

# Delta i data! – Teachers' guide



## Background

'Delta i data!' ('Participate in Data!') is a game package designed for upper secondary students with activities for getting to know each other in the beginning of the school year. In this toolkit you'll find two games that focus on creating good conversations about one's own interests, but also about how we share and communicate digitally using data on a daily basis. Learning about data is particularly relevant because data is the driving force behind AI technology.

The games were developed in the Erasmus+ project [DALI](#), and further developed by [SLATE](#) (UIB), with help from the [KI-gruppa](#) in Vestland County Council. For a PowerPoint-presentation of the games and assignments, visit this [website](#).

In each box set contain games for one school class (up to 32 students), but can also be split up (for 2 x 16 students).

The games can also be downloaded as print-and-plays (in PDF-format) here: <https://edustrust.slateresearch.ai/game-package-english/>

**TIP: Play DataDelta with the teaching staff! (15 minutes)**

*With the digital version, cards can be shown on a big screen while the players sit together in groups. (For the rules, see page 3).*



Class set  
For up to  
32 players

- 6 x DATA DELTA
  - 6 decks of card
- 8 x DATA ICEBERG
  - 8 decks of card (1 per game)
  - 32 boards (4 per game)
  - 8 leaflets with rules and solutions (1 per game)

**DataDelta is also available as a digital game:**

<https://kisida.no/datadelta>

## Purpose

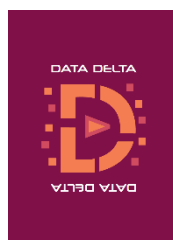
- Get to know each other.
- Learn about:
  - What is data?
  - How is data created?
  - What types of data exist?

«Fun [session], I feel like I got to know my fellow students a little better, and data»

«Always useful to learn about the digital we use all the time in our daily lives»

«The game was fun, and it can be used to get to know each other better, and learn how to use search words»

Student quotes



## Teaching programme for students (2 x 45 minutes)

A PowerPoint with the rules and assignments can be downloaded [here](#).

*Tip:* Play both games yourself, perhaps with a colleague, before playing them with the students.

### **1 – DataDelta (45 min)**

**Rules** (5 min)

**Play DataDelta** (30 min)

**Discussion and assignments** (10 min)

- What is data?
- How is data created?
- Collaborative web search

### **2 – Data Iceberg (45 min)**

**Introduction** (10 min)

- 4 types of data (with examples)
- Rules for Data Iceberg

**Play Data Iceberg** (30 min)

**Discussion and examples** (5 min)



# DATA DELTA- Game

## session 1

### Plan (45 minute)

1. Divide the class into groups (4 – 6 per group)
2. Explain the rules (5 min).
3. Play DataDelta (30 min).
4. Assignments (10 min)

### Tip

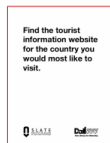
Each student needs a phone or computer with internet access.

Remember to shuffle the cards well.

Rotating the role of the referee ensures that everyone get the opportunity to be a referee.

## DATA DELTA RULES

4-6 players  
30-40 minutes  
54 cards



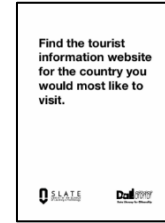
Chose a Referee for the first round, and shuffle the cards

1. **The Referee picks a card** and reads it out loud.
2. **The other players** uses their phone to find what the card is asking.
3. **After 1 minute** each player share what they have found
4. **The Referee chooses their favorite answer** and announces the winner of the round.
5. **The winner of the round** gets the card, and then becomes the referee for the next round. **Or:** Let the players take turn in being the Referee.
6. **The winner of the game** is the player with the most cards

### Alternative adaptations

- **Teacher-led:** Play a round or two in plenary with the whole class. Show the digital version of the game on a big screen: <https://kisida.no/datadelta>
- **Play without competition:** Split a deck of cards in several piles and let the students use the cards to search together (in pairs).

# After playing DataDelta (Debrief)



## Task 1: Group discussion

Talk together about the searches you did during the game:

- Which search engines and apps did you use?
- Did you accept 'Cookies'?
- What data have you shared? (for example: what search words did you use?)

Go into app store (etc.) and choose an app you used in your searches. Read what is said under 'Data security' and 'Collected data'. What kind of data does the app say it collects?

**For example:** The YouTube app gathers: pictures and videos, sound, messages, app activity, personal information, and so on. More [examples from Google here](#).

## Task 2: Collaborate on searches

- Everyone in the group searches with exactly the same words in the same search engine. Compare the results.
- Then, use the same search words in different search engines (Such as Google, DuckDuck Go, Bing/Copilot). Compare the results.

*Discuss:* What does the result look like? Does the same result and sequence appear for all players? Why/why not?

Feel free to search several times (for, for example, clothing, travelling, recipes, etc.)

### Some extra resources

AI FOR TEACHERS: AN OPEN TEXTBOOK: [A brief description of some search engines](#)

«A search engine uses both regular and machine learning algorithms that analyse data to find patterns and use patterns or rules to make future decisions or predictions».

For example:

'Indexing': <https://pressbooks.pub/aiforteachers/chapter/ai-speak-search-engine-indexing>

'Ranking': <https://pressbooks.pub/aiforteachers/chapter/ai-speak-search-engine-ranking>

## Dataisfjell – Game session 2

### Plan (45 minutes)

1. Divide into groups (2- 4 per group)
2. Introduction (10 min). Review of:
  - Four types of data (with examples)
  - The rules
3. The groups play Data Iceberg (30 min).
4. Finishing (5 min)

### Tip

Don't spend too much time on the review. Let the students play and use their curiosity and learn through discussion. Instead, walk around and give advice along the way.

The students must shuffle the cards well.

Each player turns two cards, like the game Memory.

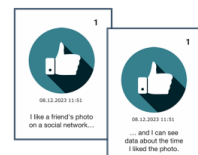
The solution sheets can either be used whilst playing the game, or at the end of the game.

*Remember:* Det most important thing is not that the students place the cards in the 'correct' category, but that they discuss and realise that data is created and, for instance, that data can be both visible and invisible.

## Data Iceberg RULES



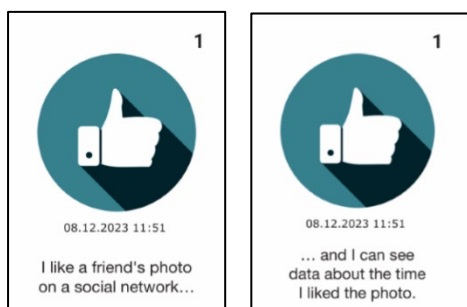
2-4 players  
30-45 minutes



1. **Spread the cards on the table** picture down.
2. **Look for pairs** with the same picture (turn two cards).
3. **Read the story** on the pair of cards. Give extra attention to the last card:  
*What type of data is created?*
4. **Place the pair of cards** on the correct data category on your game board.
5. **Check in** with the other player: What do they think?
6. **Check the solution sheet.** You will keep the cards if you placed them correctly
7. **The Winner** is the one with the most cards placed correctly on their game board

## Important

The game asks players to categorise for one type of data, but there can still be several types of data involved in a story (i.e. a pair of cards).



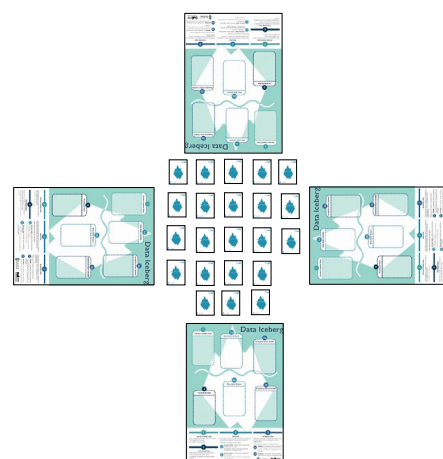
*For example:* The text on the first card (left) can describe a 'like' on a social network (raw data), but it is the most 'advanced' type of data, the time (the card on the right) that is the basis for the answer displayed in the solution suggestion (analytical data).

The most important thing is that the students talk together and become aware of the fact that different types of data is produced.

You can also be flexible and make small adjustments to the rules, by letting the students identify several types of data for each pair of cards. Then you can split the cards and place them in different categories.

## Alternative adaptations

- **Teacher driven:** Play a test round with the whole class. Use an example from the PowerPoint or from the answer sheet/deck of cards.
- **With collaboration:** Let the students play in teams in pairs (two-and-two). Max 4-6 players per group (One game board per student pair).
- **Without the Memory game:** Let the students go through the cards together (two-and-two), read the stories on the cards, and place them on a game board.



Setup for 4 players

## After playing Data Iceberg (Debrief)

The teacher can go through some of the cards, go through the solution suggestion, or use one of the examples from the PowerPoint in a joint review.

**The teaching programme is under development.**



For the latest edition, go to: <https://edustrust.slateresearch.ai/teaching-resources/>