

SCIENCE MY WAY (SWAY) BOOK CLUB: *POST-ACTIVITY REPORT*

The SWAY book club outreach was born out of a genuine passion for reading and the need to extend the opportunity to young people to learn that it can serve as a tool for education, growth and exposure to new ideas. This initiative was born to inculcate a deep and genuine interest in reading to young people, especially those in underserved communities and to expose them to a broader world of science by giving them access to books.

The book club was carried out to increase curiosity and participation in science among young learners in orphanage homes.

The SWAY outreach program, sponsored by The Biochemical Society, United Kingdom was carried out across two orphanages in Gonin gora, Chikun local government area Kaduna State Nigeria.



The team lead, Joshua Blessing Amuseh addressing the learners

The team lead, Blessing Amuseh Joshua addressed the learners by enlightening them about what a book club is all about and the activities involved in running a book club, she also told them about the importance of reading by making reference to how she has personally benefitted from reading.

The participants were divided into smaller groups and engaged in a guided book reading and discussion sessions which was collectively anchored by members of the team Oneness Emmanuel, Sani Yahaya and Grace Davou.

A science themed book “Zara’s journey from a refugee camp to space by Uchechi Mba Uzoukwu” was chosen for the Junior session. The book was selected because it promotes inclusion, represents underrepresented voices in STEM, inspires interest in science careers and encourages resilience. Its story telling approach makes STEM relatable, engaging and motivates Nigerian children to see themselves as future scientist.

The senior session read excerpts from “I am a Nigerian in STEM by Foluke Oyeleye” because of its EDI focus, it also made STEM careers feel achievable and exposed them to a wide range of careers and it provided real life role models for the participants to emulate. The book also gives room for reflective and engaging discussions.



The participants during the book reading session

They were introduced to a “word relay” game which was introduced to improve their science vocabulary, spelling and team work and a simple density experiment to introduce new science concepts while keeping the learning fun and competitive.



Word Relay game

A guest scientist, Manasseh Danbaba introduced the concept of DNA to the participants in a fun and engaging way by likening it to a recipe book with specific instructions that are responsible for the transmission of characters from parents to off springs through genes. The participants were also introduced to the different base pairs of the DNA and the unique nature of their pairing in order to make them understand the unique nature of living organisms. An experiment was carried out to illustrate the process of DNA extraction from living organisms using a banana for illustration. The experiment was conducted with common everyday items like dish soap, methylated spirit and transparent cups in a bid to

show that they can relate to science in their everyday lives and answer scientific questions with the things around them and that science is not an abstract concept but it relates to our everyday lives.



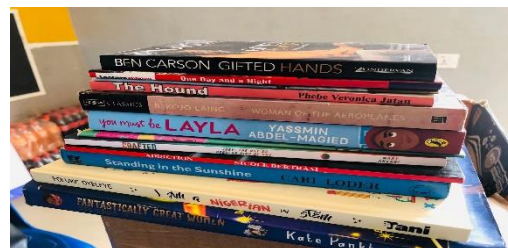
The balloon acronym game was designed as an interactive and engaging way to reinforce students understanding of scientific terms. The balloons were prepared in advance with acronyms like DNA, RNA written on them and the meanings of the acronyms written on different balloons, the participants were expected to work in groups to match acronyms with their correct meanings. This activity provided a fun way for to improve understanding of scientific terminologies and memory retention through active participation.

As a part of the STEM engagement session, the participants made DNA bracelets using colored beads to represent each DNA base with participants working in groups to create their own bracelet in accordance with the DNA sequence of any chosen organism from the charts provided to them thereby reinforcing the concept of DNA through visualization. The DNA bracelet made science seem more tangible and enjoyable, connecting the theory with practical.



Participants making DNA bracelets

Finally, books were donated to the two orphanage homes, along with a shelf to one of the orphanages to support the creation of a reading corner, ensuring continued access to learning materials beyond the outreach.



EVALUATION OF THE OUTREACH

Information		Frequency	Percentage
Age	9yrs-13yrs	37	60.7
	14yrs-18yrs	24	39.3
Gender	Male	40	65.6
	Female	21	34.4
Class	JSS 1	31	50.8
	JSS 2	7	11.5
	JSS 3	11	18
	SS 1	7	11.5
	SS 2	2	3.3
	SS 3	3	4.9

Based on the data collected from the evaluation forms, the science my way book club was a new concept to the majority of the students and they found it educational and inspiring.

During the course of preparing for this outreach, we learnt that most orphanages and schools have no book collection that meet the need of science learners besides the normal textbooks and even getting science themed fiction books proved to be a bit of a challenge which means that there will be a need to educate other orphanages and even schools in rural communities on the importance of reading and a book club.

Questions		Frequency	Percentage
Have you attended a book club before?	Yes	13	21.3
	No	48	78.7
How often do you read books outside school?	Very often	17	27.9
	Sometimes	42	68.8
	Rarely	2	3.3
How much did you enjoy the book club?	Not at all	0	0
	A little	3	4.9
	A lot	58	95.1
How often do you think you will visit the book shelf?	Not at all	0	0
	A few times	20	32.8
	Always	41	67.2
What words best describe the book club?	Interesting	19	
	Inspiring	20	
	Creative	9	
	Boring	0	
	Challenging	5	
	Exciting	8	
	Educational	24	
	Motivating	11	
	Unnecessary	1	
	Friendly	8	

From the objectives of the Science My Way book club:

1. *To increase participation in STEM by delivering engaging science activities and discussions*
2. *To broaden horizons about careers in science by exposing the children to a wide variety of pathways available in STEM*
3. *Develop essential transferrable skills such as team work, communication, problem solving and confidence through storytelling, book discussions and practical hands on experiment.*
4. *To embed long term impact and repeatability by creating a sustainable book club model that can be adapted and replicated in other orphanages and community centers extend beyond a single cycle of activities.*

....it can be said that the objectives of the outreach were reached.

Joshua Blessing Amuseh

26th March, 2026