

Международный проект BRO 2019

4 февраля 20 учащихся 10 А и 10 Б классов в сопровождении учителей английского языка Ершовой Н.Н. и Рыбиной В.А. МБОУ гимназии №9 выехали из Мурманска в г. Рованиemi, Финляндия, для участия в международном проекте BRO “Barents Region Opportunities - The Rivers of Barents Region as a unifying and dividing factor for people, culture and economy” («Реки Баренц-региона – как объединяющий и разъединяющий фактор для людей, проживающих в регионе, их культуры и экономики»)

В этом году участниками проекта были:

- международный класс бакалавриата школы высшей ступени г. Киркенес (Kirkenes Videregående Skole), Норвегия
- международная школа бакалавриата г. Рованиemi (Rovaniemi Lyseonpuiston Lukio IB World School), Финляндия
- МБОУ г. Мурманска гимназия №9

5 февраля участники проекта встретились в международной школе бакалавриата г. Рованиemi. Перед нами выступили директор школы Туови Паломая и координатор проекта Тима Лаккала. Затем были представлены преподаватели из Норвегии, России и Финляндии - руководители международных групп. Каждому участнику проекта вручили значок участника международного проекта, изготовленный в г. Мурманске по эскизу учащихся гимназии № 9 г. Мурманска. После официальной части началась работа над проектом в международных командах. Каждый из участников выбрал тему еще дома. В Рованиemi учащиеся разделились на группы в командах, поделились подготовленными материалами, сравнили полученную информацию, объединили результаты опросов, распределили обязанности для подготовки брошюр, презентаций и видеороликов.

После ланча все отправились на экскурсию в Арктикум, научный центр и музей (Arkticum Science Center and Museum). Мы узнали, что в Арктикуме работают две организации – Арктический научный центр Лапландского университета и областной музей Лапландии. Участники проекта могли познакомиться с природой севера, его культурой и историей. Группа, тема которой была «История», использовала некоторые материалы экскурсии в своей презентации.

Мы продолжили работу над созданием брошюр, видеороликов и презентаций на следующий день. Во второй половине дня мы отправились на экскурсию на гидроэлектростанцию Pittikoski Hydro Power Plant. Здесь мы услышали историю создания электростанции, посмотрели видеофильм, спустились в шахту, познакомимся с работой станции. Удивительно, но управляют работой электростанции из Хельсинки, а обслуживают ее 6 человек, хотя справиться с этим может один человек.

В международной школе бакалавриата г. Рованиеми существует традиция начинать учебный день с обращения руководителей, учителей или учащихся школы ко всем учащимся школы. 7 февраля, заключительный день работы, начался с приветственных слов координатора проекта школы и выступления представителей школ-участниц. Учащаяся гимназии №9 Анастасия Белецких в русском национальном костюме исполнила русский танец, а Елизавета Марочкина исполнила популярную русскую песню. Нашим участникам аплодировали все присутствующие. Затем команды продолжили работу над проектом. В 12 часов команды представили свои презентации, брошюры и видеосюжеты, выступили с защитой проектов. Жюри отметило творческий подход, использование научных терминов, работу команд при создании презентаций, брошюр и фильмов. Каждый участник проекта получил сертификат участника.

Участники проекта имели возможность общаться со сверстниками из Финляндии и Норвегии на английском языке и поучить их русскому языку не только во время работы над проектом, но и в неформальной обстановке во время прогулок по городу Рованиеми и посещения кафе и магазинов. Время от времени учащиеся школы из Рованиеми произносили фразы на русском языке.

Вечером 7 февраля мы поехали в деревню Санта Клауса, мир снега и льда. Здесь мы прошли по залам, посвященным истории создания деревни, познакомились с необычными экспонатами, посмотрели видео. Нас приветствовали эльфы, помощницы Санта Клауса. Многие впервые увидели место, где проходит Полярный круг. Было очень интересно. На мы сфотографировались с хозяином деревни в главном здании Santa Claus Gift House, куда приходят письма Санта Клаусу, и откуда отправляют рождественские подарки по всему миру. Совместная фотография всех участников проекта с Сантой будет напоминать о незабываемой поездке. Жаль, что наша поездка так быстро закончилась.

8 февраля мы вернулись домой.















This project is a collaboration between Kirkenes VGS International Baccalaureate, Gymnasium No 9 in Murmansk and Rovaniemi IB World School. The project will take place in Rovaniemi 4th – 8th of February 2019.

Partners

Kirkenes VGS IB, Gimnazia no.9 and Lyseonpuiston lukio IB World School would like to continue a successful cooperation with a common project working with «Barents Region Opportunities - The Rivers of Barents Region as a unifying and dividing factor for people, culture and economy».

The project will involve traditional topics such as History, Anthropology, Environmental Systems and Societies, and of course English, as all communication is in English.

The topic is chosen because of continuous collaboration between the schools over the last year, since the previous project in 2018. The final week will take place in Rovaniemi 4th – 8th of February 2019.

All schools play an equal role in planning and developing the content of the project by cooperating closely in the months before the actual gathering in Rovaniemi, during the intense project week and in the process of evaluation. The subject teachers in all schools develop the different topics together, and involve the students in cross border cooperation over the web. The project has a Facebook page where everyone involved can post ideas, the teachers organize groups, and prepare before the week in Rovaniemi. The teachers are also frequently in contact by email to ensure the quality of the different subjects we are focusing on. The administrators in Kirkenes, Murmansk and Rovaniemi have been in continuous dialogue the last year.

Kirkenes VGS is in charge of the budget and application to the Norwegian Barents Secretariat, and will be leading the process of finalizing the project report together with the other schools. All schools have contributed and are working continuously to develop the quality of the project.

Rovaniemi will host the project, and add a new dimension to the cooperation as it is the first time it is held in the arctic city of Lapland. All three schools will contribute with subject teachers to guide the students and organize activities during the project.

Preparations and ongoing process before the days in Rovaniemi

- At the end of last year's project, we agreed on the topic for next year
- Correspondence between the schools from September 2018 to start the process of developing topics and subtopic.
- Regular emails to discuss content and find approaches to the group work. In these emails, we have worked with different ideas and approaches, and agreed on which teachers to lead the different groups.

- Planning meeting in Inari in September. International Project manager and team leader IB from Kirkenes met with IB DB coordinator and teachers from Rovaniemi to discuss the content.
- Kirkenes teacher made a Facebook page for the project for everyone, teachers and students to join, to be able to prepare, post documents and discuss.
- The subject teachers are involved and started to cooperate to make a detailed content and specific subject related learning outcomes. All schools try to link it to the curriculum.
- Planning meeting in Murmansk in December. IB coordinator, project manager, IB team leader and teacher (KVGS) and Gymnasium no 9.
Planning meeting to set and agree on practical matters, and discuss the preliminary program. It's of crucial importance to have as much as possible set, for the Russian partners to have time to arrange visas, transport and other practical matters to be able to participate.
- Planning meeting on Skype/ email contact in January 2019. The subject teachers will organize the groups and specific content.
How to prepare the students in the three schools for the intense days in Rovaniemi.

Project description

Norsk

«Barents Region Opportunities- The Rivers of Barents Region as a unifying and dividing factor for people, culture and economy».

Et samarbeidsprosjekt mellom Kirkenes VGS, Rovaniemi IB World School og Gimnazia no9 i Murmansk.

Prosjektet har kommet i gang som følge av et tett samarbeid mellom disse skolene de siste årene, hvor fokuset har vært fellesskap og forståelse, språk og kommunikasjon på tvers av grenser språk og kultur.

Vi har forsøkt å finne sammen og arbeide for felles forståelse av temaer som er grenseoverskridende både i tenkemåte, kultur, hverdagsliv, politikk og geografi. Vi har tidligere jobbet med «fiendebilder» annerledeshet som kan gjøre oss til fiender, og likheter som fordrer vennskap, fornybar energi, migrasjon, menneskerettigheter og velger denne gangen å sette fokus på *Barentsregionens muligheter- elver som en samlende og begrensende faktor for folk, kultur og økonomi.*

Bakgrunnen og drivkraften bak å involvere nærmere 60 elever og lærere, er å skape og vedlikeholde forståelse og faglig utvikling der vi lærer av hverandres forskjeller, med fokus på kommunikasjon og respekt. Vi vil være en betydelig bidragsyter i ungdommenes utdanning og skape og vedlikeholde dialog, samarbeid og vennskap på tvers av grensene i Barentsregionen.

Mål for årets prosjekt:

I år setter vi fokus på elver i Barentsregionen, som en samlende og begrensende faktor for folk, kultur og økonomi. Historisk har man hatt kontakt gjennom handel og sosiale fellesskap, men de samme elvene har også tidvis begrenset disse som følge av politikk, økonomi, språk og kultur.

Ved å sette dette på dagsorden i forarbeid og gjennom en intens prosjektuke ønsker partene å bringe unge mennesker sammen, og bruke arenaen til å skape en felles erfaringsbakgrunn. Barents Prosjektene har alltid en gjennomgående rød tråd der vi arbeider for å **gi ungdommene et bedre utgangspunkt til å bli omsorgsfulle, kunnskapsrike og løsningsfokuserede aktører i fremtidig grenseoverskridende studie og arbeidsliv.**

Project description English

“BRO – Barents Region Opportunities” is a cooperative project among Kirkenes VGS, Rovaniemi IB World School and Gimnazia no9 in Murmansk, which will focus on the rivers of the Barents Region as a unifying and divisive factor for the people, culture and economy.

The project has developed from close cooperation among those schools over the past years, with a focus on community, understanding, language, and communication across borders of language and culture.

We have sought to work toward a common understanding of transnational topics in terms of culture, daily life, politics, geography, and ways of thinking. After previous work on “otherness” which might make us enemies and similarities, which make us friends, renewable energy, migration, and human rights, we have chosen to focus this year on rivers in the Barents Region as a unifying and divisive factor for the people, culture and economy.

The motivation to bring together over 60 students and teachers for this project is to build and maintain both understanding and academic development where we can learn from our differences, with a focus on communication and respect. We will strive to be a meaningful contributor to youth education and to create and maintain dialogue, cooperation and friendship across the borders of the Barents Region.

Goal for this year’s project:

This year we will focus on rivers in the Barents Region as a unifying and divisive factor for the people, culture and economy. While the rivers have often led to contact through trade and social connections, they have also limited such contact because of politics, economics, language and culture. Through background research by students, and an intense week of cooperation during the project, we will seek to bring young people together and use this arena to build common understanding and experience. All Barents Projects have a common goal where we work to prepare young people to be caring, knowledgeable and solution-focused actors in their future transnational academic and professional lives.

The group product:

- 1. A leaflet, using a common template.**
- 2. Performance from the different subjects/ VIDEO lasting 2-4 minutes.**

3. Written article from the project meant for publication in local, regional media and will be sent to the IB.

- a. Presentation of the participating schools**
- b. The process, before the meeting in Rovaniemi**
- c. The days in Rovaniemi - activities in and outside school.**
- d. What did you learn? With focus on the topic and Barents perspective**

Remember that ALL have to give their consent before publishing anything/ pictures/ video it on Facebook or any other websites.

Plan for evaluation

1. All participants will fill in an electronic evaluation form the last day of the project. This will be the base for reporting the results back to Barents Secretariat and the cooperating partners.
2. About 2-4 weeks after the project, we will meet/ skype/ email to discuss the outcomes of the project.
3. Report back to the partners and Barents secretariat

Information and media strategy

1. Meeting with the Barents secretariat in Kirkenes to discuss the project.
2. Trying to use the connections of the Barents secretariat, to promote and present the project, in Norway Russia and Finland
3. If available, have a journalist to cover the project, from the Barents secretariat
4. Use the logo of the Barents secretariat in all published material.
5. Publish the project on the schools' homepages, FFK and Barents.no homepage, Barentsobserver.com and send it to the IBO.
6. The groups will produce an information leaflet, which will be printed and distributed in all schools and a video presentation, for publishing.
7. The students in each school write an article, and send it to the different newspapers in their city.

Each partner contributes on the media strategy, how to share and spread info. Suggest- and be responsible for publishing/ share info in their city, as we know our own cities best. Publish on county, school, public homepages.

Groups and topics

1. History

Teachers in charge: Natalia and

2. Sociocultural/ anthropology

Teachers in charge: Jason and Jari

3. Science/ environmental systems and societies/ chemistry/ biology/ physics

Teachers in charge Antun, Valentina

4. Economics-

Teachers in charge: Juha and

Group 1 History

The countries of the Barents Region have an exceptionally great number of big and small rivers – the fact which has played a great role in the history and economy of the people inhabiting the area. Each country has hundreds of rivers, the longest of which are the Glomma in Norway (604 km), the Kemijoki in Finland (556 km), the Ponoï in the Murmansk Region (426 km).

The first recorded human presence in the southern area of the Scandinavian Peninsula and Denmark dates from 12,000 years ago. As the ice sheets from the glaciation retreated, the climate allowed a tundra biome that attracted reindeer hunters. The even warmer climate favoured the growth of forest which brought animals like aurochs. Groups of hunter-fisher-gatherers started to inhabit the area from the Mesolithic (8200 BC), up to the advent of agriculture in the Neolithic (3200 BC). The first inhabitants spoke closely related dialects of an Indo-European language. They settled along the rivers and on the sea coast.

The Sami, often referred to as "Lapps" or "Laplanders," began to arrive several thousand years after the Scandinavian Peninsula had already been inhabited in the south. They came from the Volga and the Ural river basins and speak the Sami language, a non-Indo-European language of the Uralic family which is related to Finnish and Estonian.

The Neolithic era (5000 BC) brought technological developments like ceramics. The settlements became bigger and were usually located in the river estuaries. Neolithic people created numerous rock paintings, examples of which are Sarvas and Taavitsainen in Finland, Alta in Norway, the Ponoï river in the Kola peninsula.

Eventually, rivers started to be used for trade between different areas of the future Barents Region, e.g. from Northern Finland they travelled down the Neva or the Lotta, then down the Tuloma in Russia and to the Arctic Ocean.

In the 19th and 20th centuries rivers acquired another role: they became energy sources. In Norway waterfalls were called “white coal” and were protected by law from being sold to foreign companies. Hydroelectric power plants on the Paz river are used by both Russia and Norway.

The Paz River has also served as a natural frontier between Norway and Russia for hundreds of years.

The main goal of BRO 2019 project is to give a review of available sources of information and analyze the development of people inhabiting the river basins in the Barents Region countries with the emphases on rivers as factors which determine economic and cultural development.

Recourse: <http://www.pasvikelva.no>

Group 2 Sociocultural/ anthropology

Focus on Social science methods and ideas about nature

Aims

- Gain experience in quantitative and qualitative methods used in social science research and weigh their pros and cons
- Learn and apply some basic concepts such as informed consent, independent/dependent variables, sampling, bias, accuracy and validity
- Reflect on some ethical issues in social science research such as representation
- Explore some ways anthropologists have approached the human relationship with nature

Some questions in anthropology about engaging with nature

- *To what extent is culture shaped by the natural environment in which people live?*
 - Students ask about clothing, arts, religion, rituals, food, language, etc. which are linked to rivers, or nature in general.
- *What is the meaning of “nature” for you? In your culture?*
 - **Anthropocentric** views where humans are seen as the most important species
 - **Bio centric** views that nature doesn’t exist to be consumed by humans; we are just one species among many
- In some cultures, natural features are considered kin and granted status as people, such as [a recent case of a river in New Zealand](#) . Create questions around this issue.
- If possible, talk with Sami community members about historical and current ways of thinking about rivers and nature in general.
- Related questions about commodification of natural resources, such as [spring water in Finland](#) in recent years.
- Many more possible topics...

Ideas for the project (same as last year)

- Students create a quantitative and qualitative instrument to learn what others think and know about nature in general and specifically rivers in the Barents region

- **Quantitative** : most likely an online survey using Google Forms; these allow one to make graphs and simple statistics
 - **Qualitative**: most likely interviews with a small number of fellow students, and possibly teachers and others not associated with the project
 - As we did last year, before meeting for the project students can brainstorm and debate how to make questions, test out making a survey on Google Forms, and read some background on common topics related to nature in anthropology, e.g. these websites on [Environmental](#) and [Ecological Anthropology](#) .
 - Discuss ethical issues, create a consent form that interview participants will sign, and then students explain the purpose of their research to the participants and pledge to maintain their anonymity
 - On the first day/half day students practice interviewing each other as a way to become comfortable with the method and improve some questions
- Expected results**
- Students can formulate various hypotheses and test them using the online survey, e.g. “We think students (from X country, of X age, of X gender) will be more likely to answer YES to question #5.”
 - By comparing student responses with responses from other groups, they can reflect on the importance of sample size and representativeness.
 - Students can transcribe the interview data and then compare quantitative and qualitative data sources.
 - They can decide how best to present their findings to the group and the public

Group 3 Science

Pasvik watercourse flows out of Lake Inari in Finland and flows into the Bøkfjord of the Varanger fjord, the Barents Sea in Norway. The basin has a total area of 18 325 km² and includes a large number of lakes and wetlands, constituting a river-and-lake system rather typical for the Kola Peninsula. The lower course of the river includes the Salmijarvi (Svanevatn) Lake linked via a stream with the Kuetjarvi Lake which in turn is in the course of the Kolosjoki River that is affected by direct discharge of sewage from the smelter.

The waterways in the river basin district are of great importance for the Sami culture and all settlement. Rivers and lakes enable livelihoods such as agriculture, forestry, fishing, hunting and industry, as well as leisure activities.

Environmental influences from human activity in the river basin district include nutrient loading, hydropower and other physical alterations of watercourses (including fish migration barriers), alien and invasive species, and pollution. Sources of pollution include both point sources and diffuse sources, such as wastewater, industry, and leaching from landfills, disused industrial areas and mining sites. The Norwegian part of the river basin also has polluted sediments in most harbours. Nutrient loading from human activities is rather small in the area and the ecological status is mainly classified as good or high. Sources of nutrient loading can be forestry, wastewater (both from households and municipal wastewater), agriculture and other diffuse sources.

The biggest pollution source in the area is Norilsk nickel plant in the Russian town Nikel, located just 7 km from the Norwegian border. The plant emits roughly 100 000 tons of SO₂

along with other heavy metal emissions (nickel and copper) to air- and waterways, although in the last 20 years much has been done to improve the situation. Wastewater is released to the Pasvik River watercourse via Lake Kuetsjärvi. Due to the prevailing southwestern winds, the airborne emissions tend to be carried northeast of the source. The pollution has affected water quality in several waterbodies, mainly in the lower Pasvik River basin and in the Norwegian Jarfjord area. In addition there is significant pollution from mining and industrial activity in the Pasvik water district, where the mining company Sydvaranger Gruve AS has a discharge permit for Bøkfjorden. Food safety warnings have been issued for certain lakes in the Sør-Varanger municipality because of dioxin pollution from ore processing. There is no actual industry on the Finnish side of the border, but there are several small salmon and reindeer meat processing plants located in the municipality of Utsjoki.

The main goal of BRO 2019 project is to compare ecological and economical similarities between Pasvik River and Kemijoki river in Rovaniemi. Great potential of these water basins is the main reason for international cooperation between Finland, Norway and Russia in attempt of constant monitoring of water quality in Barents region.

Group 4 Economics

Possible industries:

- energy production: hydro power firms
- tourism
- gold/iron ore or other mining industry
- transportation along the rivers
- fishing services

Economics theory connections

- scarcity
- opportunity costs
- demand & supply
 - demand for fishing services
 - collect data from the firms that operate in the market
- elasticities (PED)
- Theory of the firm: profit, market structures, etc.

**BRO – Barents Region Opportunities
PROJECT MEETING PROGRAMME
ROVANIEMI 4.-8.2.2019**

Monday 4.2.

Arrival of Russian and Norwegian teams

Ice-breaking activities in Lyseonpuiston lukio Upper Secondary School

Tuesday 5.2.

9.00 Welcome words by school head Mrs. Tuovi Palomaa

9.00-11.00 Project work in the school

11-12 Lunch in school canteen

12-15 Project work in the school

16-18 Visit to Arktikum Science Center and Museum

18- Free time in the town

Wednesday 6.2.

9-11 Project work in the school

11-12 Lunch in school canteen

12-16 Excursion to hydro power plant / waste water power plant

18- Socials and Conference dinner

Thursday 7.2.

9-11 Project work in the school

11-12 Lunch in school canteen

12-15 Project work in the school: Presentations and summary

15-16 Meeting closes

17-19 Visit the Santa Claus at Arctic Circle, Project photo

Friday 8.2.

Departure of Russian and Norwegian teams