

What's AYLEE and what do we do? - Maya

Alberta Youth Leaders for Environmental Education is an organization that works to provide youth with opportunities to get involved with environmental issues and activism. It gives us a platform to connect with other like-minded youth, and learn about environment, energy, and climate change. AYLEE also gives us lots of opportunities to collaborate on projects that have to do with climate action or education, present at events (like this one), and learn about how we can make changes in our own school and community.

I found AYLEE through my natural resources teacher, and was very interested in the tight-knit and supportive community. I think a lot of the time environmental activism can feel very lonely and isolating, as you're tackling these really big daunting issues. Having a group of people that share my concerns and also want to spark change has been very helpful for me, and it's super inspiring to see all the work that the other AYLEE members are doing.

AYLEE Survey Report - Maya

Now I'm going to tell you about a survey that AYLEE did last year, which gave insight into how Alberta's youth are feeling about environmental education, and taking on the future amidst a climate crisis. This survey was conducted from March 3rd to mid April of 2021, and it received 318 responses.

The survey indicated a great concern for climate change and environmental education, with over 80% believing that there should be more climate education, and 49% believing there should be much more.

Additionally, 72% of the surveyed youth stated that "I could be doing a lot more to reduce my impact on climate change", but less than half of the surveyed students felt prepared to do so. This is very telling, as it shows that while students feel passionate and concerned for climate change, they don't feel they have the resources or knowledge to take action. This is why more environmental education is so important.

When asked how comfortable they are discussing environmental topics with friends, family, and teachers, teachers had the lowest percentage of "very uncomfortable" answers; but the highest of both somewhat comfortable and neutral answers. This shows that there is a level of comfort when it comes to discussing environmental issues with teachers, but that there's a lot more that can be done.

When it comes to how much climate education they're getting, the highest percentage of survey takers (25%) stated that they learn about climate change in class 2-5 times per year, with almost 10% selecting once every few years, and 4% saying never. This is definitely not adequate, especially considering that 52% of surveyed youth feel like they don't know enough about climate change.

Overall, the AYLEE survey showed that implementing more environmental education is very important to youth, and will help ease some of the stress and fear that they feel about climate change. At AYLEE, we believe that environmental education is the key to promoting action, learning, and hope in youth across Alberta.

AYLEE White Paper - Avry

So thanks to that survey, we now know that students and youth really are worried about this, and the next step is to make an effort to include us in the discussion. We are the future of our education system, our political system, the industrial sector, and the rest of society, we are the ones who have to live on this planet facing the impacts of climate change. That's why we are so passionate about this subject, because we realize that the sooner we can take action, the bigger the difference we can make and the less damage we will have to deal with over the rest of our lives. This passion is a gift, and creates an environment of creative problem solving, a fresh outlook, and a stubborn optimism to make change happen. We are insisting that those in positions of power like yourselves listen to us because we feel like we have an important perspective to add to the discussion, and a perspective that is accompanied by a strong drive for change.

At AYLEE we have compiled, from dozens of youth members, a set of ideas and adaptations within the education system that we believe should be implemented for better education of students on climate change. From these ideas we have written a whitepaper, which is available on the ACEE website under youth leaders, I'm going to lay out the most important points, but we recommend you read through it yourself as well.

- Environmental education can no longer be a question of whether or not information from a textbook is related to students.
- Environmental education must seek to **engage** students through multiple learning strategies, outcomes, and curriculum points.
- There must be no question about the reality of climate change, but instead the extent to which humans are causing climate change through data based climate science.
- Environmental education must be fully integrated into all aspects of learning (Technology and climate science in science class, politics in social studies, hands on outdoor learning to better connect with nature, and the health impacts of climate change in health class)
- Means of further involvement for students must be made as available as possible, establishing environmental clubs, small programs to provide a way for students to work on sustainability related projects and advisory boards to the school and community that are easily accessible for students. We have to make it a topic that youth can get involved in without having to search for it, it should always be prominent in the school community.
- Professional development in areas of environmental concern must be the utmost concern in teacher's education. Teacher's must be kept up to date on current events of energy and climate in order to pass that information to students.
- Resources pertaining to the environment and climate must be kept up to date and

relevant, websites like climate reality and TED Countdown, as well as local resources like the Calgary climate hub, AYLEE, ecoschools, and the green municipal fund.

- Many of our recommendations also center on the need for school sustainability optimization. Our schools must make a dedicated effort to be as sustainable as possible, which can take many forms. Composting and recycling, efficient lighting, low or zero emission school buses, updating to electric heating instead of natural gas, and student-led initiatives such as renewable energy for the school and community gardens should all be a priority in order to lessen the climate impact of schools.

These are our recommendations boiled down to the basics, so please read our whitepaper if you want more information on any of these topics. We believe these transformative changes are essential for the well-being of us as students, because we feel the need to act, and we can't act without climate education. So now I'm going to pass it off to our eco eagle student for a look at how eco eagles are promoting climate education and action in their school.

The Recommendations in Action - FMIS Eco Eagles:

As Eco Eagle students, we do advocate for result oriented strategic thinking in implementing articles 1 and 2 of the white paper. Our goal is to become science informed citizens, who can carefully collect and analyze evidence, report our progress and use education to demonstrate the need for a sustainable source of energy for all schools at FMPSD.

So far we accomplished...

- Indoor air quality assessment in all classrooms at our school, applied for grants, planned, designed and built 2 hydroponic, 1 aquaponic and 36 plants in soil to offset Carbon levels and improve air quality.
- We also conducted garbology and sorted waste, the major waste was plastic and paper. We shared our results with the Green Scene and education department. This was a major achievement and the district adopted a paper recycling system for all the 16 schools in the division. Through Green Scene we got 2 water filling stations in our school and overall 25 in all the schools in our division.
- We carried out an energy audit on our hydroponic/aquaponic systems (solutions can not be problems because we were using the school electricity). Therefore, we applied for a second grant for renewable energy for the indoor gardening system. In collaboration with another school in our division we got approximately \$9000 from A+ Plus Energy from inside education.
- We are divided into two subunits, Shakers and Changemakers. The Shakers are working on a Waste Audit for Junior High students, while some are working on a Green Space in the school's lounge. The Changemakers however, have started a club called Junior Eco Eagles, where selected representatives from Grades 4-6 are chosen to help take action to solve environmental problems at our school.
- We recently purchased solar panels to generate clean energy. Although this project is still in progress. In June, we will compile a report of our projects,

present to our school board and show the urgent need to address clean energy for all buildings. We're very much interested in being a data informed group. We do get the projects done through core classes, options and extra curricular clubs.

We are very fortunate to have a community that supports us. Last year we partnered with Friendship local Metis centre to utilise 18 garden boxes around all Fort McMurray Public School Division. Our teacher represents us through Green Scene at division level and coordinated collaboration among all of FMPSD students. We successfully produced 50 kg of potatoes, 25 kg of tomatoes and 18 bundles of a wide range of salad in only one school.

We share data with our principal to include us in the school growth plans and secure more resources. We also registered for Eco Schools as a platform to track our progress, collaborate and plan accordingly.

What's next for us?

Our goal is to get at least three other FMPSD schools to be certified by Eco Schools through the Green Scene program. It's a useful tool and helps us build infrastructure for collaboration among schools. If you are a principal, we highly recommend checking this program for your school. Another thing is that we are working on a Green Space in the school lounge and completing the renewable energy installation for the indoor gardening system.

You can help us implement white paper recommendations in all of the schools you work in. For trustees and superintendents we need easily accessible infrastructure for school sustainability, optimization and net zero emissions.

Right now we are doing all of this to show that we can do it, but it's not a sustainable way to do so. We're fortunate to have a division that is trying its best, but it's not uniform across all schools in Alberta. Please listen to what we have to offer, print the white paper article, keep it on your desk, and take a look; the more you see the more you're likely to try. Make the infrastructure, apply the recommendations and sign up for Eco Schools.

Closing message - Avry

Better incorporating climate education into our schools is essential, including youth and students in climate discussions is also essential. We have seen the world changing around us over the last few years and we must be included in the world of climate action and education so that our voices and our concern for our future can be heard and properly acted on in coming years.

We have made our message clear, it is our education and we feel that including environmental matters in our education is essential to your future as the next stewards for this planet. We want our voices to be heard and responded to.