of literacy.

The project report summarised the main achievements of the project during the 20-month funding period under review as follows:

- the foundation and institutionalisation of CAPOLSA, a Centre for applied research and teacher education on ways of improving reading acquisition in the indigenous languages of Africa.
- the creation, collation and publication of a set of child-friendly reading ma-

The ultimate beneficiaries of the present project will therefore be the next generation of Zambian children, who will receive more appropriate and effective support for the initial acquisition of literacy.

- terials in four of the Zambian languages, based on a storywriting competition.
- the development of guidelines for the harmonisation of orthographies across the different Bantu languages.
 - the advanced training of a team of five Zambian experts for the conduct of applied research on ways of promoting early grade literacy learning in low-resource Zambian schools.

The Centre also supported the dissemination of applied research findings to policymakers, planners, in-serve teachers, and their school administrators.

The disciplinary and organisational context of CAPOLSA

This CAPOLSA project was based on a longstanding Finnish-Zambian collaboration and brought together a capacity-building agenda (post-graduate training) at Zambia's leading university, a need felt by the Zambian government for policy-oriented research and development in a priority field of public education (promotion of universal basic literacy), with an emerging programme of international research collaboration (on optimising conditions for initial literacy acquisition).

JYU has collaborated with the UNZA, and the Zambian government's Ministry of Education from the early 1990s onward, focusing on the study of learning difficulties among Zambian children. In addition, the Niilo Mäki Institute, a foundation-based unit for multidisciplinary research and development work for learning disabilities, based in Jyväskylä, Finland, has been active within and has added value to this collaboration. This collaboration has included, for example, the development of a Special Education Degree Programme at UNZA in the 1990s (Chakulimba & Kokkala 2001), and the joint research, design and

field-testing of effective methods of intervention to support the acquisition of initial literacy skills by both Finnish and Zambian children (see, e.g., Lyytinen, Erskine, Kujala, Ojanen, & Richardson, 2009; Kaoma, 2008). As most funding instruments are targeted to certain types of aims and actions, using various and parallel funding instruments has made it possible to tackle a wide scope of challenges. During the CAPOLSA project, collaboration was enriched by several projects and various funding sources. The following projects, aiming for empirical research collaboration and degree training, for material production, and for enhanced international networking, strongly underpinned CAPOLSA as a functional centre, were undertaken:

JYU has collaborated with the UNZA, and the Zambian government's Ministry of Education from the early 1990s onward, focusing on the study of learning difficulties among Zambian children.

A. RESUZ (Reading Support for Zambian children), a research project funded by the Academy of Finland in 2010-2012 and awarded to Professor Heikki Lyytinen of JYU. This study was designed to document the process of initial literacy acquisition among children enrolled in first grade classes at government schools, in Lusaka, a multilingual city facing many challenges of basic service development. An agreement between the UNZA and JYU on joint-degree doctoral studies was signed in 2010 for five Zambian scholars, who lead the implementation of the project. At the core of the project was an intervention study, for which a representative sample of 582 children that were enrolled in Grade 1 classes at 42 Lusaka urban government schools were recruited and assessed on several locally developed measures by a team of trained UNZA undergraduate Student Research Assistants.

B. the GraphoRead project, funded in 2010-2011 by National Agency for Technology and Innovation (Tekes) and awarded to Professor Heikki Lyytinen. The project developed ways to produce easy-to-access reading material in indigenous languages for African children. Together with CAPOLSA, the project launched the Kalulu Storywriting Competition in August 2011. The project ended in November 2011.

C. a scientific workshop on support for language and reading acquisition, funded in 2011-2012 by the Finnish Cultural Fund and awarded to Professor Heikki Lyytinen. The Zambian partners participated in the GraphoWorld Summer School in Jyväskylä in September 2011 through this funding.

It was seen highly important to ensure progress in this successfully developing collaboration, and to enable full ownership and leadership by the Zambian experts of the ongoing research and its effective deployment in Zambian public policy, teacher training, and instructional practices in classrooms. The Higher Education Institutions Institutional Cooperation Instrument (HEI ICI) funding provided an opportunity to establish an administrative centre (CAPOLSA) at UNZA in 2011. The CAPOLSA activities were coordinated by Professor Robert Serpell, jointly implemented by academic staff of several existing departments, and coordinated by the Psychology Department in the School of Humanities and Social Sciences. Close collaboration was maintained with the Ministry of Education's Curriculum Development Centre and other relevant arms of the Ministry.

To be able to operate as a functional unit, the newly formed CAPOLSA had to have autonomy both in planning the operations in Lusaka, and in being

financially liable for them. Due to the long collaboration and mutual trust that had already grown between the partners, the project budget was divided and administered according to a joint agreement in part by UNZA, in part by JYU. The funding allocation between the partner universities was planned already in the application phase while constructing the budget and re-agreed and clearly marked on the budget sheet in the first project board meeting at the onset of the project. Those activities that took place in Zambia were agreed to be UNZA's responsibility, while the salaries of Finnish experts as well as the travel costs were JYU's responsibility. The project action plan and budget was accepted and tracked by the Project Board, to which representatives of both universities, as well as representatives of the Zambian Ministry of Education, and Embassy of Finland in Zambia were invited. In addition, the project had a distinguished Advisory Board, chaired by Professor Stephen Simukanga, the Vice-Chancellor of UNZA. In project administration, the management and internal reporting procedures and requirements of the partner organisations were followed, as well as those imposed by the project funding body, the Finnish Ministry of Foreign Affairs.

■ Developing cooperation and institutional mandate for the project at the University of Jyväskylä

JYU is one of the largest and most popular multidisciplinary universities in Finland. It is an internationally renowned research university and an expert in education that focuses on human and natural sciences. The University's seven faculties host some 15 000 students from all over Finland and from nearly 100 countries around the world. The strategic objective is to be "one of Finland's leading and most successful multidisciplinary research universities, in which the tradition of education provided in Finnish is combined with modern internationality". In addition, "the University will be sustainably competitive, attractive and innovative, and it will have a major societal impact. The operating culture at the University is based on openness, equality, and trust" (Excellence and Dynamism, 2010).

Established in 1863, the University has its roots in teacher training, being the first Finnish-medium college for teachers. Thus, at present in 2013, the University of Jyväskylä is celebrating its 150-year-old history of first establishing Finnish Teacher Education (Excellence and Dynamism, 2010). Education has remained one of the key areas of the JYU functions, and it continues to be a nationally leading expert on teacher education and adult education, as well as a major exporter of education. "Education, learning, and teaching in the future" is one of the University's strategic key areas.

To promote the aims of internationality and impact, the international office coordinates international student and staff mobility, negotiates new partnerships with foreign universities, and supports the development of international competences of its staff. Despite the strong emphasis on internationalisation, the University's strategy does not mention anything about development cooperation. Instead, a stated objective focuses on promoting active cooperation and sustainable partnerships with the best universities and research institutes in Europe, Asia, North America, and Russia (Excellence and Dynamism, 2010). In any case, the University has committed to development cooperation and coordinates the Finnish University Partnership for International Development (UniPID), a partnership network between ten Finnish universities that promotes institutional partnerships and long-standing research, education, and development cooperation in the field of sustainable development. At present, JYU collaborates with more than 400 foreign universities around the world, including in the developing countries. Many of these partnerships initially started as collaboration between single researchers or research groups in small-scale pro-

jects with little University support. Such projects have grown into the bilateral university-level cooperative agreement signed between JYU and the UNZA.

As described above, the University supports internationalisation in general but offers no specific support for development cooperation. All project activities have traditionally been based on the researchers' own interests and activity but the University has recently increased its administrative support and training related to project applications. The increasing self-financing demands related to project funding, combined with strict management by results, force all units and researchers to direct efforts to projects that are expected to bring merits to the applying unit. These merits include degrees, publications, and student mobility.

The interdisciplinary research group led by Professor Heikki Lyytinen is one of the flagships of the University's achievements in education. Based on the scientific follow-up study of Finnish children at familial risk for dyslexia from birth to reading age, which Professor Lyytinen started in the early 1990s, the group has developed GraphoGame, an innovative digital-based learning game which helps children learn to read. After successful pilots the Graphogame (in Finnish, Ekapeli, see <https://ekapeli.lukimat.fi/>) was taken nationally into use in the Finnish education system, financed by the Ministry of Education. The research and its results have gained international attention, and the research group gained the rare status of a "Centre of Excellence in Research" (1997-2011), nominated by the Academy of Finland. Based on his discoveries, Professor Heikki Lyytinen has become an international leader in research in his field (Research Evaluation Report 2011).

The CAPOLSA project is part of the international approach Grapho Learning Initiative, run by Professor Heikki Lyytinen and JYU, and is based on the above mentioned research and learning technology GraphoGame. International pilots of the GraphoGame in different languages have first been carried out in Europe. The high illiteracy rates and therefore need for new interventions in many developing countries, specifically those in Africa, gave a reason to build on to the already existing collaboration with this approach. Discussions, collaboration, and training on the approach took place in a network of universities and teacher training institutes in several Sub-Saharan countries. Of these, UNZA proved to be the strongest candidate to host a literacy centre.

In short, the Grapho Learning Initiative combined the ambitious aim of providing a strictly evidence-based new technological tool for literacy education with

the mission of providing this support as widely as possible to all learners globally, with a special emphasis on countries where access to literacy education is limited. Evidently, this is in line with the JYU strategic aspirations to achieve an international, high-quality research-based impact on society. Internationally, this approach has attracted interest not only among researchers and education policy makers in the countries struggling with the challenge of illiteracy, but also among the leading researchers around the world. In November 2010, a group of distinguished researchers from a number of top-ranked universities (including Harvard, Stanford, Cambridge, and Oxford) met in Finland to sign a "Declaration on establishing a Language /Literacy Network of Excellence GraphoWorld" (2010), proposed by JYU and the Niilo Mäki Foundation.

According to the declaration, the GraphoWorld collaboration will benefit the participating universities *"in enabling high quality research due to collaboration between appropriate multidisciplinary groups of experts representing researchers of cross-cultural and -linguistic issues and brain researchers interested in children's language learning. A second benefit results from the availability of the GraphoGame (GG) research environment (owned by the University of Jyväskylä and the Niilo Mäki Foundation) supporting not only assessment and individually adaptive intervention but also detailed online examination, feedback and basic analysis of the data."* Another significant benefit of the collaboration is the enhanced possibilities of collecting research funding and of sharing actual research knowledge among members. The network will also provide a significant contribution to the mobility and training of researchers (summer schools, lab visits, etc.). These options provide great opportunities to the students and researchers of JYU for internationalisation and collaboration with the world's leading universities and researchers. Through the CAPOLSA project and collaboration, these benefits are also extended to UNZA. Several Finnish and Zambian master and doctoral students have benefited already from the collaboration.

■ The role of the University of Zambia in the development of Zambian society

UNZA is a public university, established in Lusaka in 1966 during the country's independence. The University was thus a national flagship of a new independent position in determining the most important areas of research and education and thus acting as an engine to facilitate the development of the new country. The University's motto "*Service and excellence*" emphasises the task of the University to have a science-based impact on society.

UNZA's School of Education has institutional arrangements for the supervision and quality control of pre-service teacher training at several Teacher Training Colleges around the country. These colleges are tasked with the training of the more than 5000 teachers responsible for imparting initial literacy to the next generation of Zambian children in one of the seven Zambian languages approved as a medium of instruction. CAPOLSA aims at mediating that process by imparting the knowledge derived from the most recent research on effective methods to support the crucial initial stages of literacy learning, which generally can make or break the impact of education.

Despite a proliferation of new Higher Education Institutions (HEIs) since 2005, UNZA has remained the leading provider of quality tertiary education in the country, and the only HEI to show a substantial output of rigorous research. UNZA includes nine schools and within them about 50 departments, with a complement of 621 academic staff, 221 of whom (i.e. 35%) have a doctoral degree, while the rest hold master-level degrees. Under the University's Staff Development Programme, about 75 (i.e. 12%) of the academic staff are at any one time registered in a doctoral studies programme. The Schools of Humanities and Social Sciences (HSS) and Education at UNZA enrol the bulk of incoming undergraduate students each year and together they currently turn out about 1500 graduates per year. Several departments in these two schools offer courses at the undergraduate and master level relevant to the understanding and correction of Zambia's crisis of inadequate educational provision to enable the majority of its citizens to acquire basic literacy, but there has not been a productively sustained connection between research on this matter and the development of national policy by the government (information obtained internally at UNZA for CAPOLSA Phase II application).

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methods to support the crucial initial stages of literacy learning, which generally can make or break the impact of education. CAPOLSA aspires to integrate the knowledge, methods, and technology generated by applied research into the curriculum and instructional resource development efforts by the Ministry of Education, and into the training programmes for early primary teachers.

During the first year of its operations, CAPOLSA forged strong links between relevant departments of UNZA (Psychology, Educational Psychology, Sociology & Special Education, Literature & Languages, Language & Social Sciences Education) and between UNZA and the relevant sections of the Ministry of Education (Directorate of Teacher Training & Special Services, Curriculum Development Centre, and the Zambia Institute of Special Education). Building on those links, CAPOLSA generated consensual guidelines among a panel of experts for a revised and harmonised set of orthographic rules for the seven Zambian languages approved as a medium of initial literacy instruction in the public schools. CAPOLSA also collected (with the support of JYU's Tekes-funded GraphoRead project), edited and translated a set of child-friendly stories and poems by indigenous authors in four of the target languages. These stories are in the process of being published in collaboration with a local publishing firm. In parallel with those initiatives, CAPOLSA disseminated research findings of the collaborative literacy research to primary school teachers and national policymakers. In addition, CAPOLSA has convened several consultative meetings with a broad range of stakeholders in Zambian society about key steps to be taken to consolidate and build on the initial progress achieved by CAPOLSA in 2011-2012.

CAPOLSA has clearly brought added value both to the University and the Zambian society already during the first 20 months of its existence.

CAPOLSA has clearly brought added value both to the University and the Zambian society already during the first 20 months of its existence. According to the University's motto, the centre has served the society by advancing and disseminating knowledge regarding literacy learning, by developing guidelines for the harmonisation of orthographies across Bantu languages, as well as by publishing reading materials for children in four indigenous Zambian languages. All these actions tackled challenges that had been widely acknowledged (see, e.g., *Educating our Future*, 1996; Banda et al., 2012). The centre also promoted excellence in research and teacher education, and networked internationally with the world's top researchers in the field. In the framework of roles of knowledge and the University in development, both UNZA and CAPOLSA represent the strongest possible engine-role (see Cloete et al., 2011).

A shared concern has been the future and sustainability of CAPOLSA: Although the unit has been supported by both the Vice-Chancellor of UNZA, and the Dean of School of Humanities and Social Sciences, they did not see it possible to establish a permanent unit based on the short-term funding of less than two years. Therefore, CAPOLSA has acted with a temporary status. The closure threat was about to actualise at the end of the HEI ICI funding period in 2012 due to delayed decision processes in Finland: The first project phase ended with no information as to whether or not there would be funding available for a second HEI ICI period. However, the progress achieved had convinced the Dean, Dr. Siamwiza to take a risk. The UNZA School of Humanities and Social Sciences offered bridge funding to cover the expenses during the first months of 2013. In his request, the Vice-Chancellor, Professor Simukanga, endorsed this proposal from the School on November 13, 2012 by approving a grant to CAPOLSA in support of the project while awaiting funding decisions by the Finnish Government. This kind of commitment would not have been possible without mutual trust and true partnership. An important indicator of this trust was that the CAPOLSA project budget was shared between the partner organisations, allowing UNZA to receive its part of this well-appreciated external funding. Openness and sharing of the budget is not yet mainstream practice in development cooperation projects.

The project and the Centre received HEI ICI funding for its continuation and next steps within its second period, starting from April 2013. Additional funding possibilities will be sought and the operations widened to other countries in Sub-Saharan Africa. Through the deliberations of the Centre's Advisory Board, chaired by the Vice-Chancellor, the University will also be invited to consider further institutionalisation of CAPOLSA within its permanent structure.

The sustainability challenge may become an issue in the future also at a time of CAPOLSA personnel changes. A key factor behind the achievements of the centre is that it has been coordinated by an eminent member of UNZA senior academics, Professor Robert Serpell. He started his career as a young Junior Research Fellow when the University was established and became one of its founding staff members. Since then, he has actively published internationally in a wide range of scholarly journals and edited volumes, as well as writing four books, which have gained international interest. He also has exceptional experience from different levels of university administration, including a period of service as the Vice-Chancellor of UNZA from 2003 to 2006. This extensive expertise will be difficult to replace by a younger scholar. On the other hand, the prestige already gained by CAPOLSA, with support from the Univer-

sity, may mitigate the challenges. The agreed upon plan is to make succession arrangements for the post of Coordinator of CAPOLSA in 2015, the third year of Phase II funding. Several candidates have been identified and trained in the CAPOLSA activities. Highlighting the eligibility of several candidates for appointment to this position when the present incumbent retires, it is hoped and expected that a competent, highly motivated, and committed scholar will take over responsibility of CAPOLSA, already by then possibly a fully integrated permanent unit of the UNZA. JYU will facilitate a smooth process by training and tutoring the young researchers working for CAPOLSA, facilitating their international contacts, and bringing international credibility to their work. In addition, JYU is in a central position to search for additional funding for the continuation of CAPOLSA's work in the larger Sub-Saharan region.

■ Conclusions

The concrete means of institutional cooperation in societal development

The CAPOLSA project and establishment of the CAPOLSA unit was based on two decades of more or less active, largely depending on suitable funding available for such purposes, collaboration between JYU and UNZA. A significant contributor in continuing the collaboration has been the Niilo Mäki Institute, an independent foundation-based unit in multidisciplinary research and development work for learning disabilities, and the major collaborator of JYU in the Grapho Learning Initiative. Often development cooperation funding in the educational field has been easier to find for an NGO than for a university. Based on earlier projects and achievements, an NGO can expect continuity in the form of new project funding. Thus it is possible to build on earlier work and maintain sustainable, trustworthy partnerships. The funding schemes for universities are more competitive and unsecure (e.g., Academy of Finland), and often focus on mobility between the countries instead of on larger collaboration activities. During these years, there have been several Sub-Saharan partners in this collaboration network, focusing on the training and development of expertise and services in the areas of learning disabilities assessment, special education, and enhancement of basic scholastic skills. Possibilities for success are determined by not only access to funding, but also on the ability to set achievable goals, on local circumstances such as political trends, or on organisational or personnel changes in core functions. Progress and new learning for both partners, as well as the growth of mutual trust has taken place little by little. The right people have to be in the right places for success—and they have to find each other! For sustainable development, a critical mass of people is needed to make the difference. This takes time.

The major advancement of the CAPOLSA project as compared to the earlier attempts was the strong shift of concrete project ownership to the UNZA, necessitated by the aim of building an efficiently functioning resource centre at UNZA. The project funding was shared in full agreement between the partners, and about 40% of it was transferred to UNZA. This was done through a direct transfer of funds from JYU balance, not through an invoice. The arrangement followed the practice of EU-funded projects. This was a decision and an administrative risk for JYU, as the Ministry of Foreign Affairs held the Finnish coordinator of the project responsible for all expenditures in the HEI ICI project, contradictory to the idea of collaborating independent partners.

Through this arrangement, it was possible to establish a committed, reputable local centre of expertise to advance literacy research, assessment, and education at all levels, instead of just relying on visiting foreign experts. The timing was right, and CAPOLSA lived up to the expectations of high impact in the society. No particular challenges arose in the management of the project funds at UNZA as evidenced by an independent audit. At present, the Zambian Ministry of Education, Science, Vocational Training, and Early Education is reviewing the education curriculum from early education to tertiary education, and re-defining the national language policy in order to enhance the teaching and learning process. Promoting such development has been within the focus of CAPOLSA collaboration. According to the Permanent Secretary, Dr. Patrick Nkanza, the language of instruction policy has been reviewed in all the necessary documents, specifically in the Education policy and the Education Curriculum Framework. In the new education curriculum, the familiar local languages will be used as languages of instruction, as well as languages for teaching initial literacy from pre-school to Grade 4. (Lusakatimes 2013).

Academic values and development cooperation

The academic environment has become more and more competitive: the universities as organisations, as well as their departments and individual researchers have to compete both nationally and internationally for funding, for talented staff and students, and for accreditation. Therefore it is evident that sustainable academic collaboration, also in the case of development cooperation, should be based on academic interests, and should include possibilities for upgrading one's academic qualifications (e.g., through publications). The academic interest can be based on the contents or collaboration networks related to the project. This applies to both sides of the collaboration. In the developing countries, where there is shortage of well-trained professionals, it is crucial to be able to attract talented students and young academics by offering long-term prospects beyond the short-term project work. This can be achieved through training, joint efforts to improve academic qualifications, and international networks. A good example of such networking was the symposium co-convened by Professors Serpell and Lytinen in the International Society for the Study of Behavioural Development 2012 Biennial Meeting, devoted entirely to reporting on the collaborative work of the RESUZ research project on reading

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acquisition support for Zambian children, including oral presentations by three of the Zambian PhD students who have been leading implementation of the project with support from CAPOLSA.

Only a university of high qualifications in its primary tasks of research and research-based education can provide credible, research-based knowledge to support progress and development in the surrounding society. Decision-makers all over the world follow the university ratings and want to raise the status of their own universities. In addition, there is a growing interest in many governments, including those of Finland and Zambia in being able to ground policy decisions in scientific evidence, and that universities are typically regarded, with good reason, as the best-placed national institutions to gather such evidence and secure its credibility. These needs were discussed by Professor Serpell in Zambia with the Parliamentary Committee on Education, Science and Technology in 2012. Enhancing and confirming that quality of research should thus be a major concern in any academic collaboration.

From a researcher point of view, a good way to secure sustainable, communicable project results is through joint data-collection and research, related to the project contents, and via the systematic follow up of project actions and results. This basic nature of academic functions is disregarded in the HEI ICI programme, in stating that “the programme cannot support academic research or applied research” (HEI ICI Programme Document 2010, 7).

As the present case demonstrates, it is possible to combine international top-level research with tackling the big societal challenges in the developing countries. Being able to contribute meaningfully, based on one’s own research, is a good motivator for such collaboration. This attitude is currently promoted in science policies, such as Horizon 2020, which emphasise tackling of big societal challenges (see, e.g., European Commission 2011).

Lessons learned

Following the ideal of the university as an engine of development in the society (Cloete et al., 2011), the key issue of HEI collaboration should be the empowerment of the partner universities. The processes of building mutual appreciation, trust, and mutually understood goals and commitment in them, as well as finding the best-fitting combination of collaborating experts can be slow. True partnership can thus only be gained through longstanding, gradually deepening collaboration. If empowered to do so, the local partner can best

tackle the local challenges and can thus most credibly advocate the endeavours towards which the development cooperation projects are aim.

Full partnership necessitates funding arrangements, in which each partner is responsible for using its own budget according to the jointly agreed project plan. However, in the present HEI ICI arrangements, this was not enabled in the project plan budget form which did not allow dividing the budget according to the partners. Splitting the budget was an administrative risk for the Finnish HEI, as the Ministry of Foreign Affairs held the Finnish coordinator of the project responsible for all expenditures in the project. Maintaining Finnish control of the budget would have been contradictory to the programme idea which required “eligible partners” from both Finland and developing countries, and “evidence of strong ownership and cooperation”. We hope the HEI ICI programme will develop towards a true partnership programme in the future, enabling arrangements similar to, for example, the European framework programmes. Naturally, securing a joint understanding of financial guidelines is important. In the CAPOLSA project, one goal was to develop the centre also administratively to be able to attract external funding and maintain its own budget. The appropriate management of finances was validated in an independent, external audit at the end of the project. JYU has also allocated funds to CAPOLSA through an Academy of Finland project RESUZ. With the gained experience and portfolio of successfully run projects, the unit will be much more competitive and credible in attracting other funding as well. As described above, also its credibility as a sustainable unit within UNZA has grown.

We hope the HEI ICI programme will develop towards a true partnership programme in the future, enabling arrangements similar to, for example, the European framework programmes. Naturally, securing a joint understanding of financial guidelines is important.

Even in well-functioning partnerships, patience is required from both sides as it takes time to navigate the cultures and bureaucracies of both parties. The value of interaction and discussions between the partners and relevant stakeholders must not be underestimated. Furthermore, it is difficult for any organisation to activate a fully functioning project at short notice. Instead, the operations can usually be activated during the first months from the positive funding decision. An optimal funding decision would then be made some months before the project is expected to be launched and include sufficient resources for a long timespan, for example, three to five years. Intermediate reporting and results could be required. A long term perspective would enable

stability and trust in the cooperative relationships. Sustainable progress cannot be made quickly but takes place gradually. Therefore it is also important to retain predictability in the funding opportunities.

In Finland, we tend to appreciate our own timeliness, the “African time concept” represents something not as efficient. However, in our experience, there is slowness and friction on both sides. For instance, the HEI ICI decision making and reporting processes in Finland were slow and overly bureaucratic. As described, without the flexibility of the UNZA administration, the smooth continuation of project work to project Phase II would have been damaged.

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