A Maths Project on Probability

Aims in Maths: The students will learn about probability, the methods of solving probability problems and how to apply this knowledge to everyday situations. The students also learn how to use and analyse mathematical terms and their interconnections.

Time for the project: 4 weeks.

Background: The teacher initially gives a few short lectures on the subject of probability. At the same time the students start working individually in their math books. After having received a basic knowledge on probability they are asked to work in pairs or groups creating short lessons by using Learnify. On this platform they will find all the tools they need to create their own digital material. Before they start their work the teacher thouroughly demonstrates all the tools that they are to use on Learnify.

Group/pair work now begins.

- **Step 1 Group work:** The students work with Learnify. They are asked to create a minimum of three pages about probability.
- 1. On the first page they give an introduction to the topic (what probability means in mathematics and other facts related to it). The students can choose either English or Swedish for this project.
- 2. A minimum of one page should contain examples of how we count probability.
- 3. The students should make up at least one game about probability.
- **Step 2 Presentation**: The students present their lesson in front of the class (their own or another class) or in smaller groups. Each presentation takes about 10 minutes.
- Step 3 Evaluation and feedback: The students listening to the presentation all produce written evaluations based on two main questions; What was the best part of the presentation? What advice would you like to give to the group? A short discussion then follows on the contents and performance of the presentation, led by the teacher.

Grading:

The criteria for evaluation of the mathematical part are:

- Correct organization of the work
- How broad and interesting the presentation is
- How many co-students understood the speech and could learn about probability
- How often mathematical terms were used in the presentation

The criteria for evaluation of the English part are:

- Well-prepared presentation showing an awareness of the listeners
- The clarity and fluency of the spoken language
- The complexity, correctness and variation of vocabulary (words and expressions)
- The use of strategies solving any problems that might occur when interacting with the other students in a constructive way