

Three Low Key, But High Impact, Teaching Techniques for Undergraduate Biology Labs

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In this poster, I present three low key, but high impact, teaching techniques for undergraduate biology labs. I used paper cutouts, face paint and games to enhance student learning and engagement in Human Anatomy and Physiology labs. I used an interactive technique for blood typing, where students were given paper cutouts as a visual representation of ABO blood types that could be received and donated. My second technique used glow-in-the-dark face paint to help students understand the principles of epidemiology. By simulating a “glow-in-the-dark” virus, I demonstrated how viruses can be spread and lead to epidemics. For my third technique, students participated in a collaborative game to demonstrate flow of cerebrospinal fluid (CSF). Students moved throughout the lab as CSF, choroid plexuses (producing CSF) or arachnoid villi (absorb CSF). Although these techniques were applied in Human Anatomy and Physiology labs, their use can be expanded to a broad range of laboratories in science.

Keywords: blood typing, epidemiology, cerebrospinal fluid (CSF), interactive technique

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