

Data and chance: Data – Suggestions for the learning environment

IDEAS FOR THE CLASSROOM

- Encourage children to make sense of data by facilitating 'data talks'. This involves presenting varied data representations to children in order to promote open-ended and exploratory conversation. Ask children what they notice and what they are curious about, using data that is related to their interests, their lives, or the world around them.
- Introduce children to the data handling cycle. The stages are: 1. Identify a problem 2. Pose a question 3. Collect and represent data 4. Analyse the data 5. Draw a conclusion.
- Younger children can investigate a simple data set such as the number of letters in their names. Encourage the children to consider other ideas for representing the number of letters.
- Encourage children to investigate meaningful and relevant topics to them. The Central Statistics Office has a range of data visualisation tools including, *Baby Names*, *How Popular is your Birthday*, *Ireland's Top Motors* and a range of very interesting infographics to stimulate further questions among children for investigation.
- Introduce children in Stages 3 and 4 to digital data collection tools.
- Discuss the uses of fitness trackers. Test their accuracy. Consider their usefulness. What are the pros and the cons of this data collection?



IDEAS OUTSIDE THE CLASSROOM

- Keep a tally of the weather for a week. Analyse the information gathered to make weather predictions for the following few days. Discuss how accurate these predictions were.
- During a school clean up, record types of rubbish found, e.g., *drinks cans*, *bottles*, *crisp wrappers*. Organise and represent this data to show other classes in school what type of rubbish is being thrown around and collectively find solutions to reduce this type of waste in the school.
- Use an activity such as the long jump. Encourage children to work in pairs or small groups to jump from a standing position and record the length of the jump. Repeat four times and find the average distance jumped. Encourage children to consider ways to improve the distance jumped.
- Measure the circumference of a number of tree trunks (either same species or varied) in the school grounds or local park. Organise and represent this data and use it to find the average circumference of the trees.
- Ask children to record data that is generated through day-to-day activities such as, *time spent on screens*, *fizzy drink consumption*, etc. Encourage children to represent this data, discuss the findings and how this data could encourage healthier choices. Compare data recorded from the following week and discuss the comparisons.

