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Na základě inspirace z mobility *Latest Digital, ICT & AI Solutions for Educators: Transform Teaching with Technology, Chat GPT, DeepSeek, Multimedia, Storytelling, Game-Based Learning & Smart Assessment Strategies, Split, Croatia,* která byla uskutečněna na základě tohoto projektu, byla vytvořena příprava pro výuku nejazykových předmětů v anglickém jazyce.

Data, Data Collection and Data Evaluation (with CLIL elements)

Written by: Libuše Kořínková

Lesson Plan for Computer Science – 6th Grade

Duration: 45 minutes
Topic: Data and Their Evaluation
Teaching Approach: CLIL + active digital learning,
Lesson Type: Based on pupils' own questionnaire results created in Google Forms.

This activity develops:

critical thinking, communication, interpretation of data

1. Learning Objectives

Content Objectives (ICT)

Students understand how data can be collected and evaluated, read information from graphs, compare results, interpret simple statistical data, create questions based on collected data.

Language Objectives (CLIL)

Students describe graphs using simple English, ask and answer questions about data, use percentages and comparison language, work with classroom instructions in English.

2. Key Vocabulary

ICT Vocabulary:

- data, graph, pie chart, questionnare, results, compare, analyse, evaluate, information, percentage

Useful Phrases:

- The graph shows ..., Most students...., Only a few students..., Nobody / Everybody ..., The biggest group is ..., The smallest group is ..., I think ..., According to the graph ...

3. Lesson Structure

- Warm-up and Revision (5 minutes)

Teacher briefly revises:

- *What is data?/ Why do we use graphs?/ What can graphs help us understand? "Why are graphs useful?"/"Which graph do you know?" /"Is a graph easier than a long text?"*

4. Main Activity – Creating, Collecting and Analysing Data (25 minutes)

The lesson builds on the previous discussion about graphs, data and information. Students work with their own questionnaire and real class data.

- **Brainstorming Question (5 minutes)**

The teacher asks: *"What do we want to know about class 6.A?"*

Students briefly discuss ideas together.

The teacher explains that before collecting data, we must think carefully about:

- what information we want,
- why the information is useful,
- and how to ask clear questions.

- **Creating the Questionnaire (8 minutes)**

Students suggest different questions for the class questionnaire.

Examples:

- Favourite colour, favourite subject, number of siblings, transport to school, opinion about school lunches.

The class discusses which questions are suitable and interesting.

Students must agree on the final version of each question before adding it into the

- **Filling in the Questionnaire (3 minutes)**

The teacher shares the Google Form in Google Classroom.

Students complete the questionnaire individually on their laptops.

The teacher reminds students:

- to answer honestly,
- to read carefully,
- to submit the form after finishing.

- **Automatic Data Collection (2 minutes)**

After all students submit the questionnaire, Google Forms automatically creates graphs and percentages.

The teacher briefly shows students:

how digital tools process data, how information is transformed into visual graphs, and how graphs help people understand results quickly.

Teacher Explanation

"The computer collected all answers automatically and created graphs for us. This helps people analyse data faster and more clearly."

- **Analysing and Evaluating the Results (7 minutes)**

Students first observe the graphs individually for a short time.

Then they work in pairs and answer teacher questions about the questionnaire results.

Example Teacher Questions

- “What information can you see?” / “Which answer is the most popular?” / “What surprised you?” /“Can we compare two graphs?” /“What can we learn about class 6.A?”

- **Students Create Their Own Questions**

Pairs create their own questions about the graphs and ask another pair.

5. Reflection / Exit Ticket (5 minutes)

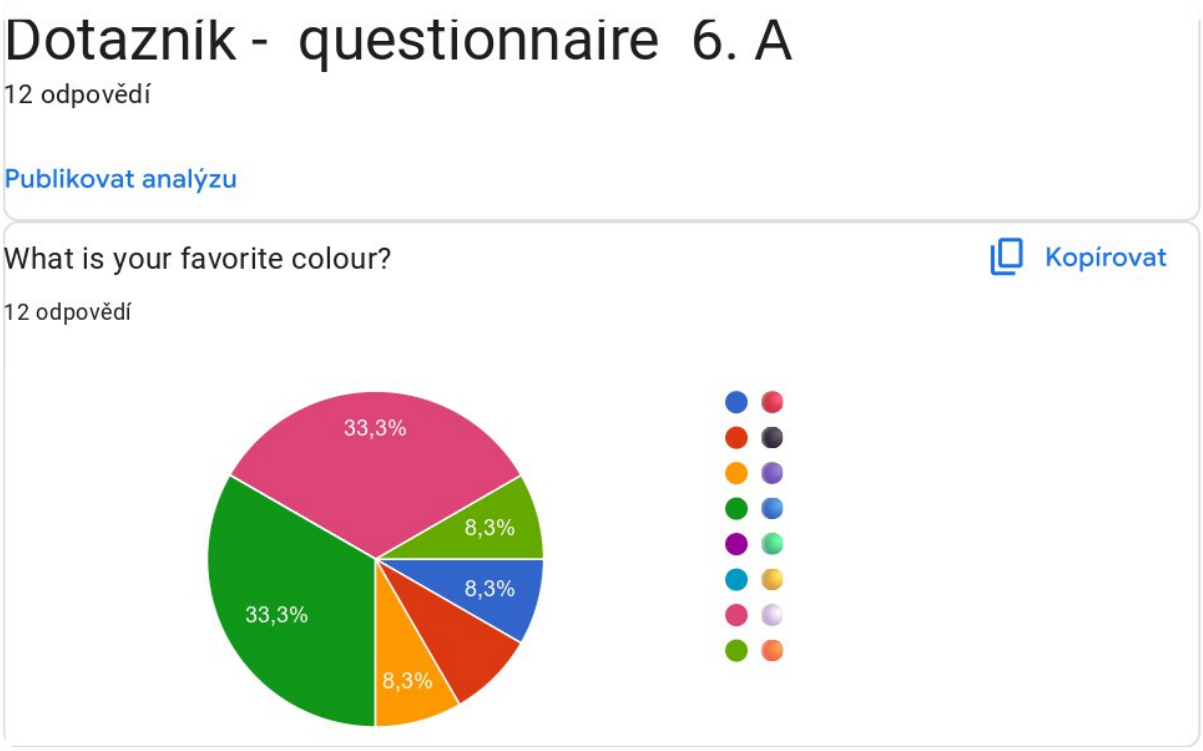
Teacher Questions:

- “What did you learn today?” / “Was it easy to read graphs?” / “Why is data important?” / “What was interesting or surprising?”

Exit Ticket

Students finish one sentence:

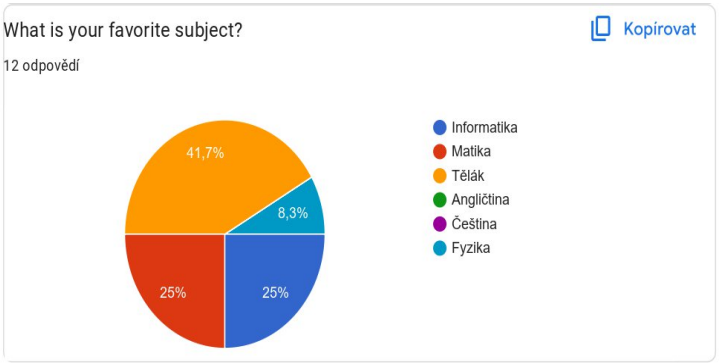
- “Today I learned that …” / “The most interesting graph was …” / “Next time I would ask …”



What is your favorite subject?

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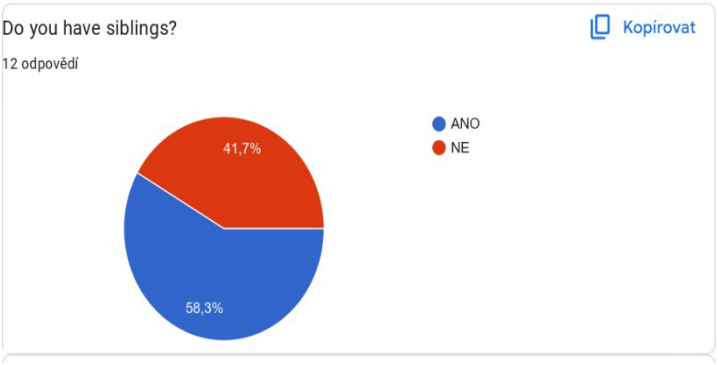
12 odpovědí



Do you have siblings?

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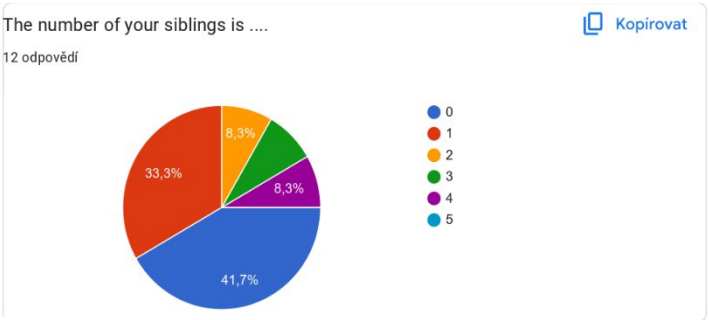
12 odpovědí



The number of your siblings is ....

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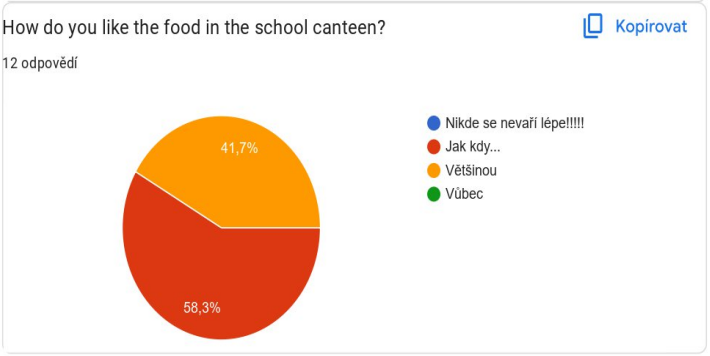
12 odpovědí



How do you like the food in the school canteen?

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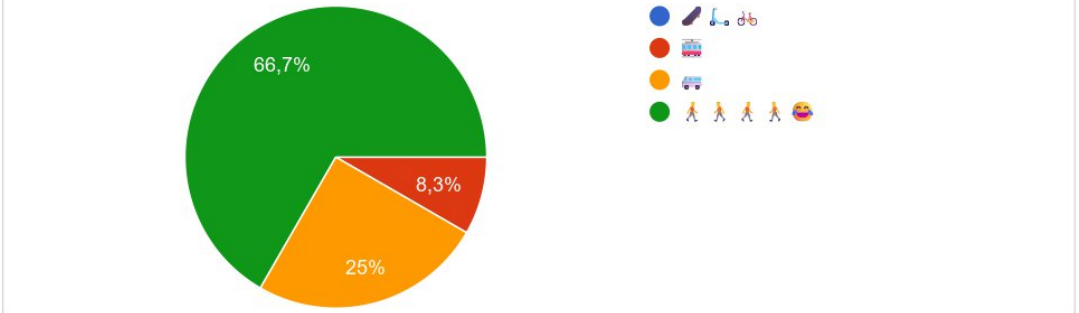
12 odpovědí



How do you go to school?

Kopírovat

12 odpovědí



Student Questions



Graph 1 – Favourite Colour

- "Which colours are the most popular?"
- "How many students chose green?"
- "What color is popular in our class?"

Graph 2 – Favourite Subject

- "Which subject is the most popular?"
- "Why do you think Informatics is popular?"

Graph 3 – Siblings

- "Do most students have siblings?"
- "What is more common – having siblings or being an only child?"
- "How many students do not have siblings?"

Graph 4 – School Canteen Food

- "Do students like school lunches?"
- "What is the most common opinion?"
- "Is anybody very unhappy with the food?"

Graph 5 – Transport to School

- "How do most students go to school?"
- "Is walking common?"
- "Which transport is the least common?"
- "Why do you think many students walk?"

Teacher Questions

- "Are there any unpopular colours?"
- "What percentage of students like PE?"
- "What can the school learn from this graph?"
- "Which question would you add to the questionnaire?"