Inclusive Science

SCIENCE ON STAGE 2019 CASCAIS
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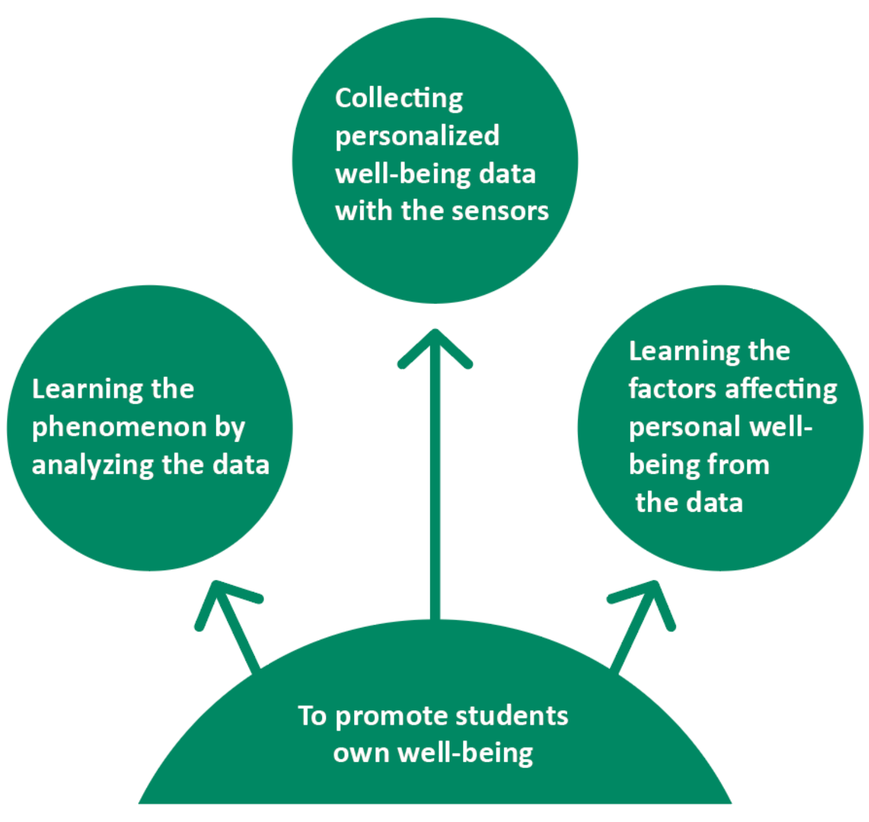
Exercise, well-being and measurement course in Jyväskylä Teacher Training School

- The course was based on the idea of multidisciplinary thematic studies, which is included in the new Finnish national curriculum for the upper secondary school (2016).
- The course integrated several different disciplines (physics, chemistry, physical education, health education, biology, maths, ICT and phychology).
- The main aims of the course were, firstly, that students measure their own body and its various physiological statistics (e.g. pulse, blood pressure), with sensors and, then, link the measured data to the studied phenomena (e.g. stress). Finally, the aim was to help students to study and find causal relationships between various measurements and phenomena.
- Themes of the course were physical activity, stress, rest and sleep management as well as nutrition.
- As part of the project, students got feedback on their well-being analyses from experts.



Students' experiences and evaluation of the course were very positive:

- Students found learning during measurements more interesting
- They also said that well-being analysis of themselves was useful (97 %) and it improved their personal well-being (78 %)
- Students liked the experts' lectures.
- However, 84 % of the students felt that the most effective learning method were the experimental measurements they did on their own bodies.

Material and equipment used in this project:

- sensors with applications
- Students' learning diaries
- visits and lectures by experts
- A computer platform for working and learning (peda.net)

Students experimented with methods of sensor-based learning in multidisciplinary teaching in upper secondary education. The aim was to combine the use of sensor technology and learning from self-produced well-being data to promote their own well-being.