

Students' and Teacher's Journal from our First Class
Gombe School of Environment & Society (GOSESO)
Lake Tanganyika Region, Kigoma, Tanzania

Fall 2009

"GOSESO teaches us the strategies to face future problems and gives us the techniques to make things better for ourselves instead of waiting for someone else to make it better. This is how we are supposed to live."
—Bashiru, GOSESO student



*Here is our first class of 22 students and three full-time teachers; not all students are present at time of photo.
Photo by Elizabeth Cross for GOSESO Tanzania*

Introduction

My name is Elizabeth Cross, and I am an American science teacher who is currently working for the [Gombe School of Environment and Society \(GOSESO\)](#) here in Tanzania. I currently teach mathematics, biology, and chemistry.

Many educational systems of the world are based on the idea that a student is a receptacle to be filled with knowledge and then regurgitate that knowledge on tests. The Tanzanian system is not much different. Many students receive an education without ever learning "to think." GOSESO is doing something different.

While the main focus of the current program is educating students in order to succeed during national examinations, GOSESO is developing an atmosphere that promotes independent thought, critical thinking, and debate through discussion.

Curriculum at GOSESO is being shaped by students and teachers. We are incorporating environmental literacy throughout all subject areas, as well as establishing environmental science and leadership as independent subjects. We challenge students to become self-directed and self-disciplined.

With student-centered hands-on education, GOSESO students will not only be able to set and accomplish goals for themselves but will be given the knowledge and ability to find solutions and create change within their communities.

I know that you are a part of this program because you saw a spark within it. You saw the potential for it to be something amazing. I wanted to give you more. I wanted to share photos and stories with you that extend beyond a newsletter and give you a concrete image of what is happening at the school. When you think of GOSESO you will not only imagine forests, but you will see the faces of teachers, students, and workers you help every day.

About the students and teachers



One of my students once said, "Education gives us the chance to think about the future and not just day to day." While this is true, it is often the simple day-to-day challenges, misadventures, and successes that make life interesting. While most of you reading this have never met me and most never will, I think it is important to share part of myself and my students with you so that you may get to know us.

There are 22 students at the school right now. They are very clever and it is upsetting to imagine what they could do if they had been given the luxury of an education with books, laboratories, and other materials that we find to be commonplace in the United States.

Every day, classes start at 8:00 am. We have three periods that are one hour long each and at 11:00 am we stop for breakfast- tea and a few sweet rolls. Classes resume at 11:30 am and last until 2:30 pm, when we have lunch (ugali, a Tanzanian flour dish, and beans) until 3:30 pm. We then have discussion periods or review for various subjects. The students leave for home at 5:30 pm. On Saturdays, the students take practice exams from 8:00 am until 12 noon.

There are two other teachers right now, Bertam and Boniface, and both are Tanzanians. Bertam teaches history, geography, and civics, while Boniface teaches Kiswahili and English. They put a lot of effort and energy into teaching and you can tell they care a great deal about the students. An American, Drew Braithwaite (who also does managerial work for GOSESO Tanzania) and founder Yared Fubusa (who teaches when he is not at Utah State University) are our two part-time teachers.

September 10th, 2009



Biology is probably the class I consider most successful at this moment in time. We currently have small class sizes. I have three students in biology class: Salum, Hajimu, and Paul. All are very bright and I can imagine them doing great things in the future.

On Tuesday, the students dissected a frog. They had never dissected a frog or toad before and the reactions were priceless. They could not believe how similar the toad was to humans.

It was, by far, the most bizarre dissection of which I've ever been a part. We did not have a table, so we did it on the floor and used newspaper. We did not have scalpels, so we used a pocket knife that was so dull I had to push really hard just to break the skin of the frog. We didn't have tweezers or any other utensils to use, so we pushed and prodded with sewing needles. And we didn't have any gloves, so we managed by putting our hands in zip-lock baggies. It was quite the experience.

The students loved every minute of it. They made diagrams and wanted to understand every aspect of the internal structures. They were curious, investigative, and self-motivated to find answers. After we had completely dissected the frog, Salum wanted to know how to put everything back correctly, sew it up, and revive the little fellow. I can see Salum becoming a doctor.

It is a unique experience to share practical discovery with someone who has only learned something theoretically for their entire life. I'm sure anyone who is a teacher knows how good it makes you feel to see a student truly grasp something when they do it practically.

September 21th, 2009

I had an exciting lesson plan for biology today. We only have 2 weeks left until exams so I'm really cramming. Paul was asking about motor neurons and I threw a pencil at him. He sort of caught it and I explained that his sensory receptors, a.k.a his eyes, had sent an impulse to his brain which had transmitted an impulse to a motor neuron to move his hand and catch the pencil. Then he threw the pencil back at me and I tossed it at Hajimu, who had obviously not been paying attention because it hit him in the face. Hajimu threw it back at me and when I threw it to Hajimu again, he still didn't catch it.



From left to right: Hajimu, Salum, Paul

It's not that Hajimu isn't coordinated. He plays soccer really well. He also catches on to stuff pretty quickly. While we were walking home from the school, some grass got caught around my ankle so I yanked my foot out and took a tall step to avoid getting snagged again.

Hajimu asked, "Madam, why do you walk like this?" and I said, "because the grass is tall and it was catching my feet." And he said, "No, it's because your neurons sensed the grass and your brain told your muscles to take bigger steps." And I said, "Hajimu, you've got it...sort of." And I was really happy. Then, because we just finished classification, he started listing off kingdoms, phylum, and classes, and giving examples from each, which was also very nice.

October 1st, 2009

Today for biology, I brought in a tadpole that I used as a final review for classification. We discussed the organism's environment, how it moves, how it reproduces, and the stages of metamorphosis it undergoes. It's very exciting to realize how much the students have learned in such a short span of time.

For the next few months we will have classes at the school for environmental science, leadership, economics, and computers. We will also work with the students on developing the curriculum for next year. Of course, there will be more stories and pictures. I know the students would love to hear from you, so please feel free to write anytime and ask any questions of me or the students.