

## SERVICE LEARNING

### Planning sheet

**Teacher:** Ines Dukić

**Class:** 4MN, physics HL and SL

**Project name:** Measurement of level of sound in the environment

**Description:** students will engage to measure level of sound at several important sites in every-day life like: classroom during discussion, school hall during big break, busy street, main square, domestic noise during dinner etc. They will all use similar equipment: Phyphox application on mobile phone, sensor „Audio Amplitude“.

<https://courses.lumenlearning.com/physics/chapter/17-3-sound-intensity-and-sound-level/>

**Student input:** Students will suggest and choose sites for measurements and organize measurements. Calibration of all sensors will be done at school. Protocol for measurement will be developed. Later each student performs measurements when convenient, individually or in a group. Data will be sorted out, averages calculated for particular sites and results presented in a form of diagram/histogram.

**Academic component:** Project is related to topic of Waves, sound waves and wave intensity. Possibly linked to health issues.

**Service component:** Sound pollution is a problem linked to some sites in a city. This project raises awareness about it. Information about potentially dangerous sites will be part of the data presented on the poster, for all members of school community to use.

**Reflective component:** class discussion is planned

**Character component:** project develops collaborative skills and feeling for responsible citizenship