Hour 1: Design tips

Teacher impulse: *Four different companies would like to place advertising on an online platform specifically for young people*.

**Goal for the next lesson/series of lessons (pass on to the students):**

*For this customer, the specialist department for data is to develop recommendations for whom suitable advertising can be placed. You are employed in the specialist department and are to develop the recommendations.*

First, the platform operator has the following questions for you (approx. 15 minutes):

1. Benefits for young people/Who among you uses

* Wearables (e.g. pedometers, fitness watches, etc.)
* a games console (discuss: fixed or portable)?

What is it like in your course/class? (-> make "living statistics")

1. Who has a wearable and who doesn't?

First determine 2 locations in the classroom and distribute yourselves accordingly.

1. Is there a difference between girls and boys?

Determine 4 locations in the classroom and distribute yourselves around the room accordingly.

To answer the first. question, for example, the

1st location: Student female and owns wearable,

2nd location: Student is female and does not own a wearable,

3rd location: Student male and owns wearable,

4th location: Student is male and does not own a wearable.

1. The platform operators also want to know: How do young people behave with regard to

* the use of TikTok
* LetsPlay YouTube Videos,
* reading online newspapers?

What is it like in your course/class? What interests you about your classmates when asked about the LetsPlay YouTube videos? Is it like question 1?

Additionally: How often is this done?

How could the frequencies of the respective answers be displayed differently without you moving around the room?

**Transition**: The platform has received data from a survey of young people and would like to use this data to better describe potential users (i.e. young people) in order to place targeted advertising. Imagine that you are supporting the specialist department for data (e.g. because everyone there is ill). You will later receive the data set, a list of variables with the survey questions and the platform will use the data analysis tool CODAP as an evaluation tool.

**Teacher demonstration** (teacher shows an example of how data analysis works in CODAP) (approx. 10 minutes)

🡪Teacher opens CODAP and shows:

* Explain table (one row corresponds to one young person who took part in this survey)
* Columns correspond to the questions, abbreviated as characteristic names (also called variables)
* Evaluation is done in graphs by dragging a variable into the graph, e.g. "gender".
* Then use the functions on the right-hand side for further evaluations, e.g. display number
* Get second graph, drag in new variable "Grade level"
* Now there are other evaluation options, e.g. mean value (does this make any sense at all for the class level?🡪 No!).
* This is how you can make evaluations!
* Let's look at the questions from above in the data set. What about the big survey? How many young people have wearables available at home? (🡪 demonstrate)

*Task: Familiarize yourself with CODAP, the data set and the variable list. To do this, work on worksheet 1.*

Give students a list of variables and access to CODAP, they should work with the data set using worksheet 1 (approx. 20 minutes, possibly homework)

Homework if necessary: Complete worksheet 1