Project Number: 2021-1-ES01-K220-SCH-000034434

PR2.A – TEACHING SOURCES

Title	The Language of Graphs
Duration	1 session
Age Group	14 – 16 YO
Dimension of the advised group of students	*One group of 20-30 people divided in small groups*
Area	☐ *Area 1: Reading, writing and literature* ☒ *Area 2: Math* ☐ *Area 3: Second language learning* ☐ *Area 4: Sciences* ☐ *Area 5: Soft skills*
Specific objectives	- *To create an encouraging connection with math* - *To promote collaborative work* - *To understand math as integral to society and our day-to-day lives* - *To cope with problems* - *To understand mathematical relationships*
Needed Materials	- *PowerPoint presentation* - *Photocopies* If the training is organized **online** one communication platform will be necessary.
Software	- *One online communication platform, such us: Zoom, Google Meet, Webex, etc.* - *In person, no software is needed.*
Description	*When people carry out research, they usually gather a great amount of data that is easier to understand and draw conclusions from if they are organized and represented in graphs. Graphs make it easier for people to record and show information about any kind of work. Graphs are also useful to make predictions about things like the weather, interest rates, and the future cost of our home electricity usage. Information in graphs and tables is often found in newspapers and pamphlets, so it is necessary that the youth know how to interpret this kind of information in order to be global citizens.* *This activity teaches participants to display data in an easy manner, highlighting similarities, disparities, trends, and other relationships. When participants decide how to display data and go through the steps to create that display, they learn which types of graphs are useful for each type of data.*
Procedure on how	***Duration:*** *60 minutes* ***No of participants:*** *small groups* ***Methods used:*** *group discussion, collaborative work*

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to put in practice	***Competences developed:*** *critical thinking, logical thinking* ***Step-by-step description:*** 1. *Explain with examples from the PowerPoint what is a sketch graph and how we can use it to show the relationship between two sets of data.* 2. *Work in pairs to interpret different points from a sketch graph and compare them. Decide if sentences describing the graphs are true or false from the information contained in them. Match statements and graphs.* 3. *From a NYTimes video, participants in groups discuss how information is taken away from a graph.* 4. *Participants are then given data sets and asked to devise graphs from them.* ***Debriefing question:*** *Where else would sketch graphs be useful? Think of examples.*
Link	*https://digibuo.uniovi.es/dspace/bitstream/handle/10651/28482/TFM_Yuste%20Mieres.pdf;jsessionid=28BE394AA6825392B798F456B4525067?sequence=6*
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