
FIRST-YEARS OUTDOORS WITH A LITTLE HELP FROM A FIELD FRIEND

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SUBTHEME: Modes of Learning

PROBLEM

Fieldwork is a critical component of biological science education, offering hands-on experience that solidifies theoretical concepts and develops the skills and knowledge that graduates require (Burke da Silva, 2014). It also creates an environment that can foster connection and inclusion for diverse student cohorts (Zavaleta et al., 2020). In traditional curricula, students generally wait until at least their second year, if not third, to get 'into the field' as field experiences are expensive and logistically difficult to curate, particularly for large cohorts of first year students (Burke da Silva, 2014). As teaching staff responsible for a large first year cohort (300+), how could we create sustainable opportunities for field-based learning?

ACTION

By using bespoke mobile technology, we structured asynchronous learning experiences outdoors to enable field trips without the traditional logistical constraints of transport and staffing. The University of Melbourne's experimental mobile app called 'Field Friend' (Pang & Weatherly, 2016) was used as it allows instructors to set up a GPS-guided 'learning trail' through a specified field site. Using Field Friend, we created location-specific media and tasks to support small student groups to complete learning trails at three locations in the Melbourne metropolitan region. These field experiences gave students an opportunity to apply what they were learning in lectures, connect with their peers, and learn field skills like observation and species identification. In 2022 and 2023 our large cohort of first year students used their mobile devices to successfully participate in these self-guided field trips.

REFLECTION

After the deployment in 2022, the app went through significant redevelopment using students' feedback. Consequently, student satisfaction with the technology went from 49% in 2022 to 80% in 2023. Students overwhelmingly (98%) agreed that these field-based experiences improved their knowledge of flora and fauna, increased their confidence for future field-based learning opportunities (90%) and that learning in this way was more effective for them than a classroom alternative (83%). Encouraged by this feedback, we are continuing to evaluate the design of Field Friend supported activities and embed this approach to getting more first-years outdoors.

REFERENCES

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