

# PROJECT REPORT: SCIENCE FOR KIDS AND SCIENCE FOR SCHOOLS 2024-2025

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## SCIENCE FOR KIDS

### SUMMARY

The Arctic Frontiers Science for Kids program is a collaboration between Nordnorsk Vitensenter and Arctic Frontiers which aims to spark curiosity about science among kindergarteners from Tromsø and enabling them to create knowledge themselves. In 2024, seven kindergartens and about 70 children and kindergarten staff from all around Tromsø participated in Science for Kids. Science for Kids promotes giving children an active role in asking questions and participating in research projects.

### INSPIRATION DAYS 2024

On September 9 2024 kindergarteners from Breivika, Workinnmarka, Hvalrossen, Tinfoten, Tsseladden, Trollstua and Skitteneelv kindergarten visited the Nordnorsk Vitensenter for an exciting day of learning. They met a marine biologist, who shared how her life as a researcher looks like and took the kindergarteners on a fictional expedition to the North Pole, learning firsthand how scientists investigate the world around them. The purpose of the Inspiration Days is to foster curiosity among the children about their environment.

In October, the kindergarten staff returned to Nordnorsk Vitensenter for training on how to conduct research with children. They applied this knowledge then in the kindergartens by working on a research project based on the questions the children came up with. Kindergarteners and adults worked together on questions such as *Where do Spiders go in autumn? How is honey made? and Why do crabs walk sideways?*

### PLAKATFEST 2024

On December 11 2024 the kindergarteners returned to Nordnorsk Vitensenter to present their hard work and results in form of research posters. Each of the seven participating kindergartens presented one poster. The kindergarteners presented their research questions proudly to representatives of Nordnorsk Vitensenter and Arctic Frontiers and answered questions about their projects eagerly. The concluded the poster party with a science show hosted by Astrid Wara from Nordnorsk Vitensenter.



Figure 1: Kindergartners presenting their research questions at the Science for Kids Poster Party in December 2024 at Nordnorsk Vitensenter.

The poster titled "[Hvordan lages Honning?](#)" made by Breivika kindergarten won the 2024 Forskerfrøprisen. This is the second time an Arctic Frontiers Science for Kids project won this research seed award after Skittenelv kindergarten has won the award previously in 2019. The jury justified the award by saying that the project put the childrens' own questions and wonders into focus and supported their exploring and testing of their own hypotheses. The jury also acknowledged that the teachers used external experts and sources to enrich the childrens' learning. Next to getting their questions answered, the children also successfully learned where to get scientific information and use local sources. The achievement that one of the kindergartens projects won the 2024 Forskerfrøprisen shows that the work we do together with Nordnorsk Vitensenter maintains a high professional level and is valued nationally. We are proud of the work all the participating kindergartens have achieved this year!

<https://samskipnaden.no/nyheter/2025-02-04-breivika-studentbarnehage-vinner-forskerfropriisen-2024>

<https://www.xn--forskerfr-t8a.no/c2175481/artikkel/vis.html?tid=2202365>

## SCIENCE FOR SCHOOLS

### SUMMARY

The Science for Schools program, organised by Arctic Frontiers in collaboration with Nordnorsk Vitensenter, is designed to showcase the exciting and important research taking place in the Arctic region and inspire young people to choose a career in science themselves. We want to create an arena where young people can meet researchers and work on their own research projects and thus be part of the important work that takes place in their home region. Through the Science for Schools program secondary school students get the opportunity to engage with locally rooted examples of the application of different knowledge in research. Next to attending expert talks, the school pupils also conducted their own research about Arctic issues, took part in an excursion to the local research station FISK and attended the Arctic Frontiers conference poster session and Youth reception.



Figure 2: Marja Gächter showing bacteria samples to Science for Schools participants.

### INSPIRATION DAYS 2024

In Autumn 2024, Arctic Frontiers and Nordnorsk Vitensenter hosted the Inspiration Days under the Science for Schools program. Spread over four days in October and November 2024 more than 580 students and teachers from all around Tromsø visited Nordnorsk Vitensenter and Fram Centre. This year the schools Sommerlyst, Kroken, Grønnåsen, Storelva, Langnes and TRINT participated, as well as Ekrehagen and Tromstun, who joined Science for Schools for the first time. In addition, 2STF Forskerlinja at Kongsbakken VGS and Naturfag 1 at Tromsdalen VGS have participated in the Inspiration Days.



Figure 3: Student preparing bacteria samples to look at them under microscopes.

For the Inspiration Days, Arctic Frontiers organized expert talks by early career scientists on various science topics, including *Bacteria in different Environments*, *Kelp Reforestation and Salmon Pesticides*, *Ethics of Genome editing*, *Fieldtrips as a Glaciologists* and *Green life under the Arctic sea ice*. Following the expert talks, the students had the opportunity to engage with the early career researchers in a Q&A session and delve deeper into their career choice and how their life as a researcher looks.

The students also engaged in two activities: looking at bacteria under microscopes, led by Marja Gächter, a PhD student from UiT. And learning more about biodiversity conservation in Finnmark and Troms by counting animal species filmed by wildlife cameras, an activity led by the COAT project (UiT).

After the Inspiration Days, the school pupils returned to school to work on their own research projects and prepare posters guided by the teachers. The students presented their posters in the schools, who selected the best posters internally to present at the Science for Schools Student Conference.



Figure 4: Student counting different animal species recorded by wildlife cameras around Finnmark.

## STUDENT CONFERENCE 2025

On January 21 and 23 2025 the winners of the participating schools returned to Nordnorsk Vitensenter to present their posters and compete to have their posters exhibited at the 2025 Arctic Frontiers conference Beyond Borders.



Figure 5: Student from Sommerlyst presenting at the poster conference.



Figure 6: Poster jurists Delphin Ruché and Jamie Hollander.

In the morning the students engaged with two more expert talks on *Citizen Science projects in Tromsø area*, held by Delphin Ruché (Rissa Citizen Science), and on *Sea Ice Operations in the polar regions*, held by William Copeland (Norwegian Meteorological Institute).

After a lunch break the students presented their posters in front of a jury. The jurists were Delphin Ruché, and Jamie Hollander, from UiT. They provided feedback to the students and asked them questions about their research project. The jurists were also responsible to choose the winning posters of the competition. The choose winners in the categories "Best Poster", "Best Presentation", and "Most Creative". The highschoolers were judged separately from the participating 10<sup>th</sup> graders to account for different levels of experiments and research.

While the jurists made their final decision about the winning posters, the students attended an exciting science show hosted by Nina Bohle Olsen (Nordnorsk Vitensenter). Some of the students even participating in experiments themselves under supervision of trained staff.



Figure 7: Science show at the Science for Schools student conference.

In total, 26 student posters were presented spread over two days. Unfortunately, Tromsdalen VGS did not submit any posters and consequently did not participate in the Student Conference. It has been the first year Tromsdalen VGS has participated in Science for Schools. Efforts were also made by TRINT and Nordnorsk Vitensenter to have students from the Paris International School participate in the Poster Conference. However, Paris International School had to cancel their visit shortly before.

Jan 21		Jan 23	
School	Number of Posters	School	Number of Posters
Tromstun	6	Sommerlyst	6
Korke	4	TRINT	1
Langnes	2	Grønnåsen	3
Ekrehagen	1	Kongsbakken VGS	2
Storleva	1		

Three winners were chosen from the 10<sup>th</sup> graders, and two winners were chosen from Kongsbakken VGS. The winning groups participated together in an excursion to Akvaplan-niva's research station FISK on Kvaløya, presented their posters at the Arctic Frontiers conference poster session on January 27 and were invited to the Arctic Frontiers conference Youth Reception, where they met other Arctic Youth participants of the conference.



Figure 7,8: Science for School winners presenting their posters at the poster session of the 2025 Arctic Frontiers conference Beyond Borders.

## WINNING POSTERS

### 10th Graders

Best Poster: [Changing Currents](#) (Storelva)

Best Presentation: [Zombie Salmon Apocalypse](#) (Sommerlyst)

Most Creative: [How Norwegian salmon farms turn dinner into ocean drama](#) (Langnes)

### Highschoolers

Best Poster: [The Salty Side of Arctic Algae](#) (Kongsbakken)

Best Presentation: [Microplastics in Snow Piles](#) (Kongsbakken)

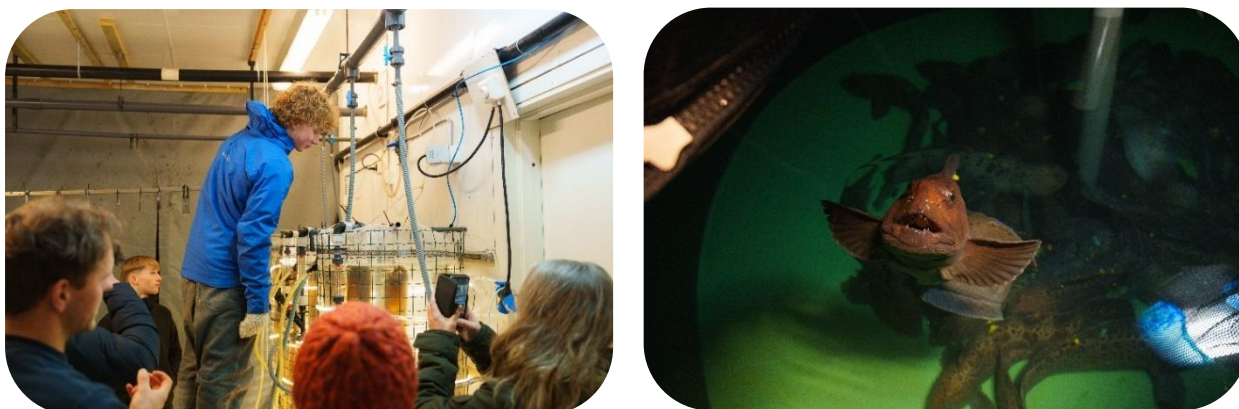


Figure 9,10: Students came into close contact with fish during the excursion to Akvaplan-niva's FISK research station.

**THANKS**

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