

E-SPeDIP2021

ABSTRACT



'MUDBLOOD' is an innovation that focuses on 'hands-on' activity and model building to help students understand the topic of human blood groups (Form 3 Science Topic, Chapter 3). The material consists of a model of four blood groups with three-dimensional antigens and antibodies and a diagram of blood donor-recipient. The focus of this innovation is on science learning using the 'MUDBLOOD' to increase the students understanding of the concepts of antigens, antibodies and the compatibility of blood groups of donors and recipients. This model is made using simple materials such as manila cards, coloured papers as well as clay and does not require large costs.

PROBLEM STATEMENT

- Students have not mastered the Human Blood Groups topic.
- Students are confused between antigens and antibodies for blood type A,B,AB and O.
- Students are not able to determine the compatibility of blood groups of donors and recipients.

COMMERCIAL POTENTIAL

- Can be spread to the whole states in Malaysia.
- Can be used by Form 3 students at all secondary schools as an enhancing and strengthening tool for the topic of Human Blood Group.

USAGE / IMPACT

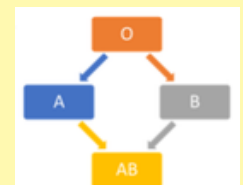
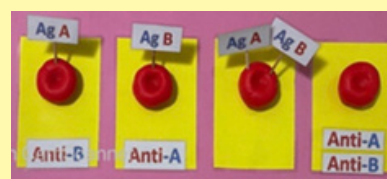
Help students to :

- Identify antigens and antibodies according to their group
- Build blood cell model with their antigens and antibodies
- Build an ABO blood group model to understand the concept of blood donor-recipient
- Transfer their knowledge and understanding of an image into a table
- Increase students' mastery in human blood group



ORIGINALITY

- A 'hands-on' 3D blood model building activity with antigens and antibodies.



- An easy way to understand the blood donor-recipient diagram as opposed compared to a mere table.