



The Sky Is Not the Limit

When some teachers from a tiny elementary school in Finland launched into Deep Learning, they set their sights beyond the skies. Three classes of Grades 5 and 8 students engaged in a multidisciplinary module that covered physics, environment, and technology. The students designed a weather balloon that would soar into the atmosphere and collect data on temperature, humidity, windspeed, and atmospheric pressure, allowing the students to predict weather days in advance. The project was a bold undertaking and earned Veikkola School a prestigious international award.

Digital played a central role in the student learning. For example, students video-recorded their experiments and used 3D printing to fabricate special parts required for the balloon. They had to design equipment that would collect data and provide video while the balloon was in flight. They also facilitated real-time video and pictures that were shared on Instagram.

Ironically, designing the weather balloon wasn't the real challenge. It was learning how to navigate through bureaucracy to legally and safely launch the balloon. So teachers Aki Kukkonen, Janne Nieminen, and Jussi Roms tapped multiple partners, including an amateur radio league, the Finnish Meteorological Institute and Transport Safety Agency, and the Lammi Biological Station at the University of Helsinki. Their professional expertise and access to resources and equipment enabled this lofty learning design to take flight. The teachers recognized the relevant life lessons these partners provided. "The project was not just to make the weather balloon fly, but to follow laws and to show pupils how much pre-work and partners a quality project needs." They added, "It was essential to learn how to find right partners, follow the instructions given by official authorities and cooperate with them all."

Check out a short video of the project: <https://youtu.be/2kxciRZSo6s>

From a small town school to the world and a little beyond . . .