



Uganda Humanist Schools Trust

Report on Visit to the Isaac Newton High School, Masaka

Saturday, November 6th, 2010

Introduction

Peter Kisirinya, the school's Director, has a full-time job as Head of Physics in a government school in Mityana, some hours away from the Isaac Newton High School. However, he spends every weekend at Isaac Newton, using Saturdays to teach science practical lessons and the remaining time to supervise building work and talk with staff, students and parents and guardians.

In the picture Peter is trying to persuade a local shopkeeper to allow her daughter, who is supported on a UHST scholarship, to stay at school. The shopkeeper has been managing as a single parent with two children. However, she has a chronic illness and her other daughter became pregnant and left home, so she is pressing her remaining daughter to leave school and help her at home and in the shop. The girl is doing well at school so it is a difficult dilemma. After making little headway with the mother Peter went to talk to her brother in the hope that he would be able to persuade her to keep the daughter at school.



The school is a 3 hour journey from Kampala, where I stay at the Makerere University Guest House. On this occasion Peter took me to the school in the morning and we spent the rest of the day together – in the school and, later, at the university guest house, where we had arranged a demonstration firing and evaluation of a new bio-mass gas stove for the school kitchen. Over the course of the day we had plenty of time to chat and for me to learn new things about the school.

School environs

The Isaac Newton High School is situated between the villages of Kateera and Kinyerere near Masaka, one of Uganda's main towns. The school is linked by murrum¹ road to the village of Kaddugala on the main Kampala-Rwanda highway, 7km away. Masaka is a further 11km south along the tarmac main road.

Peter's sister Winnie is the school's bursar. She lives in Kateera village, next to the school, with her two children. For sporting activities the school uses the Kinyerere village football pitch. The field is on a hill with stunning views across a green landscape of flat topped hills towards Lake Victoria in the east. The one downside is that the students have to move a herd of cows before they play football and cow pats can be very slippery under foot, especially when playing in bare feet! One advantage of the hilltop location is that the players get a warning sight from a distance of the late afternoon thunder cells which sweep inland from the Lake drawn by the rising air currents over the hot land surface.



All students live within fairly close vicinity of the school, with the furthest student just 3.2 km away. In general they walk to school, though 6 boys come on bicycles. Many parents and guardians would like their daughters, in particular, to board at the school. They feel that they would be safer in the school environment than in the village, where teenage girls can be subject to sexual advances from drunken males. They also feel that there are better facilities for study at school in the evenings and at weekends.

As the school registration formalities with the Education Department are not quite completed, students from the school are still required to take their O-level examinations in another school, which is a recognised examination centre. In this case, they travel to a Moslem School in Kaddugala for the entire O-level examination period. The Isaac Newton School has to pay fees to the exam centre school to cover their students' board and lodgings.

How the school operates

The normal school day begins at 8am and ends at 4.40pm. Additional classes are organised before school from 7am and in the early evenings after school for students approaching their final examinations. On Saturday mornings there are classes for all students and in the afternoon extra classes are laid on as required, especially for S4 and S6 students preparing for O and A-level examinations. The school is open 7 days a week, day and evening. This

¹ Murrum is an iron-rich laterite gravel soil used to surface roads throughout East Africa. It has high clay content and can be treacherously slippery when wet.

enables students to borrow books, use classrooms to read in peace, make use of the new computer network and play sports. The solar panels on the computer lab provide lighting in the evening for the girls' dormitory.



Students generally come to school without having had breakfast, so the school provides food during the day. From 10.30 to 11.00 they have a morning break with maize porridge (called ugali in Swahili or buji in Luganda). From 1 to 2pm they have a



lunch break where they are served a carbohydrate food with beans. The carbohydrate is usually a dough made from maize flour (called posho in Swahili or kawunga in Luganda), though sometimes they have sweet potatoes or cassava for variety. The few boarding students (10 girls and 6 boys) have a supper of posho and beans at 7pm in the evening. The only time they

have meat is if there is a special event, like the opening of the new computer lab, when a feast was organised for visitors and the local community.

The new computer lab has increased pride in the school and absence rates have fallen to very low levels since it opened. The new facility has enabled the school to raise the student fees to 50,000 Ug Sh/= (£16 per term) plus 10,000/= (£3) for school food. This is a lot for parents and guardians to find but the computer lab has actually increased their willingness to pay.



Students are meant to pay a full-term's fee when they arrive for the first day of term. However, only a

quarter are able to do this. About half of the students pay 50% of the fees at the start of term and the rest in instalments. A quarter of students pay all of their fees in weekly instalments. By the end of term up to a half of students tend to be in arrears. The school has had to send half of the students home with a letter saying they cannot return unless the arrears are paid. In almost all cases this brings forth the outstanding payments.

Students lose study time due to illness. Malaria is a problem. The main malaria season is between the long and short rains from June to October. There were 7 serious cases of malaria in August. Because the boarding students have no proper beds or mosquito nets they are particularly susceptible to mosquito bites. The school pays for malaria treatment from a local dispensary. The other common illnesses are colds, influenza, gastro-enteritis

and headaches. The school hopes in future to be able to build a dispensary and employ a nurse. There is a place reserved for the dispensary on the edge of the school grounds next to the village. Once open it will offer treatment to people from the local community as well as to students.

Staffing

The school employs 14 teachers. 11 are fully qualified and registered teachers, which is above the government's minimum requirement of 8. Three of the teachers work full-time and the remainder part-time. Most part time teachers have 2 or 3 day contracts. Their salaries, which are paid every Friday, depend upon the number of lessons they undertake to teach. The standard rate is 2,500 Uganda shillings (about 70 pence) per lesson – this includes a travel allowance of 1,500 U Sh/= (40 pence). Part-time teachers generally earn 20,000 shillings a day (£6) or £12 for the usual 2 days times 8 lesson commitment.

It is difficult to attract the best teachers when the school can only offer part-time work at low pay levels, but student numbers and fee incomes are too low to allow the school to do more. Peter has the idea of employing final year undergraduates from Makerere University to do some teaching on a casual basis. The university has some of the brightest students in Uganda and they have excellent subject knowledge – though they lack teaching experience. Peter's idea is to build a small sleeping block, which will provide single night accommodation for the university students who would travel from Kampala one day, sleep the night and do a morning's teaching before returning to Kampala. This will allow the school students to benefit from contact with inspirational young novice teachers, with positive effects on motivation and educational standards.

Registration

The school now meets all the requirements of the authorities to be officially registered in the list of approved Ugandan schools. The necessary paperwork has been submitted for final authorisation by the District Education Office. Unfortunately, the school has just been placed in the newly created district of Kalungu and, as the local administration is not yet up and running, formal registration may take some time.

Once the school registration is confirmed it will be possible for the school to apply to take government sponsored students. Uganda has started a phased introduction of free Universal Secondary Education (USE). Unfortunately few new government schools are being built so the government is encouraging private schools to provide the necessary places. There is an opportunity for Isaac Newton to become a USE school. If they did the school could receive up to 100 government sponsored students into their Senior 1 class in February 2011. It is a tempting offer as this will boost student numbers and the school will receive 65,000/= (£21) a term for each student taken. As the USE numbers work up through the school it will enable the school to offer free tuition to all the eligible children in the area. This would remove the need for UHST to raise funds to provide scholarships for needy students, because they will be allowed to enter school under the government scheme. The move to USE status will still allow the school to retain its Humanist ethos and support from UHST will still be needed to improve education and welfare standards.

Cooking facilities



At present school meals are prepared on an open fire with cooking pots resting on three stones. There are small eucalyptus plantations close to the school which grow by coppicing straight poles for use in building. Once the poles have been cut the school is able to buy the thinner branches and side growth at a low price of 100,000/= (£25 to £30) for a term's supply. Although the wood used by the school is from a renewable source, open fires are inefficient and produce a lot of smoke, which has health implications for the cook.

We have been working with the school to identify a better alternative. The obvious solution seemed to be a wood-burning stove constructed in situ. This is quite expensive - a large capacity three-pot wood-burning stove with a chimney custom-made by a builder using firebricks can cost up to £1000. However, such a stove would reduce wood consumption by two-thirds and considerably reduce the amount of smoke produced. It would also create a high capacity kitchen that would be able to provide for the cooking needs as student numbers grow.

After visiting the school, Peter and I attended the demonstration of an intermediate technology alternative to the wood-burning stove. I had met an American geographer who was part of team developing a Top Loading Up-Draught (TLUD) biomass gas stove. This stove burns dried bio-mass material including corn cobs and stalks, banana peel and papyrus stems which are plentiful and free in Uganda. The stove produces a strong heat with minimal smoke emission. The top heat is such that the material beneath it is gasified to produce the flame. Prototypes of the stove are being made by an artisan tin-smith in a suburb of Kampala for little more than £10 per unit. We have arranged for the school to be supplied with the first production model for testing.



New classrooms

In August the school was awarded a grant of £17,000 from the International Humanist and Ethical Union (IHEU) to enable it to build an additional 4-classroom block. Building work was already well advanced. By November the walls had been raised, the floors were being prepared and it is now ready for the roof to be fitted.

There is still work to do to finish two earlier building. The hall still needs windows and doors



and the science lab, also paid for by IHEU, requires windows, doors, furniture, shelves and cupboards before it can be used to teach science. Once these are done the school will have all the basic facilities it needs for day students.

School requirements in 2011

Discussion with Peter has identified the following needs that we will be trying to address in the course of the next year:

1. Further support for the Foundation Literacy Programme in the school by the purchase of textbooks for:
 - a. Senior 2 students (UHST is about to send £1,200 to the school's account at the main bookshop in Kampala so that a textbook can be bought for every child in each of their main subjects)
 - b. Senior 3 students (UHST is hoping to be able to allocate money to buy books for the Senior 3 year early in the New Year.)
2. Completion of the school hall and science lab.
3. Purchase of additional science equipment and chemicals so that science lessons can begin in the new lab.
4. Improvements to the school kitchen, kitchen equipment and replacement of open fires with stoves.
5. Additional water tanks for rain water capture. The first two tanks have been very successful, but total storage capacity needs to be increased by adding four more 5000 litre tanks. Additional gutters and drains are also needed to cope with storm water.
6. 100 single examination desks for the school hall.
7. Furniture for the school office and staff room
8. An additional 6-stance latrine.
9. Sports equipment
10. A school sick-bay and dispensary.
11. A girls' dormitory with bunk beds and mosquito nets is needed urgently.
12. The school is required to have a secure perimeter fence when it has boarding students.

If you feel you or your group would like to contribute to meeting any of these needs then please contact us at uhstinfo@gmail.com or download a supporter form from our website: www.ugandahumanistschools.org. Steve Hurd, 23 November 2010