



Sustainable health – developing a new fully online course enforcing critical thinking on sustainability

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Introduction

In 2015, United Nations member states agreed on the Sustainable Development Goals (SDGs). The third goal “Good Health and Well-being” aims to ensure healthy lives and promote well-being for all at all ages.¹



- Health and well-being can be seen as central themes, as they are closely connected with over half of the SDGs.¹
- With growing global challenges, integrating sustainable health (Fig 1) education into university curricula is essential.
- Universities play a crucial role in advancing the SDGs by equipping students with future skills to address complex sustainability issues.²
- Future skills are knowledge, attitudes, values, skills, and competencies intended to prepare learners for the future.³
- Despite its importance, universities lack multidisciplinary courses on sustainable health.⁴

Aim

To develop an online course "Sustainable Health" within the future skills framework, aimed at fostering critical thinking on sustainability.

Development process

- Course Aim:** to raise knowledge about the importance of SDGs, Estonians' public health status, future health challenges and the relationship between the environment, and health.
- Target group:** students across all disciplines and academic levels at the University of Tartu.
- Development period:** May 2023 to March 2024
- Developers:** two academics - one specializing in environmental health and sustainable development, and the other in nursing science and teaching and learning methods in healthcare.
- Teaching and learning methods:** we emphasized self-directed learning skills, including time management, collaboration, constructive feedback, and reflective practices.
- Experts:** we engaged leading experts in the field to record video lectures for the course.

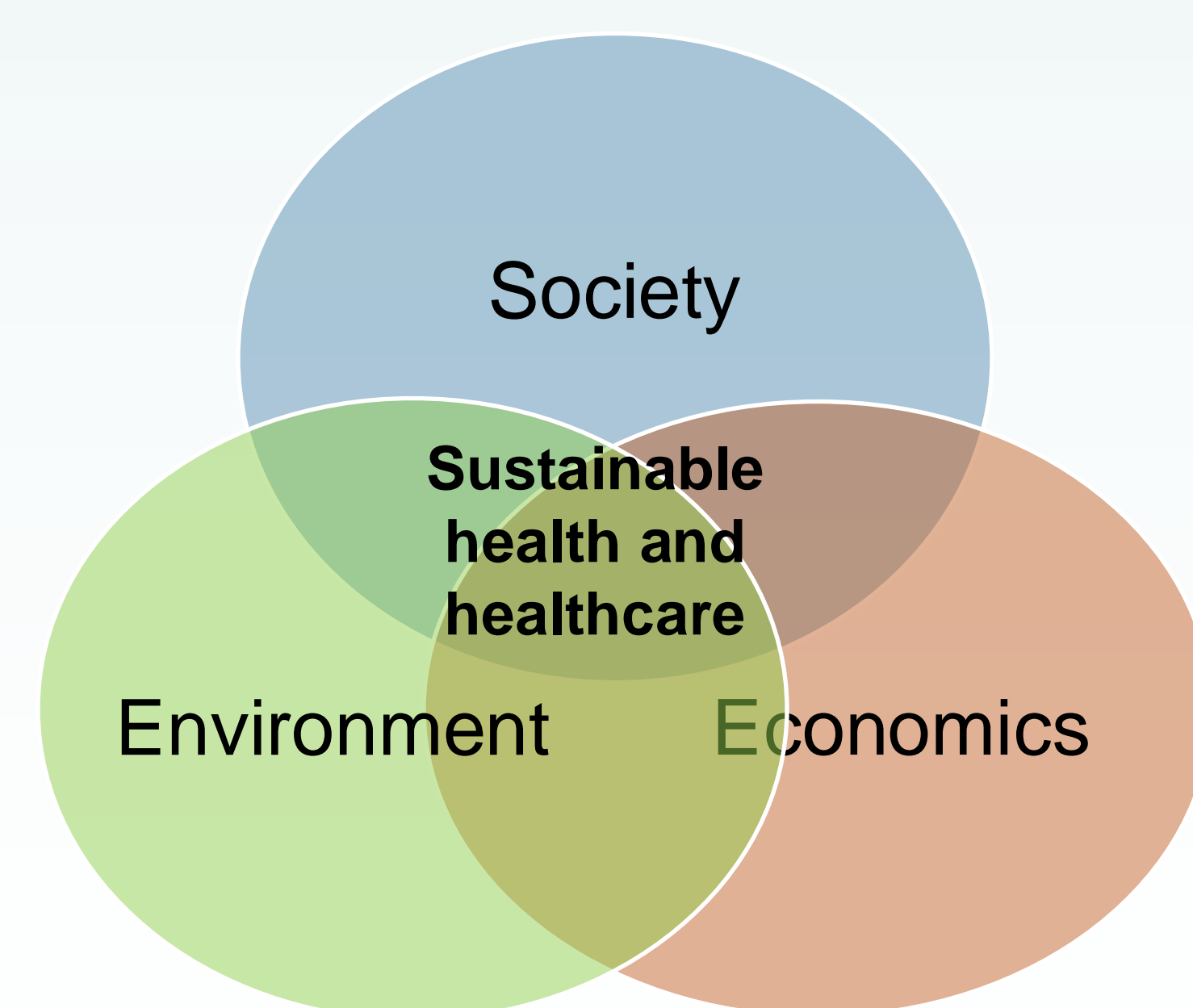


Figure 1. Concept of sustainable health.

Description of the course

- The course was divided in three modules (Fig 2).
- Each module consisted of video lectures by experts, interactive learning materials, and active learning tasks performed individually or in groups to apply what had been learned.

Module I



- Learning materials about SDGs
- Each student had to analyse one SDG in depth
- Students with the same SDG were combined into a group, and they had to develop an action plan for Estonia to improve societal processes in that context

Module II



- Learning materials about public health and environmental statistics
- Interactive worksheet, for which it was necessary to look for evidence-based information from national databases and reports
- Comparing ChatGPT and scientific literature results

Module III



- Individual analysis of dietary behaviour, traffic modal share, calculation of ecological footprint, and assessment of psychological stress and anxiety
- Based on the results, student had to develop a health promotion plan to improve their health and become more responsible

Figure 2. Course modules.

Conclusion and perspective

- Students found the course intellectually challenging, increased their interest on the topic, and appreciated the discussions.
- Course structure and online activities supported learning.
- The biggest challenge for students was to meet deadlines due to group work dependencies.
- Students needed support and reminders from the course leaders to improve deadline adherence.
- Future course development should identify strategies to motivate learners to adhere to the schedule, utilizing student feedback and course leader experiences
- We believe that this fully online course on sustainable health could also be implemented in ENLIGHT program engaging other ENLIGHT universities.

Contact

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References

- United Nations (2015). Transforming our world: The 2030 Agenda for sustainable development.
- SDSN (2020): Accelerating Education for the SDGs in Universities: A guide for universities, colleges, and tertiary and higher education institutions. New York: Sustainable Development Solutions Network (SDSN)
- Kotsiou, A., Fajardo-Tovar, D. D., Cowhitt, T., Major, L., & Wegerif, R. (2022). A scoping review of Future Skills frameworks. *Irish Educational Studies*, 41(1), 171–186. <https://doi.org/10.1080/03323315.2021.2022522>
- Amorós Molina Á, Helldén D, Alfvén T, Niemi M, Leander K, Nordenstedt H, et al. Integrating the United Nations sustainable development goals into higher education globally: a scoping review. *Global Health Action*. 2023 Dec 31;16(1):2190649