

Education as the weapon for the future:

A qualitative study of
education needs in the
Nuba Mountains of Sudan

2020



To Move Mountains Projects

*"providing quality education to
communities affected by conflict"*

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Executive Summary

This report presents the key findings of a qualitative study of people's beliefs and experiences pertaining to education in the Nuba Mountains of Sudan. It was carried out in December 2019 by To Move Mountains Projects (TMM), a 501 (c) (3) organization with a mission to provide quality education to communities affected by conflict. As the organization is responding to needs for a regional school curriculum, trained teachers, and general investment in the education system of Nuba, TMM initiated this study to inform its programming, document the needs and aspirations in regards to education, and establish community ownership over the anticipated Nuban curriculum.

The study consisted of a series of interviews and focus group discussions with 122 students, teachers, parents, and community leaders. The majority of these participants came from two communities in Nuba, which represented varied tribal, linguistic, religious, and socio-economic backgrounds. Additional interviews and focus groups were conducted in Uganda with secondary school students from across Nuba, whom To Move Mountains is sponsoring to become future teachers. Interview questions covered participants' cultural and social values, their community needs, their experiences with the current education system, and their desires for an improved education system.

Classroom observations were also conducted in primary schools in the two communities.

A summary of the study's findings is as follows:

State of Schools

- Schools in Nuba are confronted by significant material needs which affect student learning. These include needs for permanent school buildings, desks or benches for student seating, textbooks for students and teachers, and other scholastic materials such as notebooks, pens, pencils, and teaching aids.
- Schools also face an array of operational challenges, including a lack of salaries, food, and accommodation for teachers, as well as difficulties on the part of parents to pay school fees. Schools also have a need for water accessibility on the school compound and school feeding for students.
- Study participants additionally expressed a desire for more schools to be built in closer proximity to students, as well as for secondary schools, universities, and boarding schools to be opened in the region.

Teaching Practice

- Across our interviews and focus group discussions, participants expressed a need for more qualified teachers. Due to a shortage of educated people available to teach, many teachers lack adequate levels of education. Few have been able to attend sufficient teacher training.
- The teachers in Nuba, as well as the future teachers in Uganda, articulated several things they hope to learn through additional teacher training, including lesson planning skills, strategies for differentiation, knowledge of child development, and skills for classroom management.
- Due to inadequate teacher pay and competing responsibilities, schools suffer from high rates of teacher absenteeism. Although schools have a weekly class schedule, our observations and interviews found that many schools do not follow it, therefore leading to inconsistent class scheduling.

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- Teachers often struggle with lesson planning, not only because of a lack of training, but also because they lack curricular materials such as teacher textbooks and syllabi.
 - Primary school teachers in Nuba typically rotate classes, so that they teach many subjects in many grade levels. Many teachers and students, however, have articulated a desire for teacher specialization in specific content areas.
 - On average, classes in Nuba are reported and observed to include 40-50 students (with some reported classes having over 100 students). Ages of students in classes range widely.
 - Lessons often utilize teacher-centered methods with high levels of repetition and expository teaching. Few opportunities for meaningful student engagement were observed. Teachers also failed to contextualize lessons for students and clarify lesson objectives.
 - Students and teachers reported the frequent use of corporal punishment and harsh disciplinary methods in schools.
 - Although some teachers and students are aware of more effective teaching methods, they often feel that a shortage of materials hinders them from using such alternative methods.
 - Other noted areas for improved teaching practice include needs for more concrete teaching and for promoting higher-order thinking.

Needs for an Independent Curriculum

- Nuba currently does not have its own school curriculum, and has instead adopted those of neighboring countries, most recently South Sudan. For logistical, educational, and cultural reasons, the people of Nuba emphasized a great and urgent need for an independent, contextually relevant curriculum.
- Interview and focus group participants in this study described which subjects they would like to see included in a Nuban school curriculum. These included mother tongue, English, Arabic, religious education, Nuban history and geography, and practical content for math and science.
- Interview participants also identified various skills, including those related to agriculture, health, construction, business, and transportation, that would help develop their communities, and which schools could therefore promote among their students.
- In order to produce a list of social values that should be incorporated into a school curriculum, interviewers asked participants about their community strengths and the qualities they believe good leaders and community members possess. These included values of cooperation, respect, honesty, generosity, equality, faithfulness, and loyalty.
- Important elements of culture that could be incorporated into a school curriculum include traditional dance and wrestling, mother tongue, methods of traditional cultivation, Nuban history and heritage, and pride in being Nuban.

While this study documented many of the reported and observed needs for the education system in Nuba, it also captured many community strengths and hopes for the future. Despite the challenges that people face, communities have a strong commitment to education. Teachers volunteer their time, parents sacrifice to send their children to school, and students persist in difficult learning environments. The people of Nuba see education as the key to development. With continued investment, it can become their means to fight for an improved future.

Background

To Move Mountains Projects (TMM) is a 501(c)(3) organization with a mission to provide quality education to communities affected by conflict, so that they are equipped with the knowledge and skills for improved livelihoods, accountable governance, and restored social capital.

Historical Context

The Nuba Mountains region of Sudan, where TMM is initiating its work, has been in an almost-constant state of conflict since 1989¹. Due to instability, lack of investment, and even direct attack on schools, many children have not been able to receive an education. In addition to the instability generated throughout the years of conflict, the Sudanese government has not invested in education in peripheral areas such as Nuba. As a result, Nuba has some of the lowest-ranking education indicators in Sudan, and in the world at large².

Figure 1. Soldiers in the Nuba Mountains (photo from Nuba Reports)



In addition to the lack of investment in education, there is a great need for the people of Nuba to have ownership over the school curriculum. One of the primary drivers of war has been imposed Islamization and ideological oppression from the Sudanese government, which included a nationwide Islamic, Arabic-language school curriculum. Local leaders have protested, and instead adopted curricula of neighboring countries—first the Kenyan national curriculum, and more recently, the South Sudanese curriculum. However, because students are learning the history, geography, and languages of other countries, and because administrators are dependent on others to provide textbooks and exams, these curricula have failed to meet the needs of people in Nuba.

Project Context

Throughout their many years living in Nuba, TMM co-founders Ryan and Jazira Boyette have found that even in the midst of conflict, people's greatest desire is for education, which is seen as the key to overcoming poverty and achieving sustainable development.

¹ Nuba Reports. (n.d.) *History*. Retrieved from <https://nubareports.org/history/>.

² Central Bureau of Statistics, Sudan. (2008). Retrieved from <http://cbs.gov.sd/index.php/en/statistics/main/25>.

In order to address the need for a quality regional school curriculum, TMM is working in partnership with the people of Nuba to help develop a primary, and ultimately secondary, school curriculum for the region. Collaborating with a team of Vanderbilt University professors and other educational specialists, TMM will produce a curriculum and corresponding learning materials in an iterative design process with community stakeholders.

Yet because a curriculum is only as effective as the means through which it is taught, we will complement this curriculum with teacher training modules to promote improved pedagogy. This training will begin with 25 students whom TMM is currently sponsoring to receive their secondary education in Uganda in order for them to return to Nuba as future teachers.

The curriculum and pedagogy will first be implemented in TMM-run private schools, which, through our partnership with the regional Ministry of Education, will serve as hubs for replication throughout Nuba.

Methods

Objectives

In order to inform the curriculum development and teacher training programs of TMM in Nuba, a qualitative research study was conducted in December of 2019. The objectives of the study were as follows:

- To understand the current states of school operation and teacher practice, and how they could improve
- To understand the social and cultural values that would be important to incorporate in a curriculum;
- To identify practical skills needed for improved livelihoods and community development;
- To understand people's aspirations for education;
- To establish community ownership of the forthcoming curriculum.

Research Design

The study employed both individual interviews and focus group discussions, which aimed to capture both in-depth personal experiences, as well as a breadth of community perspectives. Using a purposive sampling method, four groups of relevant stakeholders were selected to participate in the interviews and focus groups:

1. Students (with emphasis on those enrolled in Primary 7 and Primary 8)
2. Parents
3. Teachers
4. Community leaders

The bulk of the research was conducted in two communities in Nuba: Kujur Shabiah (hereinafter referred to as Kujur) in Heiban county, and Tongoli in Delami county. These two communities were selected because they offered an opportunity to collect responses from constituencies of varied tribal, linguistic, religious, and socio-economic backgrounds, and because they are the anticipated sites of TMM's first private schools in Nuba.

Additional interviews and focus group discussions were held with the secondary school students in

Figure 2. A focus group with community leaders in Tongoli.



Uganda whom TMM is sponsoring to become future teachers in Nuba. These students originate from villages all across Nuba, and have been in school in South Sudan and now Uganda for the past four years. Two supplemental interviews were also conducted in the town of Gidel in Heiban county.

The interviews and focus group discussions followed a semi-structured interview format (see interview guide in the Appendix). The questions covered participants' cultural and social values, community needs, experiences with the current education system, and desires for an improved system. The interviews and focus group discussions were facilitated by two TMM researchers with the help of five local translators (who were used except in cases in which participants spoke English).

Figure 3. Laura Manni conducts an interview in Kujur with the help of a local translator.



Data Obtained

Overall, **21 individual interviews** and **11 focus group discussions** were conducted, with a total number of **122 participants** (72 males and 50 females)³. The number of interviews and focus groups for each location and stakeholder group are presented in Table 1 on the following page.

The interviews and focus group discussions were audio recorded, and ranged in length from 37 to 104 minutes, with the average lasting 62 minutes. The audio was later transcribed, and resulting data were coded and analyzed thematically.

³ The researchers made intentional effort to capture the voices of more women in this study. Yet, consistent with gender norms in the region, men made up a greater proportion of teachers and community leaders.

Table 1. Number of interviews and focus groups per location and stakeholder group

| | Location | | | | TOTAL |
|--------------------------|--|--|--|---------------------|--|
| | Kujur | Tongoli | Uganda | Gidel | |
| Students | 1 interview 2 focus groups | 1 interview 1 focus group | 4 interviews 2 focus groups | 1 interview | 7 interviews 5 focus groups |
| Parents | 3 interviews 2 focus groups | 2 interviews | | 1 interview | 6 interviews 2 focus groups |
| Teachers | 3 interviews 1 focus group | 1 interview 1 focus group | | | 4 interviews 2 focus groups |
| Community Leaders | 1 interview 1 focus group | 3 interviews 1 focus group | | | 4 interviews 2 focus groups |
| TOTAL | 8 interviews 6 focus groups | 7 interviews 3 focus groups | 4 interviews 2 focus groups | 2 interviews | 21 interviews 11 focus groups |

Additional Data

During the visits to Kujur and Tongoli, the researchers were presented with an unanticipated opportunity to conduct classroom observations. For two hours during the morning in each of the villages, the team observed, took notes, and collected photos and videos of primary school classes in session.

Findings

The interviews and focus group discussions offered numerous insights concerning the general state of schools and teacher practice in Nuba, as well as people's needs and desires for a regional school curriculum. Analogous themes arose across the various research sites, as well as among the different participant groups (teachers, students, etc.). Findings are therefore presented collectively as follows.

1. State of the Schools

Positive features

Overall, participants identified education as one of Nuba's greatest needs. Although they focused heavily on what the schools lack, they did indicate several positive features of the education system.

Namely, participants indicated a **strong commitment to education** within the community. Parents have a desire to send their children to school and often sacrifice much to do so. Pupils are also highly committed to learning, and have proven resilient even in difficult circumstances. Teachers, in particular, merit much praise. As one participant explained, *"Teachers are sacrificing their lives. [...] Although there are very many things that are not available, and the condition is not conducive to teaching and learning, the teacher offers his time and energy to continue helping the children."*

Figure 4. A teacher in Tongoli holds a lesson under a tree.



The mere **availability of teachers** is also a sign of progress for the education system of Nuba. As several participants iterated, the regional government used to bring in teachers from Kenya or Uganda because no educated teachers were available in the area. Today, many local people have completed school and are serving as teachers. Although schools still face a shortage of qualified teachers (see page 14), Nuban schools are now run entirely by local staff.

People have also seen positive outcomes from education, particularly in terms of **improved communication**. Several people talked about the advantage they have seen now that English has been introduced (in contrast to the former Arabic system of northern Sudan). Because English is an international language, translators are available for foreigners who come to visit the Nuba Mountains. People have been able to form relationships with outsiders, which facilitates exchange and can help bring aid to the region. Others also noted rising literacy rates: *"Before, even if you were given a letter, you could not read it if there was no one to explain to you. Now, [some people] are able to read and write letters themselves."*

Material needs

Throughout the interviews and focus group discussions, the profound lack of resources for schools was a prominent theme.

Firstly, participants in the study expressed an overwhelming need for **better school buildings**. Currently, most classes are held in huts made with thatch and other local materials. However, these materials need to be renewed every year due to damage by termites and rain, which creates a heavy burden for the community in terms of upkeep. Some classes, particularly the lower levels, lack buildings to meet in at all. Students may meet under a tree or circled around the teacher in the sun.

Within the classroom, students also suffer from **inadequate seating**. Most students sit on makeshift stick benches, metal bars, or even rocks. Classrooms don't have desks or tables, so students must write with books in their laps.

People claimed that these poor facilities significantly affect student learning. As one participant stated, *"The learning environment is not conducive. It will not help the child to understand or to stay in school."* Annual classroom reconstruction, for example, interrupts teaching and learning. In classrooms that are congested, *"when the teacher speaks, you cannot hear. Then you end up going home without getting any information."* *"When [students] are sitting on stones,"* one teacher explained, *"they cannot understand. It is itching their skin and the child will not concentrate on the board. But if there is a bench, at least they will concentrate."*

Another obstacle to student learning is the **lack of textbooks** in schools. With Nuba's dependency on foreign curricula, students have been unable to access textbooks; classrooms only have one copy available for the teacher. Teachers complain that even these textbooks are inadequate because they do not contain enough material from to teach (which is a particular problem for teachers without high levels of education and training themselves). As one teacher explained, *"We only use the pupil's textbooks, so it is hard to make a lesson plan. We don't have the teacher's guide and the syllabus, which provides the goals and objectives for the lesson to be built."*

In addition, teachers lack materials to help make students' learning more concrete. Both teachers and students communicated a need for demonstration charts, materials for mathematics, and equipment for classroom science experiments. Teachers explained that this would help them to teach lessons more applicably. *"For example, if you are talking about industry and there are no teaching aids,"* one explained, *"learners do not understand because there are things they have never seen in a rural area."*

Figure 5. A classroom in Kujur.



Participants also spoke of a great need for student materials, such as **pens, pencils, and notebooks**. Students described making efforts to economize by using their notebooks for two or three subjects. In instances where writing materials were not available, they would write with charcoal or in the sand with their fingers.

Other materials for which study participants repeatedly expressed a desire included **uniforms** for both teachers and students, **book bags**, better **blackboards** for classrooms, **sports equipment**, and **sanitary pads** for girls.

Many schools also struggle with **inadequate water and sanitation**. Many schools do not have boreholes or other water sources nearby, which results in shortages of water on the school compound and additional work for students to fetch water. Many schools also do not have latrines. In those that do, the latrines are often in disrepair.

Figure 6. P7 students in Kujur discuss the needs of their school.



Participants in our interviews and focus groups also described how a **lack of food** in schools impacts student learning. Schools have no program for student feeding, so students go the whole school day without a meal. As one interviewee stated, “A child stays in school for six hours and there is nothing to sustain him. When the stomach is empty, it is a problem for the child to understand the lesson.”

Operational needs

In addition to the many material needs of schools, people also described several challenges to overall school operation.

For one, schools lack the means to pay **teacher salaries, food, and accommodation**. Many teachers live far from the schools, so it is common practice for them to stay in a teachers' compound during the week and receive food allotments from the community. Without support from the government to pay teacher salaries, that responsibility falls to the

community members, who are often unable to pay. As a result, many teachers volunteer their time out of a desire to help the children. However, the lack of salary creates financial challenges for the teachers, leads to high rates of teacher absenteeism, and thus escalates the shortage of qualified teachers (see further explanation on pages 14-15). As one community leader explained:

We need teachers' incentives. There are teachers who have children and are responsible at home. You find that what is given as a salary for the teacher is not helping. [...] That has resulted in many teachers leaving. They have gone to look for a better job.

Despite the fact that the expenses covered by community members are often insufficient, the meager **school fees** that parents do pay often pose significant challenges for them⁴. Obtaining the money for school is particularly difficult for widows, orphans, and parents with many children. Several people explained that the burden of school fees sometimes results in parents sending only a few children to school, encouraging early marriage, or relinquishing school attendance altogether.

Regardless of the challenges that schools are facing, people expressed a strong desire for **more schools** to be opened. Because students and teachers must often travel long distances to school, communities would like to see more schools opened nearby. **Secondary schools and universities** are also a great need, since students often don't have opportunities for further education after primary school, and many people don't feel that a primary school education is enough for a student to make the kinds of community changes for which they hope.

Many students and community leaders would also like to see **boarding schools** opened, which they believe can help improve student achievement. Currently, when students go home after school, domestic responsibilities (especially for girls) and a lack of electricity prevent them from being able to study. As one boy explained:

After reaching home, [students] have to look after cattle and do other things that limit them from reading⁵. And that normally brings some poor performing schools. So they need to have boarding sections whereby pupils are kept in order to improve on their performance.

2. Teaching Practice

In order to better understand the state of education within the classroom, data on current teaching practice was collected by asking teachers and students to describe their classes, as well as by observing lessons in Kujur and Tongoli. Resulting information covered a range of themes, including teacher qualifications, desires for teacher training, realities of the classroom, school operations, and typical methods of teaching and discipline.

Teacher qualifications

Across our interviews and focus groups, informants emphasized the **need for more qualified teachers** in schools. Because of an overall shortage of teachers, many people have gone on to teach without receiving adequate training or credentials.

Participants claimed that many teachers enter the schools after only completing a primary education themselves. One student explained the problem: “When you finish P8⁶, you will go on

⁴ One community leader in Tongoli remarked that school fees were 3,400 SSP (South Sudanese Pounds) last year, which is approximately 11 USD.

⁵ Participants tended to emphasize that girls have more domestic responsibilities than boys, and therefore face more challenges to completing schoolwork. Boys can sometimes read while attending the cattle, but girls' work requires more attention. This student, however, explains that boys also find it difficult to study sometimes, and he connects that idea directly to school performance and the desire for boarding schools.

⁶ Equivalent of Grade 8. Grades in Nuba are referred to as Primary(P) 1, Primary(P) 2, and so on.

and teach because they are lacking teachers. But you don't know some things, so when you are asked a question, you will not answer in a good way."

Another student said:

You look at your teachers and you don't see that they are providing you with the base that you need at school. The teacher comes, he introduces something, he teaches only the parts that he knows, but he leaves the rest of the parts out. From my experience, I realize that we never finished a given syllabus of the class at all. We would just cover a topic or two, then that marks the end of the year.

Of the teachers we interviewed, levels of education varied. While none had gone to teach directly after primary school, six had only completed secondary school. Nine teachers had received one to three years of training at a teacher's college. Of those nine teachers, four had completed secondary school, four had completed some secondary school, and one had just received seven years of primary school.

Desires for teacher training

Of the teachers in this study who had not attended a teacher's college, many expressed a strong desire for more training. Of those who had attended a teacher's college, some felt that the training they did receive was not sufficient. A few, for example, explained that their time in the college was cut short because schools had an immediate need for teachers. Others described additional skills or knowledge they would like to obtain.

When the teachers in Nuba and the future TMM teachers in Uganda were asked to identify what they would hope to gain from additional teacher training, they responded with the following:

- Skills in lesson planning and developing schemes of work
- Knowledge about the learning process
- Skills for handling "slow learners" (differentiation)
- Skills in speaking and expression
- Specific teaching methods, namely for creative teaching
- Child development training, to understand the special needs and behaviors of children
- Classroom management training:
 - how to manage child behavior
 - how to direct the attention of students who are distracted or annoyed
 - how to manage the time and work of a teacher
- Computer training
- Training in school administration
- Additional content knowledge

Figure 7. A teacher in Kujur describes her training and some of the challenges she faces in the classroom.



One participant articulated the need for teacher training by explaining, “There are some teachers who are harsh to slow learners. They will tell them, ‘You are stupid. You are not getting [it].’ And they don’t bother. But if they went to the training, they would be taught how to handle them.” Another teacher explained that when a teacher is not trained, he or she will just stand and talk until the end of class. However, if the teacher is trained, he knows to give the learners time to practice and ask questions.

One person explained the need for additional content knowledge by saying, “Sometimes when you read from a textbook, you don’t understand well and you just give it to the child like that, without explaining and giving examples.” Another affirmed, “When you have more information, you have more to deliver to people.”

Classroom demographics

Of the interview participants who described their class sizes, most reported to have classes of **40 to 50 students**. Some claimed that class sizes could reach up to 100. On the days we observed, class

Figure 8. A daily school schedule posted in the head teacher's office in Kujur.

| Day | Period 1 | Period 2 | Period 3 | Period 4 | Period 5 | Period 6 |
|----------|----------|----------|----------|----------|----------|----------|
| Tuesday | Maths | English | Science | History | Art | Music |
| Friday | Maths | English | Science | History | Art | Music |
| Saturday | Maths | English | Science | History | Art | Music |
| Sunday | Maths | English | Science | History | Art | Music |
| Monday | Maths | English | Science | History | Art | Music |
| Tuesday | Maths | English | Science | History | Art | Music |

sizes ranged from 23 to 53 students, with larger numbers of students in the lower grades and progressively lower numbers of students in the upper grades.

Within each class, comparable numbers of girls and boys were observed⁷. However, the ages of students in individual classes varied widely. For example, among the P7 and P8 students in our focus groups, as well as in the classes observed, ages could range from 12 to 24 within one class.

Class scheduling

In both Kujur and Tongoli, teachers and students described a regimented school schedule, in which students are taught 6 classes per day, 6 days per week⁸. Each period is scheduled to last 45 minutes, and there is a short break mid-way through the day.

However, teachers did not adhere to this schedule in either of the schools we observed. One lesson in Kujur, for example, lasted 1 hour and 45 minutes, while others lasted less than 10 minutes. Some classes in Tongoli lasted 15 and 30 minutes.

⁷ In a past TMM study of 8- and 9-year-olds in Nuba, attendance rates for girls and boys were also equitable.

⁸ Government schools in Nuba are currently in session every day except Wednesday, supposedly to favor neither Muslim nor Christian holy days.

Consistent with the claims that a lack of teacher pay often leads to high rates of absenteeism (see page 13), a serious shortage of teachers was observed at the school in Tongoli. Most of the classrooms had no teacher at all, with students simply waiting for instruction. This absence of teachers not only dismantles the school schedule, but it also hinders students' learning. When a student in Gidel was asked what could help make her learning better, she succinctly replied, "If teachers come to every lesson with their lessons ready."

Lesson planning

In addition to the obstacle that teacher absenteeism poses for student learning, ill- or unprepared lessons also play a significant role. Teachers expressed a desire for continued training in this area, but referred to the lack of teachers' guides and other materials as a major hindrance to their ability to plan lessons. As one teacher explained:

Here we have a problem of lesson planning. It is hard for teachers to do it because of the issue of the syllabus. Because the syllabus provides the goals and objectives for the lesson to be built. We don't have these materials—teacher's guides and so on. We only use the pupil's textbooks, so it is hard to make a lesson plan.

Another challenge to lesson planning is also likely linked to a lack of teacher specialization. Currently, teachers rotate among the grade-level classrooms, teaching a variety of subjects. One teacher, for example, may be scheduled to teach P1 English during 1st period and P7 Science during 2nd period. The students in Uganda particularly noted a need for teacher specialization in Nuba. When comparing their schools in Nuba to the Ugandan secondary school they currently attend, they emphasized how much more knowledgeable teachers are when they specialize in one subject area. One of the teachers in Nuba also claimed that in order to train students for careers in medicine, or engineering, or any of the other desired outcomes, teachers need to specialize in one subject so that they can teach those specific skills.

Typical teaching practice

When describing a typical class, students and teachers explained a consistent routine in which the teacher arrives, greets the students, reviews the previous lesson, introduces a new lesson, then gives an exercise for students to do. The process of introducing a new lesson involves writing notes on the board for students to copy, asking students to repeat or to answer brief questions, and sometimes drawing pictures or diagrams on the blackboard.

Figure 9. Students wait inside a classroom for their teacher to arrive.



As one teacher described, “I will tell them this is what I am going to teach, and I will read for them several times until everyone is getting [it]. Then I will explain to them, and give them a chance to ask questions.” One student explained that her teachers typically do the following:

They first write the notes on the chalkboard. After writing, they will ask you to define. They will take a stick to point at the letters. “What is this? What is this?” Now you get up and read by yourself. [...] Sometimes they will read, then you will follow the teacher. For example, they will say, “Science is the study of living things.” And the students repeat.

The classes we observed followed a similar pattern, with **teacher-centered methods involving repetition and didactic teaching**. In a Pre-Unit⁹ English class, for example, students were learning lowercase letters. The teacher pointed to letters written on the blackboard and students repeated after him: “small a,” “small a,” “small b,” “small b,” and so forth. In math classes, the teachers would perform problems on the board for students to copy, and only offered minimal opportunities for student input. (For example, when performing a long operation, a teacher would say, “5 divided by 5...,” expecting the students to reply “1.”)

Whenever teacher would ask for student input, their questions did not measure if the students were actually comprehending. Teachers in our interviews claimed that asking questions in class provided a means for them to gauge student understanding; yet, in the classes we observed, teachers asked few questions. The questions they asked did not have much cognitive depth, and usually only a few students would respond. When explaining something, teachers would frequently ask, “Are you getting?” or “Do you understand?” and students would mechanically reply “Yes.” In one instance, even when a student replied, “no,” the teacher did not offer any additional explanation.

Figure 10. A teacher performs a math problem while students copy in their notebooks.



⁹ Equivalent to Kindergarten.

In another class, the teacher referenced the sentence "She is wearing a green scarf on her head," which was written on the board. When he asked questions about it, students rotely responded "yes," but, as shown in the following dialogue, they did not understand the meanings of the questions:

Teacher: *The scarf is on the head, isn't it?*
Students: Yes.
Teacher: *We wear the scarf on the...*
Students: Yes.
Teacher: *On the head. And we say the color of the scarf is...*
Students: (no response)
Teacher: *The color of the scarf is...is...*
Students: (no response)
Teacher: *Green, isn't it?*
Students: Yes.

Throughout the observed classes, **levels of student comprehension were unclear**. In a P2 English class, students were able to read words and sentences from their notebooks, but made no indication if they understood the meanings of those words. When students in observed math and English classes were asked to do exercises in their notebooks, most of them copied the problems, but left the answers blank.

In several of the lower-level classes, at least, higher levels of student engagement were observed. Teachers asked students to spell words or to read numbers from the board, and the children would enthusiastically raise their hands, eager to be selected. Whenever a classmate would answer a question, all the children would clap and sing, "Well done, well done. Try again another time." One teacher fostered participation by bringing a few students to the front of the class and having other students count them. In a lesson on the letter "x," another teacher had students draw the letter with their fingers in the air and form an "x" with their arms. With the absence of writing materials, lower-level teachers also took students outside to practice drawing letters and numbers in the sand.

Figure 11. Early grade students practice writing numbers in the sand.



Lesson objectives

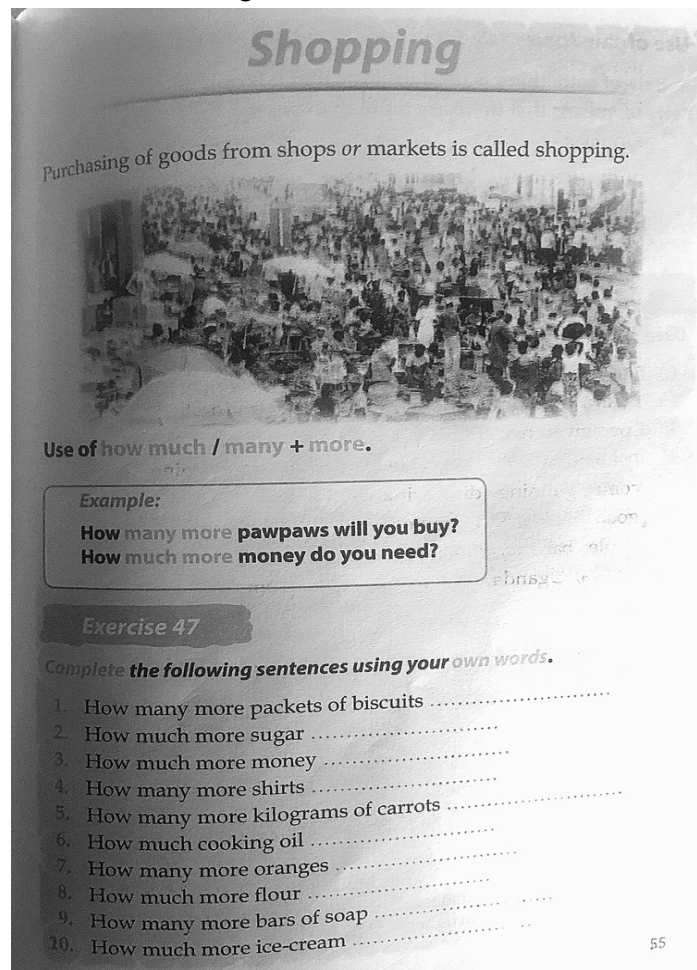
In all observed lessons, teachers failed to contextualize the lessons and clarify objectives for students. In one P5 math class, for example, the teacher taught an entire lesson on a specific method to find "L.C.M." without ever explaining what an L.C.M. is, or why it is used. At the end of the lesson, he asked the students what L.C.M. stands for (least common multiple), but the students were unable to respond. Although some of the students were able to complete the problems in class, their ability to use this skill in other contexts or understand its importance seemed unlikely.

This same problem with contextualization was observed in a P4 English class, this time influenced by the teacher's overdependence on a poor quality textbook. Copying exactly from a page in a Kenyan textbook (see Figure 12), the teacher began by telling students, "Today we will go for a new word—shopping" and he wrote a definition on the board for students to repeat. Below that, he wrote two sentences with the terms "how many" and "how much" without explaining the difference between the two or the connection with the concept of shopping.

The teacher then gave students an exercise in which students were to complete sentences with stems such as "How many more packets of biscuits...?" or "How much more sugar...?" Although the exercise contained the words "how many" and "how much," it did not assess students' ability to distinguish them. Students struggled to find unique ways to complete the sentences, and most left the sentences incomplete in their notebooks. Throughout the exercise and the lesson as a whole, the objectives for student learning were unclear.

The problem teachers face in framing their lessons may result from several of the challenges described in the interview and focus group discussions. As explained by one teacher on page 12, the lack of a curriculum guide and teacher textbooks may hinder teachers from understanding the learning objectives and preparing a scheme of work. The teachers' lack of content knowledge may also cause them to simply follow the lessons provided in the textbooks without their own deeper comprehension of the subject matter.

Figure 12. Page in a Level 4 English textbook used by the teacher during the observed P4 lesson



Discipline

In describing teaching practices in the classroom, participants in our interviews and focus group discussions, especially students, emphasized harsh disciplinary methods. One boy recalled:

When I was in Class 4, the teacher normally comes and the first thing, he will abuse us first before starting the lesson. Sometimes he will say, "Stones are better than you people." Then if you fail to answer some questions, he will immediately say, "You are stupid" or something of that kind. Instead of correcting you, he will end up insulting you, even he would cane you.

Another girl explained that her teachers "move through class with sticks. They cane you if you don't understand. You go late, they cane you. You don't do the assignment, they cane you." Students described beatings also occurring during morning assembly, for students who are late, are dirty, or refuse to do their assigned chores on the school compound.

Some students actually found these methods to be helpful, and they attested that they helped them to correct their behavior and to learn more quickly. Others, however, claimed that a good teacher is one who shows kindness and patience, and does not hit or cane students.

Some participants considered these harsh disciplinary methods to be a result of inadequate teacher training. One student, for example, said that beatings occur when teachers lack experience in helping students understand. "So they force you to understand by caning or threatening," he said. One teacher reported that in the training college, he learned that in order to teach properly, "you should not tell students, 'You are wrong,' or 'You have failed.' You should say, 'Go try again.'"

Awareness of other teaching methods

Although the interviews and classroom observations suggested that teacher-centered instruction is most common in Nuba, some teachers and students who participated in our study indicated their awareness of better alternatives. One teacher referenced "child-centered methods," while another described using group work to mix fast and slow learners together. One teacher also mentioned the possibility of using drama in the classroom by having students read or act out short pieces of a history lesson.

Some participants believed that the **lack of teaching materials** is what prevents teachers from utilizing these alternative methods. For example, some of the teachers described a need for science experiment materials in order to teach the subject more concretely, and a need for more textbooks so that students could read and synthesize the material themselves. As explained by one of the students in Kujur, "Learner-centered methods are best—giving a chance for the learners to interact. But we don't have the equipment. The teachers' method is only to teach until you go out, which is not useful to the learners."

The group of future TMM teachers offered a particularly interesting comparison of the teaching they experienced in Nuba to what they are experiencing now in Uganda. They contrasted the availability of textbooks and libraries, the expertise of the teachers, and the teaching methods used. One participant in the girls' focus group explained, "I was not prepared [for school in Uganda] because in Nuba, the way they are teaching does not require critical thinking. They just give you everything with free answers. Unlike in Uganda, you must write. It requires thinking." While

Figure 13. One of the TMM-sponsored students in Uganda describes his education in Nuba.



she described the **need for teachers to encourage higher-order thinking** in Nuba, several others also emphasized the **need for more concrete, or “practical” teaching**. In Uganda, students have access to labs and other resources to help apply their learning, whereas in Nuba, they had only been learning abstractly. As the students reflected on these contrasts, they expressed a desire to implement more effective pedagogies in their own teaching practice when they return to Nuba.

3. Needs for an Independent Curriculum

Because the people of Nuba have rejected the Arabic, Islamic school curriculum of the Sudanese national government, local schools have instead borrowed the curricula, textbooks, and exams of neighboring countries. The interviews and focus group discussions from this study covered many themes concerning the curriculum, including why participants want their own curriculum, as well as the subjects, skills, and values that they believe a Nuban curriculum should include.

Why an independent curriculum is needed

In every interview and focus group discussion, participants described the need for an independent Nuban school curriculum. Their desires for such a curriculum occurred for **logistical, educational, and cultural** reasons.

First of all, borrowing the curricula of other countries has made Nuban schools dependent on, and therefore vulnerable to, foreign school systems and their ability to deliver the needed materials. This has posed a particular challenge during exam time. For example, when students were studying the Kenyan curriculum, they were tested on subjects like Kiswahili which they had not studied. At one point, political tensions prevented Kenya from sending exams at all¹⁰, and at other times students had to take exams from a country different from the one whose curriculum they had studied. After switching to the South Sudanese curriculum, schools have also been unable to obtain enough textbooks. Students do not have access to any copies, and the one textbook provided to teachers does not contain the resources to help them guide their lessons and direct their scheme of work. Teachers also complain that the South Sudanese textbooks are quite shallow, and do not provide enough information from which to teach.

¹⁰ The national government of Sudan had pressured Kenya to end its education support to the Nuba Mountains, including the provision of exams.

Figure 14. Students in a classroom in Kujur.



Using foreign curricula also poses some educational challenges. Namely, pupils are expected to learn about things for which they have no frame of reference. As one student explained, *"I have never seen some of the fruits and animals we were taught in science. They were just telling us, but I have never touched or seen them with the naked eyes."* Another teacher described, *"Most of the pictures we see are different, but if the books could have mountains or names related to the Nuba people, this can encourage the pupils and motivate them to learn."* Because the foreign curricula contains so many unfamiliar elements, students must make a greater cognitive leap to learn new information, and struggle to apply it to the contexts around them.¹¹

Foremost, however, children need to learn their own history and geography. In the words of one community leader, *"The South Sudan curriculum is helping, but not all that much. When it comes to history, you find that children are not learning about their own history, but someone else's. They do not know their own history."* Another said:

Children are taught using the curriculum borrowed by another country, which is irrelevant to what we have here—the geography, the history, and so on. It does not give them that knowledge to make them good leaders in the future and to know about their land, the physical features, and the geography of the area.

Participants in this study not only believed that a local curriculum would have better educational outcomes for students, but several also explained that having a local curriculum could help to preserve Nuban culture. Adults lamented the fact that children do not know Nuban culture or use their mother tongue. They also regretted that when children must leave Nuba to receive a better education elsewhere, they bring a foreign culture with them when they return (which sometimes includes undesirable behaviors such as wearing short skirts or skin bleaching). A local curriculum would not only help children to know their own culture and avoid permeation from foreign cultures, but it could also help to instill a greater sense of pride in Nuba. As one woman explained:

Most of us have not studied our own culture. We have been depending on other people. Like for me, I learned the Kenyan syllabus. I do not know the history of Nuba. I do not want

¹¹ As shown in Figure 12 on page 20, references in the Kenyan textbook to goods, such as "pawpaws," carrots, and ice-cream, would be unfamiliar to students in Nuba.

my children or the children around me to be the same way I am. I need them to be different than me, to know their own culture and history, to feel that we belong to Nuba. It is important because it shows that you belong, you belong to that country, you belong to that people, that you are proud of the nation you are from.

Subjects to teach in schools

While participants strongly asserted the need for their children to have a curriculum that included Nuban history and geography, they also identified other subjects that they believe students should learn in school (see Table 2 on the following page). While many of the subjects they mentioned are those already being taught in schools, there are several others that people would like to see added (mother tongue, for example). Participants also identified content areas that they find important to include within existing subjects (for example, teaching practical information about health and hygiene within science). No significant differences in responses were observed between the interview sites and the stakeholder groups (parents, students, teachers, and community leaders).

In regards to language, English (the current language of instruction¹²) was unanimously agreed to be an important part of a future Nuban curriculum. However, participants also expressed an overwhelming desire to have their mother tongues incorporated into the school curriculum. People want to preserve the languages, and want students to develop the skills to read and write in the mother tongue, which people currently do not have. It is unclear, though, whether people would like mother tongue to be a language of instruction and, if so, to what extent.

Although not as favored as English or mother tongue, Arabic was also regarded as an important language to teach in schools. Arabic is a key means of communication in Nuba; it is widely spoken as a second language and lingua franca among people of different tribes. Despite the fact that many people perceive Arabic as the enemy's language, multiple participants in the study remarked, *"If you don't know the language of your enemy, you will not defeat your enemy."* Arabic is therefore not only important for communication and trade, but also for political discourse.

In addition, participants in this study frequently mentioned Christian Religious Education (CRE) as one of the most important subjects for students in school. Although some schools currently do not teach the subject, parents and students would like to see it return. They steadfastly promoted CRE as a means of knowing God and instilling values. Islamic Religious Education was mentioned occasionally as a necessary complement to CRE.¹³

¹² In the classrooms observed, teachers spoke English, with only occasional instruction in the mother tongue.

¹³ Although the majority of the Nuban population is Muslim, our interviews may have included more discussion of CRE because Tongoli has a higher proportion of Christians than other areas. In addition, Christians may see Religious Education as a more important part of the school curriculum than Muslims because the school schedule was recently changed to have class on Sundays.

Table 2. A compiled list of the subjects and content areas that participants believed should be taught in schools

| Subjects | Content areas |
|---------------------|---|
| Language | <ul style="list-style-type: none"> • Mother tongue • English • Arabic |
| Science | <ul style="list-style-type: none"> • Health, hygiene, and nutrition • Agriculture, animal science, plant and soil science, environmental science • Anatomy, biology, chemistry, physics • Sex education¹⁴ |
| Mathematics | <ul style="list-style-type: none"> • Operations (addition, subtraction, multiplication, etc.) • Problem solving (i.e. word problems) • Business • Finance and accounting • Measurement • Construction and engineering |
| Social Studies | <ul style="list-style-type: none"> • Geography • History • Culture • Civic education • Commerce and economics • Military science |
| Religious Education | <ul style="list-style-type: none"> • Christian Religious Education (CRE) • Islamic Religious Education |
| Home Science | <ul style="list-style-type: none"> • Cooking (for girls, and boys who are interested) • Sanitation • Domestic animal care |
| Others | <ul style="list-style-type: none"> • Arts and crafts (pottery, basketry, drawing and design, carpentry, etc.) • Games and sports • Music and drama • Debate |

¹⁴ Interestingly, a need for sex education only arose among the students in Uganda, but was mentioned in separate focus group discussions.

Skills that an education should promote

In order to discern how a Nuban school curriculum could best contribute to community development, interviewers asked participants to identify their communities' greatest needs and the skills that would be most useful to them. A compiled list of the needed skills is shown in Table 3.

Table 3. Skills that participants believe would be most useful for their communities

| Types of skills | Specific competencies |
|--------------------------------|--|
| Agricultural skills | <ul style="list-style-type: none">• Cultivation• Animal husbandry• Veterinary skills• Introducing modern farming methods, such as tractors |
| Medical skills | <ul style="list-style-type: none">• Treating diseases and injuries• Serving as doctors and nurses in local clinics and hospitals• Training the community on health, hygiene, and nutrition |
| Transportation skills | <ul style="list-style-type: none">• Road-building• Driving• Mechanics |
| Construction skills | <ul style="list-style-type: none">• Carpentry• Engineering• Welding• Masonry |
| Skills to improve water access | <ul style="list-style-type: none">• Digging boreholes• Irrigation• Ensuring water safety |
| Technological skills | <ul style="list-style-type: none">• Electricity• Computers• Communications technologies |
| Business skills | <ul style="list-style-type: none">• Entrepreneurship• Manufacturing• Trade• Financial literacy |
| Leadership skills | <ul style="list-style-type: none">• Administration• Peace-building• Advocacy• Problem-solving |
| Communications skills | <ul style="list-style-type: none">• Teaching• Preaching• Language skills• Writing• Journalism |
| Arts | <ul style="list-style-type: none">• Making pottery• Drawing |
| Manual labor | <ul style="list-style-type: none">• Digging• Hauling wood• Fetching water |
| Other | <ul style="list-style-type: none">• Tailoring• Mining• Environmental care |

Participants were additionally asked to identify the skills that they believe students should learn in school. While many of the skills corresponded with those listed above (cultivation, carpentry, etc.), people also listed several unique skills that they would like to see incorporated into a curriculum:

- self-management (hygiene, cleanliness, etc.)
- time-management
- public speaking and debate
- problem solving
- arts & crafts (e.g. pottery, basket-weaving)
- sports and dance
- cooking and home science
- traditional healing and means of survival

Figure 15. Girls in Nuba haul water from the nearest borehole.



Social values

Several questions in our interview guide also aimed to understand the values and leadership qualities that people believe children should learn. These questions included, “What are the best things (or strengths) of your community?” “What are the qualities of a good person in your community?” “What are the qualities of a good leader?” and “What values should students learn in school?”

Overall, similar themes arose from each of the questions, particularly when discussing the qualities of a good person and a good leader. These themes are listed as follows, in order of their prevalence in the interviews and focus group discussions.

| Community strengths |
|--|
| <ul style="list-style-type: none"> • Unity and cooperation <i>(The theme of unity and cooperation was by far the most prevalent. People come together to share their work as a community, rather than as individuals. They listen to each other, celebrate and grieve together, and work as a team whenever one family has a garden or construction project to do.)</i> • Patriotism/loyalty to the culture, people, and land • Hospitality <i>(People welcome strangers and visitors, and generously offer food and accommodation.)</i> • Helpfulness, especially toward the poor • Honesty • Strong work ethic • Sociability <i>(i.e. People are friendly and sociable.)</i> • Love toward others • Self-sufficiency • Faithfulness <i>(i.e. People are God-fearing.)</i> • Generosity • Peacefulness <i>(i.e. People are peace-loving and not aggressive.)</i> • Equality <i>(i.e. People do not differentiate or discriminate.)</i> |

Qualities of a good person and a good leader

- Honest (*Is transparent, does not steal or cheat, and is not corrupt.*)
- Fair and just
(*Equalizes everyone, does not discriminate or take sides, and is not tribalistic.*)
- Helpful
(*Looks out for the needs of others; helps the poor, elderly, and orphans; gives advice, and works for the development of the community.*)
- Faithful (*Has a deep faith in God.*)
- A good listener
- Wise
(*Is intelligent, discerning, democratic, and morally upright; gives good counsel; chooses words wisely; has good decision-making skills and good ideas.*)
- Peaceful (*Does not fight, is a peacemaker.*)
- Respectful
- Generous (*Shares selflessly, is not greedy, and sacrifices for others.*)
- Humble
- Social
(*Is friendly and has good relationships with others; a good leader fosters relationships with outsiders as well.*)
- A problem-solver
- Kind
- Loving
- Educated
- Hardworking
- Stands for the community (*Is patriotic, loyal, and advocates for the community.*)
- Courageous
- Exemplary
- Obedient
- Patient
- Responsible (*Is disciplined and provides for his or her family*)
- Hospitable
- Cooperative
- A good communicator

Figure 16. A Nuban woman prepares coffee for visitors.



Values students should learn in school

- Respect
- Responsibility
- Honesty
- Wisdom (*Valuing goodness and truth, and knowing right from wrong.*)
- Good, moral behavior (*Not drinking, smoking, or indulging in wrongful acts.*)
- Obedience
- Patriotism and loyalty to their culture
- Peacefulness (*Living in harmony with others and not fighting.*)
- Faithfulness (*Fearing God.*)
- Hard work
- Cooperation
- Discipline
- Hospitality
- Confidence
- Helpfulness
- Creativity
- Generosity
- Humility

Figure 17. Some children outside the teacher compound in Kujur.



Cultural values

In order to determine which elements of culture would be important to incorporate into a school curriculum, participants were asked what they found most important about Nuban culture or what they would most like their children to know about being Nuban.

Participants responded with the following (listed in order of prevalence within the interviews):

| Important elements of Nuban culture |
|--|
| <ul style="list-style-type: none">• Traditional dancing• Mother tongue• Wrestling• Cultivation, using traditional methods• Ways of dressing (<i>in particular, no short skirts or pants for women</i>)• History and heritage• Foods (<i>e.g. kiseru, asida, bilila, simsim, beans, fruits, local wine</i>)• Singing and playing local instruments• Worship (<i>i.e. the religions and ways of worship</i>)• Wedding ceremonies and traditions• Having dark skin (and not bleaching skin)• Sports and games, such as football and netball• Ways of construction• The old tradition of removing teeth, which is no longer practiced.• Keeping animals• Initiation ceremonies with cutting/marking• Oral storytelling• Traditional medicine• Hunting (<i>e.g. rabbits, hyena, rats</i>)• The spirit of communal work• Old traditions of bull-keeping and bull wrestling, which are no longer practiced.• Child-naming ceremonies• Tribal identification• Pottery |

Figure 18. Children in Tongoli perform a traditional song and dance.



Conclusions

The results of this qualitative study provide valuable information to inform the curriculum development and teacher training programs of To Move Mountains Projects in Nuba.

The interviews, focus group discussions, and classroom observations have outlined both the specific material needs that impact student learning (school infrastructure, student seating, textbooks, and writing materials), as well as the operational challenges by which people are confronted (a lack of teacher salaries and provisions, difficulties paying school fees, and a need for food and water in schools).

The data collected also provides insight into current teaching practice, which identified needs for teacher training, teacher specialization and increased content knowledge, curricular materials to assist in lesson planning, and more student-centered instruction.

Considering the desire among interview participants for a contextualized Nuban school curriculum, this study additionally identified the subjects, skills, social values, and elements of culture that people believe would be beneficial in a potential curriculum.

While this study documented many of the reported and observed needs for the education system in Nuba, it also captured many community strengths and hopes for the future. People have great pride in their land and their culture. They love the people in their communities, and are willing to work hard and sacrifice for the well-being of others. Despite numerous obstacles, communities in Nuba are strongly committed to education. Teachers work without pay, parents make great sacrifices to send their children to school, and students walk long distances and persist in difficult learning environments.

The people of Nuba see education as the pathway toward an improved future. They attribute much of their past suffering to war; they describe aerial bombardments on their schools and homes, loss of life and insecurity, and the effects of fighting on schooling, cultivation, and economic development. Yet, with hopes for peace in the region, education is their weapon of choice. In the words of one mother:

Education is like a weapon. It empowers you to fight with words and to stand firm in front of others. It creates opportunities for work so that you won't depend on anyone. An educated person will be able to face any challenge.

Appendix

Interview Guide, December 2019

Opener:

Introduce people facilitating the interview/focus group.

- We are working with Ryan and are here to learn what matters to people in this community and across Nuba.
- We want to make sure everyone in the group has an opportunity to speak.
- We hope you can be open and honest.

Part 1 (cultural and social values):

This is my first time to Nuba, so I was hoping you could tell me a little bit about your culture.

- What do you think are the most important things about Nuban culture?
- (For adults) What do you want your children (or students) to know are the most important things about being Nuban?
- Think of someone you know who is a good person in your family or neighborhood. What makes him or her a good person?

Part 2 (leadership and governance):

- Think of a good leader (don't need names). What makes him or her a good leader?

Part 3 (community development):

- What are the best things about your community? (What are its strengths? What does it do well?)
- What are the biggest needs in your community? (What would make your community a better place to live?)
- What skills, or types of knowledge, would be useful for someone to have in your community?
- How does education help you meet the community needs that you just described?

This part is differentiated by participant group, with separate sets of questions for parents, students, teachers, community leaders, and the future TMM teachers in Uganda.

Part 4 (education) - for parents:

- Why do you send your children to school? (What benefits do you want to see?)
- What should a primary school education prepare students for in the future? (What kinds of things do children do after completing school?)
- Do you know what your children are learning in school?
 - Is that different from what you want them to learn? How so?
- What do you think are the most important things a student *should* learn in school?
 - What subjects should students learn?
 - What skills should students develop?
 - What values should students develop?
- How do you know that your child is learning? (What evidence do you see to know that they have learned something?)
- Is your child getting what you want them to get from school? Why or why not?
- Did you go to school yourself?
 - If yes, how many years?
 - What was school like for you in Nuba?
 - Do you think your education prepared you for life? Why or why not? How could it have prepared you better?

Part 4 (education) - for students:

- Why do you go to school?
- What should a primary school education prepare students for in the future? (What kinds of things does someone do after completing school?)
- What is school like for you? (What does it look like day-to-day? What do you do? What is your classroom like?)
 - What kinds of things do you learn? (What subjects? What lessons?)
 - How are you taught those subjects and lessons?
 - What is your teacher like? How does he or she teach?
 - What materials do you have? How helpful are those materials?
 - What could make your learning better?
- What makes a teacher a good teacher? What makes a teacher a bad teacher?
- How do you know that you are learning? (What evidence do you see to know that you have learned something?)
- What are the most important things a student should learn in school?
 - What subjects should you learn?
 - What skills should you develop?
 - What values should be taught in schools?
- Is that different from what you are actually learning in school? How so?
- Are you getting what you want to get from school? Why or why not?

Part 4 (education) - for teachers:

- Why did you become a teacher?
- How did you become a teacher?
 - What education or training did you receive?
 - Was your training helpful? How could it have been more helpful?
- What is a typical class like? (What do you do? What do your students do?)
- What kinds of materials do you use as a teacher?
 - How useful are those materials?
 - What would be most useful to help you in your teaching? What could help make your teaching better?
- How do you know that your students are learning? (What evidence do you see to know that they have learned something?)
- What challenges do you face as a teacher?
- What should a primary school education prepare students for in the future? (What kinds of things do children do after completing school?)
- What are the most important things a student should learn in school?
 - What subjects should students learn?
 - What skills should students develop?
 - What values should students develop?
- Is that different than what you are able to offer children? How so?

Part 4 (education) – for community leaders:

- Why do you think education is important? What outcomes do you want from an education system?
- What do you believe a primary school education should prepare students for in the future? (What kinds of things do children do after completing school?)
- What do you think are the most important things a student should learn in school?
 - What subjects should students learn?
 - What skills should students develop?
 - What values should students develop?
- Tell me a little bit about the curriculum.
 - How was it chosen? Why has it been chosen?

-
- What do you like about it?
 - What do you not like about it?
 - Tell me a little bit about the teachers and how the schools run.
 - What qualifications do teachers need? How are teachers trained?
 - What are teachers doing well?
 - What could the teachers do better?
 - How do you know if the schools are successful or not? What evidence do you use?
 - Are children getting what you want them to get from school? Why or why not?
 - Did you go to school yourself?
 - If yes, how many years?
 - What was school like for you in Nuba?
 - Do you think your education prepared you for life? Why or why not? How could it have prepared you better?

Part 4 (education) - for 26 future teachers in Uganda:

- Why do you go to school?
- Why do you want to become a teacher?
- What was school like for you in Nuba? (What did it look like day-to-day? What did you do?)
 - What kinds of things did you learn? (What subjects? What lessons?)
 - What was your teacher like? How did he or she teach?
 - What materials did you have? How helpful were those materials?
 - What could have been better?
- What makes a teacher a good teacher? What makes a teacher a bad teacher?
- How did you know if you are learning? What evidence do you see?
- Do you think your education prepared you for school now? Why or why not?
 - How is school in Uganda different than in Nuba?
- What do you think a primary school education should prepare students for in the future? (What kinds of things does someone do after completing school?)
- What are the most important things you think a student should learn in school?
 - What subjects should students learn?
 - What skills should students develop?
 - What values should students develop?
- Is that different from what you learned at school in Nuba? How so?
- As you are getting ready to become a teacher yourself, how prepared do you feel? What would help you feel more prepared?
 - What training do you think would be helpful?
 - What materials and resources do you think would be helpful?

Part 5 (improving education):

- Generally, what are the best things about the school system in Nuba?
- What do you think should be done to improve the school system in Nuba?
- What do you think you can do to improve the education system?
- What things would you need to see to know that the education system is better?