
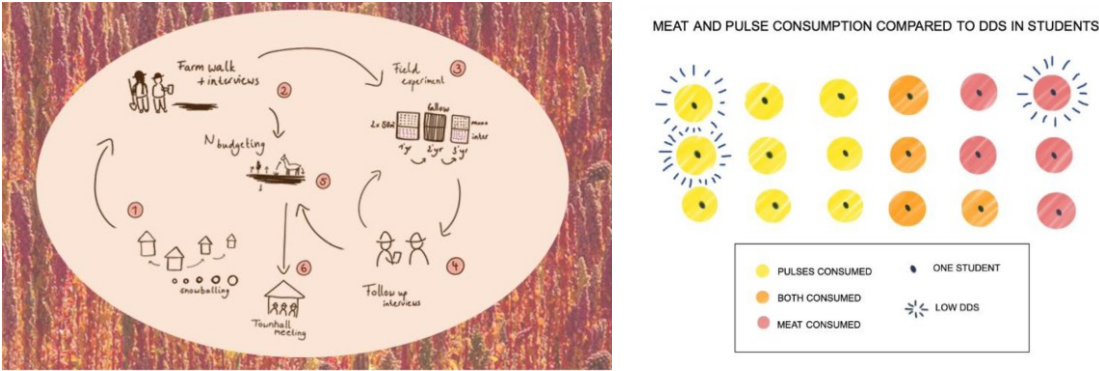


Afreportering om eksperimenter med forskningsintegration

Navn
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Kursusnavn
Environment and Development – From theory to practice. https://kurser.ku.dk/course/nigk20000u/2020-2021
Studienævn
Study Board of Natural Resources, Environment and Animal Science
Niveau og holdstørrelse
MSc Environment and Development, 1st year, 22 students
Beskrivelse af eksperimentet
<p>The students conducted detailed recordings of their food consumption in the past 24 hours. This exercise had two main goals:</p> <ol style="list-style-type: none"> 1) Students contributed to an ongoing ERC research project by testing a novel approach that combines precise food consumption data with coarse data 2) Students became co-researchers as their own consumption recordings yielded a high quality dataset that was used to further validate readily available, although less precise, data such as the Food and Agriculture Organization (FAO) Food Balance Sheets (FBS) <p>The experiment consisted of 5 main activities</p> <ol style="list-style-type: none"> 1) Hands-on exercises guided by teachers: Students learned how to measure food items (Photo 1) 2) Each student conducted 2*24-hour recall food diaries 3) Teachers compiled all student food diaries into one dataset 4) Students became co-researchers: They used the compiled dataset to compare with FAO data 5) Students worked with graphic facilitator to produce infographics (Photo 2 and 3)
 <p><i>Photo 1: Students estimate the weight of different foods using e.g. play dough and photo aids</i></p>
 <p><i>Graphic Additions by Astrid Froebrich</i></p> <p><i>Photo 2 & 3: Infographics by students with the goal of presenting data in alternative formats</i></p>
Udbytte for studerende

The students seemed to appreciate the hands-on-exercises as well as the fact that the dataset they worked with was based on their own food recordings. As part of the written evaluations, it was stated that:

- *“The very practical exercises like keeping a food journal to get acquainted with food scores was helpful”*
- *“I really like the idea of making our data set through the 24 hour recall, I found it engaging and also more effective to get to know statistical tests”*

Udbytte for forskningen

I obtained some very valuable insights on the potential problems with self-reported digital recall food recordings (these tend to be paper based and carried out by trained enumerators rather than being self-reported). This insight is paramount for improving my future data collection.

Samspil mellem undervisning, forskning og eksamen

The exam assignment was directly based upon the five activities: Students handed in a group project (10 pages) in which the first part had the following components:

- 1) Selection of at least 1 indicator of dietary quality
- 2) Presentation of estimates of the selected indicator/s across the student food recordings
- 3) Comparison of the chosen indicator/s to FAO stat data for Denmark

The second part of the exam assignment (group project) was, however, related to the broader curriculum.

Tilpasning af eksperimentet

Due to the COVID-19 lock down in late 2020, we had to move teaching online in the middle of the experiment. Luckily, the lock down happened after activity 1-3 had been carried out in November. Yet, the students' group work (Activity 4) with the compiled dataset as well as the session with the graphic facilitator (Activity 5) had to be done online.

We had originally planned (as the final teaching session) a 'FoodFair competition/dissemination event'. The plan was that students should prepare traditional dishes and 'compete' for prizes (e.g. ingredient estimates competitions). Also, their infographics on outputs should have been presented during the event, and we would have invited the study board to the FoodFair as part of evaluating the experiment. Due to the COVID-19 situation, the FoodFair has not yet been carried out.

Styrker og svagheder

The course 'Environment and Development – From theory to practice' aims to teach students how to move from conceptualizations to data collection, data analysis and data visualizations. The experiment was a unique opportunity to do so within the classroom – and the students were appreciative of the format. Ideally, the experiment will have long term impacts on students' skillset and research engagement as the experiment enhanced students' understanding of food security research and the challenges/opportunities such research entails. Yet, it should be noted that for some students the interactive teaching format was unfamiliar and they seemed at times to prefer more traditional lectures.

Oplevede udfordringer

Two challenges were experienced:

- 1) It was a relatively long process obtaining ethical clearance for the experiment
- 2) The experiment entailed heavy preparation compared to text-based lectures

Den vigtigste erfaring

It was exciting to see how much the students actually learned from the hands-on exercises. However, for a few students the format was perhaps too interactive (or just unfamiliar) as they expressed that they missed very text-based lectures. When comparing the students' performance at the exam and their ability to reflect upon the various components of the experiment with the performance the previous year (when I did not conduct the experiment), there is, however, no doubt that the students learned a lot from the experiment.

Gennemføres eksperimentet igen

We anticipate to make Activities 1-4 part of the course in the future. However, Activity 5 (work with graphic facilitator) will have to be downscaled due to budget constraints.