No. 100 Summer 2019

# Learning Physics Using Robotics By Robyn Griffin

## "Welcome to NASA! You have been selected to participate in the following project.

**Overview**: Build a robot that is capable of driving around an obstacle course.

**Project:** NASA is in the market for a new planetary rover to explore the recently discovered planet named Tobor-3. You are required to construct and test a robot that is capable of following a set of commands to explore the planet's surface. Before the robot is deployed, it must be extensively tested to ensure it will perform as expected. Finally, you can't fly a technician to Tobor-3 to reboot the robot!"

Our 9<sup>th</sup> grade science students had eagerly been awaiting this moment when they would be introduced to robotics. As they opened the new EV3 Lego Robotics, which were generously donated by loving sponsors, the students surveyed the thousands of pieces and listened intently to my instructions on the care and maintenance of the Robotics set. The excitement filled the room and other envious students and staff members peered through the classroom windows ignoring their other responsibilities.

The class is designed for students to work in teams of two with the following goals:

- To nurture the ability to think creatively, analyze situations, and use critical thinking in a teamwork environment to solve problems;
- To teach how to examine a situation and determine an appropriate course of action;
- To assist students to view "mistakes" as opportunities for learning;
- To foster a "think out-of-the-box" mentality and visualize new possibilities;
- To aid in learning basic programming skills to get a robot to perform as designed;
- To transition thinking from theory into real-world situations.

"So, what is the circumference of the robotic wheel?" I asked. Students looked at me as if I was speaking a foreign language (no pun intended).

"What is a circumference?" one student responded. "Oh...I'm glad you asked," I replied, "you have studied this before...in books...but now it is time to apply it to real life."

I explained what circumference was and asked, "So...how do you find it?" One student responded, "Put a mark on the wheel...roll the robot forward until it completes one rotation and then measure the distance?" "Well...that's one way you might do it," I said.



From the Left: Crissy and Deborah

I placed the formula on the board. Students looked at me with puzzled expressions. They had worked these formulas before in a math book, but never in a real-life situation. The students slowly began to follow the steps, working together with their partners and checking calculations. After correctly answering the question, I then asked, "So...how far will it travel if the wheel rotated six times?" Turning, I wrote on the board:

"What is the circumference of our van wheel?

"If it is 5 miles to Hili how many rotations will the van wheel make?

"How many rotations will it make traveling to Dhaka (163 miles)?"



**Brianna** 

Students grabbed their tape measures and ran for the garage...and real-life learning had begun.

This was an extra 35-minute Friday afternoon class which the students were forced to come to and it was taking their free time. Kids don't like extra classes…but two and a half hours later they were forced to reluctantly put away their things. Real learning is too much fun! Younger students were still crowding the windows dreaming of the day they would reach the  $9^{\text{th}}$  grade.

Thanks to you, our generous supporters, students at Bangla Hope are getting out of the rut of theoretical learning from a book and leaping into the fun world of practical, applied education.



From the left: Marc, Alex, and Savanna

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## Glorious Victory from Seeming Defeat By Robyn Griffin

Every time we turn around at Bangla Hope, we have something for which to praise the Lord. This year our first 10<sup>th</sup> graders were preparing for their government exams which occur in February. Books are opened and nerves are on edge as the country prepares for their 10<sup>th</sup> grade students to be evaluated. Those who succeed advance to the 11<sup>th</sup> grade, but those who fail in **one** subject return to the 10<sup>th</sup> grade to prepare to retake their exams the following year.

Each year the government issues a practice test in November so the students can discover their weaknesses and strengths prior to taking the finals in February. This year, however, the practice test came with new government regulations: those who fail in one subject on the practice test will not be allowed to take their final exams.

The pressure had intensified now that passing the practice test was nearly as important as passing the final.

In early December, I was called by the Vice Principal of Seventh-day Adventist Maranatha Seminary (SAMS), where our eighteen  $10^{\rm th}$  -grade students were studying and was asked if I could meet with him immediately. Upon arriving at the campus, I was informed that out of eighteen

of our students enrolled at their school only one had passed the practice exam. In fact, out of all the school's 117 10<sup>th</sup>-grade students, 100 had failed. I was shocked! Now what?

The school informed me that the new government regulation allowed the schools discretion under certain circumstances to allow students who failed the practice test to take the final exams after all. There was one provision, however. The students who failed the practice exam would be required to spend the next two and a half months intensively preparing. The intimidating subject which had proven to be a stumbling block for many students was, you quessed it...MATH!

Most of Christmas break was spent with tutors preparing for finals. By the first of March the exams were finished. Now they had to wait until May 6 to learn their results. Finally, the day arrived and the anxious students got online to discover if they were new 11<sup>th</sup> graders or returning 10<sup>th</sup> graders. One by one, each of them rejoiced to know that God had blessed them, and they were on their way to new horizons.

Many of you have been praying for our students and we thank you sincerely. Your prayers have been answered! Eighteen new 11<sup>th</sup>-grade students will begin school in July. Congratulations to our 11<sup>th</sup>graders!

#### **10th Grade Exam Results**

Marissa Roy	3.11
Joshua Hembrom	3.78
Rebecca Halder	3.72
Diana Sircar	3.61
Jennie Gayen	3.72
Danny Halder	3.72
Konny Dhali	3.50
Moni Halder	3.56
Melanie Modhu	4.89
Bristy Das	3.83
Kami Bala	3.78
Mitali Sircar	4.06
Joseph Panday	3.89
Kimberly Bala	3.92
Rupa Kisku	3.56
Caleb Mazzi	3.78
Sherry Baroi	3.83
Santo Kisku	4.72

## Reya and Ruppom By Robyn Griffin

People often ask me, "Are your children *really* orphans?" I often answer such questions with a story. Here is the story of two of our newest Bangla Hope family members, Reya, age 4 and Ruppom, age 3 who are siblings.

Reya and Ruppom do have parents, but their story is a sad one. Their mother left suddenly one day to live with another man. Their father works in the fields every day but cannot make enough to properly care for the family. The grandmother did her best to care for Reya and Ruppom but, due to poor health, could not manage. She began to search for an organization to provide for them. She heard about Bangla Hope and applied. After fully examining the situation and serious prayer the Executive Committee felt that these children were ones we might be able to help. We are careful about taking children much older than two because it can be very difficult on the children emotionally. Another problem was the fact that neither child spoke Bangla.

However, since their arrival in February, both children are fitting in nicely, and thriving.



**Left to right:** Father, Ruppom, Reya, and their Grandmother

So...you answer the question...are they really orphans? Not anymore! Welcome home to God's family Reya and Ruppom.

Both children need sponsors. If you feel the Holy Spirit impressing you to sponsor one or both, please let us know. You might just be the one God has in mind to sponsor these two precious children.



Reya Kisku



Ruppom Kisku

\* These two photos were taken in April—about 2 months after their arrival at Bangla Hope.

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## Building Update By Robyn Griffin

Progress seems exceedingly slow sometimes when we anticipate change. The good news is, God will direct our paths if we allow Him to do so.

In September of last year, the U.S. Board approved the Multi-purpose Building plans which I then took to Bangladesh where they were to be submitted to the Non-governmental Organization (NGO) oversight committee which governs the Bangla Hope's operations within Bangladesh for approval.

Prior to submitting the plans to the NGO we needed to re-estimate the cost of both the Multi-purpose building and the Girls' Dorm for several reasons.

First, the original estimate of \$130,000 for the Multi-purpose Building was for a completely different structure. It was originally fashioned after the way most of the buildings in Bangladesh are built. Ultimately, it was decided that a completely different design would be needed. The architectural and engineering plans were ultimately produced without charge by Ken Gray of Engineers Without Borders. He did a phenomenal job though the process did take a year to complete.

Secondly, the original estimate for both buildings had been determined several years ago and much has changed in Bangladesh since then.

In January 2017, the country's politicians voted themselves a 100% pay increase which has led to skyrocketing prices in everything including the cost of construction materials.

One final contributing factor to the building delays is that, due to a variety of reasons, (medical, family emergencies, etc.) since my return to Bangladesh last October, our Bangladesh administrative team has been running with a skeletal crew. Thus, we have not been able to focus on these projects as we would have liked. Through all this staff upheaval, our builder was able to re-estimate the cost of the newly designed Multi-purpose Building and the dormitory plans, though the process took several months.

Our building projects, which we hope will proceed simultaneously since the buildings are in the same location, will advance in the following phases:

- Submit all plans to the NGO for approval.
- 2. Begin work on the foundations, water supply, and sewage systems.
- Continue building and fundraising to complete the Multi-purpose Building and dormitory one floor at a time.
- 4. Purchase furniture and equipment for the completed building projects.

We are currently in Phase one. The plans have been submitted to the NGO and we are awaiting their approval. Thank you for your support both in prayers and in finances. May God direct our feet and guide us each step of the way.

#### **Updated Estimates:**

#### **Multi-purpose Building:**

Original estimate: \$130,000 (taxes not

included)

New estimate: \$270,819 (taxes included)

#### Girls' Dormitory:

Original estimate: \$350,000 (taxes not

included)

New estimate: \$432,426 (taxes included)

## Golden Opportunity Update By Robyn Griffin

Just after Christmas 2017, we were visited by a former Bangladesh police of-ficer asking if we were interested in purchasing some land from him. He owned three acres of farmland nearly adjoining our property. Naturally, we were interested particularly since purchasing such a large piece of property at one time is rare. Generally, we are offered two-tenths to nine tenths of an acre from those interested in selling.

Suchitra (our administrator), Litton (our CFO), a local land surveyor, and I spent an entire day with this kind man and his wife discussing the possibility. By the end of that day we had reached an arrangement that all thought was fair. Bangla Hope would lease the land from the owner for four years with the option to buy. We would be given two years to raise the funds during which time the price of the land would be frozen.

If, after two years, we had not raised the funds he would be free to sell it to another party.

God generously blessed and the funds were raised within six months! The legal side of things has taken longer, and the poor health of the owner has also been a barrier, but, the purchase was finally set to take place on June 3.

Pressure has come from the family for us to purchase the land quickly. Upon investigation it seems that the reason for the pressure to sell quickly is because the land is not **fully** theirs to sell. It was finally determined that of the 3 acres for sale, only 2.6 acres **are** clear to sell. However, the family is unwilling to part with that 2.6 acres without selling the remaining portion as well. According to the government land officer, it could take three to four years to unravel the mess with the remaining acreage.

Now the ball is in the seller's court.

Do they want to sell the 2.6 acres or not? We have given them until the end of this June to decide.

If they do not wish to sell, then we will be contacting those of you who have sacrificed for this venture to discuss what you wish to do with the funds.

Thank you for your prayers and support in this matter. We truly want to do what is right and what is God's will. We praise the Lord that He has revealed these complications prior to the purchase. An update will follow once the family makes a final decision.

Meanwhile, this week our children and our staff are busy harvesting the first cutting of rice for this growing season on this leased land as well as on our own surrounding fields.

## New Power is on the Way By Robyn Griffin

In our Winter issue for 2018 we published an article entitled *The Constant Need for Power.* We reported that the new generator would cost \$56,000 which included

VAT and tax, transportation, and complete installment. The response was overwhelming! The full funds have been received and the purchase of the new generator will take

place, Lord willing, in July 2019, when we begin our new fiscal year. Thank you for your overwhelming love to us and we thank God for His rich blessings! No. 100 Page 4

# **Bangla Hope Contact Information**

Office Hours: Monday—Thursday 9am—3pm (PT)

**USA Mailing Address** 

PO Box 6853

Kennewick, WA 99336 Phone: (509) 586-4259

Email: children@banglahope.org Website: www.banglahope.org www.facebook.com/banglahope.org



Student Correspondence Only

Bangla Hope

Student Name & Number

Village: Hazrapur

Post Office: Mazina (Uchai)

Upozila: Panchbibi, District: Jopurhat

Bangladesh

### Getting Started with REACH By Julia Lehman

We're excited to introduce you to REACH - the new tool we'll be using to manage our sponsorship program, projects and fundraising campaigns. One of the reasons we chose this new system was for its many benefits to you - our valued supporter.

With REACH, you'll have 24/7 access to your data. You can edit your contact and payment information, review your donations, print your tax receipt documentation (we will still mail out tax receipts annually in January) and manage your sponsorships. You can also view pictures of your child/children.

To login to your account, visit our website at <a href="www.banglahope.org">www.banglahope.org</a> and click the "Login" button on the top right corner. This will take you to a page where you can sign up for an account. You may also contact us at the office, we would be happy to assist you with setting up your login.

We are currently in the process of transferring all supporter's recurring donations over to REACH. If you have an automatic recurring payment, We are happy to walk you through setting up your account and converting your payments to REACH, or, we are able set it up for you.

With this new system, our supporters now have the option to give a little extra to help cover the cost of the card transaction fees. This 3% fee is a small percentage of the total donated, but it really adds up by the end of each month. Every bit helps!

Should you have any questions, please contact us. We're grateful for your continued support!

#### **POCKET MONEY DEADLINE**

August 31, 2019 is the cut-off date for sending in (or charging) pocket money for your student for the next school year.

IN HONOR OF

Thank You

Brent, Cindy, Donna & Elaine (His children)

By Al Wiggins

SPECIAL PEOPLE HELPING CHILDREN

Thank you

**Dr. Ken & Lana Rose**:25 lbs. used children's clothing and 25 lbs. crayons

IN LOVING MEMORY OF

Thank you

Arlene Wiggins (Wife of 50

years)

**Dougie Wiggins** 

**Del Wiggins** 

**Elmer Wiggins** 

**Ruth Wiggins** 

John & Thelma Lamberton

Paul & Lena Adams, (Missionaries to Thailand)

By Al Wiggins

**Marjorie Philiber** 

Mr. & Mrs. George Chappell (Parents)

By Bey Holland

# **Financial Update**

(As of May 30, 2019)

Girls' Dorm:

\$365,328.89 received of \$432,426

**Multi-Purpose Building:** 

\$161,643.50 received of \$270,819

## **SPONSORSHIP OPPORTUNITIES: Village School Students**

Name: Alina Maria Sarker

Gender: Female Grade: Kdg School: Ramshil



Village school students receive tuition, books, supplies and a uniform. You will receive a photo, name, grade level and perhaps a bit of personal information as available. The tuition rate for all village school students is \$20/month or \$220/vear.

Name: Biprojit Samadder

Gender: Male Grade: Kdg School: Ramshil



If you are interested in sponsoring a student, please give us a call or visit our website for more information.