

# 'Empower @ MTU': Leveraging technology to enact the UN Sustainable Development Goals within a regional multi-campus university.

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### **Context and Rationale**

- Aligned with MTU's 'Healthy Campus' agenda, 'Empower @ MTU' aims to leverage technological solutions to maximise the health and well-being of campus populations.
- This novel and highly scalable research traverses several UN Sustainable Development Goals (SDGs);



• This technological solution will be empirically informed by sequential sub-studies to elicit user needs (Figure 1).

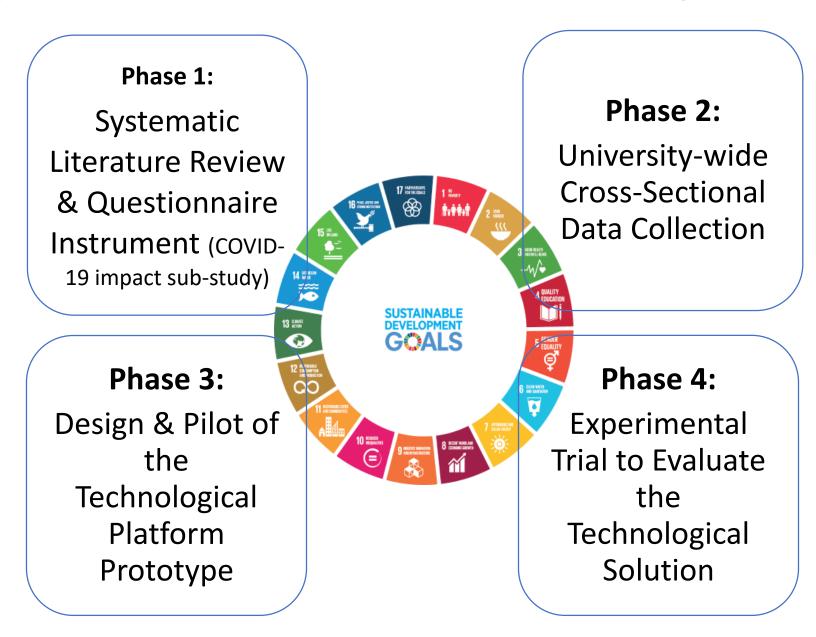


Figure 1. Phases involved in the 'Empower @ MTU' study design.

• A baseline cross-sectional study was conducted in April-June 2021 to investigate the impact of the COVID-19 pandemic upon the health and well-being of Year 2 undergraduate students (n=268).

## Research outputs, partnerships and contributions to SDGs

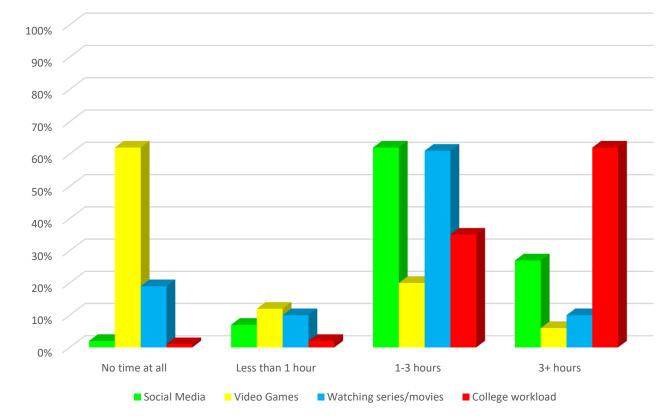
Providing an innovative technological solution to achieve 'good health and well-being' in MTU.

Adaptation and regional implementation of the technology via MTU's multi-campus structure.

Leveraging industry partnerships to upscale and implement the technological solution within similar organisational settings.

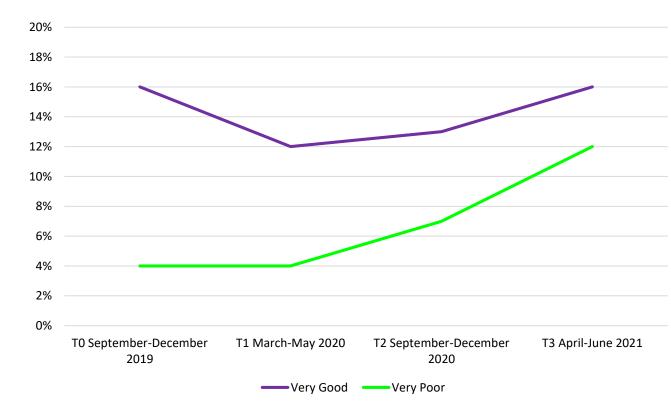
## Phase One: Preliminary Data

- COVID-19 impact and user needs sub-study: Cross-sectional multi-campus data collection (n=268 Year 2 undergraduate students).
- Tailored 63 item questionnaire instrument, developed from previous research (Bickerdike et al., 2019).
- 49% (n=131) of students perceived a requirement for a technological solution to improve health and well-being within campus settings.



**Figure 2.** Time students spend using technology, for a number of activities during weekdays (Mon-Fri)

Worryingly, 49% of students exhibited poor well-being on a validated measure (WHO-5 Well-Being Score ≤ 50).



**Figure 3.** Percentage of students who rated their sleep quality as 'Very Good' or 'Very Poor' during each of the four related timepoints as outlined in this study.

## **Impact**

- Preliminary data indicates that HEI students' health and well-being has been negatively impacted by the COVID-19 pandemic.
- Year 2 undergraduate students exhibited frequent use of technological modalities (Figure 2) and perceived a need for a technological solution to improve health and well-being.
- Future phases of 'Empower @ MTU' will inform a scalable solution that could be leveraged to enact the SDGs in collaboration with industry partners.

#### References

Bickerdike, A., Dinneen, J., & O'Neill, C. (2019). 'A Healthy CIT': An investigation into student health metrics, lifestyle behaviours and the predictors of positive mental health in an Irish higher education setting. *International Journal of Environmental Research and Public Health*, 16(22), 4318.









