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INTRODUCTION:

Teaching science and computer science at Kaveri Government School as a volunteer offers an excellent opportunity to support young students' learning while acquiring valuable teaching experience. This report follows my journey as a college student from the Computer Science Department who volunteered to teach science and computer science to 6th, 8th, and 9th-grade students at Kaveri High School. My main goal was to make science and computer science more interesting and easier to understand by showing how it applies to real life. Using my Computer Science background, I wanted to introduce new ways of teaching that would make students curious and excited about science.

Many government schools lack resources and new teaching methods, making subjects like Science hard and boring for students. Seeing this problem, I wanted to help by bringing new ideas to the classroom. I aimed to teach science and computer science and show students why it is important in everyday life and future careers.

For 16 days, I planned and taught fun and educational lessons. Each day was a new experience, helping me understand what the students needed and how best to teach them. At first, I focused on getting to know the students and their level of knowledge. This helped me create lessons that were easy to understand and challenging enough to keep them interested.

Throughout my teaching, I encouraged students to ask questions and think deeply about what they were learning. This way helps the students to trigger their curiosity to learn beyond their books and explore new things.

Looking back on this experience, I saw a big change in how students felt about Science. At first, many of them thought science was hard and scary. But as time went on, they became more confident and started to participate more in class. Seeing this change was very rewarding and showed me how powerful new teaching methods can be. I also taught the basics of Computer Science, which helped them gain an initial understanding and may make it easier for them to study advanced concepts in the future.

In conclusion, this report covers my 16 days of teaching experience, focusing on my interactions with students and showing the importance of making science and computer science fun and understandable. This experience taught me a lot about effective teaching and showed me how passionate teachers can positively impact young minds.

PROGRAM OVERVIEW:

OBJECTIVE:

The main goal of my volunteer work in this program was to improve science and computer science education for 6th, 8th, and 9th-grade students at a government school. As a college student majoring in Computer Science, I focused on making science and computer science engaging, accessible, and enjoyable. I introduced innovative teaching methods such as hands-on experiments, interactive activities, and practical applications of scientific concepts. By integrating technology where possible, I aimed to demonstrate abstract ideas effectively. My goal was to inspire a deeper understanding of science, encourage curiosity, and show the relevance of scientific knowledge in their lives and future careers, while also providing them with a foundation in the basics of computer science.

DURATION:

The program spanned 16 days, with 3 hours per day, during which I taught science and computer science to three different classes daily. This included lesson planning, teaching, interactive activities, and hands-on experiments. In total, I engaged in volunteer teaching for 16 days, amounting to approximately 46 hours.

CURRICULUM:

The curriculum covered various fundamental topics in science, tailored to the respective grade levels. The topics included:

- **6th Grade:** Basic principles such as plant and animal life and basics of Computer.
- **8th Grade:** Intermediate concepts like microorganisms.
- **9th Grade**: Advanced topics such as animal kingdom concepts and OS and memory concepts in Computer Science.

TEACHING METHODS:

- **Interactive Lessons:** Use diagrammatic representation and explain concepts with Real-time examples that trigger the student's curiosity to learn new things and make the session interactive.

- **Group Activities:** Encouraging teamwork and peer learning through collaborative discussions and activities.

- **Critical Thinking:** Promoting inquiry-based learning by encouraging students to ask questions and think deeply about the subject matter.

CONCLUSION:

The volunteer program successfully demonstrated that innovative and interactive teaching methods can significantly improve students' interest in and understanding of science and computer science. Through a combination of engaging lesson plans, hands-on experiments, and interactive activities, students were able to grasp complex scientific concepts more effectively. This approach not only made learning more enjoyable but also fostered a deeper curiosity about the subject matter. Additionally, this experience highlighted the potential for me, as a college student, to make a meaningful impact on education in government schools. I brought fresh perspectives and energy into the classroom, bridging the gap between traditional teaching methods and contemporary educational practices. By applying my knowledge and enthusiasm, I was able to inspire younger students, making science more accessible and exciting for them. This program underscored the value of my volunteerism in education, showing that with the right methods and dedication, I could achieve significant improvements in student engagement and comprehension.

DAILY ACTIVITIES:

DAY 1: **DATE: 19/06/2024**

SUMMARY OF THE WORK:

- **Class 8th:** Today was my first day teaching at Kaveri High School with the 8th-grade class. The students enthusiastically welcomed me and were curious as they settled into the lesson. I started with microorganisms, giving a brief but clear introduction. To make the topic relatable, I asked the students questions and shared real-life examples of microorganisms they might see daily. After laying the groundwork on microorganisms, I moved on to viruses. I talked about general information, their structure, and their characteristics, making sure the students understood the basics. I discussed some real-time virus examples, making the students understand how the virus functions and making them imagine its impact. The students participated actively, asked good questions, and joined the discussion. The 40-minute science class ended with an interactive session where students shared their thoughts and asked questions to clarify their doubts. This approach not only helped them learn better but also made the class fun and engaging. Overall, it was a fulfilling start and set a positive tone for future lessons.

- **Class 9th:** I had another enthusiastic first day with the 9th-grade students, who warmly welcomed me. After brief introductions, I started with the topic of the Animal Kingdom. I provided a brief overview of the five main kingdoms with examples and then taught them how animals are classified based on taxonomy and characteristics. I elaborately explained the taxonomy hierarchy with examples and simplified the seven important taxonomies so that the students could easily remember them. The students keenly listened, took notes, and interacted with me by asking questions. They found it easy to write the scientific names of animals and plants and were eager to learn new scientific names of various organisms. After discussing the taxonomy hierarchy, I explained the basis for classification. Today's 40-minute class was full of learning new concepts beyond what is in the textbook.

GEOTAGGED PICTURE:

Started an Enthusiastic class with Grade 8th Students

SIGNATURE OF HEADMASTER

DAY 2: **DATE: 20/06/2024**

SUMMARY OF THE WORK:

- **Class 8th:** Today's class began with the 8th-grade students giving me a warm welcome. I started by reviewing what we covered in our previous lessons. Many students answered the review questions, but a few still had doubts about viruses. To help them understand better, I used the example of the coronavirus. I explained what causes it, how it works, and why it has caused so many deaths. This made it easier for the students to understand the structure of a virus, its effects, and how dangerous it can be. After we finished talking about viruses, I moved on to the next topic: bacteria. I explained the basic features of bacteria and helped the students understand the difference between prokaryotic and eukaryotic cells. I used diagrams to show these differences, which helped clear up their doubts. Then, I described the structure of bacteria, talking about parts like the cytoplasm and ribosomes. The students listened carefully, took notes, and answered my questions, making today's class very engaging.

- **Class 9th:** The 9th-grade students greeted me with a smile and were ready to learn something new in today's session. Before starting the new topic, we revised what was taught in the previous class. All the students perfectly answered questions about the taxonomical hierarchy, showing they were thorough with this topic. Then we moved on to the next topic: The basis of classification. I explained all four characteristics. For the topic of Germ Layers, I gave examples that helped the students understand why germ layers are important. With a diagrammatic explanation, the students understood what a coelom is and its purpose. Next, I explained the difference between vertebrates and invertebrates. I also had the students note the different names of vertebrates and invertebrates to help them recognize these terms when they encounter them in questions. Then, I explained Binomial Nomenclature, teaching the students how to write the scientific names of different organisms, which I had already mentioned in the previous class. We also discussed some scientific names given in the textbook. Thus, today's session with the 9th grade involved learning many new things, reflecting their keen interest in learning.

GEOTAGGED PICTURE:

Engaging Class with Grade 8th Students

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DAY 3: **DATE: 21/06/2024**

SUMMARY OF THE WORK:

- **Class 9th:** Today started with the 9th-grade students, who were ready with their textbooks and rough notes when I entered the class. This made me feel very happy about teaching them. As usual, I began by reviewing the previous class lectures, questioning them about the layers present in germ layers, and asking about the types of coelom. As expected, most of them answered the questions correctly, and I clarified the doubts of the few who had them. After the review session, I moved on to today's main topic: Invertebrate Phyla. We started with Phylum Porifera. I explained the characteristics of Porifera and discussed the parts, and important terminology mentioned in the textbook. I wrote the key points on the board, which the students noted, and mentioned that it would be easier to learn this way. Next, we moved on to Phylum Coelenterate. I explained their features and the parts present in this phylum. I discussed the type of germ layer present and explained the concept of polymorphism. The students took notes diligently and clarified their doubts. They also asked questions by comparing the two phyla to understand the basis of their classification into different groups. Today's class involved a detailed discussion of two phyla. The students were keenly engaged, which helped me interpret these phyla more effectively and also learn new things myself.

- **Class 8th:** Today's 8th-grade class started positively. The students were eager to answer questions from our last class. I reviewed the characteristics of bacteria by writing important points on the board, which the students understood well. We then talked about the different shapes of bacteria, drawing examples on the board for them to remember. Next, I explained how bacteria arrange themselves based on their flagella (tiny tails). I described what flagella are and why bacteria have them. I classified bacteria into five types based on how many flagella they have and where they're located. To help the students remember, I had them repeat the names and write them down so that they could avoid spelling mistakes. Everyone in the class was interested and learned about bacteria shapes and arrangements easily. We finished today's lesson by discussing how bacteria do photosynthesis, chemosynthesis, and reproduction. It was a productive class with these enthusiastic 8th-grade students.

GEOTAGGED PICTURE:

9th-grade Students involve themselves in learning by taking notes.

SIGNATURE OF HEADMASTER

DAY 4: **DATE: 24/06/2024**

SUMMARY OF THE WORK:

- **Class 8th:** My class started with the 8th-grade students after a long weekend. The students, with bright and happy faces, wished me well and were ready for their new class today. As usual, we began by reviewing the previous lesson, and the students enthusiastically answered all the questions. After the review session, we started with the topic of fungi. I began by explaining the general characteristics of fungi and the differences between unicellular and multicellular fungi, providing examples for each. I also gave some real-time examples to illustrate these concepts. Then, I taught the structure of yeast, describing its parts, explaining how yeast gets activated, and the role of enzymes. The students asked many questions and shared their knowledge about yeast and its uses. Their questions and interest in the topic showed their eagerness to learn. Overall, today's class was a fun and engaging learning experience.

- **Class 9th:** Today's 9th-grade class was energetic, and the students were ready with their science books as I entered the room. Since it was a long weekend, I thought they might have forgotten the topics covered in the previous class, but they all answered the questions correctly, showing their interest in learning. A few of them had doubts, which I clarified. After the questioning session, I introduced the new phylum: Platyhelminthes. We discussed basic characteristics such as the type of germ layer and the presence of a coelom. Then, I covered the special characteristics of animals in this phylum, including disease-causing species, their types of gender, and examples. Next, I introduced the phylum Aschelminthes. As with Platyhelminthes, we first reviewed the general characteristics and then moved on to the special features of these animals. After completing the discussions on these two phyla, we compared their differences and similarities. The students observed each characteristic and categorized them, eventually understanding the basis for their classification into different phyla. The students also provided examples and took notes to help them prepare for their exams. Overall, today's class ended on a positive note, with a strong sense of learning.

GEOTAGGED PICTURE:

A fun-filling class with 8th Grade.

SIGNATURE OF HEADMASTER

DAY 5: **DATE: 25/06/2024**

SUMMARY OF THE WORK:

- **Class 9th:** Today's class started with grade 9 with a warm and happy welcome from the students. We began with a usual questioning session about the previous class on phyla Platyhelminthes and Aschelminthes. I asked the students to differentiate between these two phyla, which helped me understand their level of comprehension. Everyone answered and demonstrated a thorough understanding of the topic. Next, I moved on to Phylum Annelida. I discussed the basic characteristics, such as the level of organization and the type of coelom present. I then explained their special features, mainly segmentation and the parts involved in their locomotion. I made sure to clarify the purpose of these parts in animals of this phylum. Afterward, we delved into the major topic of Phylum Arthropoda. I introduced this phylum with an example, like a cockroach. I explained its important parts and highlighted some unique characteristics not seen in any other phylum, such as an open circulatory system and respiration through gills and tracheae. After completing the phylum, we discussed some interesting facts about arthropods. The class concluded with discussions, doubt-clearing, and note-taking. The students were enthusiastic and ready to answer questions for the next class right away.

- **Class 8th:** Today, I met my 8th-grade students, who were very cheerful and ready for their Science class. I generally asked them about the previous class, and they answered that they had learned about Fungi. They told me about the basic characteristics, such as the absence of chlorophyll and the fact that fungi do not make food through the process of photosynthesis, and the study of fungi is known as mycology. They gave examples and talked about yeast again. This revision session was surprising for me, and the students showed their interest and engagement in the class. With this engagement, I started with a new topic: Algae. I explained Algae by connecting them with Fungi and explaining their differences. The students understood what algae are and gave examples of algae present in rivers, ponds, lakes, and even water tanks. We discussed examples based on unicellular and multicellular forms and their shapes. Then we further discussed Chlamydomonas in detail. I explained the presence of flagella, which we had already discussed in Bacteria, and explained the anterior and posterior parts. I also

explained the use of vacuoles and chloroplasts. We finished the class with students taking notes, showing their interest in learning more in future classes.

GEOTAGGED PICTURE:

9th Grade Students keenly listen to the class.

SIGNATURE OF HEADMASTER

DAY 6: **DATE: 26/06/2024**

SUMMARY OF THE WORK:

- **Class 9th:** Today was a fresh start with my 9th-grade students. I was particularly happy because, after three days of discussing invertebrate phyla, I finally completed the topic by covering the last three phyla: Phylum Mollusca, Phylum Echinodermata, and Phylum Hemichordata. After the usual questioning session, in which the students answered well, I began with Phylum Mollusca. I explained the body types of mollusks and gave examples such as snails and octopuses. I also mentioned that these animals often have a shell-like structure. The students asked, "What about turtles and other shell animals?" I clarified that while a turtle has a shell, it does not have a soft body and does have a backbone, making it not a mollusc. This helped the students understand the differences and the concept of classification better. We also discussed an interesting fact about octopuses: they have emotions similar to humans, which surprised everyone. After completing Mollusca, we moved on to Phylum Echinodermata. I explained the body types of echinoderm animals, their basic features, and unique characteristics such as the presence of a water vascular system and their spiky, hard skin used for protection. I finished this section with examples. Finally, we covered the last invertebrate phylum, Phylum Hemichordata. I explained that hemichordates have characteristics of both vertebrates and invertebrates. However, their bodies do not have backbones, even though their behaviour and features resemble those of vertebrates. I also discussed the importance of cilia in hemichordates. With these explanations and examples, I completed the topic. Since there was still time left, I introduced the chordates, and the students responded quickly. Thus, today's class was filled with learning new topics, taking notes, discovering new facts, and maintaining full engagement.

- **Class 8th:** I had my next class with my 8th-grade students. As per my usual routine, I started with a questioning session about the previous class. The students answered all the questions about algae, demonstrating their memory power and interest. For today’s class, I began with the final microorganism, Protozoa. I explained that "protozoa" is a Greek word and clarified its meaning. I made sure the students understood that the last three microorganisms we studied were eukaryotic, and I reminded them what "eukaryotic" means. We discussed the size and the study of Protozoa, noting that protozoa are disease-causing microorganisms. We then explored the types of protozoa,

which are differentiated based on the organelle used for their movement. One such type is pseudopodia. I explained the meaning of "pseudo" so that the students would remember it. We then discussed amoebas, their special organelles, and the use of pseudopodia. The students took important notes and cleared their doubts. Next, I introduced the small topic of prions. I explained that prions do not have DNA or RNA and asked for the full forms of DNA and RNA, which the students correctly provided. I reminded them that diseases are transmitted by DNA, as discussed earlier with viruses. The students asked, "How is it possible to transmit disease if DNA is not present?" I explained that diseases are transmitted through harmless proteins, which is why they are known as prions. The students understood the concept more clearly by some examples. Thus, today's class was more fun and engaging as we learned new things.

GEOTAGGED PICTURE:

Discussing Phylum Mollusca (9th Grade students)

SIGNATURE OF HEADMASTER

DAY 7: **DATE: 27/06/2024**

SUMMARY OF THE WORK:

- **Class 8th:** Today's class started with my dear 8th-grade students. After a brief review of the previous class, where we discussed Protozoa and Prions, I introduced the topic of Virions. To clarify what a Virion is, I revisited the concept of Viruses, highlighting the differences and similarities between them. I explained the structure of Virions and their effects. The students took notes and were keenly listening to the class. After covering Virions, we moved towards the end of the lesson, which discusses the uses of microorganisms in various fields. Instead of giving a lengthy lecture on this general topic, we had a casual discussion about the uses of microorganisms. We started by discussing their medical applications, such as Antibiotics and Vaccines. I mentioned Penicillin and the discovery of antibiotics and explained vaccines. Next, we talked about the role of microorganisms in agriculture, such as Rhizobium, which is used as a nitrogen-fixing agent, natural fertilizer, and biogas production. The students also shared their knowledge about the uses of microorganisms. Finally, we discussed the presence of microorganisms in industry, making it an interesting and interactive learning day.

- **Class 9th:** My class with 9th-grade students was really interesting as we moved on to a new topic, Chordata. Before starting the new topic, we briefly reviewed all the invertebrate phyla. After recalling all the phyla, I started with the topic of Chordata. Previously, I introduced chordates and mentioned the various names associated with them. Then, I explained about pro-chordates, which are known to be the forerunners of vertebrate animals. I clarified what "forerunner" means. Next, I introduced their two main subphyla: Urochordata and Cephalochordata. I discussed the basic characteristics of these two phyla and drew a flowchart to help the students understand and answer this question for their exams. After covering the basic concepts of Chordates, we delved into the main topic of Vertebrata, which consists of six main classes. I made sure to explain the difference between class and phylum as well. The first class we covered was Cyclostomata, known as jawless vertebrates. I provided some notes and explained about their jaws. Then, we moved on to the next class, Pisces, which I generally referred to as class fishes, so the students could understand they have features such as fins and gills. I also discussed the two types present in class Pisces. Lastly, we discussed class Amphibia. The students correctly answered that these animals can adapt to both land

and water. I was pleased with their knowledge of amphibians and praised them. We discussed their special features and the number of heart chambers these animals have, briefly touching on the topic of the heart. We also went over some examples, and the class ended with the students learning enthusiastically.

GEOTAGGED PICTURE:

Discussed the uses of Microorganisms (8th Grade students)

SIGNATURE OF HEADMASTER

DAY 8: **DATE: 28/06/2024**

SUMMARY OF THE WORK:

- **Class 8th:** Today's class started with my eager 8th-grade students who were ready for their Science lesson. Continuing our discussion on the uses of microorganisms in various fields, we focused on the food industry. The students shared their knowledge by giving examples such as the use of yeast and learning about Lactobacillus bacteria, which is mainly used for converting milk into curd. These kinds of student involvement made the class more engaging and interesting. We also discussed the presence of good bacteria in the human body that help with digestion and other metabolic activities. Then, we moved on to the next important topic: Food preservation. I explained what food preservation is and why it is needed. We covered the methods involved in food preservation, including both traditional and modern methods. I explained the four main traditional methods and provided examples, which the students quickly understood and remembered. Next, we discussed the pasteurization method, including its history and where this process is mainly used. After completing the topic of food preservation, I explained food production, focusing on the concept of probiotics. We discussed why probiotics are necessary and the health benefits they offer. Today's class ended with a session of questions and answers, leading to more learning and gaining knowledge.

- **Class 9th:** I had my next class with the energetic 9th-grade students. We began with a review session of the previous class, where we discussed Vertebrata and the first three classes: Cyclostomata, Pisces, and Amphibia. The students answered all the questions correctly, showing that they had been studying the topics every day. After the review session, I started the class with the next group, Reptiles. I made sure the students did not confuse Amphibians and Reptiles, as they possess some similar characteristics. I wrote the points and clarified their confusion by discussing their differences. The students asked questions about the existence of dinosaurs, showing their broader curiosity about new things. After explaining the uniqueness of reptiles, I moved on to the last two classes of Vertebrates, Aves and Mammals. I discussed these two topics together, as the students were more familiar with them. They understood more clearly when I told them that Aves consists of birds. The students comprehended the structure of Aves and answered eagerly. Finally, I discussed mammals, sharing interesting facts about humans and elephants, and explained the two important hormones present in

mammals. The students were happy to learn something new and took notes. We were all pleased to complete the unit. As there was still time, we solved the book exercises, where the students quickly answered and marked the answers in their books. This demonstrated that they had listened to my lecture and could answer the questions. There were still some remaining questions, which we will complete in the next class.

GEOTAGGED PICTURE:

Had an interactive class with 9th Grade students

SIGNATURE OF HEADMASTER

DAY 9: **DATE: 29/06/2024**

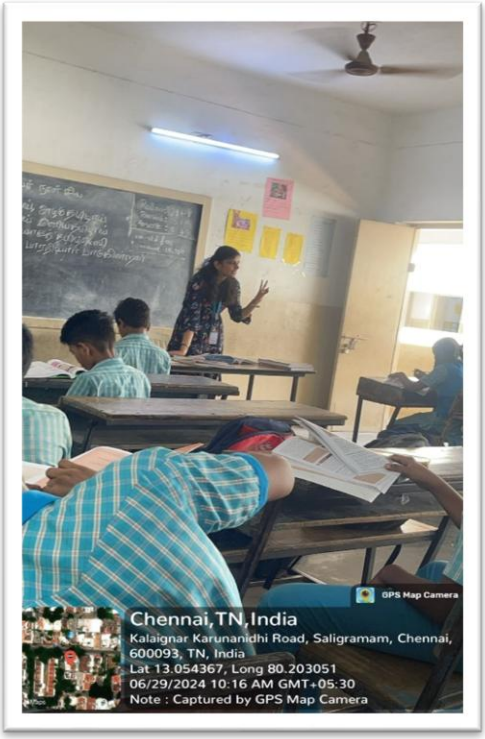
SUMMARY OF THE WORK:

- **Class 8th:** Today was a day full of positivity when I met my 8th-grade students. We were nearing the end of the unit with only two general topics pending. Before addressing those topics, we reviewed what we learned in the previous class and cleared up any doubts. Then, we discussed the two topics: Harmful Microorganisms and the relationship between humans and microbes. The students were aware that harmful microorganisms, such as those causing the flu, are disease-causing microorganisms. I clarified that these microorganisms are known as pathogens, which cause harmful diseases to all living beings. Finally, I concluded the unit by generalizing how microbes and humans are related, connecting this discussion to the uses of microorganisms we previously covered. With the unit completed, we worked on the book exercises. The students answered quickly and correctly. After marking all the one-mark answers, we discussed the true or false exercise, reasoning out the false statements. Then, I provided answers for the question-and-answer section, which the students found a little challenging due to the length of the questions and answers. I did my best to condense the answers without missing any important points and explained each question and answer again to make it easier for the students to study. Some students found their notes from my lectures helpful. With only three questions remaining to be completed in the next class, today's session was full of fun and learning.

- **Class 9th:** I met my 9th-grade students in the next class, where they were ready to take notes and mark answers for the question and answer session. Today's class focused on marking answers for the questions and providing notes for the remaining questions not found in the book. We discussed all the questions and answers again, which served as a thorough revision for the entire lesson. During the class, I went over each question in detail, ensuring that the students understood the answers and the concepts behind them. The students were engaged and asked insightful questions, which made the session interactive and productive. I provided additional explanations and examples where needed to clarify any doubts and reinforce their understanding. We also reviewed the key points of the unit, highlighting the most important concepts and information. This comprehensive review helped solidify the students' knowledge and prepared them well for any upcoming assessments. By the end of the class, we had completed the entire

unit, with all answers marked and discussed. The students were confident in their understanding and ready to move on to the next topic. Despite the productive session, I felt a bit worried that by next week I would no longer have lecturing classes with my enthusiastic, engaging 9th-grade students. Their energy and curiosity have made teaching this unit a rewarding experience.

GEOTAGGED PICTURE:



Today's class went with the discussion of Book back exercises for both Grade 9th and Grade 8th Students.

SIGNATURE OF HEADMASTER

DAY 10: **DATE: 01/07/2024**

SUMMARY OF THE WORK:

- **Class 6th:** Today, I went to a new class, which was fun and joyful. I started my class with 6th-grade students who were very excited to learn science. I asked the students to take out their science books, and we began with the lesson "The World of Plants." I generally asked the students about plants, and they enthusiastically shared their knowledge. They also identified the parts of plants and explained why plants are important. This made me realize that the students were already aware of the topic we were going to cover. We then moved into the lesson, starting with the introduction, where we discussed how vegetables grow not only from roots but also from other parts of plants, such as stems, leaves, and flowers. Many students provided examples of various vegetables that grow from different parts of the plant. Then, we delved deeper into the lesson, moving to the topic of plant forms and functions. Having already mentioned the parts of a plant, I explained that all these parts are categorized into two main parts: the root and shoot systems. I started with the root system, explaining its functions and teaching them about the two types of root systems: taproot and fibrous, with examples. The students listened keenly and took notes for better understanding and easy learning. Thus, today's class with the 6th-grade students was full of fun and interest.

- **Class 8th:** Today was my last lecture for my 8th-grade students. They greeted me warmly and were ready for class with their science books and notes. I answered the remaining questions that had not been marked in the previous class, and we reviewed the entire lesson. We spent the class marking the answers and discussing the material to make sure everyone understood it well. The students asked questions, and I explained the concepts again to help them. We went over each topic, pointing out the important points and ideas. I told the students that understanding the material was more important than just memorizing it, and I encouraged them to think about what they were learning. They took careful notes and wanted to make sure they had all the important information. At the end of the class, I gave them some tips on how to study effectively and prepare for their upcoming tests. I reminded them to review their notes regularly to keep the information fresh in their minds. Overall, it was a positive class, and we finished the week on a good note.

GEOTAGGED PICTURE:

An interactive class with 6th-grade students

Given notes for 8th-grade students

SIGNATURE OF HEADMASTER

DAY 11: **DATE: 02/07/2024**

SUMMARY OF THE WORK:

- **Class 6th:** Today, I spent my day with my energetic 6th-grade students. I started the class with a small recap of the previous lesson, where we discussed the basic parts of a plant and introduced the root system. The students answered questions and demonstrated their thorough understanding of the topic. In today's class, I began with the topic of the shoot system, explaining that it is the part of the plant above ground level that can be seen. The students understood the difference between the root and shoot systems. I then explained what a stem is, its parts, and why the stem is necessary for a plant. We also discussed an activity that showed how the root and stem absorb nutrients and water and transport them to other parts of the plant, aiding in their growth. With a few minutes left, I briefly covered the topic of leaves, explaining their basic parts. The students actively participated in the class, giving answers and asking questions, which showed their curiosity and eagerness to learn beyond the textbook.

GEOTAGGED PICTURE:

Students listening to the class (6th grade students)

SIGNATURE OF HEADMASTER

DAY 12: **DATE: 03/07/2024**

SUMMARY OF THE WORK:

- **Class 6th:** Today's class started with my dear 6th-grade students, who happily welcomed me and were ready for today's learning. I began the class with a review of the previous lesson, where we discussed the shoot system, focusing on the stem and its uses. Then, I briefly touched on the parts of the leaf. In today's class, I explained the parts of the leaf by drawing a diagram on the board and labelling each part, making it easier for the students to understand and draw for their exams correctly. The students copied the diagram into their notes and learned about the functions of each part of the leaf, such as the use of stomata for transpiration and the green pigment chlorophyll for photosynthesis. After completing the topic on the functions of leaves, we moved on to the next part of the lesson, Habitat. Anticipating confusion between the words "habit" and "habitat," I clarified the difference. The students understood what a habitat is through a story I narrated and explained. They expressed concern for the world, discussing why humans are destroying forests and expressing that this should not happen. I felt so happy and proud of my students, who, at this age, are worried about pollution and the destruction of nature. Thus, today's class ended with my 6th-grade students learning something new and informative and showing care and love for nature.

- **Class 8th:** Today I met with my 8th-grade students, who welcomed me and took out their science books. Since they had started focusing on the next lesson taught by the physics teacher, I didn't hold a lecture session. Instead, I decided to conduct a test with one-mark questions to gauge the student's level of learning. I gave them 15 minutes to study and revise all the one-word answers and the true or false statements, including the corrected statements for the false answers. I also reminded the students to study the spelling of each term carefully. The students spent the time studying, and after 15 minutes, I conducted the test by asking 15 questions orally. I emphasized that they should not copy, and they listened to my warning. After completing the 15th question, I collected their papers and informed them that I would return the graded papers the next day. A few students seemed nervous because they hadn't studied properly. I encouraged those students to prepare well, as I might conduct a similar test at any time.

The students agreed, and today's class ended with a testing session on the lesson I had taught (Animal Kingdom).

- **Class 6th A:** Today, as I completed my classes with my regular students early, I went to a new class and met another set of charming and enthusiastic 6th-grade students. These students were learning their lessons in Tamil. Since I am not very familiar with or proficient in teaching Tamil medium classes, I had a general discussion with them about the evolution of human beings and some interesting science facts. We also talked about various topics related to the latest technology, where the students eagerly shared their knowledge. Thus, today's class with these fun-filled students was positive, energetic, informative, and engaging.

GEOTAGGED PICTURE:

Conducted a test for test 8th grade students and had an interactive class with 6th-grade students (A section)

SIGNATURE OF HEADMASTER

DAY 13: **DATE: 04/07/2024**

SUMMARY OF THE WORK:

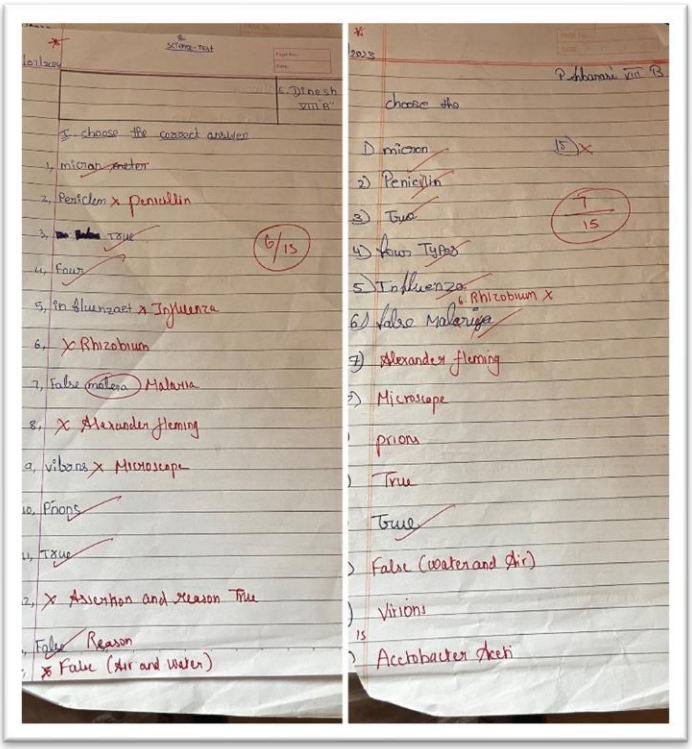
- **Class 6th:** Today's class started with my cool 6th-grade students. All of them had happy, bright faces and were ready for today's lesson. As per my usual routine, we first discussed the previous class's learnings, where the students answered questions about the parts of the leaf and the meaning of habitat. After the review session, I introduced today's topic: Types of Habitat. I explained that there are two types of habitats: aquatic and terrestrial. I began with the topic of aquatic habitats, explaining what they are and what animals live in these habitats. Since the students understood the meaning of aquatic, it was easy for me to explain the types of aquatic habitats: freshwater and marine water habitats. I made sure to clarify the differences between these habitats and the kinds of fish that live in each. After the students grasped the concept of aquatic habitats, I moved on to the next topic: terrestrial habitats. The class ended with an introduction to terrestrial habitats, where the students keenly listened, took important notes, and made today's class more interesting, fun and by sharing facts they knew.

- **Class 8th:** Today's class with my 8th-grade students was dedicated to distributing the answer papers from the one-mark test I conducted in the previous class. Before handing out the papers, I provided some notes and tips on where the students made mistakes and what they needed to focus on. I asked the students who made spelling errors to write the correct spellings a few times to help them remember. After explaining all their common mistakes, I distributed the papers and encouraged the students to study well and clarify their doubts immediately. The students noted all their mistakes and were confident that they would not repeat them in future tests. Thus, today's class with the 8th-grade students was a productive review session that showed high levels of student learning.

- **Class 9th:** After a long time, I met my 9th-grade students. They welcomed me with full energy. Although the students asked for a lecturing session, I planned to conduct a one-mark test, similar to what I had done for the 8th-grade students in previous classes. I gave them 15 minutes to revise and asked them to get ready with a paper. The students eagerly prepared for the test. After 15 minutes, I asked the students to close their books

and be ready for the test. I asked about 20 questions; most students wrote the answers, while some were unsure about a few. After the test was over, the students had mixed feelings about their answers. I assured them that it's okay to make mistakes, but emphasized the importance of better preparation next time. The students felt more confident about writing the answers correctly in future tests. Thus, today's 9th-grade class ended with a test session, and we will review the answers in the next class.

GEOTAGGED PICTURE:



Conducted a test for 9th-grade students and reviewed the answer papers of 8th-grade students

SIGNATURE OF HEADMASTER

DAY 14: **DATE: 05/07/2024**

SUMMARY OF THE WORK:

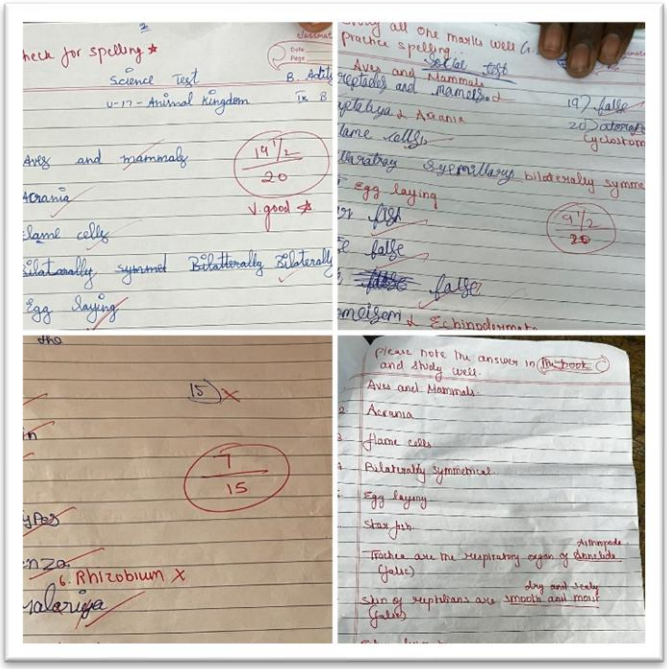
- **Class 6th:** Today's class started with my 6th-grade students. Before moving on to today's topic, we reviewed the previous class lecture on aquatic habitats and the introduction to terrestrial habitats. The students demonstrated that they were thorough with the previous class and were ready to move on to the next topic. So, I began today's class by discussing the types of terrestrial habitats and giving examples for each type. I also explained man-made terrestrial habitats, making it easier for the students to understand. We discussed some facts about the Thar Desert, which enhanced their learning. Finally, we reached the last topic of the lesson: plant adaptations and modifications. I explained the meanings of adaptation and modification, and then discussed climbers, twiners, and thorns. I provided one example for each type of adaptation, while the students contributed many other examples, showing their good knowledge about climber plants and plants with thorns meant for protection. With this topic, we completed the lesson and also marked the book-back answers, discussing and marking the correct responses. Thus, today's class with the 6th-grade students ended with full enthusiasm and completing a whole unit with lots of learning together.

- **Class 9th:** Today's class with the 9th grade was not a lecturing session. Instead, I met with my 9th-grade students to review the answers to the test conducted in the previous class. Before distributing the papers, I first explained the reasons for the false statements in the true or false section and had the students write the correct spellings to help them remember. Then, I called each student individually, clarified their mistakes, and provided the correct answers so they could use them for future tests. The students felt more confident and were ready to answer questions from the lesson on the Animal Kingdom. Thus, today's class with the 9th-grade students ended with a review session.

- **Class 9th A:** Today, I met another set of interesting and fun 9th-grade students from Class 9A. This was my first class with them, and they welcomed me with happiness, joy, and eagerness. Since I hadn't taken any lectures for them before, we had a general discussion about technology and robotics. We talked about how AI might evolve in the future and what humanity could look like as a result. The students showed a keen

interest in learning about various technologies. I also gave examples of robots, such as Sophia, a humanoid robot, and other inventions that many of them were familiar with. Thus, today's class with these students was very interesting and engaging, where they learned about various fields of computer science and the growth of AI in future generations.

GEOTAGGED PICTURE:



Engaging class with 6th-grade students and reviewing answers for 9th-grade students

SIGNATURE OF HEADMASTER

DAY 15: **DATE: 08/07/2024**

SUMMARY OF THE WORK:

- **Class 6th:** Today, I spent my day with my 6th-grade students. I started the class by introducing the topic of computers. The students shared their knowledge, describing computers as electronic devices with keyboards, mice, etc. They were curious to learn about the uses of computers and how they have evolved over the years. They were surprised to discover that computers have now evolved into smartphones and other portable digital gadgets. We discussed the various uses of computers and how they make human life easier. I gave some examples and briefly touched on the importance of data storage and retrieval. One curious student asked me about the father of the computer, and I provided the answer, which they noted down. They were also eager to learn about the early computers. Thus, with this general discussion about computers, I helped the students refresh their knowledge and ideas about computers that they learned earlier.

GEOTAGGED PICTURE:

Today's engaging class with 6th-grade students

SIGNATURE OF HEADMASTER

DAY 16: **DATE: 09/07/2024**

SUMMARY OF THE WORK:

- **Class 9th:** Today was my last day at Kaveri High School with my 9th-grade students. Since there was no lecture scheduled, I introduced some basic knowledge about computers. I asked what a computer is, and the students responded enthusiastically. We then discussed operating systems, and the students named various ones they knew. We also talked about the CPU and the memory used in computers. The students were aware of the uses of RAM and ROM, and I explained their characteristics. Lastly, we discussed the applications used in computers and how computers effectively improve human life. Thus, my last class with my 9th-grade students ended on a positive and engaging note.

GEOTAGGED PICTURE:

Enthusiastic class with 9th grade students

SIGNATURE OF HEADMASTER

IMPACT ASSESSMENT:

OBJECTIVE:

The main goal of my volunteer work was to make science and computer science more fun and understandable for 6th, 8th, and 9th-grade students at a government school. As a college student studying Computer Science, I used hands-on activities, fun experiments, and real-life examples to teach. I wanted to show how science is useful in everyday life, spark curiosity, and give students a basic understanding of computer science.

DURATION:

The program lasted 16 days, with 3 hours of teaching each day. I taught science and computer science to three different classes daily, including lesson planning, teaching, and hands-on activities. Altogether, I volunteered for about 46 hours.

CURRICULUM:

The curriculum covered various fundamental topics in science, tailored to the respective grade levels. The topics included:

- **6th Grade:** Basic principles such as plant and animal life and basics of computer science.
- **8th Grade:** Intermediate concepts like microorganisms.
- **9th Grade:** Advanced topics such as animal kingdom concepts and OS and memory concepts in computer science.

TEACHING METHODS:

- **Interactive Lessons:** Used diagrams and real-life examples to make learning interesting and engaging.
- **Group Activities:** Encouraged teamwork and learning from each other through group discussions and projects.
- **Critical Thinking:** Promoted curiosity by encouraging students to ask questions and think deeply about the topics.

DATA COLLECTION METHOD:

- **Pre- and Post-Assessments:** Administered quizzes at the beginning and end of the volunteer period to assess knowledge improvement.
- **Attendance Records:** Maintained daily attendance records to monitor student engagement.
- **Feedback Forms:** Distributed surveys to students and interviewed teachers to gather qualitative feedback.

ANALYSIS:

- **Quantitative Analysis:** Measured the increase in students' knowledge by comparing their understanding before and after the program.
  Example: Students significantly improved their grasp of biology and computer science concepts throughout the program.

- **Qualitative Analysis:** Analysed feedback to identify strengths and areas for improvement in teaching methods.
  Example: Students reported increased interest in biology after hands-on experiments and found theoretical computer science concepts intriguing. Teachers noted improved student engagement and enthusiasm during interactive sessions.

FINDINGS:

- **Knowledge Improvement:** Students demonstrated significant improvement in understanding biology and theoretical computer science concepts. Pre-assessment scores in both subjects showed a noticeable increase in comprehension and retention by the end of the program.

- **Student Engagement:** High attendance rates (average of 90%) and active participation indicated increased interest in science subjects.

- **Feedback Analysis:** Positive student responses highlighted the effectiveness of hands-on experiments in biology and theoretical discussions in computer science.

Constructive feedback from teachers emphasized the need for more guided explanations of complex theoretical concepts.

RECOMMENDATIONS:

- **Practical Applications:** Add more hands-on biology experiments and simple examples for computer science.
- **Ongoing Support:** Organize follow-up sessions to reinforce learning.
- **Peer Learning:** Encourage study groups with occasional volunteer guidance.
- **Interactive Tools:** Use visual aids and online simulations to explain complex ideas.
- **Feedback Loop:** Collect student feedback regularly to improve teaching methods.

LONG-TERM IMPACT:

- **Monitor Progress:** Track students' performance in biology and computer science.
- **Career Support:** Guide students interested in science and tech careers.
- **Resource Sharing:** Provide helpful resources and materials for ongoing learning.
- **Encourage Exploration:** Motivate students to explore further studies in science and technology.
- **Feedback Collection:** Continuously gather student feedback to improve future programs.

CONCLUSION:

The volunteer program showed that fun and interactive teaching methods can greatly improve students' interest and understanding of science and computer science. Using engaging lessons, hands-on experiments, and interactive activities, students learned complex topics more easily and enjoyed the process. This experience demonstrated that college students can positively impact education in government schools by bringing fresh ideas and bridging the gap between old and new teaching methods. By sharing knowledge and enthusiasm, volunteers can inspire younger students and make learning more exciting. The program highlighted the importance of volunteerism in education, proving that dedication and the right approach can significantly boost student engagement and understanding.

FEEDBACK AND SUGGESTIONS:

FEEDBACK OF HEADMASTER:

Nivethakumari Rajnikandh's dedication and passion for teaching are greatly appreciated. She did an excellent job guiding students and helping them understand science and computer science concepts with ease. She put in a lot of effort in preparing lessons and concepts, especially since she had to teach different classes of students. She was active and enthusiastic in her teaching. She enhanced student learning by conducting tests and helping students identify their mistakes. Overall, her hard work, commitment, and service have made a significant impact on the community and are deeply appreciated.

FEEDBACK FOR MY VOLUNTEER TEACHING EXPERIENCE:

I had a wonderful experience teaching at Kaveri High School. From the very first day to the last, the students were incredibly supportive and engaged. They listened eagerly to the lessons, took notes carefully, asked thoughtful questions, and even shared interesting facts they knew. This made the classroom a lively and interactive environment. It was a two-way learning process for me, as I also gained new knowledge and perspectives from the students. The students found my teaching clear and interesting, which made me very happy. However, sometimes it was challenging to control the class because the students were so excited and curious. Their enthusiasm was great, but it made managing the class a bit difficult at times. This volunteer experience helped me grow in many ways. I became more courageous when speaking in front of a class, which boosted my confidence. I also learned to be more patient while managing the students. Understanding their different learning levels helped me to explore the topics more deeply so that I could explain them in ways that were easy for the students to understand. Overall, my time as a teaching volunteer at Kaveri High School was very rewarding. It helped me improve my teaching skills and gave me valuable insights into how students learn. It was a memorable and impactful experience that I will always cherish.

SUSTAINABILITY AND FUTURE PLANS:

SUSTAINABILITY:

- **Resource Sharing:** I left behind detailed lesson plans and materials for teachers and students to use.
- **Teacher Training:** I showed teachers some interactive teaching methods they can use in their classes.
- **Student Mentorship:** I encouraged interested students to help their classmates with difficult concepts.
- **Feedback Mechanism:** I set up a system for collecting feedback from students and teachers to improve teaching methods.
- **Additional Learning Materials:** I provided extra study guides, notes, and resources for students to use after the class to improve their learning beyond textbooks.

FUTURE PLANS:

- **Follow-Up Visits:** I plan to return to the school occasionally to check on progress and offer more support.
- **Workshops and Seminars:** I want to organize workshops on advanced science and computer science topics to keep students interested.
- **Online Support:** I'll create an online platform for students to ask questions and access more learning materials.
- **Collaboration with Colleges:** I aim to get more college students involved in volunteering at the school.
- **Scholarship Programs:** I hope to find opportunities for scholarships for students who are interested and want to study the advancement of science and technology further.

By focusing on sustainability and plans, I want to ensure that my volunteer teaching experience continues to help the students and the school even after I'm gone.

CONCLUSION:

Volunteering as a teacher at Kaveri High School has been an incredibly rewarding and transformative experience. Over 16 days, I had the privilege of engaging with bright and eager students from the 6th, 8th, and 9th grades, teaching them science and computer science concepts. This experience has not only enhanced my teaching skills but has also allowed me to make a meaningful impact on the student's educational journeys. From the beginning, the students were welcoming and enthusiastic. Their eagerness to learn and their active participation made each day a joy. They listened attentively, asked insightful questions, and were eager to share their knowledge and experiences. This two-way interaction was a key highlight of my experience. Not only did I teach them, but I also learned a lot from their fresh perspectives and ideas.

One of the significant challenges I faced was managing the classroom dynamics due to the students' excitement and curiosity. However, this challenge turned into an opportunity for growth. I learned to maintain a balance between fostering an interactive environment and maintaining classroom discipline. This experience greatly improved my ability to manage a classroom and handle various teaching scenarios. Throughout the program, I focused on making the lessons engaging and accessible. I used a variety of teaching methods, including hands-on experiments, group activities, and interactive lessons, to ensure that the students could grasp complex scientific concepts.

The students responded positively, finding the lessons interesting and easy to understand. Their feedback and improved understanding were testaments to the effectiveness of these methods. In addition to teaching, I put considerable effort into preparing lesson plans and materials tailored to the different grade levels. This preparation was crucial in delivering content that was both relevant and understandable. I also conducted assessments to help students identify their strengths and areas for improvement, which further enhanced their learning experience.

The support from the school staff and the positive feedback from the students were incredibly encouraging. It was heart-warming to see the students' progress and to hear them express their enjoyment and appreciation for the classes. Their enthusiasm for learning reinforced my belief in the importance of innovative and interactive teaching methods. This volunteer experience has had a profound impact on me. It has boosted my confidence in public speaking and teaching, taught me the value of patience, and deepened my understanding of effective

educational practices. Moreover, it has inspired me to continue contributing to education in meaningful ways. Looking ahead, I am committed to sustaining the impact of this program. I have left behind detailed lesson plans and educational materials for the teachers to use. I also plan to maintain contact with the school to provide ongoing support and to organize future workshops and follow-up sessions. Additionally, I hope to encourage more college students to volunteer and share their knowledge with school students.

In conclusion, my volunteer teaching experience at Kaveri High School has been a fulfilling journey of learning and growth. The positive impact on the students and the personal development I experienced are invaluable. I am grateful for the opportunity to contribute to the student's education and to be a part of their learning journey. This experience has reinforced my passion for teaching and my commitment to making a difference in the field of education.