



Summary of the NCRIBE Final Research Report

*Evaluating the Outcomes of a Sesame-IDPRS Teacher Training Program
for Teachers in Low-Resource Private Primary Schools in Ghana*

June 2013



Introduction

In Ghana, many teachers lack the formal training that would help them provide meaningful learning opportunities for the pupils in their classrooms. In response to this reality, Sesame Workshop and the IDP Foundation, Inc. implemented a teacher training program, entitled *Techniques for Effective Teaching*, in the IDP Rising Schools, which are low-resource private schools located in four regions in Ghana. This program aimed to provide support for teacher professional development and to enhance teaching strategies in approximately 100 IDP Rising Schools. In 2011, Sesame Workshop contracted the National Centre for Research into Basic Education (NCRIBE) to conduct a qualitative assessment of the impact of the teacher training program on the knowledge, attitudes, and behaviors of the program participants. The present summary provides an overview of NCRIBE's final report of their evaluation.

Program Description

The *Techniques for Effective Teaching* program consists of ten specifically tailored video modules, each of which addresses a specific teaching topic and relevant teaching techniques. Project materials include a DVD with the video modules, a corresponding teacher guide, and a school-based kit of learning materials. The ten module topics were determined through a series of focus groups with educators and stakeholders in Ghana, as well as a content seminar with education experts in Nigeria.

The final video modules are as follows:

- The Fundamentals of Teaching
- Developing a Child-Friendly Classroom
- Positive Discipline and Classroom Management
- Developing and Teaching with Creative, Low-Cost Materials
- Pupil-Centred Learning for English Literacy
- Pupil-Centred Learning for Mathematics

- Time Management
- Practical Ways to Make the Classroom Creative and Fun
- Differentiated Instruction
- Evaluation and Assessment

Each of the videos is hosted by two Sesame Muppets, Zobi and Kami, along with the famous Ghanaian actor, Matilda Asante. The accompanying teacher guide underscores key messages and encourages teachers to think creatively about implementing new practices in their classrooms. The materials were disseminated to 82 IDP Rising Schools through a cascade training process. The proprietor and a teacher from each of the IDP Rising Schools were trained “first-hand” by Sesame staff during a two-day Master Training. These “Master Trainees” then shared the trainings with other teachers in their schools (the “Step-Down Trainees”), through their own training workshops.



Pupils collect materials during Module 4: Developing and Teaching with Creative, Low-Cost Materials

Methods

The NCRIBE study aimed to assess the effectiveness of project materials and teacher trainings, as well as the project's impact on teachers' knowledge, attitudes, and behaviors related to the teaching techniques encouraged by the program.

Design

The assessment utilized a cross sectional design. The target population included teachers, head teachers, proprietors, students, and parents. To sample these groups, NCRIBE employed a multi-staged sampling technique, using purposive and random stratification sampling. Forty-one of the 82 participating IDP Rising Schools were chosen across four regions (Brong Ahafo, Ashanti, Upper East, and Western). In total, 74 Master Trainees participated in in-depth interviews, including 37 staff (20 teachers and 17 head teachers) and 37 proprietors. An additional 27 Step-Down Trainees completed similarly detailed interviews. To gain a thorough understanding of the impact of the program, 77 parents completed surveys, and 370 primary school students participated in focus groups.

Data collection took place in late May 2012, approximately 2.5 months after Master Trainings were conducted. Teachers, head teachers, proprietors, and parents were surveyed using an interview guide containing both open and close-ended questions. The adult participants completed a face-to-face interview. The students were interviewed through focus groups of five students each. Each focus group contained both boys and girls.

Participant Demographics

NCRIBE found that proprietor, head teacher, and teacher participants' ages varied between 19 and 66 years with a mean age of 26 years. There were more male (81%) than female (19%) Master Trainee respondents. There were also more male (64%) than female (36%) Step-Down Trainee

respondents. Most teachers (65%) had either Senior Secondary School (SSS) or O-Level certification (a junior secondary school certificate). The proprietors tended to have higher educational qualifications, such as A-Level certification (an advanced high school certificate) and first degrees (post-high school certification). Most teachers had less than two years of teaching experience, which suggests that schools may face the challenge of high teacher turnover.

As mentioned above, 370 primary school students participated in focus groups. Out of these 370 students, 180 were male and 190 were female. The ages for the lower primary students ranged from 8-12 years with a mean close to 8 years, and the age range for the upper primary students was 10-12 years with a mean close to 11 years. Seventy-seven parents were also interviewed. More men than women completed the parent survey, and the majority of parent participants held a middle school certificate and worked as farmers.

Research Participants by Category

Category	Number of Participants	Gender Breakdown	Additional Details
Master Trainees, Proprietors	36	Male – 78% Female – 22%	<u>Teaching certification?</u> Yes – 29% No – 71%
Master Trainees, Staff	37	Male – 81% Female – 19%	<u>Employment?</u> Proprietor – 5% Head teacher – 54% Teacher – 41%
Step-Down Trainees	27	Male – 67% Female – 33 %	<u>Teaching certification?</u> Yes – 15% No – 85%
Parents	77	Male – 52% Female – 48%	<u>Employment?</u> Farmer – 34% Petty trader – 30% Teacher – 24% Other – 12%
Pupils	370	Male – 49% Female – 51%	<u>Grade level?</u> Lower primary – 55% Upper primary – 45%

Analysis

NCRIBE employed a variety of data analysis techniques. The qualitative data were subjected to factor, thematic, and grounded theory analyses to evaluate the effectiveness of the teacher training program. These analytical techniques allowed for structuring, categorizing, and interpreting transcribed respondents' interview data. The quantitative data were analyzed with the paired-samples t-test, in order to investigate differences in the participants' reported teaching practices before and after they participated in the Sesame-IDP Master and Step-Down Trainings.

Key Findings

Impact of Teacher Training

"It helps us to improve the standard of teaching."

On the whole, the *Techniques for Effective Teaching* program appears to have had a positive effect on the study participants' teaching pedagogy, which in turn has the potential to impact the pupils' educational experiences as well as the community's view of the school. One teacher explained, "[the training] has helped improve the literacy and mathematical competence of children. This has also made the school popular and as a result, our [enrollment] numbers are increasing every day."

The program appears to have positively impacted the teaching skills and practices of the training participants. According to the NCRIBE study, 90% of both the Master and Step-Down Trainees said that the training has improved their teaching, and 88% said that the training has impacted their knowledge, attitudes, and behavior inside the classroom. The study also demonstrates statistically significant improvements in teaching strategies. Specifically, improvements were measured in using materials from the environment, having students work in groups, playing games and singing songs, role playing,

discussing problems with the whole class, including students' interests in lesson planning, evaluating student progress throughout the school day, and meeting with parents to discuss students' progress.

No statistically significant improvements were measured for preparing lessons (among Master and Step-Down Trainees) or providing feedback to students (among Step-Down Trainees). Additionally, while reports of caning as a disciplinary measure decreased among Step-Down Trainees, it increased among Master Trainees. Self-report data are generally unreliable, but this unexpected finding may result from the fact that using the cane for punishment has been a historically central disciplinary practice in Ghanaian schools. Because Master Trainees tended to have more teaching experience than Step-Down Trainees, it may have been more difficult for them to integrate the new, positive disciplinary practices into their teaching. It is promising that the practice of caning decreased among the less experienced Step-Down Trainees.

Useful and Important

“It was useful because it gave me an insight into how to manage classroom effectively.”

A large majority of the research participants felt that the training they attended was both highly valuable and essential to their teaching. There was very strong agreement among Master Trainees, Step-Down Trainees, and Proprietors that the modules were worthwhile, with 90% or more of respondents describing each module as “Useful”. Additionally, 90% or more of respondents felt the vast majority of the modules were “Important”. Participants described the modules as being highly relevant to their classrooms and to the challenges they face as teachers. When discussing the module on the Fundamentals of Teaching, one Step-Down Trainee expressed, “This training has made me now think of becoming a professional teacher.” This quote indicates an important step towards reducing the high teacher turnover rates in the IDP Rising Schools and similar low-resource private schools in Ghana.

When discussing the Time Management module, one Master Trainee stated, “[The module] was useful because it gave me an insight into how to manage [the] classroom effectively.” Others believed the trainings were useful for learning new pedagogical techniques and for thinking about how to use creative and low-cost resources for teaching materials. The module on Child-Centred Learning for Mathematics received more varied feedback than the other modules. Even so, 88% of participating Master Trainees and Proprietors described this module as “Important”.

Implementation in the Classroom

“This has helped the children to feel free and learn.”

Though the knowledge and attitudes of participating teachers and proprietors have changed, some of the teachers found it challenging to implement their trainings into the classroom, which is reflected to an extent through variance in the interview data. When asked how easy each module was to implement in the classroom, there was more variation than in previous questions in responses given by Proprietors, Master-Trainees, and Step-Down Trainees. Unsurprisingly, the implementation of the modules into the classroom was generally easier for Master Trainees and Proprietors than for Step-Down Trainees.

It is noteworthy that for nine of the ten modules, at least 50% of the respondents responded that the modules were “Easy” to implement. There was agreement across participant groups that the Differentiated Instruction module was difficult to implement, with 61% of Master Trainees, 52% of Step-Down Trainees, and 51.2% of Proprietors reporting that it was “Easy”. Challenges that made certain modules more difficult to implement included large class sizes, poor infrastructure, and time constraints. Findings also indicated that some teachers were not confident about implementing new techniques and therefore may have experienced challenges related to their own professional development and present

capacity levels. It is important to recognize that it may take time and practice to develop the skills necessary for implementing new teaching practices in the classroom.

Despite these challenges, participants reported applying their trainings in the classrooms in different ways. They were especially likely to make adjustments to make the classroom child friendly. A Master Trainee explained, “I no longer force everything on my children. I know that they are different from each other and as such I now teach my children based on their individual uniqueness.” The implementation of the Developing a Child-Friendly Classroom module was also supported with student data, with some students observing changes in desk arrangement that corresponded with a technique for classroom arrangement that is specifically highlighted in the video module. One student described different desk arrangements for different lessons, saying, “We arranged our desks in a line where one sits before and after me but arrange it in a circular form when it is story time with our teacher in the middle.” This was echoed by another student, who explained, “We were used to facing the board but now we sit in groups facing each other and during group assignment and exercises.” And a teacher also noted the successful implementation of this practice by sharing the following: “I tried grouping my pupils and using songs to teach them the capitals towns for the ten regions and it worked. Now pupils can mention the capital towns.” In addition, students frequently reported using natural and recycled resources during their lessons, and approximately half were familiar with the new Sesame Workshop learning materials.

Teachers also note that they are receiving support from the school proprietors to meet the challenges of implementing the new teaching techniques in their classrooms. Twenty-four of the 31 respondents reported receiving sufficient support from the proprietors, generally in the form of advice and guidance. In addition, some of the participating proprietors reported donating time and money to better meet the needs of their teachers.

Summary of Participant Feedback on the Training Modules

Module Title	Highly Useful	Highly Relevant	Very Easy to Implement
<i>Developing a Child-Friendly Classroom</i>	97.0%	99.0%	66.2%
<i>Positive Discipline and Classroom Management</i>	96.2%	96.2%	71.9%
<i>Developing and Teaching with Creative, Low-Cost Resources</i>	34.2%	98.1%	88.2%
<i>Pupil-Centred learning for English Literacy</i>	94.1%	95.3%	70.3%
<i>Pupil-Centred Learning for Mathematics</i>	94.5%	88.7%	72.0%
<i>Time Management</i>	98.1%	100.0%	79.3%
<i>Practical Ways to Make the Classroom Creative and Fun</i>	96.1%	97.1%	78.5%
<i>Differentiated Instruction</i>	95.9%	97.0%	55.7%
<i>Evaluation and Assessment</i>	100.0%	96.8%	77.4%

Parent Perspectives

In general, parent participants had positive perceptions of the quality of education available through private schools. They specifically noted that their children received more attention in private schools, and they felt that disciplinary measures were better. Nearly half of participating parents (n=33, 43%) were familiar with the Sesame Workshop – IDP Foundation teacher training program. One parent explained that the program “intended solving the problems the school was facing”, while another simply summarized, “[The program] help[s] private schools.”

Challenges

Participating proprietors and teachers at the IDP Rising Schools encountered various challenges when attempting to execute and implement the Step-Down Training program. Due to the high teacher

turnover rate, some of the Master Trainees left schools prior to implementing the Step-Down Training. Additional barriers to implementation included a lack of access to DVD players and/or computers, as well as inconsistent electricity. Another common challenge for both Master and Step-Down Trainees was the length of the training program. There was strong agreement across participant groups that the length of the training was too short and should be extended to better allow participants to fully absorb the content.

Recommendations

The longer NCRIBE report concludes with a series of recommendations for the improvement and sustainability of the teacher training program. First, they recommend increasing the Master Training from two to three days. They specifically recommend extending the time spent on the Differentiated Instruction module so teachers have the opportunity to more fully grasp the highlighted concepts and recommended techniques. Relatedly, teachers may need additional practice integrating the Sesame Workshop learning materials into lessons for students at different grade levels, to ensure that the materials are used to enhance—rather than replace—how natural and recycled materials are used in the classroom. Second, NCRIBE recommends revisiting the module on Pupil-Centred Learning for English Literacy to improve the clarity of content and simplicity of messages. Third, they recommend establishing processes to ensure that all Master Trainees successfully organize and execute a Step-Down Training for their colleagues. High levels of teacher turnover are likely to necessitate refresher training opportunities at the school level.