

Helpdesk Report: Primary education interventions in Malawi

Date: 4th February 2016

Query: What interventions in Malawi aim to improve a) literacy levels, b) learning outcomes more broadly, c) enrolment, attendance and/or completion rates, and d) transition rates to secondary education for primary school children? What evidence is there of impact? What is the evidence on interventions in the region?

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1. Overview

This rapid review identified a number of resources on primary education interventions in Malawi. Section 2 highlights literacy interventions. The Early Grade Reading Project (EGRP), funded by USAID, aims to strengthen teaching methodologies, develop appropriate learning materials, increase parental and communal support for reading, and improve the policy environment for reading. Evaluation of this project finds improved literacy scores and improved reading instruction (USAID, 2016; USAID, 2015; USAID, 2013). Save the Children's Literacy Boost project uses assessments, teacher training and community mobilisation to improve literacy. Evaluation results show Literacy Boost schools to have significantly higher reading skills than before the programme (Dowd & Mabeti, 2011).

Section 3 highlights interventions with a focus on girls' education. A Theatre for a Change UK project empowered young female teachers to create inclusive environments for marginalised girls. The intervention was found to improve literacy levels and attendance for marginalised girls in treatment schools (Morrell et al., 2014).

Interventions focussed on learning outcomes more broadly, enrolment, attendance and completion are included in Section 4. Programmes reporting evidence include:

- The World Bank's Project to Improve Education in Malawi saw improvement in enrolment rates from 79 to 88 % over four years (World Bank, 2015).
- Primary school support program: a school fees pilot (PSSP: SFP) funded by USAID for equitable access to education reports improved pupil achievements and improvement in the use of active teaching methods (American Institutes for Research, 2009).

- A randomised control trial found a tablet intervention significantly improved maths learning (Pitchford, 2015). The VSO International Unlocking Talent Project is scaling up this idea.
- Learning material provision and a 'school buddy' system improved dropout rates (Jere, 2011; Jere et al., 2014). A slight intervention effect on maths test scores was also found.

Evidence on transition rates was not identified.

In addition to identifying evidence on Malawi, the scope of this report allowed for only a very rapid search for evidence of education interventions in the wider African region. Research was mainly identified from more comprehensive reviews. See section 5 for interventions in countries with the closest proximity to Malawi: Zambia, Zimbabwe, Tanzania and Mozambique. See section 6 for interventions in other countries in the region: Uganda, Rwanda, Ethiopia and Kenya.

2. Malawi interventions with a literacy focus

USAID Malawi education fact sheet

USAID. (2016). Web page accessed: 28/1/2016

<https://www.usaid.gov/malawi/fact-sheets/usaid-malawi-education-fact-sheet-2012-13>

Through the Early Grade Reading Project (EGRP), USAID Malawi is working with the Ministry of Education, Science and Technology (MoEST) to enhance the quality of primary education through targeted early grade reading interventions. Activities focus on strengthening teaching methodologies, developing appropriate learning materials, increasing parental and communal support for reading, and improving the policy environment for reading to help government, schools, and communities build a stronger foundation for learning for all students. EGRP activities include:

- Early Grade Reading Activity (EGRA) (June 2013-October 2016). Implemented by RTI International in 11 education districts, EGRA provides technical assistance to the MoEST to improve the reading performance of Malawian students in Standards 1–3. EGRA improves early grade reading instruction, provides TLMs, encourages greater parental and community engagement in providing reading support, and strengthens the policy environment for early grade reading.
- EGRA Impact Evaluation (EGRAIE) (April 2013 – September 2018). This evaluation, implemented by Social Impact, measures the effect of EGRA on student reading outcomes and tests the hypothesis that integrating USAID interventions in education, agriculture, and health, as well as adding a community strengthening component, results in increased learning amongst primary school students. Data collection for the EGRAIE will take place in 2013, 2015 and 2017.
- Strengthening Early Grade Reading in Malawi (SEGREM) (October 2014 – October 2017). The Malawi Institute of Education, a parastatal organisation, replicates EGRA activities in Standards 1-4 in the Chiladzulu, Dedza, and Mchinji Education Districts.
- Learning to Read Activity (December 2014- November 2015). The African Centre for Communication for Development, a local organisation, replicates EGRA activities in Standards 1 and 2 in the Phalombe Education District while also increasing retention of girls in school and reducing overcrowding in primary schools.
- Strengthening Early Grade Reading for Malawi's Children Through Teaching Assistants (SEGRA) (April 2014-April 2015). Implemented by the Forum for African Women Educationists in Malawi, a local organisation, this activity addresses the problem of over-crowded classrooms and their effect on learning outcomes. Implemented in two districts, Ntchisi and Mwanza, 70 % of the beneficiaries for this activity are women with an interest in the teaching profession who will work in schools as Learning Assistants (LAs) for reading.

- USAID - Lakeland College Educational Partnership (March 2014-January 2017). Twenty language arts teacher trainers from public Teacher Training Colleges in Malawi will earn their Master of Education (M.Ed.) degree, with an emphasis in early grade reading instruction, at Lakeland College in Wisconsin. The degree programme includes a research practicum on early grade reading in Malawi.
- Girls' Empowerment through Education and Health Activity (ASPIRE) (December 2014 – December 2018). Save the Children Federation, Inc. ASPIRE is designed to specifically address the challenges that girls face in the Malawian Education System. A collaborative, co-funded activity between USAID/Malawi's Education and Health Offices and implemented by Save the Children Federation, Inc., ASPIRE focuses on all primary and secondary schools in the Balaka and Machinga districts. Interventions will improve reading skills for girls in upper primary school, increase the adoption of positive sexual and health-care seeking behaviours, and decrease key structural and cultural barriers for girls' access to schooling.

Impact:

- During the 2013-2014 school year, Standard 1 zero scores (pupils scoring zero) in familiar word reading dropped from 94% to 63% in USAID reading intervention areas.
- In Standard 3, the mean score in oral reading fluency rose from 13.6 to 25.8 correct words per minute.
- A 2014 reading assessment found that 72% of students in Standard 2 who were able to read 30 correct words per minute or more came from USAID reading intervention districts.

Anecdotal evidence from USAID projects:

- [A Young Girl Teaches Her Father to Read](#)
- [Disability is not Inability](#)
- [Malawian Villages Join Forces to Teach Children to Read](#)
- [Hearing Impaired Students Learn to Read Faster in Malawi](#)
- [Children Become Readers in Malawian Village](#)
- [Stella Stays in School](#)
- [Martha Learns to Read](#)

Performance Evaluation of the USAID/Malawi Early Grade Reading Activity (EGRA)

USAID. (2015). USAID.

http://pdf.usaid.gov/pdf_docs/PA00KBNS.pdf

The USAID/Malawi Early Grade Reading Activity (EGRA), is a firm-fixed-price, three-year, four-month contract that was awarded to RTI International on June 17, 2013 and ends on October 16, 2016. It has a ceiling of \$23,992,906. It is currently the flagship education activity for USAID/Malawi. It is designed to provide technical assistance to the MoEST to improve reading skills of Malawian students in Standards 1-3.

EGRA emphasises deepening the capacity to effectively provide reading instruction in Standards 1 to 3 and introduces a community engagement component to support early grade reading. The main activity interventions are grouped into four component areas: Component 1: Provide Quality Reading Instruction for Early Grade Students Component 2: Provision of Teaching and Learning Materials for Reading Component 3: Increasing Parental and Community Engagement to Support Reading Component 4: Improving Policy Environment to Support Early Grade Reading.

Evaluation found:

- The EGRA has effectively changed reading instruction in Standard 1-3 classes in Malawi in the 11 targeted education districts. In those schools, almost all (95%) teachers stated they have training to teach reading. Evidence that the students are reading, showcased in competitions, was reported to be highly motivating for teachers, parents, and students. The Braille Cup and reading fairs are highly successful and inspiring for all involved.
- The design of EGRA/Malawi includes systematic implementation of Continuous Professional Development (CPD) in-service teacher training based at the district and zonal levels, and CPD is effectively managed and executed. Strategies taught during CPD were observed in most Treatment Standard 1-3 classes, and in some control schools.
- EGRA Implementation has led to the increase in Chichewa reading instruction towards the one hour goal in primary classes in intervention schools. In observed treatment schools, the average reading class is 43 minutes, including 55 minutes in Standard 1 classes.

Malawi reading intervention Early Grade Reading Assessment (EGRA), Final assessment - 2012

Pouzevara S, Costello M, Banda O. (2013). USAID

https://www.eddataglobal.org/documents/index.cfm/EGRA%202012%20INTERVENTION%20study%20report%20USAID_cleared_05172013_REV1-Mar2014.pdf?fuseaction=throwpub&ID=561

This reading intervention, Maziko a Kuwerenga (Foundations of Reading), was rolled out to schools in Salima and Ntchisi September 2011 reaching 238 schools and an estimated 46,000 Standard 1 learners. It has since been expanded to five more districts (Mzimba North, Ntcheu, Zomba Rural, Blantyre Rural, and Thyolo) and now reaches 1,310 schools with over 200,000 Standard 1 learners. The programme was designed to integrate into Standard 1 classrooms “the five T’s,” or five major inputs that have been shown effective in improving reading scores¹ : increased time to read, appropriate and sufficient texts in the mother tongue, improved direct teaching methods, and testing to measure progress and inform practice.

Measurements using the Early Grade Reading Assessment (EGRA) methodology² compared baseline (2010), midterm (2011), and endline (2012) reading scores for the schools participating in the programme and against a control group of schools not participating in the programme. The results showed that while overall performance remains low, large absolute and relative gains in reading performance were achieved in the intervention schools that were not achieved in control schools. Children in control schools are demonstrating little, if any, measurable pre-reading skill, including in ‘naming the letters of the alphabet’. Although average scores for children in the intervention schools are still very low, student scores in intervention schools beginning Standard 2 are close to the level of achievement demonstrated by beginning Standard 4 learners nationwide. Students with measurable reading ability (those who read at least 1 correct word per minute by Standard 2), were reading an average of 19 correct words per minute. There is no statistically significant difference in scores based on gender, indicating that boys and girls are being affected equally by the intervention.

Although this type of intervention is having an effect, it alone is not enough to overcome many of the underlying constraints to quality education in Malawian schools— large class sizes (average 122 in Grade 2, according to the national study conducted by MTPDS in 2012), teachers with limited training in teaching reading, a very short school day, high teacher and learner absenteeism, and persistent shortages in teaching materials and infrastructure

(many classes are held under trees), for example. Moreover, children come from resource-poor environments, both economically and academically—a minority of parents are educated beyond primary school, there are few reading materials at home, they may have started school late without any prior school readiness preparation, and could be in poor health, all of which contribute to a poor foundation on which to build a learning trajectory.

Literacy Boost Malawi, Year 2 Report

Dowd AJ & Mabeti F. (2011). Save the Children.

<http://resourcecentre.savethechildren.se/sites/default/files/documents/6908.pdf>

The Literacy Boost programme is an intervention focused on working with teachers and communities to improve children's reading skills. The programme uses assessments, teacher training and community mobilisation. In its second year of implementation in Malawi, Literacy Boost demonstrated school-wide impact, the potential for enhancing efficiency, achieved significantly higher reading gains on average than in year one, had significant impact on learning even in the face of huge class sizes, as well as on lesson delivery and community action in support of education.

In its second year of implementation in Malawi, Literacy Boost demonstrated school-wide impact, the potential for enhancing efficiency, achieved significantly higher reading gains on average than in year one, had significant impact on learning even in the face of huge class sizes, as well as on lesson delivery and community action in support of education.

Achievements identified through Save the Children data collection include:

- Year 1 impact: students in Literacy Boost schools had significantly higher reading skills.
- Absentee levels were lower in Literacy Boost schools.
- Teaching quality was found to be better compared to control schools.
- Communities assisted students with programme support.

Analysis of Best Practices on Early Literacy in Malawi

Wiener K. (2010). USAID

http://pdf.usaid.gov/pdf_docs/PA00HVTX.pdf

Over the last decade, Malawi has seen the introduction of several literacy projects and initiatives to help combat the struggles with reading and writing found throughout the country. These projects include pilot studies, full-scale programs, and localized work completed by international organizations. The purpose of this report is to consolidate these practices and provide recommendations for MOEST in their efforts to improve early grade literacy in Malawi and to revise the Primary Curriculum and Assessment Reform (PCAR).

Three key sources of information were used for this report. This includes a document analysis of project documents, interviews with key stakeholders, and the presentations and outcomes of the Best Practices Literacy Forum held in Malawi in July, 2010.

The literacy initiatives reviewed involved a wide range of goals and activities and varied in their size and scope. While some have yet to be evaluated, others show modest gains in reading and writing learning outcomes. Those included in this report include: Malawi Teacher Training Activity (MTTA), Basic Literacy Program of Malawi (BLP/M), Literacy Across the Curriculum, Malawi Breakthrough to Literacy (MBTL), Tikwere, Extensive Reading, EuroTalk, Complementary Basic Education (CBE), Adolescent Girls Literacy Project (AGLIT), and Literacy Boost.

Most literacy interventions and activities began with a problem statement or review of the current teaching and learning conditions and challenges in the target schools and standards. Some of the challenges discussed include: class size, understaffing, teacher and pupil absenteeism, insufficient time on task, poor teaching methodologies, poor use of teaching and learning materials, lack of classroom space, ineffectual head teachers, overstretched government workers, lack of a reading culture, and pupil hunger.

The best practices and lessons learned from each of these initiatives are subdivided into the typical domains and components usually involved in any literacy initiative: Design and Structure; Professional Development, Monitoring, and Supervision; Materials and Supplies; Content and Curriculum; Instruction and Assessment; and Community Involvement.

3. Malawi interventions with a focus on girls

Empowering young female teachers to create inclusive learning environments for marginalised girls

Morrell F, Young P, Navarrete AO, Omarshah TT, & van Egmond M. (2014). Theatre for a Change.

<http://www.tfacafrica.com/wp-content/uploads/2014/07/Morrell-Young-Navarrete-Omarshah-Egmond.doc.pdf>

The 32 month project is funded by the UK Department for International Development as part of their Girls' Education Challenge portfolio. The project is led by Theatre for a Change UK and implemented by Theatre for a Change Malawi. The project's goal is to improve the learning outcomes and attendance of 6,372 marginalised girls from 225 rural Primary School in 10 districts across Central and Southern Malawi. 'Marginalised girls' are defined as girls, aged 11 – 14 or in Standards 5 – 8 (the last three years of Primary School) who are currently at risk of dropping out of school, or who have already dropped out of school. The project uses 315 trained female teachers, who are tasked with running participatory, girl-friendly, extra curricula activities focused on improving the girls' self-confidence, sexual and reproductive health and literacy and numeracy.

External evaluators conducted two independent baselines in October 2013 and October 2014 with samples of girls in treatment and control schools. The baselines observed the girls' attendance, and current literacy and numeracy scores. They also used focus groups and household surveys to learn more about the girls' sexual and reproductive health, socio-economic situation, and reported sense of self-esteem.

At midline the intervention has had an impact on the literacy levels and attendance of marginalised girls in treatment schools, accounting for 3.5 points of EGRA improvements and 9.1% of the overall improvements in attendance. At midline the intervention has had a significant impact on re-enrolment of out of school girls, with 92% re-enrolment in treatment schools, compared with 52.4% in control schools.

Enhancement of Girls Participation and Completion of Primary Education (EGPCPE)

Center for Education Innovations. (2016). Webpage accessed: 29/1/2016

<http://www.educationinnovations.org/program/enhancement-girls-participation-and-completion-primary-education-egpcpe#sthash.xZQURPwh.dpuf>

The Enhancement of Girls Participation and Completion of Primary Education Program is an initiative launched by the Creative Centre for Community Mobilization (CRECCOM) and PLAN Malawi that seeks to mobilise and strengthen the capacity of parents, school administration, and community leaders to support primary school students through training.

The ultimate goal of the EGPCPE project is to foster local networks that support girls' enrollment in, performance during, and completion of primary school in the Mzimba North, Kasungu North, Lilongwe, and Mulanje districts. The project model is centred around creating two distinct kinds of networks: Girls' education networks, and Teacher and school leader networks.

Evidence of the impact of this project was not identified.

Promotion of Girls' Education (PROGE)

Center for Education Innovations. (2016). Web page accessed: 29/1/2016

<http://www.educationinnovations.org/program/promotion-girls-education-proge>

The Promotion of Girls' Education (PROGE) Project is an initiative funded by UNICEF that is implemented by the Creative Centre for Community Mobilisation (CRECCOM). It aims to improve retention and transition rates for marginalised girls by increasing their access to education and engaging communities through the Social Mobilisation Campaign Model.

PROGE seeks to empower girls by increasing participation in life skills, providing incentives for academic competition, and sensitising, motivating, and mobilising community structures (teachers, village heads, SMC/PTA, mothers' groups, initiation counsellors) in schools to eliminate practices such as school-related gender-based violence. To achieve these goals, the project uses a combination of strategies such as social and community mobilisation, scholarships, and mentoring and advocacy. In particular, the PROGE project utilises a three-pronged approach to engage students, teachers, and other community members in support of girls' education.

Evidence of the impact of this project was not identified.

4. Other primary education interventions in Malawi

Malawi - Project to Improve Education Quality

World Bank (2015). Washington DC: World Bank Group.

http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/T_MNA/2015/12/27/090224b083ff01ce/1_0/Rendered/PDF/Malawi000Proje0ve0Education0Quality.pdf

The project development objectives were to increase access and equity and enhance quality of the teaching and learning environment in basic education.

Project components were:

- To improve access and equity: Construct and upgrade education facilities and provide direct support to disadvantaged children.
- To improve the teaching and learning environment: Provide textbooks and learning materials and train teachers through open distance learning.
- To improve management capacity at all levels: Support teacher management reform, Support school improvement planning, and strengthen planning and budgetary management.

Key factors affecting implementation and outcomes:

- Sound background analysis.
- Strong government commitment
- Well-designed project with clear objectives
- Programmatic sector-wide approach
- Placing of the MoEST as the implementing agency

- Design considered lessons learned from other projects
- Project risks were assessed and measures to mitigate them identified

Achievement of development objectives were rated as substantial:

- The net enrolment rate increased from 79 to 88 % over four years
- Equity impacts were modest
- The teaching and learning environment was enhanced with improved student teacher ratios and pupil to textbook ratios.

Primary school support program: a school fees pilot (PSSP: SFP), Final report

American Institutes for Research (2009) USAID

http://pdf.usaid.gov/pdf_docs/PDACO621.pdf

The Primary School Support Program: A School Fees Pilot (PSSP: SFP) was a three-year initiative funded by USAID/Malawi in collaboration with the Malawi Government, targeting all of the 226 public primary schools in Dowa district.

The core goal of PSSP: SFP was to achieve equitable access to quality basic education. To reach this goal, the project had the following objectives:

- To increase access to basic education and improve learning with special focus on orphans, vulnerable children, girls and children with special needs.
- To increase resources at the school level.
- To improve teaching and learning outcomes in schools in Dowa.

Methodologies and activities:

- Decentralised teacher professional development
- Enhanced supervision
- Literacy promotion
- Promotion of effective school-community partnerships
- Increased resources at school level
- Increased support to orphans and vulnerable children
- Capitalising on local resources
- Building capacity and creating synergy with other stakeholders

PSSP: SFP was designed by the Ministry of Education, Science and Technology (MOEST) and USAID as a holistic programme reaching not only formal education actors such as teachers, PEAs, ACs, and SMCs, but members of the community as well. To understand the impact of PSSP: SFP in Dowa, the project collected various types of data.

The results show that PSSP: SFP has brought positive change to teachers, pupils, and communities. The results also show a significant increase in pupil achievements – 28% to 39% improvement, an indication that learning is truly taking place in all Dowa schools. More teachers are now able to use active teaching methods to improve teaching and learning. Follow-up surveys show a significant improvement in the use of the active teaching methods (from 30.3% of teachers in 2006 to 73.0% in 2008). This means that the majority of the teachers in Dowa now fully involve learners in their lessons by using creative, participatory methods of teaching. Communities also benefited a great deal in terms of income generating activities (IGAs) to support schools; lobbying for funds from outside sources such as Members of Parliament, other well-wishers and from other sources; and the improvement of buildings. At the start of PSSP: SFP, only 52% of schools had IGAs; and to date (2008) 76% of the schools have them. Also, 100% of schools are now involved in physical rehabilitation.

Development of early mathematical skills with a tablet intervention: a randomized control trial in Malawi

Pitchford NJ. (2015) *Frontiers in Psychology* 23 April.

http://journal.frontiersin.org/article/10.3389/fpsyg.2015.00485/full?_ga=1.117571529.1755938750.1453464844

This study reports a randomised control trial to evaluate the effectiveness of a tablet intervention for supporting the development of early mathematical skills in primary school children in Malawi. A total sample of 318 children, spanning Standards 1–3, attending a medium-sized urban primary school, were randomised to one of three groups: maths tablet intervention, non-maths tablet control, and standard face-to-face practice. Children were pre-tested using tablets at the start of the school year on two tests of mathematical knowledge and a range of basic skills related to scholastic progression. Class teachers then delivered the intervention over an 8-weeks period, for the equivalent of 30-min per day. Technical support was provided from the local Voluntary Service Overseas (VSO). Children were then post-tested on the same assessments as given at pre-test. A final sample of 283 children, from Standards 1–3, present at both pre- and post-test, was analysed to investigate the effectiveness of the maths tablet intervention. Significant effects of the maths tablet intervention over and above standard face-to-face practice or using tablets without the maths software were found in Standards 2 and 3. In Standard 3 the greater learning gains shown by the maths tablet intervention group compared to both of the control groups on the tablet-based assessments transferred to paper and pencil format, illustrating generalisation of knowledge gained. Thus, tablet technology can effectively support early years mathematical skills in developing countries if the software is carefully designed to engage the child in the learning process and the content is grounded in a solid well-constructed curriculum appropriate for the child's developmental stage.

The Unlocking Talent Project

Webpage accessed: 29/1/2016

<https://unlockingtalent.org/about>

Unlocking Talent is a project that aims to improve the quality of primary school education for children in Malawi. The project will focus on marginalised groups across all education districts; Standard 1 and 2 learners, in-service and pre-service teachers, TTC lecturers, Primary Education Advisors, Out of school youths and children with special needs will benefit directly. Other community members will benefit from the project indirectly.

This project is a scaling-up based on the research abstracted above (Pitchford, 2015).

Malawi School Improvement Programme (MSIP)

Link Community Development. Web page accessed: 1/2/2016

<http://www.lcdinternational.org/content/programme-information/malawi-school-improvement-programme-msip>

The Malawi School Improvement Programme (MSIP) 2006-2009, funded by the Scottish Government, focused on building national and district capacity in relation to monitoring school progress and planning for school improvement. Link successfully embedded School Performance Review (SPR) into the school inspection process by training district officials on the methodology and training district staff on how to effectively collect and use school-level data as a tool to measure school performance and plan for further improvements. As part of this process, Link supported district officials and school staff across both districts to produce and review school development and school improvement plans. Link additionally provided training for teachers and head teachers on a range of themes with the aim of improving the quality of education being delivered.

Key Achievements:

- All 219 schools in Dedza and all 149 schools in Mulanje developed a School Improvement Plan outlining priorities and strategies for improving the quality of teaching and learning.
- A total of 952 teachers, including Head Teachers, were trained in school management and teaching skills through a combination of support from Scottish teachers and sessions co-facilitated by Link staff and district education officials.
- A total of 269 teachers in Dedza were trained on literacy and numeracy, including child-centred approaches to teaching and learning, and Primary Education Advisors later cascaded this training within Mulanje.
- School Performance Review was conducted in all 149 schools in Mulanje throughout the course of the MSIP project; the first time Link had full coverage of a district, marking a significant achievement.
- A total of 45 school partnerships between schools in Malawi and Scotland were established throughout the MSIP project; 5 reciprocal visits took place and teachers from Scotland completed 5-week teaching placements in Malawi in 2007, 2008 and 2009 as part of the Global Teachers Programme during which they mentored local teachers and supported ongoing training sessions.
- Link established and maintained a good working relationship with MoEST, regularly holding meetings to share information on the project and as a result was invited to join the Basic Education Technical Working Group.
- Link shared learning from the programme with other NGOs, including UNICEF, VSO, DFID, USAID and FAWEMA.

GIZ: Improving basic education

Webpage accessed: 28/1/2016

<https://www.giz.de/en/worldwide/20110.html>

Programme: Improving primary education (in Malawi)

The project advises the Malawian Government on developing and, above all, implementing its education policy. Earlier phases focused on consultancy on sectoral management, the development of decentralisation guidelines and teacher training, and on developing and institutionalising an out-of-school basic education programme for the reintegration of school drop-outs into the formal school system.

Four areas of activity:

- Improving the general conditions for teaching staff at primary schools and teacher training facilities.
- To promote the effectiveness of primary teacher training, the project offers support and advice on restructuring the curriculum for the first year of teacher training.
- To promote the continuing professional development of qualified primary school teachers, the project advises the Ministry of Education on designing, conducting and institutionalising in-service training measures.
- To improve the relevance and quality of the curriculum, a review of the primary school curriculum and of selected teaching and learning aids is being conducted.

Results:

- As part of the advisory services already provided to improve the two-year teacher training course, a structured training programme, with supporting material and mentoring, has been introduced for the second, practical year of training, which is conducted in schools. Around 9,000 students have already successfully completed their teacher training under the new programme.

- The project also supported the development of the decentralisation guidelines for education management.
- The approach to giving children without access to formal schooling a chance to catch up on their basic education has now helped several thousand children gain the qualifications they need to progress to a higher class in the formal school system. The success of this pilot project has led to the launching of a nationwide programme which has been incorporated into the national education plans.

Ripple Africa, Primary Education

Ripple Africa. Web page accessed: 1/2/2016

<http://146.148.126.62/education-in-malawi-africa/primary-school-education-in-malawi-africa>

RIPPLE Africa is an NGO that is supporting five local primary schools, has built several classroom blocks, and pays the salaries of 15 trainee teachers. Most of their work is to reduce class sizes – which can be over 100 pupils in each class – and provide a better learning environment for the children. Our overall aim is to increase the number of children who achieve good results in their exams and proceed to secondary school.

Achievements:

- RIPPLE Africa is paying for 15 additional Malawian trainee teachers, together with overseas volunteers who provide valuable help in the classroom as volunteer teaching assistants.
- Provision of textbooks, desks, teacher training opportunities. RIPPLE Africa has built two double classroom blocks at Mwaya Primary School which provide four additional classrooms, as well as a teachers' office and new toilets. They have also built a double classroom block at Chiomba Primary School.
- Through RIPPLE Africa's partnership with American not-for-profit partners RIPPLE Africa Inc., the charity has also helped build two double classroom blocks at Mazembe Primary School, and has renovated and painted existing classrooms at Mwaya, Mazembe, and Matete.

Quality of Education, Improving Teaching and Learning Capacity in Malawi

World Bank (2012). Washington DC: World Bank Group.

<http://www->

[wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2015/10/26/090224b08316c995/1_0/Rendered/PDF/Quality0of0edu0g0capacity0in0Malawi.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2015/10/26/090224b08316c995/1_0/Rendered/PDF/Quality0of0edu0g0capacity0in0Malawi.pdf)

The Education Sector Support Project (ESSUP) contributed to improving the quality of education at the primary, secondary and tertiary levels in Malawi. At the primary level, the quality of learning was improved through provision of learning and teaching materials, and food and medication for better health and nutrition, to almost all schools in the country. At the secondary and tertiary levels, learning was boosted with better-trained teachers and new classrooms.

Retrospective analysis of a school-based malaria treatment programme demonstrates a positive impact on health and education outcomes in Mangochi district, Malawi

Simwaka B, Simwaka NK. and Bello G. (2009) Journal of Development Effectiveness, 1(4):492-506

<http://www.tandfonline.com/doi/abs/10.1080/19439340903342336>

This report presents a retrospective evaluation of the school-based malaria treatment programme implemented in Mangochi district, Malawi. The teachers were trained to identify and treat children suffering from malaria. The evaluation was undertaken using the school

administrative records. The intervention and comparison schools were matched using propensity score matching. The impact was assessed using generalised linear modelling of family Poisson and also Kaplan–Meier for survival analysis. The results showed significant reductions in general absenteeism and grade repetition by students. Treating the cost-savings arising from the reduced rate of repetition as the benefits of the programme, the study showed that benefits far outweighed costs.

Evaluating the provision of flexible learning for children at risk of primary school dropout in Malawi

Jukes MCH, Jere CM, & Pridmore P. (2014) *International Journal of Educational Development*, 39, 181-192.

<http://www.sciencedirect.com/science/article/pii/S0738059314000716>

Communities in Malawi selected 15 children deemed “at-risk” – predominantly orphans – in Class 6 of each of 20 intervention schools to receive learning materials, support from the community and a school “buddy.” An experimental evaluation found that dropout was reduced by 45% across intervention schools compared to 20 control schools. The programme had spillover effects, indirectly reducing dropout among older pupils in the class not deemed at-risk. These findings imply that age, and not orphanhood, was the main indicator of dropout risk and that when targeting criteria are considered carefully, flexible learning programs can reduce dropout substantially among vulnerable children.

Developing, implementing and evaluating the SOFIE model: Supporting increased educational access for vulnerable pupils in rural Malawi

Jere CM. (2011). Institute of Education, University of London, UK.

<http://sofie.ioe.ac.uk/publications/MalawiFinalReport.pdf>

This report introduces a model of education that uses open, distance and flexible learning (ODFL) to strengthen and support access to learning within conventional schools. The model utilises low-tech ODFL strategies - including self-study guides, peer group learning, a buddy system, and ‘school-in-a-box’ - to enrich and complement formal schooling. It also promotes an enabling environment within schools through increasing school and community capacity in identifying, monitoring and providing pastoral care for vulnerable pupils, as well as promoting practices to support greater inclusion. This report presents findings from a three-year collaborative research study working within the SADC region (the SOFIE project), which developed and trialled this model. In Malawi the model was trialled in schools in two rural districts – Phalombe and Mzimba South – targeting Standard 6 pupils. The research used an embedded experimental design to collect and analyse both quantitative and qualitative data, following a mixed methods approach.

This report reviews the success and challenges of implementing the SOFIE model, drawing on perspectives from research participants to explain process and impact data. A key finding was that the intervention had a significant positive impact on dropout rates, both amongst vulnerable pupils identified as at-risk and targeted for support and in Standard 6 classes overall. There was also evidence of slight intervention effects on at-risk pupils’ test scores in Mathematics. Although there was no significant impact on the likelihood of pupils’ being promoted to the next grade, findings highlight additional qualitative educational and psychosocial benefits for targeted ‘at-risk’ pupils. For example, peer support and guided collaborative learning in after-school clubs – led by youth volunteers – appear to have resulted greater confidence and participation in class, as well as building supportive social networks and reducing discrimination from fellow pupils. Several schools made changes to school-level policies that were identified as excluding vulnerable pupils, for example, through reducing school costs and addressing disciplinary practices that excluded pupils from learning. Sustaining community support was a key challenge, particularly in Phalombe,

although the use of youth volunteers proved to be a successful strategy, with good working relationships established between teachers and volunteers.

The report concludes that lessons learnt from implementation of the SOFIE model provides a rationale for supporting greater flexibility in educational provision, targeted remedial and pastoral support and affirmative action to improve equitable access and retention - alongside critical reflection and action regarding schools' ethos and exclusionary practices. Successful and sustained implementation of innovation requires increased capacity amongst schools and communities to support all vulnerable pupils, including those affected by HIV/AIDS, as well as the promotion of a more inclusive philosophy within schools.

See <http://sofie.ioe.ac.uk/> for more information on SOFIE.

A Malawian school library: culture, literacy and reader development

Anderson J and Matthews P. (2010). A Malawian school library: culture, literacy and reader development. *Aslib Proceedings; New Information Perspectives*, 62 (6). pp. 570-584. http://eprints.uwe.ac.uk/13681/1/anderson_matthews_malawi_library.pdf

Purpose: This project aimed to investigate the success and suitability of a Western-donated school library in furthering the aims of literacy and reader development in Malawi.

Methodology: A qualitative, case study approach was taken using extensive interviews with school teachers and a library assistant at a primary school in Malawi. Semi-structured interviews with the teachers and the library assistant were analysed alongside internal documentation collected, which included exam statistics and diary-like reports written by the library assistant since the library was installed.

Results: Contrary to a common discourse that libraries are of limited value in a predominately oral culture such as that of Malawi, the research revealed a valuable role in providing sources for sharing knowledge from young readers to the non-literate. The books provide children with access to information which they then share with their parents. The sharing of information from books between the literate and non-literate encourages readers and turns the typically lone activity into a social one. In addition, new literates can slip back into illiteracy if they do not have access to reading materials post-school. This section of the community should not be overlooked by library providers. Limitations of the library under study included insufficient attention to reader development and inappropriateness of materials for the local context. Increased support from donors and NGOs would therefore be beneficial in order to further global literacy targets.

The Complementary Basic Education (CBE) Project

Center for Education Innovations. Webpage accessed: 29/1/2016

<http://www.educationinnovations.org/program/complementary-basic-education-cbe-project>

The Complementary Basic Education Project is an initiative of the Malawian government implemented by the Creative Center for Community Mobilization (CRECCOM) that seeks to improve access to primary education for out of school youth. Its learning centers emphasise literacy, numeracy and other skills that promote self-reliance and lifelong learning.

The three year programme gives primary school dropouts and first year students the opportunity to complete the standard five years of primary education in a compressed amount of time. The curriculum focuses on literacy and numeracy, but also covers health and agriculture-related topics. In addition to more traditional offerings, CBE emphasises soft skills and values that promote self-reliance, lifelong learning, community engagement, and citizenship.

Evidence of outcomes of this project was not identified.

Happy Classrooms

Center for Education Innovations. Web page accessed: 29/1/2016

<http://www.educationinnovations.org/program/happy-classrooms>

The Happy Classrooms project emerged from the need to improve learning environments in government primary schools. When boNGO started its early childhood education programme it soon became clear that children graduating from boNGO's Model Childcare Centers were introduced to a much lower standard of learning upon entering government primary schools.

To reduce the difference boNGO partnered with the primary schools in which boNGO's pre-school graduates were enrolled, and decorated the Standard 1 and Standard 2 classrooms with child-friendly, syllabus-related paintings. The change it brought was great: teachers started to use a wider variety of teaching methods; and children concentrated better, remembered things easier, and school for them has become a more interesting, inspiring and friendly place.

Seeing the positive impact of the decorated walls, this initiative was implemented in other ten rural primary schools and given the name 'Happy Classrooms' project. Soon the project began to be replicated in as many primary schools as funding would allow. Since then many Malawian companies, as part of their Corporate Social Responsibility (CSR), have partnered with boNGO and sponsored more Happy Classrooms. Also international development organisations, such as Concern Worldwide, partnered with boNGO and "commissioned" boNGO to paint over 200 classrooms in their impact areas. From June 2011 to March 2014, over 900 classrooms have been transformed into Happy Classrooms.

Decorating one classroom costs \$400 to \$600 depending on how remote the school is and how much maintenance the walls need before painting. This price covers: Introduction of the project to teachers, headmasters of schools and authorities from the Ministry of Education; Maintenance of the old walls; Painting materials; Art work; Administration.

Each Happy Classroom will last for at least 10 years and have a positive impact on over 1,500 Malawian pupils. So far, boNGO has developed a manual for painting classrooms of Standard 1-4, but plans to go up to Standard 8.

Evidence of the impact of this project was not identified.

Education projects in Malawi running 2013-2016

The Scottish Government (accessed 02/02/16)

<http://www.gov.scot/Topics/International/int-dev/Maps/Malawi/2013Projects>

There is not yet information available on the results of these ongoing projects.

Chancellor College Masters in Primary Education, Strathclyde University (£399,663)

Project Summary: This project aims to address the need for a Diploma in Primary Education in Malawi, which will encourage more trained teachers to teach in primary schools. Currently, primary teachers qualify with a Certificate in Teaching, but to advance their careers they must get a Diploma in Teaching. As it is only possible to get a Diploma in Secondary Education, the system siphons the most ambitious, energetic and academically-able teachers away from working in primary schools. A Diploma course will aim to improve: teacher content knowledge, including child development; training for collaborative and active learning and pupil engagement; teacher motivation; and classroom management. Scottish and Malawian

academics will work together on this project to create knowledge of the course-design features that will work and make a difference in Malawi.

Malawi Deaf/Deafblind Awareness and Communication Training, Sense (£368,843)

Project Summary: This project aims to enable progress towards the achievement of Education for All and to support mainstream primary schools to effectively include deaf learners in the classroom. Malawi requires additional resources for Special Needs Education (SNE) learners, as currently they do not receive any additional help to achieve at school. Consequently, drop-out rates are high with few progressing academically. Sense Scotland will deliver awareness training to community leaders, families and teachers. This will improve understanding of deafness and gain support for the project. Additionally, they will provide training for practical skills and improve understanding of children's rights to education. Further, the provision of small grants from Sense Scotland to parent groups will enable them to address issues within their schools and communities including the provision of feeding programmes, and school uniforms and text books.

Support to the Inspection and Advisory Services in Malawi, Link Community Development (£399,722)

Project Summary: This project aims to address the problems resulting from the enrolment explosion in Malawi's schools. While access to education has greatly improved, data clearly demonstrates that there has been a negative impact on the quality of education. The high drop-out rate and repetition rates in early primary years is indicative of the issues faced and combined with the lack of school performance monitoring, affects the overall primary education sector. This project will enable the development of training for staff, including inspectors and district education officials to assist them in evaluating, monitoring and supporting school improvement in Malawi.

Equitable Access to Education for Children with Disabilities in Malawi, CBM UK (£395,192)

Project Summary: This project will help to support and increase access to education for disabled children and the quality of education they receive. The project will assist in the identification of children for early intervention and provide training to parents and guardians in early intervention skills. It will also provide training for teachers and parents on sign language, Child Protection Policies and implementation guides. Community leaders, head teachers, school management committees and Primary Education Advisors will all also be briefed on the training that will be provided to further increase awareness. Advice will also be provided on technology that can assist teachers in their support of disabled children.

Karonga Girls and Boys Empowerment Project, Tearfund (£397,546)

Project Summary: This project aims to build on Tearfund's 2010-2013 International Development Fund supported project, by expanding to additional communities. The project aims to address the problems that are exacerbating the HIV/AIDS pandemic, including: harmful cultural practices; low household income; and increased exposure to HIV. The project seeks to empower girls to protect themselves from harmful practices, whilst acknowledging that boys and the wider community also have to be targeted. The project will further develop and reinforce community bylaws to protect children from harmful practices, including forced marriage, forced employment and exploitation. Additionally, they will deliver increased HIV testing and counselling alongside HIV/AIDS education to improve awareness. The provision of sexual reproductive health education and the development of Life Skills Clubs will assist in improving awareness and knowledge among school children. The project will also set up Village Savings and Loans groups to enhance household income and encourage parents to send children to school rather than forcing them into employment.

5. Evidence from other countries in the region: Zambia, Zimbabwe, Tanzania, Mozambique

Primary Education in Zambia

de Kemp A, Elbers C & Gunning JW. (2008) IOB Impact Evaluation, Policy and Operations Department, no. 312.

<http://aiid.org/website/wp-content/uploads/2015/12/iob-impact-evaluation-primary-education-in-zambia.pdf>

This study reports the results of an evaluation of the development of primary education in Zambia and the effectiveness of investments in this subsector since 2000. The study is quantitative and based on a statistical analysis of information at the school and pupil levels. The information is obtained from the annual school census and test and examination figures of the Examinations Council of Zambia.

This evaluation is one of the first attempts of the Policy and Operations Evaluation Department (IOB) to analyse the impact of a contribution to a sector (or subsector) as a whole. The basic principle is that evaluation of support received by a sector should focus on the sector as a whole, rather than focusing on the contribution of one specific agency. The evaluation analyses the effectiveness of interventions to which the Netherlands contributed. The study is an impact evaluation in the sense that it analyses the effectiveness of interventions in the sector, taking into account various factors that may have influenced the outcome. As such, it deals with the attribution problem and selection effects.

Conclusions:

- In no more than six years, Zambia has made enormous progress in improving access to primary education.
- The Sector-Wide Approach, with pooled funding, was a condition for the successful implementation of the two development plans and the introduction of Free Basic Education in 2002.
- The example of Zambia shows that it is difficult to simultaneously improve the level of enrolment and the quality of education. At the same time, the country shows that it is possible to significantly raise the enrolment level within a few years without any considerable negative effects in terms of pupils' test and examination results.
- The quality of basic education remains low and results are unstable.
- The education policy has generally been pro-poor, even though both the distribution of investments and access are still regressive.
- The effectiveness of investments in schools, teachers, classrooms and books can and should be improved.

When can school inputs improve test scores?

Das J, Dercon S, Habyarimana JP, & Krishnan P. (2004). World Bank Policy Research Working Paper, (3217).

http://www.rti.org/files/conferences/intl-educ-finance-05/background/grants/Das_School_Inputs_Improve_Scores.pdf

The relationship between school inputs and educational outcomes is critical for educational policy. The authors recognise that households will respond optimally to changes in school inputs and study how such responses affect the link between school inputs and cognitive achievement. To incorporate the forward-looking behaviour of households, the authors present a household optimisation model relating household resources and cognitive achievement to school inputs. In this framework if household and school inputs are technical substitutes in the production function for cognitive achievement, the impact of unanticipated inputs is larger than that of anticipated inputs. The authors test the predictions of the model for non-salary cash grants to schools using a unique data set from Zambia. It was found that household educational expenditures and school cash grants are substitutes with a coefficient of elasticity between -0.35 and -0.52. Consistent with the optimisation model, anticipated

funds have no impact on cognitive achievement, but unanticipated funds lead to significant improvements in learning. This methodology has important implications for educational research and policy.

School Feeding Programme in Zambia

Vorley Kand Corbett M. (2005). Field Exchange 25

<http://www.enonline.net/fex/25/school>

Field Exchange is not a peer reviewed publication. It enables fast track publication of programming experiences of relevance to nutrition in emergencies and high burden contexts.

The UN's World Food Programme (WFP) first commenced food assistance to community schools in Lusaka district of Lusaka province in Zambia in January 2003, with Project Concern International (PCI) as the implementing partner. After six months of successful implementation, the project was scaled up into two additional districts. It served a total of 205 community schools, as well as nine residential centres that cater for street children. Over 67,000 children each month were being supported with school feeding. Many of the children enrolled in these schools were very marginalised, some are street children and a high proportion are affected by HIV. For most schools, the assistance was in the form of one cooked meal a day, consisting of a wet ration of High Energy Protein Supplement (HEPS) and vegetable oil, a locally produced fortified Soya blend donated by WFP and delivered by PCI and cooked on site by school volunteers. All children in the target community schools were fed with the wet ration at the community school to avoid stigma. In addition to the wet ration, individual children identified as particularly vulnerable also received a monthly family take home ration, consisting of a 50kg bag of grain.

Results: Absolute enrolment and attendance rates increased by 26.6% and 40% respectively but there remained numerous challenges. Many schools found it difficult to turn away students, putting strain on the physical school capacity, i.e. space in classrooms, class size, etc., and creating an additional workload for the teachers which may adversely affect the quality of teaching and record keeping. As a result, in some schools, the two-class rotation (whereby some students come in the morning while others attend in the afternoon) was replaced by three sessions - especially for the junior classes. This meant that the students had less contact time with the teachers in the school. The reduced contact time and larger class sizes may have negatively impacted on academic results. However, anecdotally, teachers felt that the school feeding has made a big positive difference with a reduction in numbers of children dropping out. Also, many of the children no longer came to school hungry, so concentration levels improved. There has been no clear formal evaluation of the programme's impact.

Including Children with Disabilities in Primary School: The Case of Mashonaland, Zimbabwe

Deluca M, Tramontano C and Kett M. (2014). Leonard Cheshire Disability and Inclusive Development Centre

https://www.ucl.ac.uk/lc-ccr/centrepublishations/workingpapers/WP26_IE_Zimbabwe.pdf

This paper summarises the school-based information gathered on girls and boys with disabilities in schools in four districts in Mashonaland West Province (MWP), a large province in the north of Zimbabwe, as well as the main results derived from a survey on knowledge, attitudes and practices of their parents or caregivers, teachers and head teachers. This research forms part of a three-year project led by Leonard Cheshire Disability Zimbabwe Trust to promote the provision of inclusive primary education for children with disabilities in that province. The first part of the paper outlines the current state of education for children with disabilities in 268 schools in the four selected districts in MWP; including disaggregation

of numbers of children in school by age, gender and impairment. It also provides an overview of the numbers of teachers as well as pupil/teacher ratios. The second part examines findings from a survey on disability and Inclusive Education (IE), administered to 67 head teachers, 183 teachers and 186 parents/caregivers of children with disabilities.

Results: Findings highlighted a lack of training in special education needs/IE, and the need for further training emerges as a pressing issue. Overall, the attitudes and beliefs of respondents were positive, but amongst the major perceived barriers preventing children with disabilities from going to school by respondents was the lack of assistive devices. Other major barriers include distance to school and lack of transportation. Parents reported that the direct and indirect costs for schooling their children with disabilities are too high. Head teachers and teachers identified human resource allocation and financial administration as potential critical issues. This survey contributes to the limited literature that examines knowledge, attitudes and practices of teachers and families, as well as well as barriers and challenges.

Inputs, Incentives, and Complementarities in Primary Education: Experimental Evidence from Tanzania

Mbiti I, Muralidharan K and Schipper Y. (accessed 02/02/16)

http://www.riseprogramme.org/sites/www.rise.ox.ac.uk/files/19_Mbiti.pdf

This presentation refers to a study on the effectiveness of policies aiming to alleviate both of these constraints with a large-scale RCT conducted across a representative sample of 350 schools in Tanzania. Interventions studied include: A block capitation grant (CG) to schools Large grant (doubled per-child non-teacher spending) subject to same guidelines as national CG program; a Teacher performance pay program referred to as "Cash on Delivery" (CoD) paid to each teacher based on the number of students passing a basic test in each of 3 subjects (Math, Swahili, English); and a "Combination" (Combo) treatment arm that provided both interventions. Key innovation over existing work is that the design was explicitly powered to test for complementarities.

Results: Increasing inputs (using capitation grants) had no impact on test scores. This particular teacher incentive program had no impact on test scores on average (but some suggestive evidence of positive effects on students near the passing threshold). The combination of the two programs had a positive and significant impact on test scores. The combination is more than the sum of the parts (i.e., there are complementarities between the two). If complementarities matter, cross-cutting designs (which are widely used) could yield biased estimates if they ignore interactions.

Randomized Impact Evaluation of Various Early Reading Skills Interventions in Mozambique

Naudeau S, Cloutier M-H, Ramirez M-J (2015). Washington DC: World Bank Group.

<http://www.worldbank.org/en/programs/sief-trust-fund/brief/randomized-impact-evaluation-of-various-early-reading-skills-interventions-in-mozambique>

This refers to a study which has not yet been published and does not include any results. The article describes how the study looks at one main intervention to improve reading performance of young children and seeks to provide evidence-based information on its impact to implement a program on a larger scale. A tailored version of the *Provinha* reading assessment program, developed in Brazil, is at the core of this intervention. The twice-yearly *Provinha* test comprises 20 multiple-choice questions given to 3rd graders to assess reading skills they should have mastered after two years of primary school. The evaluation design is experimental using a randomised controlled trial. The study focuses on one district in the each of two Northern provinces, Tete and Niassa. Researchers randomly assigned 52

schools to a treatment group and 58 to the control group. In the treatment group, teachers administered and scored the *Provinha* standardised reading test and the school directors participated in a workshop to analyse their school's results and discuss strategies for improvement. In the control group, an external firm administered and scored the *Provinha* test without involvement by teacher or school officials. Baseline tests were administered in the first two months of the school year, with follow-up tests about six months later. The primary outcomes analysed are the reading skills scores for 3rd graders taking the *Provinha* test. Using these results, researchers will estimate the effectiveness of the intervention using, among other methodological approaches, a difference-in-differences analysis. Researchers also surveyed school directors, teachers, parents, and community-leaders and observed classroom instruction to collect information on teacher and director assessments of student reading skills, teacher motivation and qualifications, parental involvement and support, and student and teacher absenteeism.

Literacy Boost Results: Mozambique

Save the Children (2011)

<http://resourcecentre.savethechildren.se/sites/default/files/documents/6864.pdf>

In 2008, Save the Children launched the Early Literacy Project in Mozambique, to help 7,800 preschool and primary school-age children, including children affected by HIV/AIDS and other vulnerabilities, develop sound early literacy skills. Funded by a private donor, this project randomly assigned the intervention to 30 communities and 10 geographically close primary schools, having for each a control community of similar population size. The program provided teacher training, community mobilisation and reading promotion activities to foster systemic and high-quality early literacy instruction in Portuguese, the language of instruction. Additional activities included creating and distributing materials to support literacy instruction. The project evaluated the emergent and early reading and writing skills of more than 600 children in grades 1-3 in 20 schools in a March 2009 baseline and an October 2010 endline, two full school years later. The assessment evaluated children's concepts of print, letter knowledge, phonological awareness, reading fluency, vocabulary, oral comprehension and writing.

Results: In the primary schools surrounding randomly assigned ECD treatment sites, Literacy Boost kept more children in primary school and promoted greater skills development during the project period in key aspects of early literacy development. Further research should consider designs less susceptible to attrition bias (when poorer performing children drop out of the sample – unfortunately approximately 28.9 % of primary school children were missing from the endline data collection due to circumstances beyond the control of the project); include additional skills assessment once ECD participants enter primary schools; and extend the early literacy tools on which many children are fully mastering skills to capture more complex skills development as children grow older.

The Effectiveness of Short-Term Literacy Skills Intervention on Children at Risk of Reading and Writing Difficulties in Tanzania: A Study of Grade One Children with Dynamic Assessment Approach

Kumburu SA. (2011) Åbo Akademi University Press

http://www.doria.fi/bitstream/handle/10024/69841/kumburu_salvius.pdf

The aim of the study was to create and evaluate an intervention programme for Tanzanian children from a low-income area who are at risk of reading and writing difficulties. The learning difficulties, including reading and writing difficulties, are likely to be behind many of the common school problems in Tanzania, but they are not well understood. The design of the study included an identification and intervention phase with follow-up. A group based dynamic assessment approach was used in identifying children at risk of difficulties in reading

and writing. The same approach was used in the intervention. Dynamic assessment (DA) is a method of conducting a language assessment which seeks to identify the skills that an individual child possesses as well as their learning potential. It emphasises the learning process. The study was a randomised experiment with one experimental and two control groups. For the experimental and the control groups, a total of 96 (46 girls and 50 boys) children from grade one were screened out of 301 children from two schools in a low income urban area of Dar-es-Salaam. One third of the children, the experimental group, participated in an intensive training programme in literacy skills for five weeks, six hours per week, aimed at promoting reading and writing ability, while the children in the control groups had a mathematics and art programme. Follow-up was performed five months after the intervention. The intervention programme and the tests were based on the Zambian Basic Skill Assessment Tool, but the content was drawn from the Kiswahili school curriculum in Tanzania. The main components of the training and testing programme were the same, only differing in content. The training process was different from traditional training in Tanzanian schools in that principles of teaching and training in dynamic assessment were followed. Feedback was the cornerstone of the training and the focus was on supporting the children in exploring knowledge and strategies in performing the tasks.

Results: The experimental group improved significantly more ($p = .000$) than the control groups during the intervention from pre-test to follow-up (repeated measures ANOVA). No differences between the control groups were noticed. The effect was significant on all the measures: phonological awareness, reading skills, writing skills and overall literacy skills. A transfer effect on school marks in Kiswahili and English was found.

Improving Early Grade Learning Outcomes in Tanzania

Innovations for Poverty Action (accessed 02/02/16)

<http://www.poverty-action.org/study/improving-early-grade-learning-outcomes-tanzania>

This Tanzania-focussed study (ongoing) aims to evaluate approaches aimed at improving learning outcomes for school children in the first three grades of school. In the first two years of the project (2013-2014) researchers sought to evaluate the impact of: i) providing schools with extra resources in the form of capitation grants (a grant per child enrolled) and ii) providing teachers with financial incentives based on student performance. The evaluation aimed to measure the two approaches separately and in combination with each other. Government primary schools in 10 districts in Tanzania were divided into three treatment groups and a comparison group. Researchers used government test scores, results from the tests conducted by Twaweza, results from independent tests conducted by the researchers, school administrative records, and data from six surveys (three per year), to measure changes in school performance and student learning.

Results: Analysis of Phase I findings showed that children in schools where both capitation grants and financial incentives were tested together (“combination schools”) showed significantly better learning outcomes than schools in the comparison group. The bonus only had some impact, with teachers spending more time teaching (extra classes and additional test taking); it has shown a positive but not significant impact on learning outcomes. One possible explanation for this is the teacher’s lack of initial trust that the bonuses would actually delivered. After receipt of the bonuses in 2013, teachers responded enthusiastically and had more faith that the program would deliver on its promises. In addition, the capitation grant was received in full by all schools in the sample. This change led to reports of more essential materials at schools, but it did not lead to any significant improvements in learning.

Improving Early Grade Learning Outcomes in Tanzania

Innovations for Poverty Action. (2016). Webpage accessed: 1/2/2016

<http://www.poverty-action.org/printpdf/7546>

In February 2013, Twaweza and IPA-affiliated researchers launched KiuFunza, an education initiative that seeks to discover through rigorous research what really works to help children learn. Twaweza, the implementing partner, is a nonprofit focusing on large-scale change in East Africa, with operations in Tanzania, Kenya and Uganda.

In the first two years of the project (2013-2014) researchers sought to evaluate the impact of: i) providing schools with extra resources in the form of capitation grants (a grant per child enrolled) and ii) providing teachers with financial incentives based on student performance. The evaluation aimed to measure the two approaches separately and in combination with each other.

In 2015, the researchers and Twaweza dropped the capitation grant arm and added another incentive arm. Both intervention arms in the second phase of the programme focus on teacher incentive programmes, with two separate designs.

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The bonus only had some impact, with teachers spending more time teaching (extra classes and additional test taking); it has shown a positive but not significant impact on learning outcomes. One possible explanation for this is the teacher’s lack of initial trust that the bonuses would actually be delivered. After receipt of the bonuses in 2013, teachers responded enthusiastically and had more faith that the programme would deliver on its promises.

In addition, the capitation grant was received in full by all schools in the sample. This change led to reports of more essential materials at schools, but it did not lead to any significant improvements in learning.

With complete funding reaching the schools as planned, the Ministry of Education and Vocational Training stated its intention to begin sending the grants directly to schools. (The current government policy had been to send capitation grants indirectly, through many district- and ward-level officials; this results in time delays, and less than the full amount reaching the school itself.) As a result of this stated policy change, researchers and the partner organisation decided to discontinue the capitation grant component of the study, and further delve into effective teacher incentive programmes through the two new intervention arms begun in Phase II of the project.

8 Recommendations for ICT4E Intervention Success in African Schools

ICTworks (posted 02/03/2012. Accessed 01/02/16)

<http://www.ictworks.org/2012/03/02/8-recommendations-ict4e-intervention-success-african-schools/>

This report from 2012 suggests practices to make ICT use in classrooms more effective. The project, entitled Appropriate New Technologies to Support Interactive Teaching in Zambian schools (ANTSIT), was funded by DFID, and provided a detailed report including recommendations for introducing future ICT4Ed projects in Sub-Saharan Africa. During the 6-month project, a team of researchers conducted over 30 visits to two under-resourced Zambian primary schools. Through observing classes and working with local science and mathematics teachers, the team was able to analyse and compare the effectiveness and applicability of a variety of mobile technologies in the classroom. Netbook, tablet and laptop computers, e-Book and wiki readers, digital cameras and mini-projectors along with Open Educational Resources and Open Source software were all considered when determining the most appropriate and versatile resources for creating an environment supportive of learning

through active participation. The team worked with participating teachers not only to create lesson plans utilising assigned ICTs, but also to ensure a participatory and interactive learning approach. The report concluded that considering the often outdated and passive pedagogies used in many Zambian schools, the ‘most appropriate’ device is largely dependent on the particular classroom circumstances and the teaching goals and methods used by the teacher.

Recommendations in the report for future ICT4Ed programs include:

1. Purchase classroom sets, including a teacher laptop and student laptops, and do not forget storage and transport needs
2. Provide training to teachers on the ICT tools and how to use them creatively, incorporating them into a participatory teaching approach
3. Use ICTs with non-ICT resources, such as mini blackboards, a cheap and invaluable teaching aid
4. Choose cheap netbooks (e.g. the Classmate netbook) over Android-based tablets which may be promising in the future but currently make keyboard-based entry activities difficult
5. Do not mix multiple ICT devices within a single class if cost and maintenance problems are an issue
6. Invest time in setting up and configuring computers well so that tech problems don’t interfere with lesson planning or class time
7. Consider resource sharing between student computers through local wireless networks
8. Enable ICT ownership through microfinance

Impact evaluation for the USAID/ Aprender a Ler project in Mozambique year 2 (midline 2) IE/RCT final report – executive summary

Raupp M, Newman B, Revés L, and Lauchande C. (2015) USAID.

http://pdf.usaid.gov/pdf_docs/pa00kbd7.pdf

United States Agency for International Development (USAID) Mozambique has financed World Education Inc. to develop and implement an early grade reading approach, the USAID/Aprender a Ler (ApaL) project, in line with USAID’s global goal of 100 million children reading by 2015. The project advocates the “simple view of reading” and includes vocabulary, decoding, fluency, and reading comprehension activities, training, coaching and scripted lesson plans for teachers, teaching-learning aids (TLAs), decodable books, student readers and school director (SD) training and coaching to support reading instruction.

Results show that after a full school year of project implementation, students in both the Medium and the Full treatment schools perform at significantly higher levels than their counterparts in Control schools on all EGRA subtests. The findings clearly indicate the impact of the project and show the improvement made by students in the intervention groups—especially in Full treatment schools. ApaL strengthened reading instruction in the intervention schools on all EGRA measures, as evidenced by student reading outcomes and the observation of teacher instructional behaviour. After six months of participation in ApaL, students in the intervention schools made marked improvement in their reading performance compared with students in the Control schools. Looking across EGRA subtasks, the authors found intervention groups showed the greatest improvements in letter recognition (identifying and sounding out letters), familiar word reading, and reading connected text (fluency).

Compared with Midline 1, letter recognition by third graders in the intervention schools increased from 16 to 29 correct letters read per minute (clpm), an increase of 78% versus an increase of 54% in Control schools. In treatment schools, familiar word reading doubled from 3.7 correct words per minute (cwpm) at Midline 1 to 7.3 cwpm at Midline 2. By contrast, in Control schools, the improvement was modest, from 2.9 to 3.2 cwpm, a 10% increase.

Reading connected text (fluency) shows the same patterns: treatment groups rose from 4.9 cwpm at Midline 1 to 13.4, an increase of 174% while students in Control schools who read 4.4 cwpm at Midline 1 and were reading 5.2 cwpm at Midline 2, an 18% increase over what was observed at Midline 1. Differences in gains between treatment and Control groups are always significant and with very few exceptions, the differences observed between Full and Medium treatment groups are also significant.

The fact that students in the Full treatment group outperform their counterparts in the Medium treatment group could be the effect of the school management component, which is part of the Full treatment. Figure 1 compares scores obtained at Midline 1 (October 2013) and Midline 2 (September 2014) and provides an overall picture of the evolution of the groups between the two data points.

6. Evidence from other countries in the region: Uganda, Rwanda, Ethiopia and Kenya

USAID/Kenya Primary Math and Reading (PRIMR) Initiative: Final Report

USAID. (2014). USAID.

https://www.eddataglobal.org/documents/index.cfm/FR_Kenya%20PRIMR%20Final%20Report_073114_DEC.pdf?fuseaction=throwpub&ID=663

PRIMR focused on improving numeracy and reading outcomes in Classes (grades) 1 and 2. As a task order under the Education Data for Decision Making (EdData II) project, PRIMR's scope was to apply innovative, data-based instructional improvement methods to increase students' fundamental skills in reading and mathematics. Further, it assessed how a sustainable reading and mathematics programme could be implemented at scale. PRIMR also tested and monitored several scenarios within the public education system to determine which activities would most efficiently and cost-effectively improve pupil achievement. By design, the MoEST played a major role in advising and determining the purpose and direction of the USAID programme as well as participating directly in implementation.

The randomised controlled trial design of PRIMR made it feasible to estimate the impact of PRIMR on learning. Key research findings include:

- For letter-sound fluency, treatment pupils in PRIMR identified 47.0 correct letters per minute (clpm) correctly, compared to 25.7 letters per minute among the control pupils. Reading comprehension scores were more than twice as high in PRIMR (21.1%) as they were in control schools (9.8%) in Class 1, and the absolute gain in comprehension attributed to PRIMR in Class 2 was 17.3%.
- The proportion of pupils reading at benchmark by the time of the endline assessment was more than twice as high in PRIMR (28.3%) than control schools (12.6%).
- For letter-sound fluency, the results show that the PRIMR effect was 15.6 clpm for Class 1 and 22.1 clpm for Class 2. The overall effect size for letter-sound fluency was 0.63 SD.
- For the proportion of pupils reading at the Kiswahili benchmark (45 words per minute), scores among pupils receiving the PRIMR treatment were nine times larger in Class 1 (0.28 SD) and two times larger in Class 2 (0.30 SD).
- Evaluation shows a moderate effect of PRIMR on math overall of 0.16 SD for Class 1 and 0.26 SD for Class 2. PRIMR seemed to improve outcomes on the number identification (0.27 SD) and missing number (0.29 SD) subtasks, but had no effect on quantity discrimination (0.03 SD).

The Primary Math and Reading (PRIMR) Initiative, DFID/Kenya Rural Expansion Programme: Bungoma and Machakos Endline Study

RTI International. (2015). DFID.

https://www.eddataglobal.org/documents/index.cfm/DFID%20Endline%20Report_030415_v3.pdf?fuseaction=throwpub&ID=806

This report presents the research methods, implementation details, analysis findings, and recommendations from the endline assessment of the Kenya PRIMR Rural Expansion intervention, a research study and collaboration between the UK Department for International Development (DFID) and Kenya's Ministry of Education, Science and Technology (MoEST), with technical implementation by RTI International, Dec 2012-Jun 2015. It was an extension of the PRIMR Initiative funded by USAID/Kenya and focused on understanding how to structure a cost-effective and scalable instructional improvement programme.

This randomised controlled trial tested the effects of several different characteristics of learning improvement. It was implemented in Bungoma and Machakos counties, in 837 schools divided into four treatment groups and one control group. In all treatment groups, coaches provided instructional support to the teachers through regular school visits and lesson observation. Schools in the Full PRIMR treatment group also received pupil books, teacher's guides, and training. For the Books & Training treatment, teachers received training on instructional improvement, and pupil books were supplied at a 1:1 ratio. In the Training Only treatment, teachers received professional development on how to prepare improved lesson plans for the books that they were using in their schools before PRIMR. The Full PRIMR Mother Tongue treatment group evaluated the impact of a mother tongue intervention in two local languages. Samples of students were assessed at baseline, midterm, and endline using the EGRA, EGMA, and SSME.

Improving Early-Grade Literacy In East Africa: Experimental Evidence From Kenya And Uganda

Lucas AM, McEwan PJ, Ngware M, & Oketch M. (2014). *Journal of Policy Analysis and Management*, 33(4), 950-976.

<http://onlinelibrary.wiley.com/doi/10.1002/pam.21782/abstract>

Primary school enrollments have increased rapidly in sub-Saharan Africa, spurring concerns about low levels of learning. The authors analyse field experiments in Kenya and Uganda that assessed whether the Reading to Learn intervention, implemented by the Aga Khan Foundation in both countries, improved early-grade literacy as measured by common assessments. They find that Ugandan literacy (in Lango) increased by 0.2 standard deviations. The authors found a smaller effect (0.08) on a Swahili literacy test in Kenya. No evidence of differential effects are found that are explained by baseline differences across countries in student test scores, classroom attributes, or implementation fidelity. A plausible explanation that cannot be directly tested is differential effective exposure to the literacy treatment in the tested languages. Students in Kenya were tested in Swahili, which is not necessarily the main language of instruction in primary schools, despite official policy.

Scaling up what works: Experimental evidence on external validity in Kenyan education

Bold T, Kimenyi M, Mwabu G, Ng'ang'a A, & Sandefur J. (2013). *Center for Global Development Working Paper*, (321).

<http://www.csae.ox.ac.uk/workingpapers/pdfs/csae-wps-2013-04.pdf>

The recent wave of randomised trials in development economics has provoked criticisms regarding external validity. The authors investigate two concerns – heterogeneity across beneficiaries and implementers – in a randomised trial of contract teachers in Kenyan schools. The intervention, previously shown to raise test scores in NGO-led trials in Western Kenya and parts of India, was replicated across all Kenyan provinces by an NGO and the government. Strong effects of short-term contracts produced in controlled experimental

settings are lost in weak public institutions: NGO implementation produces a positive effect on test scores across diverse contexts, while government implementation yields zero effect. The data suggests that the stark contrast in success between the government and NGO arm can be traced back to implementation constraints and political economy forces put in motion as the programme went to scale.

The role of teachers in improving learning in Burundi, Malawi, Senegal and Uganda: great expectations, little support. The Improving Learning Outcomes in Primary Schools (ILOPS) Project | Research report on teacher quality.

Marphatia AA, Legault E, Edge K, Archer D. (2010). Institute of Education and Action Aid.
http://www.actionaid.org/sites/files/actionaid/ilops_teachers_final.pdf

In 2008, ActionAid, the Institute of Education, University of London, and partners in Burundi, Senegal, Uganda and Malawi compiled evidence on issues impacting on the teaching profession, including recent trends in the recruitment of teachers, their pay levels and training. They also tabulated how teachers and parents interacted both within school governance structures and through various other activities to support children's learning.

Findings show that while the number of untrained teachers in the four countries is decreasing, the number of under-trained teachers and those employed under time-defined contractual terms by communities and government is increasing. Understanding what the influence is of these different types of qualifications and contracts on learning outcomes is particularly difficult due to the absence of a regulated and monitored system of tracking the training levels as well as a lack of reliable student outcome data.

The growing trend of recruiting teachers with nonstandard training and credentials, often in an unplanned way, is particularly alarming because of the lack of conclusive evidence on how the different training and academic qualification levels influence teaching practice and, ultimately, student outcomes. This changing landscape has made it both increasingly difficult to monitor the impact of these teachers on student achievement and to identify the key inputs required to strengthen the education system. For example, while recruiting local people into teaching may mean there is a familiarity of context and a certain level of commitment, this is not a sufficient substitute for training and expertise in pedagogy, skills and knowledge. Little documentation exists on the options for balancing pre-service and in-service training so teachers can both maintain their professionalism and support student achievement. More information is needed on how best to reform traditional training programmes before truncating them or expanding local volunteer/community teacher schemes.

Impact of malaria control and enhanced literacy instruction on educational outcomes among school children in Kenya

Brooker S, & Halliday K. (2015). International Initiative for Impact Evaluation (3ie).
http://www.3ieimpact.org/media/filer_public/2015/03/13/ie18-kenya_malaria_literacy.pdf

The malaria intervention is based on intermittent screening and treatment for malaria. The enhanced literacy instruction component devised a teaching manual to be used on a daily basis for developing beginning reading skills in an alphabetic language. They include letter-sound relationships, blending, spelling, connected text, developing a concept of word in text, phonological awareness, vocabulary and reading comprehension. The 140 sequential lessons are structured to guide the teacher in what to say, what to do (i.e. with their hands or materials), which instructional materials to use and the estimated time of the lesson. The plans build from existing teaching methods (e.g. choral repetition, use of song) and show teachers how these methods can be modified slightly to promote successful beginning reading instruction.

The literacy intervention was conceptualised to be compatible with successful models of literacy acquisition in an alphabetic language while taking into account the current teaching practices that had been observed in the area, as well as the perceived barriers to successful instruction. Importantly, the literacy intervention was not intended to be an independent curriculum for teaching reading in English and Swahili. Instead, the goal was to supplement the existing curriculum with methods to develop foundational literacy skills that did not have adequate attention previously.

Teachers implemented the literacy intervention as part of their routine teaching activities. Training workshops and weekly text message exchanges were implemented by the HALI team. The initial training workshops were held between February and March 2010 and sought to provide Class 1 teachers with background information about how children learn to read, to explain how to use the provided teacher manual, and to give them the opportunity to customise materials for use in their classroom.

Following the workshop, the study teams communicate weekly with teachers using text messages providing brief instructional tips and motivation to implement lesson plans. A response is required in order to receive a small amount of credit for their mobile phones which facilitates and provides an incentive for further communication. The average response rate averaged 87 % for the 37 weeks that a question was asked in year 1 and 84 % in year 2. Each week, teachers are requested to complete a Weekly Summary Sheet that documents which lessons they used, what worked well and suggestions for improvement. Two day-long follow-up workshops were conducted, one in June 2010 when teachers learnt additional instructional methods, received and shared feedback, and another in February 2011 as the students entered Class 2.

To evaluate these interventions a factorial, cluster randomised trial was implemented in 101 government primary schools on the south coast of Kenya between 2010 and 2012.

During the intervention period, an average of 88.3 % children in intervention schools was screened for malaria at each round, of whom 17.5 % were RDT-positive. 80.3 % of children in the control and 80.2 % in the intervention group were followed up at 24 months. No impact of the malaria IST intervention was observed for prevalence of anaemia or *P. falciparum* at either 12 or 24 months or on scores of classroom attention. No effect of IST was observed on educational achievement in the older class, but an apparent negative effect was seen on spelling scores in the younger class at 9 and 24 months and on arithmetic scores at 24 months.

In contrast, there was a significant impact of the literacy intervention on key educational outcomes. Significant improvements were observed in the intervention group compared with the control group at nine months for two of the three literacy assessments, with a mean adjusted difference in spelling scores of 1.43 (95 % CI 0.86, 2.00; $p < 0.001$) and in Swahili sounds scores of 5.28 (95 % CI 3.18, 7.39; $p < 0.001$) between study groups. The significant impact of the literacy intervention on these outcomes was sustained at 24 months and was also observed in Swahili word reading, with a mean difference of 2.30 (95 % CI 0.03, 4.58; $p = 0.047$) observed between intervention and control groups. The positive impact of the literacy intervention appears to be primarily mediated through two key factors observed in the intervention schools: the increased time children spent reading in class and the increased print displayed in the classrooms.

School governance, teacher incentives, and pupil–teacher ratios: Experimental evidence from Kenyan primary schools

Duflo E, Dupas P & Kremer M. (2015) *Journal of Public Economics* 123, pp: 92–110.

http://web.stanford.edu/~pdupas/DDK_ETP.pdf

Some education policymakers focus on bringing down pupil–teacher ratios. Others argue that resources will have limited impact without systematic reforms to education governance, teacher incentives, and pedagogy. The researcher examine a programme under which school committees at randomly selected Kenyan schools were funded to hire an additional teacher on an annual contract renewable conditional on performance, outside normal Ministry of Education civil-service channels, at one-quarter normal compensation levels. For students randomly assigned to stay with existing classes, test scores did not increase significantly, despite a reduction in class size from 82 to 44 on average. In contrast, scores increased for students assigned to be taught by locally-hired contract teachers. One reason may be that contract teachers had low absence rates, while centrally-hired civil-service teachers in schools randomly assigned contract teachers endogenously reduced their effort. Civil-service teachers also captured rents for their families, with approximately 1/3 of contract teacher positions going to relatives of existing teachers. A governance programme that empowered parents within school committees reduced both forms of capture. The best contract teachers obtained civil service jobs over time, and large potential dynamic benefits are estimated from supplementing a civil service system with locally-hired contract teachers brought in on a probationary basis and granted tenure conditional on performance.

Many children left behind? Textbooks and test scores in Kenya

Glewwe P, Kremer M, & Moulin S. (2009). American Economic Journal: Applied Economics, 1(1), 112-135.

<http://pubs.aeaweb.org/doi/pdfplus/10.1257/app.1.1.112>

A randomised evaluation in rural Kenya finds, contrary to the previous literature, that providing textbooks did not raise average test scores. Textbooks did increase the scores of the best students (those with high pretest scores) but had little effect on other students. Textbooks are written in English, most students' third language, and many students could not use them effectively. More generally, the curriculum in Kenya, and in many other developing countries, tends to be oriented toward academically strong students, leaving many students behind in societies that combine a centralised educational system; the heterogeneity in student preparation associated with rapid educational expansion; and disproportionate elite power.

2014 Nuru Kenya Education Program Impact Assessment. Results of the 2014 Education Uwezo Survey.

Paris B. (2014). Nuru International

<http://www.nuruinternational.org/wp-content/uploads/2014/06/2014-Nuru-Kenya-Education-Program-Impact-Assessment-20141219.pdf>

The Nuru Kenya (NK) Education Program aims to increase child literacy to the Standard Two (Grade 2) level among rural primary school children through student-centred teaching and literacy-focused interventions. NK Education works with the Ministry of Education to supplement existing classroom curriculum in rural primary public schools located in communities where Nuru farmers live. NK Education Outreach facilitates student workshops that focus on the five main components of literacy development: phonemic awareness, phonics, fluency, vocabulary, and comprehension. NK coordinators aim to build student confidence and increase student participation in literacy development through games, reading activities, and creative projects.

An evaluation team implemented a quasi-experimental methodology comparing the change in literacy during a pre-intervention year (2013) with its first intervention year (2014). Results of this study indicate that NK Education positively impacted its two core indicators: 1) average literacy proficiency level; and 2) percentage of children who can read at least at the paragraph level.

The Impact of Distributing School Uniforms on Children's Education in Kenya

Evans D & Kremer M, Ngatia M. J-Pal. Web page Accessed 02/02/16.

<https://www.povertyactionlab.org/evaluation/impact-distributing-school-uniforms-childrens-education-kenya>

NGO ICS-Africa distributed uniforms to children in the first four years of primary school in twelve selected schools in Western Kenya. All children who had experienced the deaths of one or both of their parents received free uniforms, and the rest of the beneficiaries were selected through a lottery. The schools also received general assistance through grants for construction, health care programmes, and agricultural programmes. An attendance dataset recorded pupil attendance at each of the twelve schools from 2002 through the end of 2004. Attendance was gathered as field officers made unannounced visits to each school multiple times each year and recorded whether each child was present. From these multiple visits, an annual child attendance average was collected.

Results: The programme appeared to have a strong positive impact of receiving a school uniform on student school participation. Giving a uniform reduced school absenteeism by 6.4 percentage points (43 %) from a base of 15 % school absenteeism. The effect was 3.4 percentage points larger for students who did not have a uniform at the baseline. This is a major reduction in absenteeism from a baseline school attendance level of 85 %.

The program appears to have had a positive impact on test scores in 2003, raising average test-scores of recipients by one quarter of a standard deviation. While the average test scores of uniform recipients were still observed to be higher two years after the program started by one fifth of a standard deviation, the effect is less precisely estimated.

The average effect of the program was an increase in school participation of 0.064 years per recipient child. The average cost of a school uniform was 436.86 Kenyan shillings (US\$5.82). Thus, the cost of increasing school by one year was $\$5.82 / 0.064$, or US\$90.94. While this was more than other interventions, such as deworming, which were tested in this area, it was still considerably less than the cost of many programmes which give beneficiaries cash, rather than goods.

Analysing the effectiveness of selected interventions on school resources for improving quality of primary education in Kenya

Obiero CO. (2012). UNESCO-IIEP.

http://www.sacmeq.org/sites/default/files/sacmeq/research/Masters%20and%20Doctoral%20Theses/obiero_charles_kenya_2012.pdf

This study examines Southern and Eastern Africa Consortium for Monitoring Education Quality (SACMEQ) policy suggestions and agenda for action on school resources and the impact of the policy interventions in Kenya's primary education system. The research dwells on the extent the school instructional materials support, a large scale investment, has contributed to quality in primary education. The Government did also implement targeted infrastructure improvement programme for improving pupil learning environment.

The Kenya SACMEQ I, II and III project data was used in this study that took place in 1998, 2000 and 2007 respectively. The school learning environment (SLE) and the School Instructional materials (SIM) variable scales were constructed using Item Response Theory technique. Descriptive and inferential analysis was used to explain level and trends of school instructional materials and the relationship to pupil learning outcomes in reading and mathematics among standard 6 pupils' across the provinces

One key finding was a significant positive coefficient between school instruction materials index and reading and mathematics scores in good SLE. Variation among provinces existed with Nairobi and North Eastern provinces reporting significant positive correlation in both poor and good SLE. The positive coefficient meant that there was likelihood of the pupils' learning achievement improving with increased SIM resources. In 2007 overall, the pupils in poor SLE had a negative correlation between the SIM resources and the reading and mathematics scores. The implication is that the school learning environment is also equally important for a likelihood of the pupils attaining higher scores. The explanation to this divergence in poor school learning environment can be attributed to pupil access to school and classroom library, home context, parents' attitude and participation among others.

The pupil's competency skills are anticipated to improve with increased school resource levels. Using the eight SACMEQ competency levels, two broad skills were derived that is, basic or advanced skills in reading and mathematics. About double the pupils in good SLE had advanced reading and mathematics skills compared to those from poor SLE. The same scenario was replicated in pupils from High SES, urban areas and with relatively more pupils with advanced skills from good than poor SLE. Over half the pupils from high SES and in good SLE had attained advanced reading and mathematics skills. The results also indicate that with increasing SIM scale, more pupils attain advanced skills in reading and mathematics. However, there was a decline in the proportion of pupils in SIM Level 2 and 3 with advanced reading and mathematics from 2000 to 2007. This being the period of policy intervention, with proven increase in schools resource levels in level 2. This means that despite the large scale intervention, there were other factors that downplayed the skills achievement levels in reading and mathematics. The possible explanation is on utilisation of textbooks and reading culture so as to improve reading comprehension and numeracy skills. A further analysis conducted based on a regression model for mathematics and reading indicated that in 2007, the school location, pupil SES, SIM index and SLE index accounted for a total variance of 17.3 % and 12.9 % in reading and mathematics respectively.

DFID Rwanda: Joint Education Sector Support (JESS) Narrative Progress Report, 6th~7th October 2010

HEART (2010)

<http://www.heart-resources.org/wp-content/uploads/2012/04/028-Rwanda-Narrative-Report-Mission-Nov2010.pdf>

In terms of the specific targets set in the Education Sector Support Programme, the following results have been observed:

- net enrolment in Primary has increased but remains below target
- Gross Enrolment Rate (GER) remains high but has fallen markedly over the period
- Primary completion rates have exceeded expectation
- dropout rates have fallen but remain high
- the qualified teacher to pupil ratio at the primary level has improved slightly but is below target
- the pupil to classroom ratio has worsened as has the pupil to teacher ratio, despite the extensive use of double shifts

The continued pressure on the primary sector is a consequence of focusing attention on lower secondary under the 9 Year Basic Education policy. The physical expansion at lower secondary has seen a 100% increase in the number of classrooms and the GER almost doubling. Fiscal effort by the government has remained good, with education's share of the budget steady at around 18%. There is continued need for reform at the primary level, where universal access is close but not achieved and where quality remains threatened.

In conclusion, JESS has been an effective means of supporting the sector.

Evaluation of Results Based Aid in Rwandan Education - 2013 Evaluation Report

Musker P, Clist P, Abbott P, Boyd C & Latimer K. (2013) Upper Quartile.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/312006/Rwanda-education-results-based-aid-evaluation.pdf

The RBA pilot in Rwandan education forms part of DFID's Rwanda Education Sector Programme (RESP). RESP is embedded in GoR's Education Sector Strategic Plan (ESSP) which is clearly aligned with Rwanda's Economic Development and Poverty Reduction Strategy (EDPRS), within which sector policies and strategic plans operate, and Vision 2020; the Government vision to transform Rwanda by growing social capital, fostering wealth creation, entrepreneurship, the development of the knowledge economy, regional and international economic integration.

The evaluation finds that, in year one, the RBA pilot did not make a SIGNIFICANT contribution to the observed increase in completion in 2012 (14,371 additional female students and 3,742 males), for which a payment of approximately £1.16 million was made by DFID to the GoR in May 2013.

The impact of the RBA pilot on teachers' proficiency in English will be fully evaluated in 2014. However, at present there is cause for concern arising from the low level of teachers' English language proficiency, which is likely to have a detrimental impact on the quality of education and, in turn, on completion. The baseline survey undertaken in 2012 shows that the vast majority of teachers surveyed (93.5%) currently possess only a basic level of English language proficiency. This includes just under 40% who are considered 'beginners'.

In the opinion of the evaluation team it is too early in the implementation of the RBA pilot to expect results or to assess value for money of the pilot from DFID's perspective. A possible contributing factor in the lack of impact to date is the late completion of the RBA agreement in October 2012, which may suggest that for most of the first year of implementation the GoR could not take additional actions (above and beyond those already planned) to improve achievement against the two results that were eventually included in the agreement.

Impact assessment of USAID's education program in Ethiopia 1994-2009

Method F, Ayele T, Bonner C, Horn N, Meshesha A, Abiche TT. (2010). USAID.

<https://www.usaid.gov/sites/default/files/documents/1860/Impact%20Assessment%20of%20USAID's%20Education%20Program%20in%20Ethiopia%201994-2009.pdf>

The Education Impact Assessment team was tasked with reviewing USAID assistance to education in Ethiopia since it began in 1994 with the Basic Education System Overhaul programme, BESO 1, through the current programme. The assessment focused on the impacts of this assistance on 1) education access, equity and quality, and 2) on the management systems and institutional capacities to plan, assess and implement improvement strategies. The assessment focused on identifying lessons learned, the sustainability of the initiatives, systems and innovations supported by USAID, the degree to which continuing support may be needed and used effectively, and on recommendations for future programme and project support.

The overall assessment is that USAID assistance has been key to Ethiopia's education progress over the past 15 years, both in terms of the specific impacts on management systems, quality improvement and institutional capacity building and in terms of the abilities of Ethiopians to undertake essential functions of needs assessment, systems analysis, policy development, strategic planning and coordination with decreasing reliance on external technical assistance for these core functions.

The Effect of Lengthening the School Day on Children's Achievement in Ethiopia

Orkin K. (2013) Young Lives Working Paper 119

<http://www.younglives.org.uk/publications/WP/effect-of-extending-school-day-ethiopia/wp119-orkin-lengthening-the-school-day>

Many developing country schools have four-hour school days and teach two groups of children each day. Governments are considering lengthening the school day, at great expense, to improve school quality. Advocates of the shift system argue the reform is unnecessary, as evidence from developed countries suggests increasing instructional time only improves achievement scores by small amounts. This paper is the first study of the effect of a large increase in instructional time in a low-income country. In 2005, the Ethiopian federal government directed school districts to abolish teaching in shifts and lengthen the school day from four to six hours. Districts implemented the reform at different times, creating exogenous variation in instructional time. The author uses a difference-in-difference specification controlling for time-invariant unobservables at school level on a unique longitudinal dataset. For eight-year-old children, a longer school day improved writing and mathematics scores, but had no significant effect on reading. However, effects are larger among better-off children: children who are not stunted, children from richer households and children in urban schools. The exception is that the reform has larger positive effects on girls than boys. The reform thus improves achievement on average, but may exacerbate gaps between wealthier and poorer children.

7. Additional information

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