

Tactile Materials in the Geography Lab

There is a background of preparing tactile materials in Geography Lab. It began with a few experimentations by me with a few students. While our geography lab was getting ready with models designed to illustrate various geographical concepts, I found myself questioning their effectiveness, particularly for students with visual impairments.

One day, a student with partial visual impairment expressed her desire to learn geography and showed a keen interest in understanding the 2-D and 3-D models in our lab. I could then understand that day the biggest problem with our lab: the lack of all- inclusive teaching materials.

To address this, I created a tactile material from waste materials to help her understand the world's heat and air pressure zones. As seen in Photo 1, the first tactile model was made out of Pista shells, strips of waste papers, one birthday cake base, transparent plastic paper and few beads. Her excitement upon understanding the concept marked the creation of our first tactile teaching material. This sparked a new project: converting all our models into tactile versions. The revised version is displayed in photo 5.

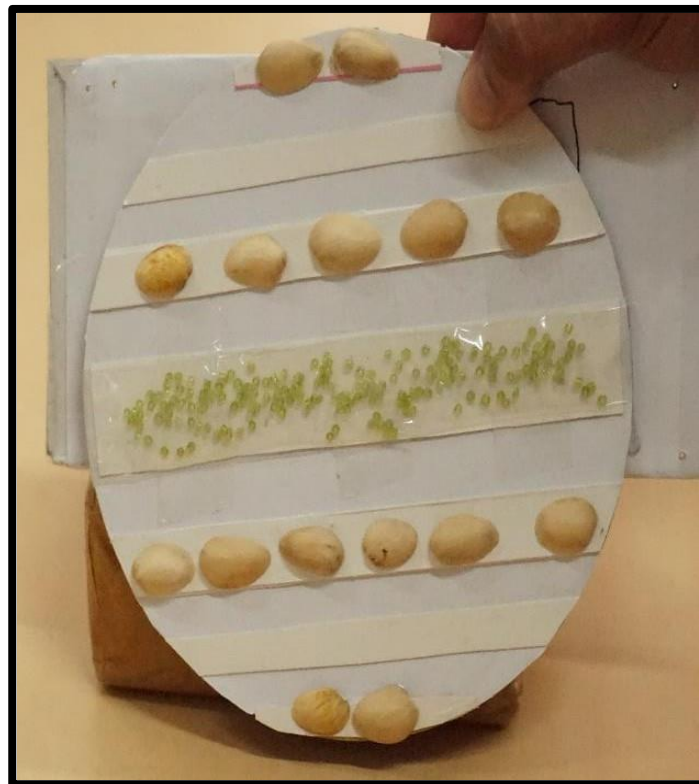


Photo 1: Heat and Pressure zones

We are also incorporating Braille labels and audio descriptions for our models, enabling students with visual impairments to learn and explore independently. We believe that this will help us to make our lab a truly inclusive space where the practice of inclusive education can be demonstrated with actually practicing it.

Some of the images of the tactile models developed in the lab are provided below. As seen in Photo 2, a world atlas has been made of pulses, threads, and toothpicks. Photo 3 shows another view of globe from the north pole, made of birthday cake base, pulses and threads. Photo 4 shows the solar system made of sponge balls and paper balls.

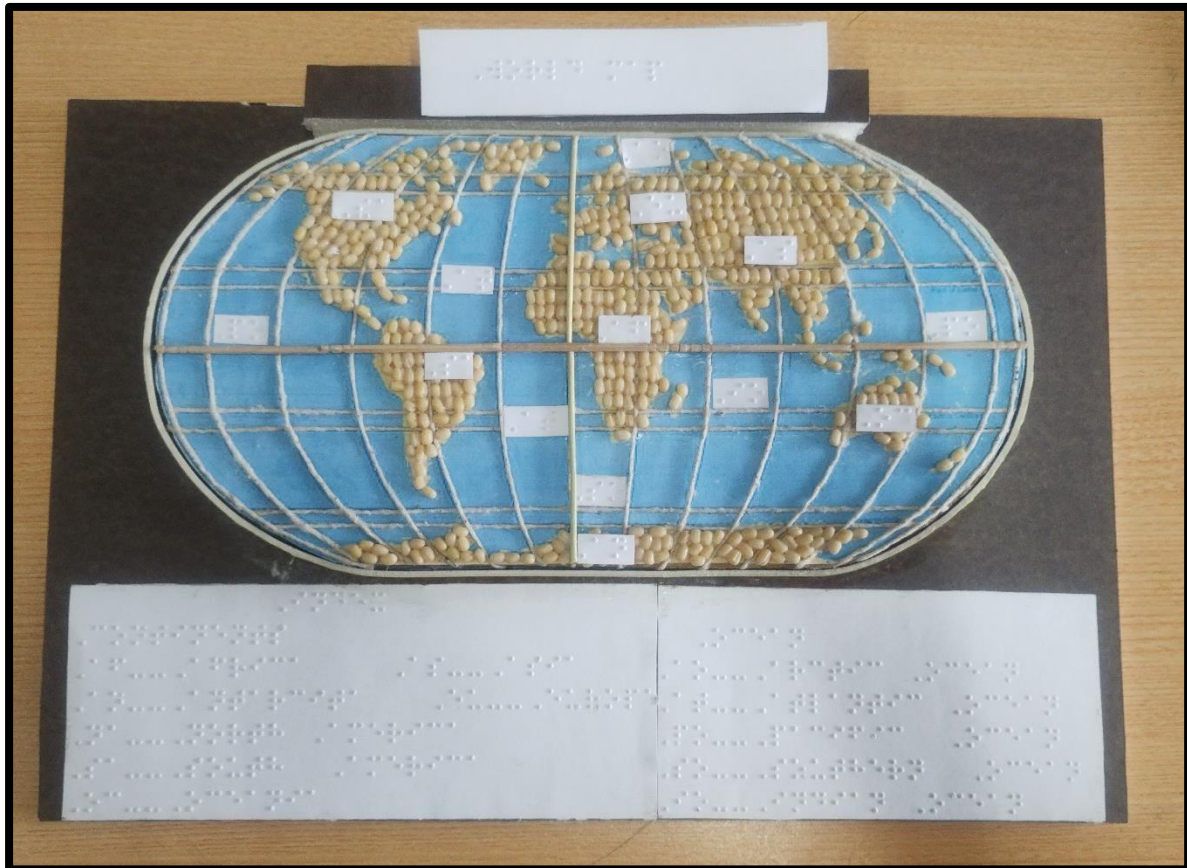


Photo 2: World Map



Photo 3: World map as seen from the North Pole

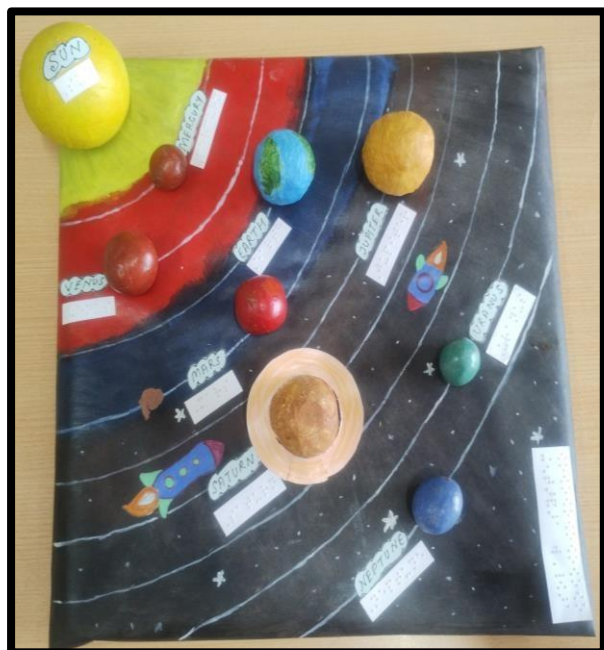


Photo 4: Solar System

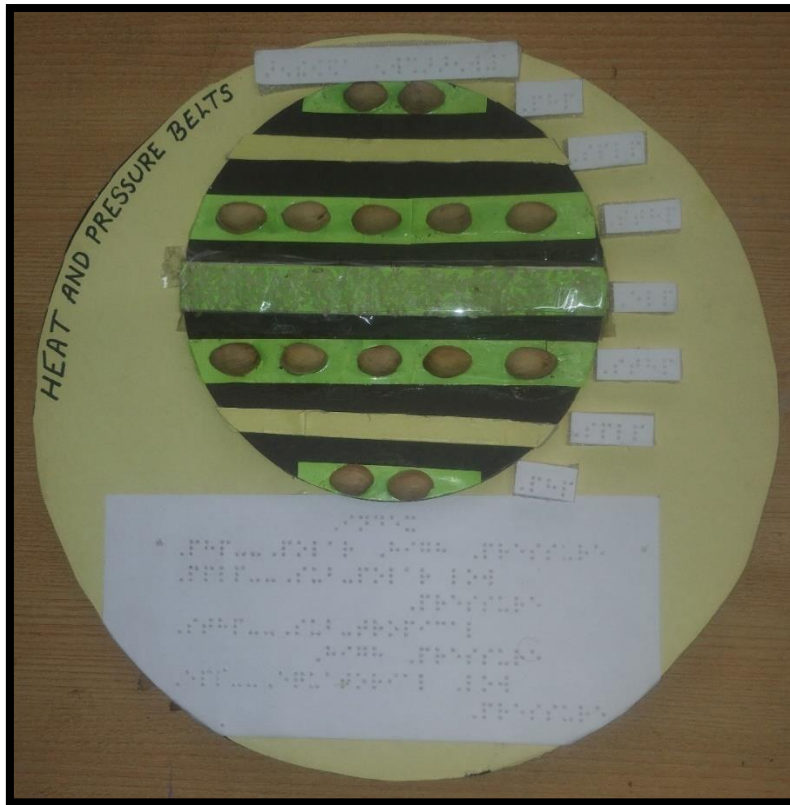


Photo 5: Heat and Pressure Belt Model

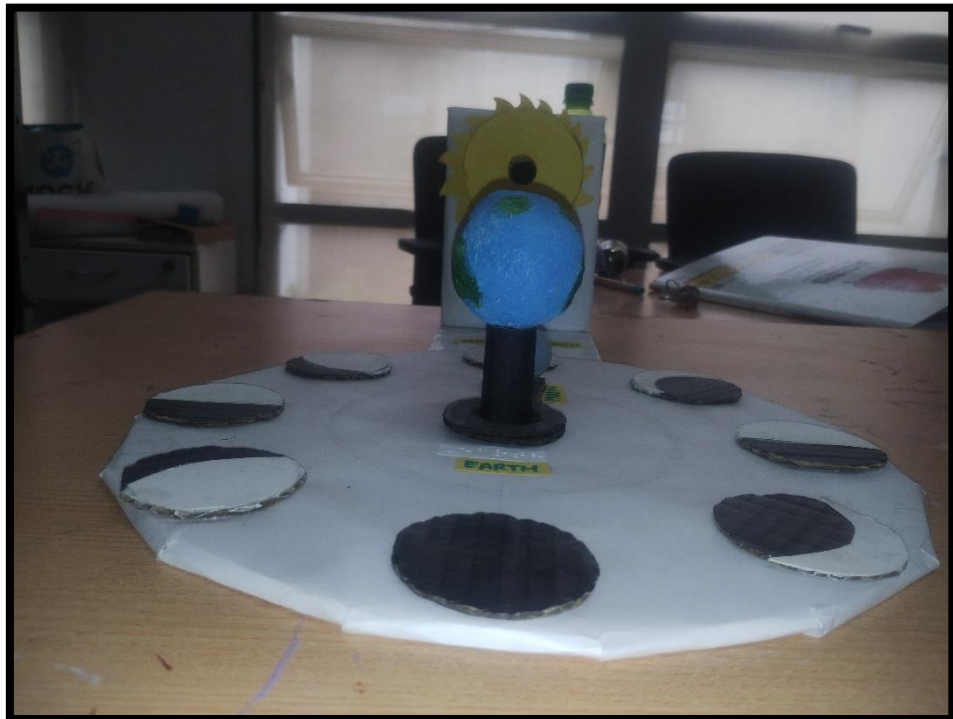
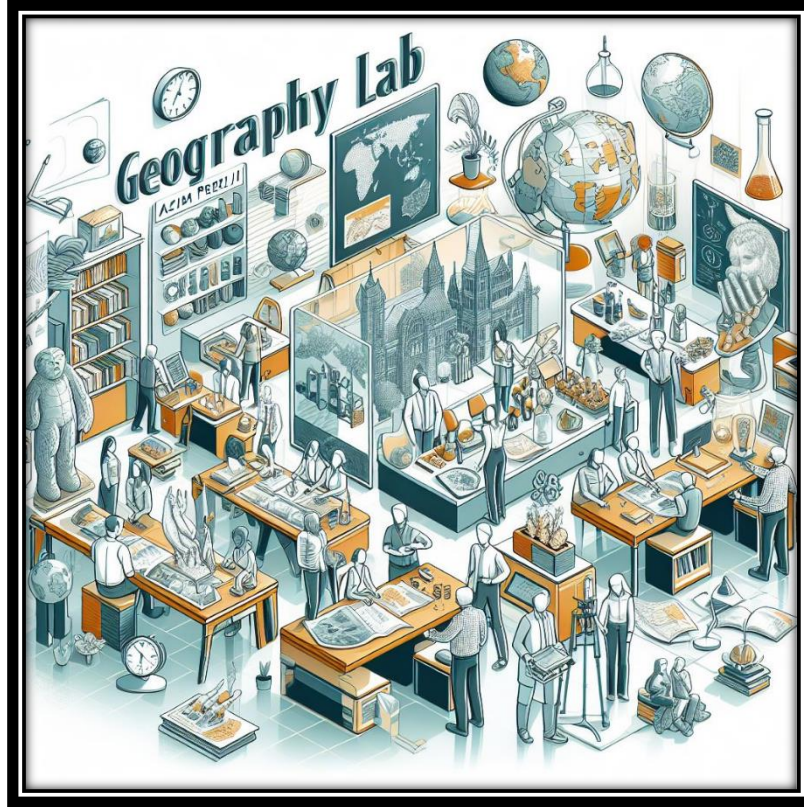


Photo 6: Phases of Moon

Vision for an Inclusive Geography Lab

The Geography Lab at Azim Premji University has evolved into a dynamic space for exploring and understanding geography. Our initiatives, including teacher workshops, creation of tactile teaching materials, and expansion of our map and specimen collections, have enhanced the teaching and learning experience.



As we move forward, we aim to collaborate with other universities, sharing our best practices and resources to build a community of educators passionate about geography. We are committed to making our geography lab fully inclusive and accessible to all learners.

By offering a variety of teaching materials, from tactile models to audio descriptions, we aim to make geography accessible and enjoyable for everyone, regardless of their abilities or background. We believe that geography education is crucial for all learners, as it provides a deep understanding of the world around them, fostering informed and engaged citizens.

We invite you to join us on this journey.

The Unique purpose of geography is to seek comprehension of the variable character of areas in terms of all the interrelated features which together form that variable character.

*– Richard
Hartshorne*



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